

Systematic review of Egyptian Studies on "Liaison Psychiatry"

Submitted for partial fulfillment of Master Degree of
Neuropsychiatry

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List Of Abbreviations

ART	Assisted Reproductive Technology
ASD	Acute Stress Disorder
BEAM	Brain Electric Activity Mapping
BDI	Beck Depression Inventory
BPRS	Brief Psychiatric Rating Scale
CDI	Children Depression Inventory
CMA	ChildrenManifest Anxiety
DM	Diabetes Mellitus
EPQ	Eysenck Personality Questionnaire
FAS	Fertility Adjustment Scale
FLIC	Functional Living Index Cancer
GAD	Generalized Anxiety Disorder
GHQ	General Health Questionnaire

List of abbreviations

GTCSs	Generalized Tonic Clonic Seizures
HADS	Hospital Anxiety Depression Scale
HAS	Hamilton Anxiety Scale
HDS	Hamilton Depression Scale
IDDM	Insulin Dependant Diabetes Mellitus
IHD	Ischemic Heart Disease
LNNB	Luria Nebraska Neuropsychological Battery
MAS	Manifest Anxiety Scale
MMSE	Mini-Mental State Examination
MFI	Multidimensional Fatigue Inventory
MS	Multiple Sclerosis
MSHQ	Middle Sex Hospital Questioner
OCD	Obsessive Compulsive Disorder
PTSD	Post Traumatic Stress Disorder
SCID	Structured Clinical Interview for DSM-IV
SLE	Systemic Lupus Erythematosus
SPRAS	Sheehan Patient Rated Anxiety Scale

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***List of reviewed Egyptian studies
on Liaison-Psychiatry***

Researcher/s & Supervisors	Article title	Year	Source
Abdulghani MO supervised by Prof. Moustafa M, Assist. Prof. Bishry Z & Lect. Ashour A	1. Mental disorders with brain tumors (review of literature with a pilot study)	1981	MSc thesis Faculty of medicine- Ain Shams University
Gharib HH supervised by Prof. Moustafa M, Prof. Okasha A & Lect. Bassiouni M	2. Neuropsychiatric complications following open heart surgery	1982	MSc thesis Faculty of medicine- Ain Shams University
Abdel-Wahab YM supervised by Prof. El-Zeiady A & Assist. Prof. Bishry Z	3. Comparative psychiatric study between organic and non-organic gastrointestinal illnesses	1982	MSc thesis Faculty of medicine- Ain Shams University

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Sowmail FB supervised by Assist. Prof. Lotaif F & Prof. El-Kaparity H	4. Psychiatric complications of female sterilization	1983	MSc thesis Faculty of medicine- Ain Shams University
Derias SF supervised by Prof. Abo-Zied Y & Prof. Sadek A	5. Psychiatric aspects of clinical neurology	1984	MSc thesis Faculty of medicine- Ain Shams University
Omar KA supervised by Prof . Okasha A	6. Cognitive deficits in Egyptian Diabetics	1984	MSc thesis Faculty of medicine- Ain Shams University
Morsi HH supervised by Prof. Kamel M & Prof. Soliman S	7. Psychiatric morbidity in hearing clinic patients	1984	MSc thesis Faculty of medicine- Ain Shams University
Ashour A, Philobos KZ, Khalil AH, Ismail MK	8. Psychiatric complications of Propranolol Therapy in Essential	1984	Egy.J. of Psych. PP71-84

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	Hypertensives		
Abdel-Gawad MS, Hunter MS, Ghaz EH, Ahmed S, Sayed S, Arafa M, Askar MA	9. Anxiety, depression and ego-strength assessment in Duodenal ulcer and Somatizer patients	1988	Egy.j. of Psych PP41-56
El-Dawla AS supervised by Prof. Okasha A & Prof. Abdel-Daiem K	10. Psychological profile of a sample of Egyptian patients with ischemic heart disease	1989	MD thesis Faculty of medicine- Ain Shams University
Attia HM supervised by Prof Demerdash A, Prof Abdel-Gawad MS, Prof El-Ganzoury A	11. Study of the psychiatric aspects of burned adult patients	1991	MD thesis Faculty of medicine- Al-Azhar University
Khalil AH, Ghanem M, Fathallah M, Effat S, Aboul-Seoud S	12. Psychological sequelae of wearing lower limb orthosis in children	1991	Egy.J. of Psych. Vol.14, PP97-106

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El-Mahallawy NN, El-Said WM, Effat SM	13. Depression in hemodialysis patients and their risk of suicide	1991	Ain Shams Medical J. Vol.42,No10, PP631-639
Asaad TA supervised by Prof. Okasha A, Prof. Kamel M & Lect. Zakaria M	14. Psychiatric morbidity after cerebrovascular accidents	1992	MD thesis Faculty of medicine- Ain Shams University
El-Defrawi MH, Lotfi G	15. Psychiatric correlates of infertility	1992	Egy.J. of Psych. Vol.15, No.2 PP192-200
Abdel-Baki O, Effat S, El-Mahallawy N, Khalil A	16. Depression and intellectual state in children with chronic renal failure	1994	Egy.J. of Psych. Vol.17, PP109-116

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El-Gamel MM supervised by Prof. Abdel-Mohsen Y, Prof. El-Tamawy M, Lect. Shaheen M	17. Psychiatric assesment of multiple sclerosis	1995	MSc thesis Faculty of medicine- Cairo University
Abdel-Aal F, Eissa MA, Soliman NM	18. Psychological impact of rheumatic heart disease on affected children and their mothers	1995	Egy.J. of Psych. Vol.18, PP71-80
Abdel-Hameed WL supervised by Prof. Ahmed SA, Assist. Prof. Hashem AH	19. Psychiatric assesment of female burn patients during hospitalization	1996	MSc thesis Faculty of medicine- Cairo University
El-Mehallway NN & Gad-Allah F	20. Depression in women with type 2 diabetes	1996	Menoufiya Med. J Vol.8,No2, PP293-306

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Mahmoud LS supervised by Prof. Kamel M, Prof. Ghanem M& Assist. Prof. Effat S	21. Psychiatric disorders and falling hair	1997	MSc thesis Faculty of medicine- Ain Shams University
Abou-Lughod GG supervised by Prof. El-Gindy TA, Prof. Aly SA, Lect. Abol-Magd S	22. Psychiatric aspects of liver diseases	1997	MSc thesis Faculty of medicine- Cairo University
Kamal AM supervised by Prof. Abdel-Aziem S, Prof. Tawfik O, Assist. Prof. El-Ray LA	23. Psychosocial aspects of cancer pain in Egyptian patients	1997	MSc thesis Faculty of medicine- Cairo University
Khashaba AM, Sahloul M, Abdel-Latif AA El-Sayed LM	24. Cross-Sectional study of psychiatric disorders in pediatric outpatient clinic	1997	Egy.J. of Psych. Vol.20 PP265-270
Morsy HM supervised by Prof. Mohamed SA, Consultant Abdel-Meguid IM, Assist. Prof. El-Ray	25. Psychiatric aspects of cardiac surgery	1998	MSc thesis Faculty of medicine- Cairo

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LA			University
Omar HS supervised by Prof. Ahmed MM, Prof. Ahmed MM, Lect. Shaheen MO	26. Psychological aspects of hysterectomy	1998	MSc thesis Faculty of medicine- Cairo University
Youssef MA supervised by Prof. Mohsen YM, Prof. Moafy H, Assist. Prof. El-Salam ZA	27. Psychiatric aspects of ICU patients with recent myocardial infarction	1998	MSc thesis Faculty of medicine- Cairo University
Kandil MR, El-Sayeh AA, El-Otiefy MA	28. Psychiatric aspects of burns	1998	Egy.J. of Psych. Vol.21 PP115-120
Shama G	29. Depression in Parkinson's disease a clinical study	1998	Egy.J. of Psych. Vol.21 PP107-113

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El-Hennawy HS supervised by Prof. Sadek A, Prof. El-Mahallawy NN & Assist. Prof. El-Dawla AS	30. Psychological profile of a sample of Egyptian female patients with breast cancer	1999	MSc thesis Faculty of medicine- Ain Shams University
El- Shourbagy O, Farid MN	31. Depression and Anxiety in Children with Dermatological Diseases	1999	Current Psychiatry Vol.6, No.3, PP320-326
Habib HA supervised by Prof. Ali SA, Assist. Prof. El-Haddad AM, Assist. Prof. Moussa SS	32. Psychological and psychiatric impact of cancer diagnosis and management on children	2000	MSc thesis Faculty of medicine- Cairo University
El-Azzazy OA supervised by Prof Ragheb KM, Prof Khalil AH, Prof Khaled HM	33. Psychological aspects of breast cancer	2000	MSc thesis Faculty of medicine- Al-Azhar University
Fahmy M, Abdel Mohsen S, EL-Sheekh E	34. The Psychological Sequel of Breast Cancer and their Relationships to Locus of Control, Fatigue, Coping Styles and	2000	Current Psychiatry Vol.7, No.1, PP39-54

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	Treatment		
Abu El-Ela II	35. Utilization of Non-Psychiatric Medical Services by a Sample of Egyptian Patients with Panic Disorder	2000	Current Psychiatry Vol.7, No.1, PP31-38
Magda KF, El-Defrawi MH, Ismael MY, Amal ZA	36. Psychiatric Morbidity among Children 6-12 years Attending Pediatric Outpatient Clinic in Suez Canal University Hospital	2000	Current Psychiatry Vol.7, No.3, PP276-290
Akram KW, Abdulmajeed A, Zahar N, Heba I, Sobhy A	37. A Study of Life Events, Personality and Anxiety Traits and Depression in Egyptian Patients with Cancer Bladder	2000	Current Psychiatry Vol.7, No.3, PP346-352
Roshdy EH, Abdel-Latif R, Ahmed AA, Sahlol ME, Dawood O, Khshba MA, Wail	38. Somatization Disorder Among Medical Outpatients in Zagazig University Hospital	2000	Current Psychiatry Vol.7, No.3, PP304-309

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H, Amal D			
Haggag WL, Mekhaie V, Tantawy A, Al-Hamadi M, Al- Bitar E	39. Medical Referrals with Unexplained Physical Complaints: Psychosocial and Dynamic Characteristics	2000	Current Psychiatry Vol.7, No.3, PP332-344
El-Defrawi MH, Zeitoun AA, Abdel- Hamid OA	40. Behavioral and cognitive functions in children with chronic illness in Port Said	2000	Egy.J. of Psych. PP197-213
Abdel-Baky OM, Khalil AH, Mokhtar GM	41. Cognitive and Non- cognitive (Anxiety and Depression) Functioning in children treated with cranial irradiation for acute leukemia	2000	Egy.J. of Psych. Vol.20, PP297-311
El-Shahawy HH supervised by Prof. Khalifa AS	42. Psychiatric sequelae in children with chronic lymphatic leukemia	2001	MD thesis Faculty of medicine- Ain Shams

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			University
El-Gamal MM supervised by Prof Mohamad SA, Prof El-Guindy, Prof El- Ray LA	43. Psychiatric morbidity in general medical departments of Kasr El-Aini Hospital	2001	MSc thesis Faculty of medicine- Cairo University
El-Shinnawy HH supervised by Prof. Moussa FA, Prof. El- Ray LA, Prof. Shaheen OO	44. A study of the impact of stress in chronic illness on children and their parents	2001	MD thesis Faculty of medicine- Cairo University
Fahmy MT, Haggag WL, Osama A, Negm M	45. Psychiatric Assessment of Patients with Mild Traumatic Brain Injury	2001	Current Psychiatry Vol.8, No.2, PP211-224
Hassan MM supervised by Prof. El-Mahallawy NN, Assist. Prof. Omar AM & Lect. El- Khayat NM	46. Psychiatric manifestations in cerebrovascular stroke	2002	MSc thesis Faculty of medicine- Ain Shams University

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Hassanein SM supervised by Prof. Sadek A, Prof.Saad A & Prof. El-Sayed N	47. Effect of eating attitude and behavior on metabolic control in children and adolescents with Insulin Dependant Diabetes Mellitus	2002	MSc thesis Faculty of medicine- Ain Shams University
Saadani M, Said S, El-Amin H, AbdelSalam K, Saad A	48. Depression in Epilepsy and Migraine: A Comparative Study in Children	2002	Current Psychiatry Vol.9, No.3, PP266-275
Allam MA supervised by Prof. Bishry Z, Prof. Khalifa A, Prof. Saad A & Prof. Abdou TA	49. Psychological profile and quality of life (QoL) assessment in cancer breast patients	2003	MD thesis Faculty of medicine- Ain Shams University
Shaker NM supervised by Prof. El-Mahallawy N, Prof. El-Dawla AS, Assist. Prof. Hassanein S, Assist. Prof. El-Sayed N	50. Psychiatric disorders in children and adloescents with type I diabetes mellitus	2003	MD thesis Faculty of medicine- Ain Shams University

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عبد الوهاب تحت إشراف أ.د. عويضة م, أ.د. عطية إ ع. أ.د. عبد الغني م ج, أ.د. صلاح م خ, أ.م.د. إسماعيل إ ع	51. دراسة إكلينيكية للأكتئاب لدى المرضى الذين يجرون الإستصفاء الدموي	2003	رسالة ماجستير - كلية الطب - جامعة الأزهر
Salem M, El-Laboudy M, Ramy H, Mostafa H	52. Quality of life and emotional disturbances in children with type 1 diabetes mellitus: the impact of glycemic control	2003	Current Psychiatry Vol.10, No.1, PP18-25
Kotb M.A, Sabry N	53. Depression and body image in children with chronic liver disease A cross section study	2003	Current Psychiatry Vol.10, No.2, PP168-181
Essawy H, El Shenawy H, Ahdy A	54. Psychiatric side effects during interferon therapy in hepatitis C patients	2003	Current Psychiatry Vol.10, No.3, PP403-410
Fat-hy M supervised by Prof. Salem SS, Prof. Shaheen MO, Lect. Goueli TA	55. Psychiatric clinical profile in patients with multile sclerosis	2004	MSc thesis Faculty of medicine- Cairo University

List of reviewed Egyptian studies

المهدي م ل تحت إشراف أ.د. المدني ع م, أ.د. عويضة م, أ.د. عطية إ ع, أ.د. صلاح م خ.	56. دراسة إكلينيكية لعينة من مرضى الهلع المصريين المترددين على العيادة النفسية و عيادتي الصدر و القلب بمستشفى الحسين الجامعي	2004	رسالة دكتوراة - كلية الطب - جامعة الأزهر
رشدي ر تحت إشراف أ.د. المدني ع م, أ.د. لطيف ف ل, أ.د. بحري م ك, أ.د. عبد الغني م ج	57. معدل حدوث الاضطرابات النفسية في المرضى الذين يعانون من مرض عضوي و المحجوزين في مستشفى الحسين الجامعي و تأثير ذلك علي مدة إقامتهم بالمستشفى	2004	رسالة دكتوراة - كلية الطب - جامعة الأزهر
النبوي ع ع تحت إشراف أ.د. حلمي م خ, أ.م.د. إسماعيل ع, أ.م.د. إياهم ع م, أ.م.د. حسين ح م.	58. القلق و الاكتئاب في مرضى الصرع	2004	رسالة ماجستير - كلية الطب - جامعة الأزهر

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Bishry Z, Sayed M, El-Nahas G, El-Khli S, Salem M, El- Habashy S, Mohamad N	59. Predictors of neuropsychological dysfunction in children with diabetes mellitus	2004	Current Psychiatry Vol.10, No.3 PP352-362
El-Aswad MZ supervised by Prof. Shaheen OO, Assist. Prof. Abol-Magd SM, Lect. Amin MM	60. Psychosocial Characters of Insulin Dependant Diabetic children and its relation to coping strategies of their primary caregivers	2005	MSc thesis Faculty of medicine- Cairo University
أبو العباس م م تحت إشراف أ.د. حمودة م م , أ.د. نصار ل ا , أ.د. إبراهيم ع م.	61. الاضطرابات النفسية لدى مرضى الحروق	2005	رسالة ماجستير – كلية الطب – جامعة الأزهر

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Essawy H, El-Nahas G, Abou-Zeid M, Abdel-Meguid F	62. Assesment of depressive symptoms among asmathic children	2005	Current Psychiatry Vol.12, No.3, PP 171-179
Noby SI supervised by Prof. El-Mahallawy NN, Assist. Prof. El-Ela EA & Lect. Khalifa DA	63. Mental disorders due to a general medical condition among long stay patients	2006	MSc thesis Faculty of medicine- Ain Shams University
El Laboudy M & Ramy H	64. Emotional Disturbances and Quality of Life in Type-1 Diabetic Children and Adolescents: Relation to Glycemic Control and Microvascular Complications	2006	Current Psychiatry Vol.13, No.1, PP80-92

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Radwan DN supervised by Prof. Khalil AH, Prof. Mohamed MM, Prof. Sayed MM, Assist. Prof. Ramy HA & Assist. Prof. Moussa KS	65. Psychiatric morbidity in infertility in a sample of Egyptian females	2007	MD thesis Faculty of medicine- Ain Shams University
Abdel-Mawella SM supervised by Prof. Moussa Fa, Prof. El- Batrahy MA, Lect. Shaheen NM	66. Systemic Lupus Erythematosus: Psychological and Immunological study	2007	MD thesis Faculty of medicine- Cairo University
El-Azazzy OA supervised by Prof. Ragheb KM, Prof. Okasha A, Prof. Khalil AH, Prof. Demerdash AM, Prof. Attia HM	67. Prevalence of panic disorder in a medical outpatient egyptian sample	2007	MD thesis Faculty of medicine- Al-Azhar University

List of reviewed Egyptian studies

El-Tantawy A, Hagag A, Hassab-Allah S	68. Multiple Psychiatric Disorders among Patients with Stable Coronary Heart Disease Affecting Their Quality Of Life	2007	Current Psychiatry Vol.14, No.2, PP175-186
El-Serafi DM supervised by Prof. Khalil AH, Prof. Saad A, Prof. El-Nahas GM, Assist. Prof. Zaki N	69. Psychiatric morbidity and Coping Strategies in a Sample of Egyptian Cancer Breast Female Patients	2008	MD thesis Faculty of medicine- Ain Shams University

INTRODUCTION

Liaison psychiatry is sometimes known as Consultation-Liaison psychiatry or CL psychiatry. In consultation work, the psychiatrist is available to give opinions on patients referred by physicians and surgeons. In liaison work, the psychiatrist is a member of a medical or surgical team, and offers advice about any patient to whose care he feels able to contribute. The liaison psychiatrist also assists other staff to deal with day-to-day psychological problems encountered to their work, including the problems of patients whom staff have discussed but the psychiatrist has not interviewed (*Gelder et al, 2006*).

Sadock & Sadock (2007) reported that consultation-liaison psychiatry is the study, practice, and teaching of the relation between medical and psychiatric disorders. In Consultation-liaison psychiatry, psychiatrists serve as consultants to medical colleagues or to other mental health professionals (psychologist, social worker, or psychiatric nurse). In addition, Consultation-liaison psychiatrists consult regarding patients in medical or surgical settings and provide follow-up psychiatric treatment as needed. Consultation-liaison psychiatry is associated with all the diagnostic, therapeutic,

research, and teaching services that psychiatrists perform in the general hospital and serves as a bridge between psychiatry and other specialities.

Many studies have demonstrated the dramatic impact of comorbid psychiatric conditions on the course and outcome of several medical illnesses. For example, depression has been shown to increase the risk of recurrence and mortality from myocardial infarction (**Glassman & Shapiro, 1998**), the risk of stroke in hypertensive patients (**Simonsick et al, 1995**), and physical aggression and functional dependency in Alzheimer patients (**Lyketsos et al, 1999**). Depression has also been shown to worsen glycemic control in diabetic patients (**Lustman et al, 2000**) and double the mortality of stroke patients (**Morris et al, 1993**). Psychiatric disorders have been shown to increase the length of hospital stay and re-hospitalization rates in numerous illnesses (**Saravay et al 1991, Levenson 2002**). Cost-effectiveness studies have demonstrated the value of psychosomatic medicine interventions in hospital and outpatient populations (**Strain et al 1991, Von Korff et al 1998**).

Patients in the general hospital have the highest rate of psychiatric disorders when compared to community samples and patients in primary care settings .Compared to community samples, depressive disorders among patients in general hospitals are more than twice as common, major depression is two to three times as

common, substance abuses two to three times as common, and somatization disorders more than 10 times as common **(Cole & Saravay 1999)**. Delirium occurs in 18% of general hospital patients which is much higher than that of the community samples. These high rates of psychiatric disorders in general hospital patients may result from reactions to or complications from medical disorders and treatments; a higher rate of medical comorbidity among patients with psychiatric disorders due to psychophysiological factors (e.g., depression in cardiovascular disease); unhealthy life styles among patients with psychiatric disorders; and disproportionately more frequent use of medical services by persons with mental disorders, especially somatoform disorders. **(American Psychiatric Association, 1999)**

Huyse (1997) in the Netherlands has referred to the general hospital as a filter that can identify the high concentration of patients with psychiatric disorders .The patients who pass through its portals need recognition, appropriate diagnosis, initiation of treatment, and referral for the follow-up psychiatric care they would otherwise fail to receive. Failures to identify, evaluate, diagnose, treat, and achieve symptom resolution results in significant adverse outcomes. For example, depression, dementia, and delirium, three common disorders found among general hospital patients are associated with worse medical outcomes and higher utilization of medical care, both

in the hospital and after discharge (**Katon 1996, Francis & Kapoor 1992**).

Patients with depression who are not diagnosed and do not begin treatment during their medical hospitalization only have an 11% chance of receiving treatment for depression in the year following discharge (**Koenig et al, 1997**). Untreated depression is associated with higher medical utilization after hospital discharge and higher mortality and morbidity in coronary disease, hypertension, diabetes, and strokes (**Koenig & Kuchibhatla , 1998**).

Psychiatric care may be invaluable in addressing the traumatic impact of a cancer diagnosis, which may abruptly convert previously healthy individuals into a patient teetering precariously between remission and life or treatment failure and death. Cancer patients may need psychiatric intervention at all stages of disease (**Holland, 2002**).

Egyptian infertile women have poor quality of life with further deterioration when psychiatric morbidity is present, as it negatively influence infertility treatment outcome. The psychiatric aspects associated with infertility are increasingly considered both as determinants and a consequence of fertility problems (**Radwan, 2007**).

So, Consultation-liaison (C-L) psychiatry has an important role in the identification and management of psychological problems in patients with medical disorders in general hospitals. The diagnostic tools C-L psychiatrists are usually provided with may reveal to be limited because of particular psychosomatic syndromes and subthreshold psychopathology that are undetected by psychiatric diagnostic criteria, which lead to the development of "The Diagnostic Criteria for Psychosomatic Research", demonstrating the importance of consultation-liaison psychiatry (*Porcelli & Sonino, 2007*).

RATIONALE OF THE WORK

As there are many previous researches discussing the topic of Liaison psychiatry in Egypt from different aspects, this effort deserves not to go in vain. This accentuates the importance of having a clear system for reviewing these studies and planning for future researches. And, as medicine moves to be evidence-based, the need for having the criteria for critical appraisal to determine the value of the published researches and to decide their applicability to clinical practice is increasing. So this work was done to make use of this effort to identify the missing points in Egyptian researches to overcome the defects in the future.

So, we hope that this study will be a step to know where the Egyptian studies of "Liaison psychiatry" stand and what is needed to be done further.

AIM OF THE WORK

The aim of this work is:

1. To systematically review and appraise the available Egyptian studies on Liaison Psychiatry.
2. To generate recommendations for further studies.
3. To provide a summary of clinical M.S.c thesis and M.D. Thesis on Liaison Psychiatry done in Ain-Shams University, Neuro-psychiatry Department.

METHODOLOGY (PROCEDURES)

In order to fulfill the aim of the work, a systematic review of all available Egyptian studies on Liaison Psychiatry will be done.

The following databases will be explored:

1. Library of Faculty of Medicine Ain Shams University
2. Library of Faculty of Medicine Cairo University
3. Library of Faculty of Medicine Al-Azhar University
4. Journals of Psychiatry for Egyptian studies

The obtained studies from these databases will be categorized according to the following categories:

1. Epidemiology
2. Etiology
3. Clinical description
4. Outcome
5. Management

These studies will be critically appraised and important findings will be discussed. Following these steps recommendations for further studies would be generated.

I. Epidemiology of psychiatric symptoms and disorders in physically ill patients

i. Prevalence of psychiatric symptoms and disorders in physically ill patients

A. Medical diseases:

1. General medical diseases:

By studying 1006 children collected from the pediatric clinic of Zagazig University Hospital, **Kashaba et al (1997)** found that 174 out of 1006 (17.3%) child outpatients show at least one psychiatric disorder according to DSM-IV. **Roshdy et al (2000)** studied 1852 patients attending the general medical clinic of El-Zagazig University Hospital over a 3 months period. They found that 19.7 % (364/1852) of the patients don't have genuine physical disorder. **Magda et al (2000)** collected 250 children from the pediatric clinic of Suez Canal University Hospital, and she found that 14.8% (37/250) of these children have psychiatric disorders. In

another study done on 11307 patients attending the general medical clinic of Al-Zahraa Hospital, Al-Azhar University, **El-Azzazy (2007)** found that 2% (227/11307) of the patients don't have medical illness.

Table 1: Prevalence of psychiatric disorders in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Kashaba et al (1997)	1006 children coming as outpatients in pediatric clinic	Pediatric outpatient clinic in Zagazig University Hospital	Psychiatric interview (DSM IV)	17.3% have at least one psychiatric disorder
Roshdy et al (2000)	1852 general medical outpatients	Zagazig University Hospital	Psychiatric interview (DSM IV)	19.7 % don't have genuine physical disorder
Magda et al (2000)	250 children attending pediatric outpatient clinic	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	14.8% have psychiatric disorders

El-Azzazy (2007)	11307 patients attending the general medicine clinic	general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	2% don't have medical illness
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a. Somatoform disorders in medical patients:

Roshdy et al (2000) reported that 37.4% (136/364) of the non-organic medical patients are diagnosed as somatoform disorders according to DSM IV diagnostic criteria. The 136 somatoform disorders patients are distributed as follows: pain disorder 2.7% (50/1852), somatization disorder 0.76% (14/1852), conversion disorder 1.89% (35/1852), and hypochondriasis 2% (37/1852) of the general medical patients. In another study done on 74 medical referrals to psychiatric clinics, **Haggag et al (2000)** found that 36.49% (27/74) of medical referrals to psychiatric clinics have somatoform disorders according to ICD-10. **Magda et al (2000)** found that 0.4% (1/250) of children attending pediatric clinic of Suez Canal University Hospital have somatization according to DSM IV.

Table 2: Prevalence of somatoform disorder in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Roshdy et al (2000)	1852 general medical outpatients	Zagazig University Hospital	Somatoform section of Composite International Diagnostic Interview (DSM IV)	37.4% of the non-organic medical patients have somatoform disorders
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	ICD-10 Symptom Checklist	36.49% have somatoform disorders
Magda et al (2000)	250 children attending pediatric outpatient clinic	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	0.4% have somatization

b. Panic disorders in medical patients:

Haggag et al (2000) reported that 21.62% (16/74) of medical referrals to psychiatric clinics have panic disorder according to ICD 10. By studying 30 patients with panic disorder who attended

different medical clinics **Abu El-Ela (2000)** reported that 93.3% (28/30) of panic patients tried at first their general practitioners, 83.3% (25/30) consulted specialist of internal medicine, 66.6% (20/30) consulted cardiologists, 66.6% (20/30) consulted neurologists, 33.3% (10/30) consulted audiologists, 26.6% (6/30) consulted chest specialists, 16.6% (5/30) consulted neurosurgeons and 16.6% (5/30) consulted endocrinologists. 73% (22/30) of patients had visited the emergency room and 26.6% (8/30) were admitted to inpatients wards and 13.3% (4/30) were admitted to Intensive Care Unit (ICU). **El-Azzazy (2007)** found that 0.68% (77/11307) of the patients attending the general medical clinic have panic disorder and 1.2% (6/500) of controls have panic disorders.

Table 3: Prevalence of panic disorder in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	ICD-10 Symptom Checklist	21.62% have panic disorder

Abu El-Ela (2000)	30 patients with panic disorder who attended different medical clinics	private clinic in Cairo	Psychiatric interview	93.3% tried at first their general practitioners, 83.3% consulted specialist of internal medicine, 66.6% consulted cardiologists, 66.6% consulted neurologists
El-Azzazy (2007)	11307 patients attending the general medicine clinic	general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	0.68% have panic disorder

c. Adjustment disorder in medical patients:

Magda et al (2000) found that 3.2% (8/250) of children attending pediatric clinic of Suez Canal University Hospital have adjustment disorder with depressed mood according to DSM IV. By studying 500 medically ill patients, **El-Gamal (2001)** found that 20% (100/500) of the patients have adjustment disorders according to DSM IV.

Table 4: Prevalence of adjustment disorder in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Magda et al (2000)	250 children attending pediatric outpatient clinic	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	3.2% have adjustment disorder with depressed mood
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	20% have adjustment disorders

d. Depression in medical patients:

Haggag et al (2000) found that 24.47% (23/74) of the medical referrals to psychiatric clinics with unexplained physical complaints have depression according to ICD 10. **El-Gamal (2001)** found that 25% (125/500) of medically ill patients have major depression according to DSM IV.

Table 5: Prevalence of depression in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	ICD-10 Symptom Checklist	24.47% have depression
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	25% have major depression

e. Anxiety in medical patients:

Haggag et al (2000) found that 13.51% (10/74) of medical referrals to psychiatric clinics with unexplained somatic symptoms have Generalized Anxiety Disorder (GAD) and 13.51% (10/74) of the patients have mixed anxiety and other anxiety disorders according to ICD 10. Whereas, **Magda et al (2000)** found that 0.8% (2/250) of children attending pediatric clinic of Suez Canal University Hospital have separation anxiety according to DSM IV. In another study, **El-Gamal (2001)** found that 15% (75/500) of medically ill patients have mixed anxiety depression according to

DSM IV and 20% (100/500) have affective and anxiety symptoms not reaching specific diagnosis.

Table 6: Prevalence of anxiety in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	ICD-10 Symptom Checklist	13.51% have GAD and 13.51% have mixed anxiety and other anxiety disorders
Magda et al (2000)	250 children attending pediatric outpatient clinic	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	0.8% have separation anxiety
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	15% have mixed anxiety depression and 20% have affective and anxiety symptoms

f. Other psychiatric disorders in medical patients:

By studying 1006 children collected from the pediatric clinic of Zagazig University Hospital, **Kashaba et al (1997)** found that 4.7% (48/1006) have nocturnal enuresis and 2.4% (24/1006) have conduct disorder according to DSM-IV. **El-Defrawi et al (2000)** studied 33 children with chronic hemolytic anemia and 110 children without known physical or psychiatric illness, and he reported that by using the arabic version of Conner's parent-teacher rating scale, the behavioral problems are present in 30.3% (10/33) of children with chronic hemolytic anemia and 13.6% (15/110) of the controls with significant difference between them. In another study done on 74 medically referred patients to psychiatric clinics, **Haggag et al (2000)** found that 13.51% (10/74) have dissociative disorders, 12.16% (9/74) are dependent personality, 10.81% (6/74) are histrionic personality and 4.05% (3/74) are anankastic personality. 6.76% (5/74) have non-organic sexual dysfunction and 4.05% (3/74) have non-organic sleep disorders according to ICD 10. **Magda et al (2000)** collected 250 children from the pediatric clinic of Suez Canal University Hospital, and she found that 4% (10/250) have nocturnal enuresis, 2.4% (6/250) have attention deficit hyperactivity disorder (ADHD), 2% (5/250) have conduct disorder, 1.2% (3/250) have stuttering according to DSM IV.

Table 7: Prevalence of psychiatric disorders in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Kashaba et al (1997)	1006 children coming as outpatients in pediatric clinic	Pediatric outpatient clinic in Zagazig University Hospital	Psychiatric interview (DSM IV)	4.7% have nocturnal enuresis and 2.4% have conduct disorder
El-Defrawi et al (2000)	33 children with chronic hemolytic anemia	Outpatient clinics of Port Said and Port Fouad General Hospitals	arabic version of Conner's parent-teacher rating scale	30.3% have behavioral problems
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	ICD-10 Symptom Checklist	13.51% have dissociative disorders, 12.16% are dependent personality, 10.81% are histrionic personality and 4.05% are anankastic personality

Magda et al (2000)	250 children attending pediatric outpatient clinic	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	4% have nocturnal enuresis, 2.4% have ADHD, 2% have conduct disorder, 1.2% have stuttering
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2. Gastrointestinal diseases:

By studying 50 gastrointestinal diseases patients collected from the internal medicine clinics (see appendix), **Abdel-Wahab (1982)** found that the prevalence of non organic gastrointestinal illnesses is 50% (25 out of 50). All the cases attending the outpatient clinic complaining of lower gastrointestinal tract such as diarrhea, constipation and abdominal colic are proved by endoscopic studies to be non-organic in origin and only few of the cases with upper gastrointestinal tract complaints such as epigastric pain, hyperacidity, and vomiting are proved to be non-organic in nature.

Table 8: Prevalence of psychiatric disorders in gastrointestinal diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Wahab (1982)	50 cases with gastrointestinal illness	clinic of internal medicine	Psychiatric interview	50% have non organic gastrointestinal illness

a. Duodenal ulcer:

By studying 100 patients with duodenal ulcer, 30 somatizers (patients complaining of symptoms simulating peptic ulcer with free endoscopic examination) and 30 controls with no known psychiatric or physical illness, **Abdel-Gawad et al (1988)** found that depression is present in 62% (62/100) of duodenal ulcer patients, 83.38% (25/30) of somatizers and 13.3% (4/30) of controls according to Beck Depression Inventory (BDI), with significant difference between duodenal ulcer patients and controls.

Table 9: Prevalence of depression in duodenal ulcer

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Gawad et al (1988)	100 duodenal ulcer patients and 30 somatizers	Not stated	BDI	depression is present in 62% of duodenal ulcer patients and 83.38% of somatizers

b. Liver disease:

By studying 30 children with chronic liver disease and 30 controls without known psychiatric or physical illness, **Kotb & Sabry (2003)** found that 40% (12/30) of hepatic children and 30% (9/30) of controls have depression according to Children Depression Inventory (CDI), without significant difference between them.

Table 10: Prevalence of depression in chronic hepatic patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Kotb & Sabry (2003)	30 children with chronic liver disease	Hepatology Clinic of the New Children's Hospital, Cairo University	CDI	40% have depression

3. Systemic Lupus Erythematosus (SLE):

By studying 50 SLE patients and 40 controls (20 with depressive disorder and 20 without known psychiatric or physical illness), **Abdel-Mawella (2007)** found that 32% (16/50) SLE patients have adjustment disorders with depressed mood, 10% (5/50) have major depressive disorders with psychotic features, 4% (2/50) have double depression, 4% (2/50) have dysthymia and 2% (1/50) has mixed anxiety depression according to DSM IV.

Table 11: Prevalence of psychiatric symptoms in SLE

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Mawella (2007)	50 SLE patients	Rheumatology and Rehabilitation clinic and department of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	32% have adjustment disorders with depressed mood, 10% major depressive disorders with psychotic features, 4% double depression, 4% dysthymia and 2% mixed anxiety depression

4. Diabetes Mellitus (DM):

By studying 48 diabetic patients (see appendix), **Omar (1984)** found that 32 out of 48 (66.67%) diabetic patients have psychiatric morbidity. **Shaker (2003)** studied 69 diabetic children and adolescents and 40 controls without known physical or psychiatric illness (see appendix). She found that 44.7% (31/69) of diabetic children and adolescents and 22.5% (9/40) of controls have psychiatric disorder with significant difference between them. In another study done on 30 children with uncontrolled Insulin Dependent Diabetic Mellitus (IDDM), 30 controlled IDDM children and 30 healthy children, **El-Aswad (2005)** found that 53.3% of uncontrolled IDDM and 10% (3/30) of controlled IDDM and 10% (3/30) of healthy children have behavioral and affective disorders with significant difference between the uncontrolled IDDM and the other two groups.

Table 12: Prevalence of psychiatric disorders in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
Omar (1984)	48 diabetic patients	outpatient clinic of diabetes mellitus in Ain Shams University Hospital	Psychiatric interview	66.67% diabetic patients have psychiatric morbidity

Shaker (2003)	69 diabetic children and adolescents	Pediatric Diabetes Clinic, Children's Hospital, Ain Shams University	Psychiatric interview	44.7% have psychiatric disorders
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	Behavior-affective scale	53.3% of uncontrolled IDDM children and 10% of controlled IDDM children have behavioral and affective disorder

Anxiety in DM:

El-Shinnawy (2001) reported that 100% of diabetic children and 10% (3/30) of controls have anxiety according to anxiety scale for children, with significant difference between them.

Table 13: Prevalence of anxiety in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Shinnawy (2001)	15 diabetic children	Pediatric clinic of Abu El-Reesh Hospital	Anxiety scale for children	100% have anxiety symptoms

Depression in DM:

By studying 80 diabetic women, **El-Mehallawy & Gad-Allah (1996)** found that 12 out of 80 (15%) diabetic patients have major depressive disorder according to DSM IV. **El-Shinnawy (2001)** reported that 53% (8/15) of diabetic children and none of the controls have depression according to CDI with significant difference between them. **Shaker (2003)** found that 22.4% (15/69) of diabetic children and adolescents versus 2.5% (1/40) of controls have depression with significant difference between them, the most common type of depression is major depression among the diabetic patients (12/69, 17.6%) and none have major depression among the controls. By studying 30 uncontrolled insulin dependent diabetic children, 30 controlled insulin dependent diabetic children and 30 healthy children, **El-Aswad (2005)** found that 60% (18/30) of uncontrolled IDDM children, 13.3% (4/30) of controlled IDDM children and 23.3% (7/30) of the healthy children have depression according to CDI, with significant difference between them.

Table 14: Prevalence of depression in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Mehallawy & Gad-Allah (1996)	80 diabetic women	Diabetic clinic of Ain Shams University Hospital	Psychiatric interview	15% have major depressive disorder
El-Shinnawy (2001)	15 diabetic children	Pediatric clinic of Abu El-Reesh Hospital	CDI	53% have depression
Shaker (2003)	69 diabetic children and adolescents	Pediatric Diabetes Clinic, Children's Hospital, Ain Shams University	Psychiatric interview	22.4% have depression, 17.6% have major depression
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CDI	60% of uncontrolled IDDM children and 13.3% of controlled IDDM children have depression

Irritability in DM:

By studying 30 uncontrolled insulin dependent diabetic children, 30 controlled insulin dependant diabetic children and 30 healthy children, **El-Aswad (2005)** found that the uncontrolled IDDM children are significantly more irritable (21/30, 70%) than the controlled IDDM (12/30, 40%) and the healthy children (14/30, 46.7%).

Table 15: Prevalence of irritability in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	Psychiatric interview	70% of uncontrolled IDDM children and 40% of controlled IDDM children are irritable

Aggression in DM:

El-Shinnawy (2001) reported that 53% (8/15) of the diabetic children have aggression according to Ain Shams scale for aggressive behaviors, compared to 3.3% (1/30) of the controls, with significant difference between them.

Table 16: Prevalence of aggression in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Shinnawy (2001)	15 diabetic children	Pediatric clinic of Abu El-Reesh Hospital	Ain Shams scale for aggressive behavior	53% have aggression

Eating disorders in DM:

By studying 40 girls with IDDM, **Hassanein (2002)** found that 29 out of 40 (72.5%) of diabetic girls have eating disorders, 40% (11/29) have atypical bulimia nervosa, 55% (16/29) have binge eating and 2.5% (1/40) have atypical anorexia nervosa.

Table 17: Prevalence of eating disorders in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
Hassanein (2002)	40 IDDM girls	Pediatric Diabetes Clinic, Children's Hospital, Ain Shams University	Eating disorder inventory, symptom checklist	72.5% have eating disorders.

Oppositional defiant disorder in DM:

Shaker (2003) found that 11.8% (8/69) of diabetic children and adolescents versus 2.5% of controls (1/40) have oppositional defiant disorder, with significant difference between them.

Table 18: Prevalence of Oppositional defiant disorders in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
Shaker (2003)	69 diabetic children and adolescents	Pediatric Diabetes Clinic, Children's Hospital, Ain Shams University	Psychiatric interview	11.8% have oppositional defiant disorder

5. Chronic renal failure:

By studying 30 children with chronic renal failure, **Abdel-Baki et al (1994)** reported that 14 out of 30 (47%) of renal failure children have depression as follows: 7 out of 15 (47%) patients with parynchymal renal diseases, 3 out of 6 (50%) patients with systemic diseases involving the kidneys and 4 out of 9 (44%) patients with obstructive renal diseases have depression according to D score for depressive scale of Kovac.

Table 19: Prevalence of depression in renal diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Baki et al (1994)	30 children with chronic renal failure	Nephrology clinic of Abu El-Reesh Hospital	D score for depressive scale of Kovac	47% have depression: 47% of patients with parynchymal renal diseases, 50% of patients with systemic diseases involving the kidneys and 44% of patients with obstructive renal diseases

6. Cardiovascular diseases:

El-Azzazy (2007) reported that 14.9% (143/957) patients attending the heart clinic of Al-Zahraa Hospital, Al-Azhar

University haven't organic heart disease and 7.9% (75/957) of the patients have panic disorders.

Table 20: Prevalence of panic disorders in cardiology outpatients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Azzazy (2007)	957 patients attending heart clinic	heart clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	7.9% have panic disorder

a. Ischemic heart disease (IHD):

By studying 90 IHD patients (30 with old and 30 with recent myocardial infarction, and 30 with angina pectoris) (see appendix), **El-Dawla (1989)** found that 35 out of the 90 (38.88%) IHD patients have psychiatric morbidity including three with psychiatric diagnoses not only symptoms according to DSM III. **El-Tantawy et al (2007)** studied 120 patients with coronary heart disease, and he found that 71 out of 120 (59.17%) of patients with coronary heart disease have psychiatric disorders. 24 out of 120 (20%) of the

coronary heart disease have comorbid psychiatric diagnoses according to DSM IV.

Table 21: Prevalence of psychiatric disorders in IHD

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Dawla (1989)	90 IHD patients	ICU of Ain Shams University Hospital	Psychiatric interview (DSM-III)	38.88% have psychiatric morbidity including three with psychiatric diagnoses not only symptoms
El-Tantawy et al (2007)	120 patients with coronary heart disease	cardiology outpatient clinic of Suez Canal University Hospital	SCID I (DSM-IV)	59.17% have psychiatric disorder, 20% have comorbid psychiatric diagnoses

Anxiety in IHD:

El-Dawla (1989) found that 15 out of 90 (16.66%) IHD patients show anxiety symptoms according to DSM III (see

appendix). **El-Tantawy et al (2007)** found that 29.17% (35/120) of patients with coronary heart disease have GAD, 14.17% (17/120) have panic disorder and 9.17% (11/120) have Post-Traumatic Stress Disorder (PTSD) according to DSM IV.

Table 22: Prevalence of anxiety in IHD

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Dawla (1989)	90 IHD patients	ICU of Ain Shams University Hospital	Psychiatric interview (DSM-III)	16.66% IHD patients show anxiety symptoms
El-Tantawy et al (2007)	120 patients with coronary heart disease	cardiology outpatient clinic of Suez Canal University Hospital	SCID I (DSM-IV)	29.17% have GAD, 14.17% have panic disorder and 9.17% have PTSD

Depression in IHD:

El-Dawla (1989) found that 2 out of 90 (2.2%) IHD patients have major depressive disorder and 17 out of 90 (18.88%) show depressive symptoms according to DSM III (see appendix). **El-Tantawy et al (2007)** reported that 27.5% (33/120) of patients with coronary heart disease have major depressive disorder and 11.67% (14/120) of the patients have dysthymic disorder according to DSM IV.

Table 23: Prevalence of depression in IHD

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Dawla (1989)	90 IHD patients	ICU of Ain Shams University Hospital	Psychiatric interview (DSM-III)	2.2% have major depressive disorder and 18.88% show depressive symptoms
El-Tantawy et al (2007)	120 patients with coronary heart disease	cardiology outpatient clinic of Suez Canal University Hospital	SCID I (DSM-IV)	27.5% have major depression and 11.67% have dysthymic disorder

Hypochondriasis in IHD:

El-Dawla (1989) reported that one out of 90 (1.1%) patients with IHD has hypochondriasis according to DSM III (see appendix).

Table 24: Prevalence of hypochondriasis in IHD

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Dawla (1989)	90 IHD patients	ICU of Ain Shams University Hospital	Psychiatric interview (DSM-III)	1.1% has hypochondriasis

Personality disorders in IHD:

El-Tantawy et al (2007) reported that 12 out of 120 (10%) of the patients with coronary heart diseases have personality disorder. 3.33% (4/120) have dependent personality disorder, 2.5% (3/120) have narcissistic personality disorder, 2.5% (3/120) have avoidant personality disorder and 1.67% (2/120) have obsessive-compulsive personality disorder according to DSM IV.

Table 25: Prevalence of personality disorders in IHD

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Tantawy et al (2007)	120 patients with coronary heart disease	cardiology outpatient clinic of Suez Canal University Hospital	SCID I (DSM-IV)	10% have personality disorder, 3.33% dependent, 2.5% narcissistic, 2.5% avoidant and 1.67% obsessive-compulsive personality disorder

b. Cardiac valvular diseases:

By studying 100 children with rheumatic heart and 30 controls with acute febrile illness as tonsillitis, pharyngitis, **Abdel-Aal et al (1995)** found that the rheumatic heart children having nocturnal enuresis (38%) and those having sleep disturbances (61%), are significantly higher than the controls (1/30, 3.3% have nocturnal enuresis and 2/30, 6.7% have sleep disturbance), while aggression is significantly lower in rheumatic heart children (8%) than in the controls (5/30, 16.7%). **Morsy (1998)** studied 50 cardiac patients (mitral and aortic valves stenosis, mitral and aortic valve regurge and tricuspid stenosis) with age range 16-60 years old, undergoing cardiac surgery (mitral, aortic and tricuspid valve replacement), He found that 3 out of 50 (6%) cardiac patients have

major depressive disorder, 1 out of 50 (2%) has substance induced mood disorder and 1 out of 50 (2%) has bipolar affective disorder (single manic episode) according to DSM IV. In another study done on 15 cardiac children and 30 controls without known physical or psychiatric illness, **El-Shinnawy (2001)** reported that 100% of cardiac children have anxiety symptoms which is significantly higher than controls (3/30, 10%) by anxiety scale for children, and 60% (9/15) of cardiac children have depression on CDI, significantly higher than controls (nil).

Table 26: Prevalence of psychiatric disorders in cardiac valvular diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Aal et al (1995)	100 children with rheumatic heart	Pediatric clinic-Assiut University Hospital	Specially designed questionnaire	38% have nocturnal enuresis, 61% have sleep disorder
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	Psychiatric interview (DSM IV)	6% have major depressive disorder, 2% substance induced mood disorder and 2% bipolar affective disorder

El-Shinnawy (2001)	15 cardiac children	Pediatric clinic-Abu El Reesh Hospital	Anxiety scale for children, CDI	100% have anxiety and 60% have depression
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c. Congenital heart diseases:

By studying 25 children with congenital heart disease and 110 children without known physical or psychiatric illness, **El-Defrawi et al (2000)** found that 6 out of 25 (24%) children with congenital heart disease and 15 out of 110 (13.6%) controls have behavioral problems according to the arabic version of Conner's parent-teacher rating scale without significant difference between them.

Table 27: Prevalence of psychiatric disorders in congenital heart diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Defrawi et al (2000)	25 children with congenital heart disease	Outpatient clinics of Port Said and Port Fouad General Hospitals	arabic version of Conner's parent-teacher rating scale	24% have behavioral problems

7. Respiratory diseases:

By studying 52 children with bronchial asthma and 110 children without known physical or psychiatric illness, **El-Defrawi et al (2000)** found that 15 out of 52 (28.8%) asthmatic children and 15 out of 110 (13.6%) controls have behavioral problems according to the arabic version of Conner's parent-teacher rating scale, without significant difference between them. By studying 15 chest diseases children and 30 controls without known physical or psychiatric illness, **El-Shinnawy (2001)** found that 100% of chest diseases children have anxiety symptoms according to anxiety scale for children which is significantly more common than controls (3/30, 10%), also he reported that 53% (8/15) of children with chest diseases have aggression according to Ain Shams scale for aggressive behavior which is significantly more common than the controls (1/30, 3.3%). In another study done on 172 asthmatic children and 87 controls without known psychiatric and physical illness, **Essawy et al (2005)** reported that 10 out of 172 (5.8%) of asthmatic children have depression according to John Hopkins Depression Checklist. It is non-significantly higher than the controls (1/87, 1.1%). In another study done on 1079 patients attending the chest clinic of Al-Zahraa Hospital, Al-Azhar University, **El-Azzazy (2007)** found that 12% (130/1079) of the patients attending the chest-clinic of AL-Zahraa hospital (AL-

Azhar university hospital) haven't organic chest illness and 6.95% (75/1079) of the chest-clinic patients have panic disorders.

Table 28: Prevalence of psychiatric disorders in respiratory diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Defrawi et al (2000)	52 children with bronchial asthma	Outpatient clinics of Port Said and Port Fouad General Hospitals	arabic version of Conner's parent-teacher rating scale	28.8% have behavioral problems
El-Shinnawy (2001)	15 chest diseases children	Pediatric clinic of Abu El-Reesh Hospital	Anxiety scale for children, Ain Shams scale for aggressive behavior	100% and 53% have anxiety symptoms and aggression respectively
Essawy et al (2005)	172 asmathic children	Pediatric clinic Ain Shams University Hospital	John Hokins Depression Scale	5.8% have depression
El-Azzazy (2007)	1079 patients attending chest clinic	chest clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	6.95% have panic disorder

8. Neurological diseases:

By studying 90 neurologically ill patients (51 cerebral diseases and 39 peripheral diseases) (see appendix 1), **Derias (1984)** found that 34 out of 90 neurologically ill patients (37.7%) have emotional disorders, according to the General Health Questionnaire (GHQ) [32/51 (62.74%) with cerebral illness and 2/39 (5.13%) with peripheral illness]. The commonest subjective emotional disorders are depression (12/90, 13.33%), irritability (11/90, 12.22%), lack of concentration (11/90, 12.22%) sleep disorder (10/90, 11.11%) and anxiety (5/90, 5.55%), while the objective emotional disorders found in this study are depression (12/90, 13.33%), intellectual impairment (12/90, 13.33%), anxiety (11/90, 12.22%), lack of spontaneity (5/90 patients, 5.55%) and thought disorders and delusions (4/90 patients, 4.44%).

Table 29: Prevalence of psychiatric symptoms in neurological disorders

Author/s	Sample	Site	Diagnostic tools	Prevalence
Derias (1984)	90 neurologically ill patients (51 cerebral diseases and 39 peripheral diseases)	Neurological ward, Ain Shams University Hospitals	GHQ	37.7% have emotional disorders

a. Epilepsy:

Derias (1984) reported that 40% of the epileptic patients (4/10) have sleep disorders, and 30% of epileptic patients (3/10) are irritable according to GHQ (see appendix 1). **Saadani et al (2002)** studied 20 children with primary generalized tonic clonic seizures (GTCSs), He found that 6 out of 20 (30%) epileptic children have psychiatric disorder: 2 (10%) with major depression, 2 (10%) with dysthymia and 2 (10%) with adjustment disorder according to DSM-IV.

Table 30: Prevalence of psychiatric symptoms and diagnoses in epilepsy

Author/s	Sample	Site	Diagnostic tools	Prevalence
Derias (1984)	90 neurologically ill patients (51 cerebral diseases and 39 peripheral diseases)	Neurological ward, Ain Shams University Hospitals	GHQ	40% of the epileptic patients have sleep disorders, and 30% of epileptic patients are irritable

Saadani et al (2002)	20 children with 1ry GTCs	Not stated	Psychiatric interview (DSM IV)	30% epileptic children have psych. disorder: 10% with major depression, 10% with dysthymia and 10% with adjustment disorder
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b. Parkinsonism:

Derias (1984) reported that Parkinsonism is commonly associated with depression. In another study done on 30 cases with Parkinson's disease, **Shama (1998)** found that 17 out of 30 (56.67%) patients with Parkinson's disease presented with depression, 11 out of these 17 patients (64.71%) are diagnosed as major depression, while 6 out of the 17 patients (35.29%) are diagnosed as dysthymia according to DSM-IV.

Table 31: Prevalence of psychiatric diagnoses in Parkinsonism

Author/s	Sample	Site	Diagnostic tools	Prevalence
Shama (1998)	30 cases with Parkinson's disease	Neuropsychiatric department, Tanta University	Psychiatric interview	56.67% have depression, 64.71% of them have major depression, and 35.29% have Dysthymia

c. Brain tumours:

By studying 18 patients with brain tumours and 18 controls (see appendix 2) **Abdulghani (1981)** found that 13 out of 18 (72.2%) of the brain tumour patients show altered emotions versus 10 out of 18 (55.5%) in the controls, 1 out of 18 (5.5%) of brain tumour patients have thought disorders, 3 out of 18 (16.7%) of the brain tumour patients show disturbed behavior, 3 out of 18 (16.7%) of the brain tumour patients have social deterioration and 1 out of 18 (5.5%) of the patients have hallucinations.

Table 32: Prevalence of psychiatric symptoms in brain tumour

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdulghani (1981)	18 patients with brain tumours	Neuropsychiatric department, Ain Shams hospital	Psychiatric interview	72.2% show altered emotions, 5.5% have thought disorders, 16.7% show disturbed behavior, 16.7% have social deterioration and 5.5% have hallucinations

d. Cerebrovascular stroke:

Post-stroke depression:

Derias (1984) reported that 4 out of 8 (50%) of the right hemiplegic patients have depression according to GHQ (see appendix 1). By studying 103 patients with cerebrovascular stroke and 50 controls without known physical or psychiatric illness (see appendix 3) **Asaad (1992)** found that after 4 to 16 weeks from the onset of cerebrovascular stroke, 17 out of 103 patients (16.5%) develop major depression, while 20 out of 103 (19.41%) develop dysthymia according to DSM III, which means that 7 out of 103 patients (35.9%) develop post-stroke depression whether major or

minor. In another study done on 30 patients with cerebrovascular stroke and 15 controls without known physical or psychiatric illness (see appendix 4), **Hassan (2002)** found that 20% (6 out of 30) of the cerebrovascular stroke patients develop depression according to ICD-10.

Table 33: Prevalence of post-stroke depression

Author/s	Sample	Site	Diagnostic tools	Prevalence
Derias (1984)	90 neurologically ill patients (51 cerebral diseases and 39 peripheral diseases)	Neurological ward, Ain Shams University Hospitals	GHQ	50% of the right hemiplegic patients have depression
Asaad (1992)	103 patients with cerebrovascular stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	SCID based on DSM III	35.9% have depression, 16.5% major depression, and 19.41% Dysthymia
Hassan (2002)	30 patients with cerebrovascular stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	ICD-10 symptom checklist	20% develop depression

Post-stroke mania:

Asaad (1992) reported that after 4 to 6 weeks from the onset of cerebrovascular stroke, manic or hypomanic syndromes develops in 5 out of 103 of the patients (4.85%) according to DSM III.

Table 34: Prevalence of post-stroke mania

Author/s	Sample	Site	Diagnostic tools	Prevalence
Asaad (1992)	103 patients with cerebrovascular stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	SCID based on DSM III	4.85% develop manic or hypomanic syndromes

Post-stroke anxiety:

Asaad (1992) reported that after 4 to 12 weeks from the onset of cerebrovascular stroke, anxiety disorders develop in 18 out of 103 patients (17.47%) according to DSM III. The most common anxiety disorder found following cerebrovascular accidents is generalized anxiety disorder (6/103, 5.8%), followed by agoraphobia (3/103,

2.9%). In another study done by **Hassan (2002)**, he found that 43.6% (13 out of 30) of the cerebrovascular stroke patients develop anxiety disorder, 53.7% (7 out of 13) among them have GAD, while 46.3%(6 out of 13) have agoraphobia according to ICD-10.

Asaad (1992), in his study, emphasizes a significant link between anxiety symptoms and depressive symptoms as 9 patient out of 103(8.73%) fulfilled the diagnostic criteria of both generalized anxiety disorder and major depression.

Table 35: Prevalence of post-stroke anxiety

Author/s	Sample	Site	Diagnostic tools	Prevalence
Asaad (1992)	103 patients with cerebrovascular stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	SCID based on DSM III	17.47% develop anxiety
Hassan (2002)	30 patients with cerebrovascular stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	ICD-10 symptom checklist	43.6% develop anxiety disorder, 53.7% have GAD, while 46.3% among them have agoraphobia

Non-affective psychoses following stroke:

Asaad (1992) reported that after 4 to 7 weeks from the onset of cerebrovascular stroke, 7 patients out of 103 (6.79%) develop psychotic features, 3 of them (45.82%) have major depression with psychotic features (mood congruent or incongruent).

Table 36: Prevalence of non-affective psychoses following stroke

Author/s	Sample	Site	Diagnostic tools	Prevalence
Asaad (1992)	103 patients with cerebrovascular stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	SCID based on DSM III	6.79% develop psychotic features, 45.82% of them have major depression with psychotic features

e. Multiple Sclerosis (MS):

El-Gamel (1995), by studying 20 MS patients, found that 50% (10/20) of MS patients have depressed mood, 40% (8/20) have sleep disturbance, 35% (7/20) have decreased appetite, 30% (6/20)

complain of fear, 20% (4/20) have suicidal thoughts and 10% (2/20) have hallucinations and delusions.

Table 37: Prevalence of psychiatric symptoms in MS patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	Psychiatric interview	50% have depressed mood, 35% decreased appetite, 40% sleep disturbance

Depression in MS patients:

By studying 20 MS patients, **El-Gamel (1995)** found that 7 out of 20 (35%) MS patients have major depression and 2 out of 20 (10%) MS patients have dysthymia according to DSM III. In another study done on 31 MS patients (16 of relapsing remittant type and 15 of secondary progressive type), **Fat-hy (2004)** found that 13 out of 31 (41.86%) MS patients develop depression according to BDI, versus 3 out of 20 (15%) controls.

Table 38: Prevalence of depression in MS patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	Psychiatric interview	35% MS patients have major depression and 10% MS patients have Dysthymia
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	BDI	41.86% MS patients develop depression

Anxiety in MS patients:

By studying 20 MS patients, **El-Gamel (1995)** found that 3 out of 20 (15%) MS patients have generalized anxiety according to DSM III. **Fat-hy (2004)** studied 31 multiple sclerotic patients (16 of relapsing remittant type and 15 of secondary progressive type). He found that 4 out of 31 (12.88%) MS patients have anxiety by Hamilton Anxiety Scale (HAS) versus 1 out of 20 (5%) controls.

Table 39: Prevalence of anxiety in MS patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	Psychiatric interview	15% MS patients have generalized anxiety
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	HAS	12.88% MS patients have anxiety

f. Brain trauma:

By studying 36 patients with mild traumatic brain injury, **Fahmy et al (2001)** found that three months after mild traumatic brain injury 21/36 (58.3%) have psychiatric disorder and 3/36 (8.4%) show comorbid psychiatric diagnoses according to ICD-10. 28.2% (11/36) of patients with mild brain trauma have Acute Stress Disorder (ASD), 16.7% (6/36) develop PTSD, 22.2% (8/36) have depression, 13.9% (5/36) have mixed anxiety-depression, 8.3% (3/36) have GAD and 5.6% (2/36) have panic disorder.

Table 40: Prevalence of psychiatric diagnoses in brain trauma

Author/s	Sample	Site	Diagnostic tools	Prevalence
Fahmy et al (2001)	36 patients with mild traumatic brain injury	emergency department of Suez Canal University Hospital	ICD-10 symptom checklist	58.3% have psychiatric morbidity, 28.2% acute stress disorder, 16.7% PTSD, 22.2% depression and 13.9% mixed anxiety-depression. 8.3% GAD and 5.6% panic disorder

g. Migraine:

By studying 20 children with migraine, **Saadani et al (2002)** found that 7 out of 20 (35%) children with migraine have psychiatric disorder distributed as follows: one (5%) has major depression, 2 (10%) have dysthymia and 4 (20%) have adjustment disorder according to DSM-IV.

Table 41: Prevalence of psychiatric diagnoses in migraine

Author/s	Sample	Site	Diagnostic tools	Prevalence
Saadani et al (2002)	20 children with primary generalized tonic clonic seizures	Not stated	Psychiatric interview (DSM-IV)	35% have psychiatric disorders as follows: 5% with major depression, 10% with dysthymia and 20% with adjustment disorder

B. Dermatological diseases:**1. Alopecia areata**

By studying 53 patients having alopecia areata (see appendix), **Mahmoud (1997)** found that 20 out of 53 (37.7%) patients with alopecia areata have anxiety and depression, according to DSM III.

Table 42: Prevalence of psychiatric disorders in alopecia areata

Author/s	Sample	Site	Diagnostic tools	Prevalence
Mahmoud (1997)	53 patients with alopecia areata	outpatient dermatologic clinic of El-Mattaria general hospital	Psychiatric interview (DSM IV)	37.7% have anxiety depression

2. Generalized hair fall

By studying 21 patients having generalized hair loss (see appendix), **Mahmoud (1997)** found that 10 out of 21 (47.6%) patients with generalized hair fall have anxiety and depression. 1 out of the 21 (4.76%) patients with generalized hair fall has depression only according to DSM III.

Table 43: Prevalence of psychiatric disorders in generalized hair loss

Author/s	Sample	Site	Diagnostic tools	Prevalence
Mahmoud (1997)	21 patients with generalized hair fall	outpatient dermatologic clinic of El-Mattaria general hospital	Psychiatric interview (DSM IV)	41.8% have psychiatric morbidity

C. Phoniatic problems:

By studying 39 patients complaining of hearing defects (see appendix), **Morsi (1984)** found that 11 out of 39 (28.2%) patients complaining of hearing defects have psychiatric symptoms [7/39 (17.94%) have depressive symptoms, 3/39 (7.69%) have anxiety symptoms and 1/39 (2.56%) case has obsessive symptoms].

Table 44: Prevalence of psychiatric symptoms in Phoniatic problems

Author/s	Sample	Site	Diagnostic tools	Prevalence
Morsi (1984)	39 patients with hearing defects	audiology clinic in Ain Shams University Hospital	Psychiatric interview	28.2% have psychiatric symptoms (17.94% depressive symptoms, 7.69% anxiety symptoms and 2.56% obsessive symptoms)

D. Infertility:

By studying 107 infertile women and 100 fertile controls (see appendix) **Radwan (2007)** found that 62 out of 107(57.9% of infertile females have psychiatric disorders (DSM IV TR) in comparison to 28% (28/100) only in fertile females.

Anxiety disorders in infertile women:

El-Defrawi & Lotfi (1992) studied 78 patients with primary infertility, 55 patients with secondary infertility and 50 controls from routine-care gynecology patients. They found that 51 out of 78

(65.4%) primary infertile patients have anxiety which is significantly higher than controls (6/50, 12%) and 10 out of 55 (8.2%) secondary infertile patients have anxiety according to Manifest Anxiety Scale (MAS) with non significant difference with the controls, **Radwan (2007)** reported that anxiety disorders according to DSM IV are the most frequent diagnosis in infertile females reaching 19.6% (21 out of 107) while reaching 11% in fertile controls. GAD is the most prevalent diagnosis reaching 25.2% (27 out of 107) in the infertile females and 12% in the fertile controls, followed by social phobia, 20 out of 107(18.7%) infertile females and 8% of fertile controls. 9 out of 107 (8.4%) the infertile females have agoraphobia without panic while nil in the fertile controls.

Table 45: Prevalence of anxiety disorders in infertile women

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Defrawi & Lotfi (1992)	78 1ry infertile patients, 55 2dry infertile patients	Gynecologic clinic in Suez General Hospital	MAS	65.4% of 1ry infertile patients have anxiety and 8.2% of 2ry infertile patients have anxiety

Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM-IV TR)	19.6% have anxiety disorders, 25.2% GAD, 18.7% social phobia, 8.4% agoraphobia
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Mood disorders in infertile women:

By studying 78 patients with primary infertility, 55 patients with secondary infertility and 50 controls from routine-care gynecology patients, **El-Defrawi & Lotfi (1992)** found that 40 of 78 (51.3%) primary infertile patients have depression which is significantly higher than controls (5/50, 10%) and 15 out of 55 (27.3%) secondary infertile patients have depression according to BDI, which has insignificant difference with the controls, **Radwan (2007)** found that mood disorders are present in 19 out of 107 in infertile females (17.8%) while only in 10% of fertile females. Dysthymia shows significant higher prevalence among infertile females (29 out of 107, 27.1%) than among fertile females (14%) and 17 out of 107 (15.9%) of infertile females have major depressive disorder (DSM IV) in comparison to 7% of the fertile females. 17 out of 107 (15.9%) infertile females have comorbid diagnoses

(mood and anxiety disorders) in comparison to 7% of the fertile controls.

Table 46: Prevalence of mood disorders in women

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Defrawi & Lotfi (1992)	78 1ry infertile patients, 55 2dry infertile patients	Gynecologic clinic in Suez General Hospital	BDI	51.3% of 1ry infertile patients, 27.3% of 2ry infertile patients and 10% of controls have depression
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the ART Unit. Ain Shams University Hospitals	SCID I (DSM IV TR)	17.8% have mood disorders, 27.1% dysthymia and 15.9% major depression

Personality disorders in infertile women:

Radwan (2007) reported that the infertile ladies have a significant higher prevalence of personality disorders (64 out of 107, 59.9%) than fertile women (47.0%). The most frequent personality cluster among infertile females is cluster C (19 out of 107, 17.7%) followed by cluster D (15 out of 107, 14%), then cluster A (14 out

of 107, 13.1%) personalities and lastly cluster B (8 out of 107, 7.5%) while the mixed personality disorders represent (8 out of 107, 7.4%). The most frequent personality disorders among the infertile ladies are avoidant (15 out of 107, 14%) then depressive (14 out of 107, 13%) then paranoid (13 out of 107, 12.2%) personality disorders which show statistically significant difference when compared with fertile controls. When taking into consideration the subthreshold personality traits, dependent, histrionic and antisocial personality traits are exhibited more among infertility patients group.

Table 47: Prevalence of personality disorders in infertile women

Author/s	Sample	Site	Diagnostic tools	Prevalence
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID II (DSM IV)	14% avoidant, 13% depressive, 12.2% paranoid personality disorders

E. Burn:

By studying 30 female patients 2 weeks after burn incident of 3rd or 4th degree and 20 controls without known physical or psychiatric illness, **Abdel-Hameed (1996)** found that 12 out of 30 (40%) burn females have psychiatric disorders according to DSM-IV. In another study done on 50 burn patients (30 acute and 20 chronic) and 30 controls without known physical or psychiatric illness, **Kandil et al (1998)** found that 9 out of 50 (18%) burn patients have preburn psychiatric disorders and 32 out of 50 (64%) have postburn psychiatric disorders according to DSM IV.

Table 48: Prevalence of psychiatric disorders in burn patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	Psychiatric interview (DSM-IV)	40% have psychiatric disorders
Kandil et al (1998)	50 burn patients	Not stated	Psychiatric interview (DSM-IV)	18% have preburn psychiatric disorders and 64% have postburn psychiatric disorders

Mood disorders in burn patients:

By studying 60 patients with acute burns (between their 2nd and 21st day of injury), 40 patients with chronic burn (at least 6 months after the injury) and 50 orthopedic patients as controls, **Attia (1991)** found that 25% (15/60) of acute cases of burn injuries develop mood disorder: 7% (4/60) have major depression, 13% (8/60) have dysthymia and 3% (2/60) have schizoaffective, manic disorder. In chronic cases, 35% (14/40) develop mood disorders: 15% (6/40) have major depression, 20% (8/40) have dysthymia according to DSM III. In another study done on 30 burn females, **Abdel-Hameed (1996)** found that 8 out of 30 (26.7%) burn females have depression as follows: 5 (16.7%) have major depression without psychotic features, 1 (3.3%) has major depression with psychotic features and 2 (6.7%) have dysthymia according to DSM-IV. In another study done on 50 burn patients, **Kandil et al (1998)** found that the commonest preburn psychiatric disorders is mood disorder (5 out of 50 burn patients, 10%): 3 (6%) have major depression, and 2 (4%) have dysthymia. As regards the post burn psychiatric illness, mood disorders is found in 10 out of 50 burn patients (20%), it includes 5 (10%) major depression, and 5 (10%) dysthymia, according to DSM IV.

Table 49: Prevalence of mood disorders in burn patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Attia (1991)	60 acute burns patients, 40 chronic burn patients	Burn unit of AlAzhar university hospital	Psychiatric interview (DSM-III)	25% of acute cases have mood disorder: 7% major depression, 13% dysthymia and 3% schizoaffective, manic disorder. 35% of chronic cases have mood disorders: 15% major depression, 20% dysthymia
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	Psychiatric interview (DSM-IV)	26.7% burn females have depression: 16.7% major depression without psychotic features, 3.3% major depression with psychotic features and 6.7% dysthymia
Kandil et al (1998)	50 burn patients	Not stated	Psychiatric interview (DSM-IV)	10% have preburn mood disorder: (6% major depression and 4% dysthymia). 20% have postburn mood disorders (10% major depression and 10% dysthymia)

Anxiety disorders in burn patients:

Attia (1991) found that 25% (15/60) of acute cases of burn injuries develop PTSD. In chronic cases, 10% (4/40) develop GAD, 5% (2/40) develop PTSD, and 2% (1/40) develop panic disorder according to DSM III. **Abdel-Hameed (1996)** reported that 6.7% (2/30) of burn females have acute stress disorder and 3.3% (1/30) of burn females has mixed anxiety depression according to DSM-IV. In another study done by **Kandil et al (1998)**, he found that the most common post burn psychiatric illness is PTSD (14/50 burn patients, 28%) and 4% (2/50) of burn patients have postburn panic disorder, according to DSM IV.

Table 50: Prevalence of anxiety disorders in burn patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Attia (1991)	60 acute burns patients, 40 chronic burn patients	Burn unit of AlAzhar university hospital	Psychiatric interview	in acute cases: 25% PTSD, in chronic cases, 10% GAD, 5% PTSD, and 2% panic disorder

Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	Psychiatric interview	6.7% have acute stress disorder and 3.3% have mixed anxiety depression
Kandil et al (1998)	50 burned cases	Not stated	Psychiatric interview	28% have postburn PTSD and 4% have postburn panic disorder

Adjustment disorders in burn patients:

Attia (1991) found that 5% (3/60) of acute burn patients develop adjustment disorder and 5% (2/40) of chronic burn patients develop adjustment disorder with depressed mood according to DSM III. In another study, **Kandil et al (1998)** found that 12% (6/50) of burn patients develop post burn adjustment disorder, according to DSM IV.

Table 51: Prevalence of adjustment disorders in burn patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Attia (1991)	60 acute burns patients, 40 chronic burn patients	Burn unit of AlAzhar university hospital	Psychiatric interview (DSM-III)	5% of acute cases and 5% of chronic cases have adjustment disorder
Kandil et al (1998)	50 burned patients	Not stated	Psychiatric interview (DSM-IV)	12% have postburn adjustment disorder

Schizophrenia in burn patients:

Attia (1991) found that 5% (3/60) of acute burn patients have schizophrenia according to DSM III.

Table 52: Prevalence of schizophrenia in burn patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Attia (1991)	60 acute burns patients, 40 chronic burn patients	Burn unit of AlAzhar university hospital	Psychiatric interview (DSM-III)	5% have schizophrenia

Delirium in burn patients:

Attia (1991) found that 10% (6/60) of acute burn patients have delirium according to DSM III. **Abdel-Hameed (1996)** found that 3.3% (1/30) of burn females have delirium according to DSM-IV.

Table 53: Prevalence of delirium in burn patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Attia (1991)	60 acute burns patients, 40 chronic burn patients	Burn unit of AlAzhar university hospital	Psychiatric interview (DSM-III)	10% have delirium
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	Psychiatric interview (DSM-IV)	3.3% have delirium

F. Malignant diseases:

Kamal (1997) studied 40 cancer pain patients (13 breast cancer, 9 cancer bladder, 7 cancer colon, 2 skin cancer, 3 leukemia, 2 hemangioblastomas, 2 cancer rectum, 1 cancer parotid and 1 bone malignancy). He reported that 19 out of 40 (47.5%) cancer pain patients have adjustment disorder with depression, 2 out of 40 (5%) have adjustment disorder with anxiety, 3 out of 40 (7.5%) have adjustment disorder with anxiety and depression and 5 out of 40 (12.5%) cancer pain patients have major depression according to DSM IV. In another study done on 50 children having malignant diseases (25 first time diagnosed and 25 long-term diagnosed) 22/50 diagnosed leukemias, 12/50 lymphomas and 7/50 other cancers (osteosarcoma, medulloblastoma, Ewing sarcoma, soft tissue sarcoma, Wilm's tumour, Neurofibrosarcoma, Rhabdomyosarcoma), **Habib (2000)** found that 28 out of 50 (56%) cancer children have psychiatric morbidity according to DSM-IV, the most frequent diagnosis is adjustment disorder (19/50, 38% of cancer children) followed by PTSD (8/50, 16%) then major depression (1/50, 2%). There is no significant difference between newly and long-term diagnosed cancer children. 90% (45/50) of cancer patients have an abnormal distress according to cancer-related distress (Holland, 1997), Subsyndromal anxiety or depression (17/50, 34%), reactive anxiety (8/50, 16%), situational anxiety (7/50, 14%) and finally major depression (1/50, 2%). There

is no significant difference between newly and long-term diagnosed cancer children according to Holland, 1997, classification of cancer-related distress.

Table 54: Prevalence of psychiatric disorders in patients with malignant diseases

Author/s	Sample	Site	Diagnostic tools	Prevalence
Kamal (1997)	40 cancer pain patients	National cancer institute	Psychiatric interview (DSM-IV)	47.5% have adjustment disorder with depression, 5% adjustment disorder with anxiety, 7.5% adjustment disorder with anxiety and depression and 12.5% major depression
Habib (2000)	50 children having malignant diseases	National Cancer Institute	Psychiatric interview (DSM-IV)	56% have psychiatric disorders: 38% adjustment disorder, 16% PTSD, 2% major depression

1. Lymphoblastic leukemia:

By studying 103 children with acute lymphoblastic leukemia (see appendix), **El-Shahawy (2001)** found that 61 out of 103 (59%) leukemic children have psychiatric disorders, the most common diagnosis is adjustment disorder (15%, 9/61), followed by depressive disorder (11.4%, 7/61) according to ICD-10.

Table 55: Prevalence of psychiatric disorders in children with lymphoblastic leukemia

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Shahawy (2001)	103 children with acute lymphoblastic leukemia	Hematology /oncology clinic in children Hospital, Ain Shams University	Semi-structured questionnaire according to ICD-10	59% have psychiatric disorders

2. Breast cancer:

By studying 20 females with breast cancer, 20 females with benign breast diseases and 20 controls without known physical or psychiatric illness (see appendix), **El-Hennawy (1999)** found that 65% (13/20) of patients with breast cancer have psychiatric disorder according to ICD-10, as compared to 25% (5/20) of patients with benign breast diseases and 10% (2/20) of controls with no

statistically significant difference. The prevalence of the psychiatric symptoms is found to be significantly higher in breast cancer patients (80%, 16/20) than in benign breast diseases patients (40%, 8/20) and controls (30%, 6/20). There is a significant difference between breast cancer patients, patients with benign breast diseases and controls in loss of libido (70%, 14/20 and 15%, 3/20 and 20%, 4/20 respectively), in persistent somatic complains (70%, 14/20 and 10%, 2/20 and 20%, 4/20 respectively), in depressed mood (55%, 11/20 and 20%, 4/20 and 20%, 4/20 respectively), in sleep troubles (55%, 11/20 and 15%, 3/20 and 10%, 2/20 respectively) in fears and worries (45%, 9/20 and 10%, 2/20 and 5%, 1/20 respectively) and eating problems (40%, 8/20 and 10%, 2/20 and 5%, 1/20 respectively). In another study on 100 breast cancer female patients (see appendix), **El-Serafi (2008)** found that 96% of the breast cancer patients have psychiatric morbidity according to DSM IV.

Table 56: Prevalence of psychiatric disorders in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Hennawy (1999)	20 breast cancer females	Not stated	ICD-10 symptom checklist	65% of breast cancer patients, 25% of patients with benign breast diseases have psychiatric disorder

El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	96% of the breast cancer patients have psychiatric morbidity
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Adjustment disorder in breast cancer patients:

El-Hennawy (1999) found that 30% (6/20) of breast cancer patients have adjustment disorder according to ICD-10, compared to 15% (3/20) of patients with benign breast diseases and none of the controls, with no statistically significant difference. **Fahmy et al (2000)** studied 25 breast cancer female patients. She found that 10 out of 25 breast cancer patients (40%) have adjustment disorder, chronic, with mixed anxiety and depressed mood according to DSM-IV. In a study done by **Allam (2003)** on 40 patients with breast cancer and 20 controls without known physical or psychiatric illness (see appendix), he found that 7 out of 40 (17.5%) breast cancer patients have adjustment disorder according to DSM IV by using SCID I, which is significantly higher than controls (nil). **El-Serafi (2008)** found that 21% of breast cancer females have adjustment disorder, whether the depressive type (18%) or the anxiety type (3%) according to DSM IV.

Table 57: Prevalence of adjustment disorder in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Hennawy (1999)	20 breast cancer females	Not stated	ICD-10 symptom checklist	30% have adjustment disorder
Fahmy et al (2000)	25 breast cancer females	Health Insurance oncology outpatient clinic at Port Said	Psychiatric interview (DSM-IV)	40% have adjustment disorder
Allam (2003)	40 breast cancer patients	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	SCID I	17.5% have adjustment disorder
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	21% have adjustment disorder: 18% depressive type and 3% anxiety type

Anxiety disorders in breast cancer patients:

El-Hennawy (1999) found that 15% (3/20) of breast cancer patients have anxiety disorder according to ICD-10, compared to

5% (1/20) of benign breast diseases patients and none of the controls with no statistically significant difference. **Fahmy et al (2000)** found that according to DSM-IV 2 out of 25 breast cancer patients (8%) have PTSD. In a study by **Allam (2003)**, he found that 28 out of 40 (70%) breast cancer patients have Anxiety whereas in the controls only 2 out of 20 (10%) have anxiety according to DSM IV by using SCID I, which is statistically significant (see appendix). **El-Serafi (2008)** found that 25% of the breast cancer patients have anxiety disorders and 15% of the patients have anxiety with co-morbid depression according to DSM IV. Among the anxiety disorders, PTSD is found in 13% of the breast cancer patients. GAD comes then in a rate of 7%. Panic disorder is diagnosed in 4%. The anxiety disorders are found more frequently in the early post-operative group (37/75, 49.3%) than in the recurrent group (6/25, 24%).

Table 58: Prevalence of anxiety disorder in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Hennawy (1999)	20 breast cancer females	Not stated	ICD-10 symptom checklist	15% have anxiety disorder

Fahmy et al (2000)	25 breast cancer females	Health Insurance oncology outpatient clinic at Port Said	Psychiatric interview	8% have PTSD
Allam (2003)	40 breast cancer patients	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	SCID I	10% have anxiety
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	25% have anxiety disorders: 13% PTSD, 7% GAD, 4% panic disorder

Obsessive Compulsive Disorder (OCD) in breast cancer patients:

El-Hennawy (1999) found that 5% (1/20) of breast cancer patients have OCD, compared to 5% of benign breast diseases patients and none of the controls, with no statistically significant difference.

Table 59: Prevalence of OCD in breast cancer

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Hennawy (1999)	20 breast cancer females	Not stated	ICD-10 symptom checklist	5% have OCD

Affective disorders in breast cancer patients:

El-Hennawy (1999) found that 15% (3/20) of breast cancer patients have affective disorder according to ICD-10 while no patients with benign breast diseases and no controls show affective disorder with no statistically significant difference. In a study by **Allam (2003)**, he found that the prevalence of major depressive disorder among breast cancer patients is 42.5% (17 cases out of 40), which is significantly higher than controls (2/20, 10%) according to DSM IV. 14 out of the 17 depressed patients show comorbid anxiety (see appendix). **El-Serafi (2008)** found that 32% of the breast cancer females have mood disorders according to DSM IV, major depressive disorder is found in 24% and dysthymic disorder in 8%. The recurrent stage of breast cancer shows more frequent mood disorder diagnosis (19/25 of recurrent group, 76%) than in the early post-operative group of breast cancer patients (34/75, 45.3%).

Table 60: Prevalence of affective disorder in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Hennawy (1999)	20 breast cancer females	Not stated	ICD-10 symptom checklist	15% have affective disorder

Allam (2003)	40 breast cancer patients	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	SCID I	42.5% have major depressive disorder
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	32% have mood disorders: 24% major depression, and 8% dysthymia

Personality profile and disorders in breast cancer patients;

El-Serafi (2008) reported that the most frequent personality cluster among breast cancer patients group is cluster C (34%) followed by cluster B (23%), then cluster D (16%) personalities and lastly cluster A (12%) while the mixed personality disorders represent 5% according to DSM IV. The most frequent personality disorders are avoidant, obsessive and histrionic personality disorders (each diagnosis represents 12% of the breast cancer patients). Dependant personality disorder comes after (10%).

Table 61: Prevalence of personality disorder in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID II	avoidant, obsessive and histrionic personality disorders represent each 12% of the patients, 10% have dependant personality disorder

ii. Age distribution

A. Medical diseases:

1. General medical diseases:

By studying 174 child having psychiatric disorders collected from the pediatric clinic of Zagazig Univesity Hospital, **Kashaba et al (1997)** found that most of the children with psychiatric disorders (84/174, 48%) present in the age group 7-10 years followed by the

age group 10-12 years (56/174, 32%) then the age group 12-14 years (34/174, 20%). In another study done on 37 child having psychiatric disorders attending the pediatric clinic of Suez Canal University Hospital, **Magda et al (2000)** found that most of the children with psychiatric disorders (15/37, 40.5%) present in the age group 8-10 years, followed by the age group 6-8 years (12/37, 32.4%) then the age group 10-12 years (10/37, 27%). By studying 400 medically ill patients having psychiatric morbidity and 100 medically ill patients without psychiatric disorders with mean age 42.42 ± 13.8 , **El-Gamal (2001)** found no significant relation between the age and the psychiatric morbidity in medically ill patients. In another study done on 227 patients with panic disorders attending different medical clinics of Alazhar University Hospital (75 from chest clinic outpatients, 75 from heart clinic outpatients and 77 from general medicine outpatients), **El-Azzazy (2007)** reported that most cases of panic disorders (82/227, 36.1%) are in the age group 36-45 years, followed by the age group 15-25 years (52/227, 22.9%) then the age group 46-55 years (19.4%).

Table 62: Age distribution among medically ill patients with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
Kashaba et al (1997)	174 child medical outpatient with psych. disorders	Pediatric outpatient clinic in Zagazig University Hospital	Psychiatric interview (DSM IV)	48% present in the age group 7-10 years followed by the age group 10-12 years (32%) then the age group 12-14 years (20%)
Magda et al (2000)	37 child medical outpatient with psych. disorder	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	40.5% present in the age group 8-10 years, followed by the age group 6-8 years (32.4%) then the age group 10-12 years (27%)
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	no significant relation between the age and the psychiatric morbidity

El-Azzazy (2007)	227 patients with panic disorders attending different medical clinic	Chest, heart & general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	36.1% are in the age group 36-45 years, followed by the age group 15-25 years (22.9%) then the age group 46-55 years (19.4%)
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2. Diabetes Mellitus (DM):

By studying 80 diabetic women with age range 30-65 years old, **El-Mahallawy & Gad-Allah (1996)** reported that the mean age of depressed diabetic patients is 43.5 ± 7.9 and that of non-depressed diabetic patients is 44.1 ± 6.94 without significant difference between them.

Table 63: The mean age of depressed diabetic women

Author/s	Sample	Site	Diagnostic tools	Results
El-Mehallawy & Gad-Allah (1996)	80 diabetic women	Diabetic clinic of Ain Shams University Hospital	Psychiatric interview	the mean age of depressed diabetic women is 43.5 ± 7.9

3. Neurological diseases:**a. Parkinson's disease:**

By studying 17 depressed Parkinsonian patients with a mean age of 55.93 ± 2.24 , **Shama (1998)** found that the mean age of Parkinsonian patients with mild depression according to Hamilton Depression Scale (HDS) is 59.56 ± 7.63 , the mean age of patients with moderate depression is 41.25 ± 14.03 , and that of patients with severe depression is 56.5 ± 9.85 , with significant difference between them.

b. Cerebrovascular stroke:**Post-stroke Anxiety:**

By studying 30 patients with cerebrovascular stroke (age range: 31-87) (see appendix), **Hassan (2002)** reported that the mean age of anxious CVS patients is 58.5 ± 7.2 , while that of non-anxious CVS patients is 61 ± 8.1 , with insignificant difference between them.

Post-stroke Depression:

By studying 30 patients with cerebrovascular stroke (age range: 31-87) (see appendix), **Hassan (2002)** reported that the mean age of depressed CVS patients is 61.8 ± 9.1 , while that of non-depressed CVS patients is 58.3 ± 9.2 , with insignificant difference between them.

Table 64: The mean age of neurological diseases patients having psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
Shama (1998)	17 depressed Parkinsonian patients	Neuropsychiatric department, Tanta University	HDS	the mean age of mildly depressed Parkinsonian patients is 59.56 ± 7.63 , that of moderately depressed patients is 41.25 ± 14.03 , and that of severely depressed patients is 56.5 ± 9.85

Hassan (2002)	30 patients with CVS stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	ICD-10 symptom checklist	the mean age of anxious CVS patients is 58.5 ± 7.2
Hassan (2002)	30 patients with CVS stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	ICD-10 symptom checklist	the mean age of depressed CVS patients is 61.8 ± 9.1

B. Dermatological disorders:

1. Alopecia areata & Generalized hair fall:

By studying 74 patients with hair fall (53 alopecia areata patients and 21 generalized hair fall patients) (see appendix) with age range 2.5-48 years old, **Mahmoud (1997)** suggests that there is a significant positive correlation between age and anxiety and insignificant relation between age and depression in patients having hair fall (alopecia areata and generalized hair fall).

Table 65: The age and the psychiatric disorders in alopecia areata and generalized hair fall

Author/s	Sample	Site	Diagnostic tools	Results
Mahmoud (1997)	74 patients with alopecia areata or generalized hair fall	outpatient dermatologic clinic of El-Mattaria general hospital	Psychiatric interview (DSM IV)	there is a significant positive correlation between age and anxiety, and insignificant relation between age and depression

C. Infertility:

By studying 62 infertile females with psychiatric morbidity and 45 infertile females without psychiatric morbidity (see appendix, **Radwan (2007)**) reported that the mean age of infertile females with psychiatric morbidity is 28.98 ± 5.6 while that of infertile females without psychiatric morbidity is 27.55 ± 5.4 with insignificant difference between them.

Table 66: The mean age of infertile women with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	62 infertile women with psych. disorders	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV)	the mean age of infertile women with psychiatric morbidity is 28.98 ± 5.6

D. Breast cancer:

Anxiety in breast cancer patients:

By studying 28 anxious patients with breast cancer with mean age of 47.6 ± 12 (see appendix), **Allam (2003)** reported that the breast cancer patients below 50 years old have significantly higher anxiety level (15 ± 2) than those above 50 years old (11 ± 6) according to Hospital Anxiety Depression Scale (HADS). The breast cancer patients with borderline anxiety below 50 years old have significantly worst quality of life by Functional Living Index Cancer (FLIC) (125 ± 7) than those above 50 years old (135 ± 9), while he

didn't find significant difference between the breast cancer patients above 50 years old and those below 50 years old as regards anxiety according to DSM IV. In another study done on 100 breast cancer female patients (see appendix), **El-Serafi (2008)** reported that the mean age of breast cancer patients with anxiety is 47 ± 10 and that of patients without psychiatric morbidity is 44 ± 8.4 , without significant difference between them.

Table 67: The age and the anxiety in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Results
Allam (2003)	28 anxious breast cancer patients	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	HADS FLIC SCID I	breast cancer patients below 50 years old have significantly higher anxiety level (HADS) and worst quality of life than those above 50 years old , although according to SCID-I there is no significant difference between the two groups as regards the anxiety disorders

El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	the mean age of breast cancer patients with anxiety is 47 ± 10
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Depression in breast cancer patients:

Allam (2003) reported that the breast cancer patients below 50 years old have significantly higher score of depression on HADS (16 ± 2) than those above 50 years (11 ± 6). The breast cancer patients with severe depression and those with moderate depression below 50 years old have significantly worst quality of life by FLIC (99 ± 20 and 108 ± 20 respectively) than those above 50 years old (109 ± 16 and 119 ± 16 respectively), while he didn't find significant difference between the breast cancer patients above 50 years old and those below 50 years old as regards depression according to DSM IV. In another study done on 100 breast cancer female patients (see appendix), **El-Serafi (2008)** reported that the mean age of breast cancer patients with mood disorder is 49.2 ± 9.3 and that of patients without psychiatric morbidity is 44 ± 8.4 , without significant difference between them.

Table 68: The age and the depression in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Results
Allam (2003)	17 depressed breast cancer patients	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	HADS FLIC SCID I	breast cancer patients below 50 years old have significantly higher depressed level and those with moderate or severe depression have worst quality of life than those above 50 years old
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	the mean age of breast cancer patients with mood disorder is 49.2±9.3

Adjustment disorder in breast cancer patients:

Allam (2003) found that 25% (5/20) of breast cancer patients below 50 years old have adjustment disorder compared to 10% (2/20) of breast cancer above 50 years old, with non-significant difference. The breast cancer patients with adjustment disorder

below 50 years old have significantly worst quality of life by FLIC (110 ± 9) than those above 50 years (125 ± 12).

Table 69: The age and the adjustment disorder in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Results
Allam (2003)	7 breast cancer patients with adjustment disorder	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	SCID I FLIC	breast cancer patients below 50 years old have significantly high prevalence (25%) of adjustment disorder than those above 50 years old (10%), and worst quality of life than those above 50 years

E. Surgical procedures:

1. Mastectomy:

In a study done on 40 breast cancer patients treated with mastectomy and chemotherapy (20 within the first 6 months of their treatment with a mean age of 44.4 ± 7.61 and 20 patients within 2

years of their treatment with a mean age of 44.6 ± 5.65), **El-Azzazy (2000)** found that 50% (4/8) of breast cancer patients below the age of 44 years old within 6 months post-operatively have disturbed body image compared to those above 44 years old (10/12, 83.3%) without significant difference between them. There is also an insignificant difference between breast cancer patients (2 years post-operatively) with disturbed body image below 44 years old and above those 44 years old (30%, 3/10 and 50%, 5/10 respectively).

2. Hysterectomy

By studying 30 female patients who will carry on hysterectomy with a mean age of 47.4 ± 8 , assessing them 1-2 weeks preoperatively and 1-3 months post-operatively, **Omar (1998)** found that the mean age of patients who have psychiatric morbidity before hysterectomy is 41.9 ± 5.38 while that of patients without psychiatric disorders is 52.2 ± 4 , with significant difference between them. The mean age of patients who show psychological improvement 1-3 months post-operatively is 45.5 ± 7.93 and that of patients who don't improve is 34.8 ± 6.7 , with significant difference between them.

Table 70: The age of the patients having psychiatric morbidity followed surgical operations

Author/s	Sample	Site	Diagnostic tools	Results
El-Azzazy (2000)	40 breast cancer patients treated with mastectomy and chemotherapy	Alazhar university hospital	Psychiatric interview	There is insignificant difference between the breast cancer patients below the age of 44 years old and those above 44 years old as regards the prevalence of "disturbed in body image"
Omar (1998)	30 female patients who will carry on hysterectomy	Obstetric and Gynecology department of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	the mean age of patients having psychiatric morbidity before hysterectomy and the mean age of those having psych. improvement after hysterectomy are 41.9 ± 5.38 and 45.5 ± 7.93 respectively

iii. Sex distribution

A. Medical diseases:

1. General medical diseases:

By studying 1006 children collected from the pediatric clinic of Zagazig University Hospital (498 males and 508 females), **Kashaba et al (1997)** found no significant difference between male outpatients with psychiatric disorders (90/498, 18%) and females (84/508, 16.5%). In another study done on 250 children attending the pediatric clinic of Suez Canal University Hospital (102 males and 148 females), **Magda et al (2000)** reported significant difference between male children with psychiatric disorders (21/102, 20.59%) and females (16/148, 10.8%). **Haggag et al (2000)** studied 74 medical referrals to psychiatric clinics with unexplained physical complaints (29 males and 45 females). They found that 37.78% (17/45) of the female medical patients and 13.79% (4/29) of the male medical patients have personality disorders according to ICD 10 with significant difference between them. But there is no significant difference between males and females as regards the prevalence of neurotic syndromes (29/29, 100% of the male patients versus 44/45, 97.78% of the female patients), depression (11/29, 37.9% of the male patients versus

12/45, 36.67% of the female patients) and behavioral syndrome (3/29, 10.8% of the male patients versus 5/45, 11.11% of the female patients). **El-Gamal (2001)** collected 500 medically ill patients admitted in Kasr el Aini Hospital, including 290 males and 210 females. He reported that medically ill females have significantly higher psychiatric morbidity (12.8 ± 7.5) than males (8.9 ± 7.2) according to GHQ. **El-Azzazy (2007)** studied 227 patients with panic disorders attending different medical clinic (75 from chest clinic outpatients, 75 from heart clinic outpatients and 77 from general medicine outpatients). She reported that females with panic disorder (140/227, 61.7%) are significantly more common than males (87/227, 38.3%).

Table 71: Sex distribution of psychiatric disorders in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Results
Kashaba et al (1997)	1006 children coming as outpatients in pediatric clinic	Pediatric outpatient clinic in Zagazig University Hospital	Psychiatric interview (DSM IV)	No significant difference between male outpatients with psychiatric disorders (18%) and females (16.5%)

Magda et al (2000)	250 children attending pediatric outpatient clinic	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	significant difference between male children with psychiatric disorders (20.59%) and females (10.8%)
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	ICD-10 Symptom Checklist	37.78% of the females and 13.79% of the males have personality disorders with significant difference
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	GHQ	females have significantly higher psychiatric morbidity than males
El-Azzazy (2007)	227 patients with panic disorders attending different medical clinic	Chest, heart & general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	females with panic disorder (61.7%) are significantly more common than males (38.3%)

2. Neurological disorders:

a. Parkinsonism:

By studying 17 depressed Parkinson's disease patients, **Shama (1998)** found that there is no significant relation between sex of Parkinsonian patients and depression, according to HDS.

Table 72: Sex distribution of depression in Parkinsonism

Author/s	Sample	Site	Diagnostic tools	Results
Shama (1998)	17 depressed Parkinsonian patients	Neuropsychiatric department, Tanta University	HDS	no significant relation between sex of Parkinsonian patients and depression

b. Cerebrovascular stroke:

Post-stroke Anxiety:

By studying 30 patients with cerebrovascular stroke (17 males and 13 females) (see appendix), **Hassan (2002)** reported that male to female ratio in post stroke anxiety is 6:7 while in CVS without anxiety, it is 14:3 with significant difference between them.

Table 73: Sex distribution of anxiety in CVS

Author/s	Sample	Site	Diagnostic tools	Results
Hassan (2002)	30 patients with CVS stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	ICD-10 symptom checklist	male to female ratio in post stroke anxiety is 6:7

Post-stroke Depression:

By studying 30 patients with cerebrovascular stroke (17 males and 13 females) (see appendix), **Hassan (2002)** reported that male to female ratio in post stroke depression is 1:1 while in non-depressed CVS patients, it is 1.3:1 with insignificant difference between them.

Table 74: Sex distribution of depression in CVS

Author/s	Sample	Site	Diagnostic tools	Results
Hassan (2002)	30 patients with CVS stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	ICD-10 symptom checklist	male to female ratio in post stroke depression is 1:1

c. Multiple Sclerosis (MS):**Depression in MS patients:**

El-Gamel (1995) studied 20 MS patients (9 males and 11 females). He reported that the mean score of female MS patients on HDS (20.64 ± 9.74) is significantly higher than that of male MS patients (10.56 ± 8.7). But **Fat-hy (2004)** reported that there is no significant difference between the mean scores of 22 female MS patients (13.6 ± 12.7) and that of 9 male MS patients (7.78 ± 5.4) on BDI.

Table 75: Gender difference of depression in MS patients

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	HDS	mean score of female MS patients on HDS is significantly higher than that of male MS patients
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	BDI	no significant difference between the mean scores of female MS patients and that of male MS patients

Anxiety in MS patients:

El-Gamel (1995) studied 20 MS patients (9 males and 11 females). He reported that the mean score of female MS patients on HAS (17.54 ± 6.99) is significantly higher than that of male MS patients (8.67 ± 7.4). But **Fat-hy (2004)** reported that there is no significant difference between the mean scores of 22 female MS patients (7.78 ± 5.4) and that of 9 male MS patients (9.3 ± 10.3) in HAS.

Table 76: Gender difference of anxiety in MS patients

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	HAS	the mean score of female MS patients on is significantly higher than that of male MS patients
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	HAS	no significant difference between the mean scores of female MS patients and that of male MS patients

B. Dermatological disorders:

By studying 65 children (31 males and 34 females) with skin diseases (17 acne vulgaris, 15 alopecia areata, 13 atopic dermatitis, 10 psoriasis and 10 urticaria), **El-Shourbaghi & Farid (1999)** reported that the mean score of females with psoriasis on D-test for depression for children (19.2 ± 3.3) is significantly higher than that of males (13.4 ± 2.4), otherwise, there is no significant difference between males and females scores in other skin diseases.

Table 77: Gender difference of depression in psoriasis

Author/s	Sample	Site	Diagnostic tools	Results
El-Shourbaghi & Farid (1999)	65 children with skin diseases	outpatient clinic at Mahalla Kobra General Hospital	D-test for depression for children	mean score of females with psoriasis is significantly higher than that of males

1. Alopecia areata & generalized hair fall:

By studying 74 patients with hair fall including 21 males and 53 females (53 alopecia areata and 21 generalized hair loss) (see

appendix), **Mahmoud (1997)** reported that females with hair fall have significantly more psychiatric morbidity (23/53, 43.4%) than males with hair fall (8/21, 38%).

Table 78: Gender difference of psychiatric disorders in alopecia areata and generalized hair fall

Author/s	Sample	Site	Diagnostic tools	Results
Mahmoud (1997)	74 patients with alopecia areata or generalized hair fall	outpatient dermatologic clinic of El-Mattaria general hospital	Psychiatric interview (DSM IV)	females have significantly more psychiatric morbidity (43.4%) than males (38%)

C. Burn:

By studying 60 patients with acute burns (31 males and 29 females), 40 patients with chronic burn (22 males and 18 females), **Attia (1991)** reported that on Middle Sex Hospital Questioner (MSHQ), male burn patients are significantly more obsessive (8.7 ± 2.5) and depressed (10.26 ± 3.78) than females (7.7 ± 2.77 and 8.17 ± 3 respectively). In Brief Psychiatric Rating Scale (BPRS),

male burn patients are significantly more emotionally withdrawn (1.15 ± 0.4) and depressed (3.4 ± 1.4) than females (1.5 ± 1.1 and 2.7 ± 1.1 respectively).

Table 79: Gender difference of psychiatric morbidity in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Attia (1991)	60 acute burns patients, 40 chronic burn patients	Burn unit of AlAzhar university hospital	MSHQ BPRS	male burn patients are significantly more obsessive, depressed and emotionally withdrawn than females

iv. Residence

A. Medical diseases:

1. General medical diseases:

By studying 1006 children collected from the pediatric clinic of Zagazig University Hospital (582 patients from rural areas and 424 from urban areas), **Kashaba et al (1997)** found no significant difference between outpatients with psychiatric disorders from rural

areas (108/582, 18.5%) and those from urban areas (66/424, 15.5%). In another study done on 250 children attending the pediatric clinic of Suez Canal University Hospital (148 from urban area and 102 from rural area), **Magda et al (2000)** reported no significant difference between outpatients with psychiatric disorders coming from urban area (19/148, 12.8%) and those from rural area (18/102, 17.6%). **El-Gamal (2001)** collected 500 medically ill patients from Kasr El Aini Hospital including 264 patients from urban areas and 216 from rural areas. He found that medically ill patients coming from urban areas have significantly higher psychiatric morbidity (11.7 ± 7.3) than those coming from rural areas (8.7 ± 6) according to GHQ.

Table 80: Residence of medically ill patients with psychiatric disorders

Author /s	Sample	Site	Diagnostic tools	Results
Kasha ba et al (1997)	1006 children coming as outpatients in pediatric clinic	Pediatric outpatient clinic in Zagazig University Hospital	Psychiatric interview (DSM IV)	no significant difference between outpatients with psychiatric disorders from rural areas (18.5%) and those from urban areas (15.5%)

Magda et al (2000)	250 children attending pediatric outpatient clinic	Pediatric outpatient clinic in Suez Canal University Hospital	Psychiatric interview (DSM IV)	no significant difference between outpatients with psychiatric disorders from urban area (12.8%) and those from rural area (17.6%)
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	GHQ	medically ill patients coming from urban areas have significantly higher psychiatric morbidity than those from rural areas

B. Infertility:

By studying 107 infertile women including 85 from rural areas and 22 from urban areas (see appendix), **Radwan (2007)** reported no significant difference between infertile females with psychiatric disorders from rural areas (47/85, 55.2%) and those from urban areas (15/22, 68.2%).

Table 81: Residence of infertile women with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV)	no significant difference between infertile females with psychiatric disorders from rural areas (55.2%) and those from urban areas (68.2%)

C. Malignant diseases:

1. Breast cancer:

By studying 100 breast cancer female patients including 40 from rural areas and 60 from urban areas (see appendix), **El-Serafi (2008)** found no significant difference between breast cancer patients with mood disorders from rural areas (20/40, 50%) and those from urban areas (33/60, 55%). As regards the anxiety disorders, 42.5% (17/40) of the patients from rural areas and

43.33% (26/60) of the patients from urban areas have anxiety without significant difference between them.

Table 82: Residence of breast cancer patients with psychiatric disorder

Author/s	Sample	Site	Diagnostic tools	Results
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	no significant difference between breast cancer patients from rural areas and those from urban areas as regards mood disorders and anxiety

v. Occupation

A. Medical diseases:

1. General medical diseases:

By studying 500 medically ill patients from Kasr El Aini Hospital, **El-Gamal (2001)** reported that the scores of the psychiatric morbidity by using GHQ are as follows: 11.7 ± 7.5 among the skilled medically ill workers, 10.2 ± 10.2 among the

unskilled medically ill workers, 8.2 ± 6.2 among the unemployed medical patients, 7.4 ± 6.9 among the professionals medical patients and 7.4 ± 6.7 among the semiskilled workers medical patients. In another study done on 227 patients with panic disorders attending different medical clinics of Alazhar University Hospital (75 from chest clinic outpatients, 75 from heart clinic outpatients and 77 from general medicine outpatients), **El-Azzazy (2007)** reported that 48.9% (111/227) are jobless, 30.8% (70/227) are manual workers, 19.8% (45/227) are employees.

Table 83: Occupation of medically ill patients with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	GHQ	skilled workers: (11.7 ± 7.5), unskilled workers: (10.2 ± 10.2), unemployed: (8.2 ± 6.2), professionals: (7.4 ± 6.9) and semiskilled workers (7.4 ± 6.7)

El-Azzazy (2007)	227 patients with panic disorders	Chest, heart & general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	48.9% are jobless, 30.8% are manual workers, 19.8% are employees
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B. Infertility:

By studying 62 infertile females with psychiatric disorders and 45 infertile females without psychiatric disorders (see appendix), **Radwan (2007)** reported that there is no significant difference between the occupation of the infertile females with psychiatric disorders (manual worker: 7/62, 11.3%, professional: 4/62, 6.5%, administrative: 13/62, 20.9%, managerial: 1/62, 1.6% and housewives: 37/62, 59.7%) and the occupation of the infertile females without psychiatric disorders (manual workers: 4/45, 8.9%, professional 1/45, 2.2%, administrative: 9/45, 20%, managerial: 2/45, 4.4% and housewives: 29/45, 64.5%).

Table 84: Occupation of infertile women with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV)	manual worker: 11.3%, professional: 6.5%, administrative: 20.9%, managerial: 1.6% and housewives: 59.7%

C. Surgical intervention:

1. Hysterectomy:

By studying 30 female patients with history of hysterectomy, **Omar (1998)** found no significant difference between occupation in hysterectomy females with psychiatric morbidity (housewives: 15/30, 50%, manual workers: 2/30, 6.67% and professional workers: 1/30, 3.33%) and those without psychiatric morbidity (housewives: 6/30, 20%, manual workers: 4/30, 13.33% and professional workers: 2/30, 6.67%).

Table 85: Occupation of patients with post-hysterectomy psychiatric disorder

Author/s	Sample	Site	Diagnostic tools	Results
Omar (1998)	30 female patients who will carry on hysterectomy	Obstetric and Gynecology department of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	housewives: 50%, manual workers: 6.67% and professional workers: 3.33%

vi. Marital status

A. Medical diseases:

By studying 500 medically ill patients from Kasr El Aini Hospital, **El-Gamal (2001)** found that single and divorced medically ill patients have significantly higher scores on GHQ (16.5 ± 7.3 and 10.3 ± 7.4 respectively) than married (9.5 ± 7.4) and widow medically ill patients (9.5 ± 4.9). In another study done on 227 patients with panic disorders attending different medical clinics of Alazhar University Hospital (75 from chest clinic outpatients, 75 from heart clinic outpatients and 77 from general medicine

outpatients), **El-Azzazy (2007)** reported that 55.9% (127/227) are married, 26.4% (60/227) are singles, 15% (34/227) are widowed and 2.6% (6/227) are divorced.

Table 86: Marital status of medically ill patients with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	GHQ	single and divorced patients have significantly higher scores than married and widow patients
El-Azzazy (2007)	227 patients with panic disorders	Chest, heart & general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	55.9% are married, 26.4% singles, 15% widowed and 2.6% divorced

B. Burn:

By studying 30 female burn patients, **Abdel-Hameed (1996)** found that there is no significant difference between females with

psychiatric disorders (26.7%, 8/30 are married and 13.3%, 4/30 aren't) and females without psychiatric morbidity (53.3%, 16/30 are married and 6.7%, 2/30 aren't) as regards the marital status.

Table 87: Marital status of burn patients with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	Psychiatric interview (DSM-IV)	26.7% are married and 13.3% aren't married

C. Malignant diseases:

1. Breast cancer:

By studying 40 breast cancer patients treated with mastectomy and chemotherapy, **El-Azzazy (2000)** found that although the non-married female cancer patients have more severe anxiety symptoms on HAS than married females, there is no significant difference between them. In another study on 100 breast cancer female patients (see appendix), **El-Serafi (2008)** found no

significant difference between married breast cancer patients with mood disorder (34/67, 50.75%) and non-married breast cancer patients with mood disorder (19/33, 57.58%). As regards anxiety, 43.28% (29/67) of married breast cancer females and 42.42% (14/33) of non-married have anxiety without significant difference between them.

Table 88: Marital status of breast cancer patients with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	no significant difference between married and non-married breast cancer patients as regards mood disorders and anxiety

D. Surgical intervention:

1. Hysterectomy

By studying 30 female patients who will carry on hysterectomy, **Omar (1998)** found that there is no significant difference between the marital status of hysterectomy patients with psychiatric morbidity (married: 11/30, 36.67%, widow: 3/30, 10%,

divorced: 3/30, 10% and single: 1/30, 3.33%) and the marital status of hysterectomy patients without psychiatric morbidity (married: 9/30, 30%, widow: 3/30, 10%, divorced: 0% and single: 0%).

Table 89: Marital status of patients with post-hysterectomy psychiatric disorder

Author/s	Sample	Site	Diagnostic tools	Results
Omar (1998)	30 female patients who will carry on hysterectomy	Obstetric and Gynecology department of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	married: 36.67%, widow: 10%, divorced: 10% and single: 3.33%

II. Etiology of psychiatric symptoms or disorders in physically ill patients

i. Stress

There is a strong correlation between stress and the onset of physical diseases and psychiatric disorders.

A. Medical diseases:

1. Gastrointestinal diseases:

Abdel-Wahab (1982) reported that 17 out of 25 (68%) patients with non-organic gastrointestinal complaints have history of psychological stress (mainly financial problems, work troubles and familial problems) one month before the onset and acute exacerbation of the gastrointestinal complaints. He also found that 20 out of 25 (80%) patients with organic gastrointestinal symptoms have history of psychological stress, (see appendix).

Table 90: Stress as a risk factor of psychiatric disorders in gastrointestinal diseases

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Wahab (1982)	50 cases with gastrointestinal illness	clinic of internal medicine	Psychiatric interview	80% of patients with organic gastrointestinal symptoms have history of psychological stress

B. Malignant diseases:

1. Breast cancer:

By studying 100 breast cancer patients (see appendix), **El-Serafi (2008)** found that 54.8% of breast cancer patients subjected to mild form of life event stresses and 52.2% of the patients subjected to moderate life events stresses have mood disorder, with no significant difference between them.

Table 91: Stress as a risk factor for psychiatric disorders in cancer breast patients

Author/s	Sample	Site	Diagnostic tools	Results
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	54.8% of breast cancer patients subjected to mild form of life event stresses and 52.2% of the patients subjected to moderate life events stresses have mood disorder

ii. Physical illness as a risk factor for psychiatric symptoms and disorder

The physical diseases can be perceived as a stressful event.

1. Severity of the physical disease:

A. Medical diseases:

1. Systemic Lupus Erythematosus (SLE):

By studying 50 patients with SLE, **Abdel-Mawella (2007)** reported that there is no significant difference between SLE patients with psychiatric manifestation and those without psychiatric manifestations as regards the disease activity, after assesment with SLE Activity index (47.7 ± 15.1 and 40.8 ± 13.74 respectively).

Table 92: Severity of SLE as a risk factor for psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Mawella (2007)	50 SLE patients	Rheumatology and Rehabilitation clinic and department of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	there is no significant difference between SLE patients with psychiatric manifestation and those without psychiatric manifestations as regards the disease activity

2. Diabetes Mellitus:

Anxiety in DM:

By studying 56 IDDM children and 35 controls without known psychiatric or physical illness, **Bishry et al (2003)** reported that there is a significant positive correlation between anxiety and frequency of hypoglycemic attacks as well as poor glycemic control. In another study done on 91 IDDM children, **Salem et al (2003)** found that 73.3% (28/38) of patients with poor glycemic control have anxiety, followed by 33.3% (8/24) of patients with

good glycemic control and lastly 21.8% (7/32) of patients with fair glycemic control according to Children Manifest Anxiety scale (CMA) with significant difference between them. **El-Aswad (2005)** studied 30 uncontrolled insulin dependent diabetic children, 30 controlled insulin dependent diabetic children. He found that there is no relation between frequent glycemic complications and anxiety in IDDM children, as 60.9% (14/18) of complicated diabetic children have moderate to severe anxiety, versus 40.4% (15/37) of uncomplicated diabetic children according to CMA. In another study done on 94 diabetic children and adolescents (divided in 3 groups according to the degree of glycemic control as reflected by the mean glycosylated hemoglobin level: 24 patients with good glycemic control , 32 patients with fair glycemic control and 38 patients with poor glycemic control), **El-Laboudy & Ramy (2006)** reported that 73.3% (28/38) of patients with poor glycemic control have anxiety, followed by 33.3% (8/24) of patients with good glycemic control and lastly 21.8% (7/32) of patients with fair glycemic control according to CMA with significant difference between them.

Table 93: Severity of DM as a risk factor for anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Bishry et al (2003)	56 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CMA	there is a significant positive correlation between anxiety and frequency of hypoglycemic attacks as well as poor glycemic control
Salem et al (2003)	91 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CMA	73.3% of patients with poor glycemic control have anxiety, followed by 33.3% of patients with good glycemic control and lastly 21.8% of patients with fair glycemic control
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CMA	there is no relation between frequent glycemic complications and anxiety in IDDM children

El-Laboudy & Ramy (2006)	94 diabetic children and adolescents	Diabetic clinic in Children Hospital of Ain Shams University	CMA	73.3% of patients with poor glycemic control have anxiety, followed by 33.3% of patients with good glycemic control and lastly 21.8% of patients with fair glycemic control
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Depression in DM:

By studying 80 diabetic women, **El-Mahallawy & Gad-Allah (1996)** reported that there is significant difference between the number of depressed diabetic patients with poor diabetic control (12/12, 100%) and that of non-depressed diabetic patients with poor diabetic control (48/68, 70.6%). **Bishry et al (2003)** reported that there is a significant positive correlation between depression and frequency of hypoglycemic attacks as well as poor glycemic control. **Salem et al (2003)** found that 31.6% of patients with poor glycemic control have depression according to CDI compared to 18.2% and 13.6% of patients with good glycemic control and those with fair glycemic control respectively, and the difference is statistically significant. **El-Aswad (2005)** found that IDDM children with frequent glycemic complications compared to uncomplicated IDDM children are significantly more depressed (14/23, 60.9%

versus 8/37, 21.6%). **El-Laboudy & Ramy (2006)** reported that 31.6% of patients with poor glycemic control have depression according to CDI compared to 18.2% and 13.6% of patients with good glycemic control and those with fair glycemic control respectively, and the difference is statistically significant.

Table 94: Severity of DM as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
El-Mehallawy & Gad-Allah (1996)	80 diabetic women	Diabetic clinic of Ain Shams University Hospital	Psychiatric interview	there is significant difference between the number of depressed diabetic patients with poor diabetic control (100%) and that of non-depressed diabetic patients with poor diabetic control (70.6%)
Bishry et al (2003)	56 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CDI	there is a significant positive correlation between depression and frequency of hypoglycemic attacks as well as poor glycemic control

Salem et al (2003)	91 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CDI	31.6% of patients with poor glycemic control have depression according to CDI compared to 18.2% and 13.6% of patients with good glycemic control and those with fair glycemic control respectively
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CDI	IDDM children with frequent glycemic complications are significantly more depressed than uncomplicated IDDM children
El-Laboudy & Ramy (2006)	94 diabetic children and adolescents	Diabetic clinic in Children Hospital of Ain Shams University	CDI	31.6% of patients with poor glycemic control have depression according to CDI compared to 18.2% and 13.6% of patients with good glycemic control and fair glycemic control respectively

Aggression in DM:

El-Aswad (2005) found that IDDM children with frequent glycemic complications (6/23, 26.1% have moderate to severe aggression) are significantly more aggressive than uncomplicated IDDM children (6/37, 16.2% have moderate to severe aggression).

Table 95: Severity of DM as a risk factor for aggression

Author/s	Sample	Site	Diagnostic tools	Results
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	Ain Shams scale for aggressive behavior in children	IDDM children with frequent glycemic complications are significantly more aggressive than uncomplicated IDDM children

Quality of life:

Salem et al (2003) found that the Peds QL Generic core shows that the poorly controlled patients have significantly the worst quality of life (10.5 ± 5.4) than those with fair control (6.5 ± 4.5), the score of IDDM children with good glycemic control being in between the other 2 groups (9.3 ± 4.3). **El-Laboudy & Ramy (2006)** reported that the poorly controlled patients have

significantly the worst quality of life according to Peds QL Generic core (10.5 ± 5.4) compared to those with fair control (6.5 ± 4.5), the score of IDDM children with good glycemic control being in between the other 2 groups (9.3 ± 4.3).

Table 96: Severity of DM as a risk factor for poor quality of life

Author/s	Sample	Site	Diagnostic tools	Results
Salem et al (2003)	91 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	Peds QL Generic core	poorly controlled patients have significantly the worst quality of life compared to those with fair control, the score of IDDM children with good glycemic control being in between the other 2 groups
EI-Laboudy & Ramy (2006)	94 diabetic children and adolescents	Diabetic clinic in Children Hospital of Ain Shams University	Peds QL Generic core	poorly controlled patients have significantly the worst quality of life compared to those with fair control, the score of IDDM children with good glycemic control being in between the other 2 groups

3. Respiratory diseases:

Behavioral problems:

By studying 52 children with bronchial asthma, **El-Defrawi et al (2000)** found significant positive correlation between the severity of bronchial asthma and the presence of behavioral problems evaluated by Conners Scale (mild and moderate bronchial asthma: 6/40, 15% and severe bronchial asthma: 9/12, 75%).

Table 97: Severity of bronchial asthma as a risk factor for behavioral problems

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	52 children with bronchial asthma	Outpatient clinics of Port Said and Port Fouad General Hospitals	arabic version of Conner's parent-teacher rating scale	there is significant positive correlation between the severity of bronchial asthma and the presence of behavioral problems

Depression:

El-Defrawi et al (2000) found significant positive correlation between the severity of bronchial asthma and the severity of depression evaluated by Johns Hopkins Depression scale (mild and moderate bronchial asthma: 40.4 ± 5.2 and severe bronchial asthma: 53.2 ± 8.2).

Table 98: Severity of bronchial asthma as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	52 children with bronchial asthma	Outpatient clinics of Port Said and Port Fouad General Hospitals	Johns Hopkins Depression scale	there is significant positive correlation between the severity of bronchial asthma and the severity of depression

4. Cardiovascular problems:

a. Congenital heart disease:

Behavioral problems:

By studying 25 children with congenital heart disease, **El-Defrawi et al (2000)** found significant positive correlation between the severity of congenital heart disease and the presence of behavioral problems evaluated by Conners Scale (acyanotic: 2/20, 10% and cyanotic: 4/5, 80%).

Table 99: Severity of congenital heart disease as a risk factor for behavioral problems

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	25 children with congenital heart disease	Outpatient clinics of Port Said and Port Fouad General Hospitals	arabic version of Conner's parent-teacher rating scale	there is significant positive correlation between the severity of congenital heart disease and the presence of behavioral problems

Depression:

El-Defrawi et al (2000) found significant positive correlation between the severity of congenital heart disease and the severity of depression evaluated by Johns Hopkins Depression scale (acyanotic: 40 ± 3.2 and cyanotic: 48 ± 5.7).

Table 100: Severity of congenital heart disease as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	25 children with congenital heart disease	Outpatient clinics of Port Said and Port Fouad General Hospitals	Johns Hopkins Depression scale	there is significant positive correlation between the severity of congenital heart disease and the severity of depression

4. Neurological disorders:

a. Parkinsonism:

By studying 17 depressed Parkinsonian patients, **Shama(1998)** reported that there is no association between depression evaluated by HDS and motor manifestations of Parkinson's disease, as tremors (present in 9/17, 52.9% of depressed parkinsonian patients), rigidity (present in 10/17, 58.8%) and posture instability (present in 7/17, 41.2%). No significant relation is found between the presence of depression and the severity of motor disability assessed by Hoehn and Yahr Scale (13/17, 76.4% of stage I & II and 4/17, 23.6% of stage III).

Table 101: Severity of Parkinson's disease as a risk factor for depression

Author /s	Sample	Site	Diagnostic tools	Results
Shama (1998)	17 depressed Parkinsonian patients	Neuropsychiatric department, Tanta University	HDS	there is no association between depression evaluated by HDS and motor manifestations of Parkinson's disease or the severity of motor disability

b. Multiple Sclerosis:

By studying 31 MS patients (16 of relapsing remittant type and 15 of secondary progressive type), **Fat-hy (2004)** found that there is no significant correlation between depression and number of relapses or severity of MS symptoms. There is no significant correlation between anxiety and number of relapses or severity of MS symptoms.

Table 102: Severity of MS as a risk factor for depression and anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	BDI HAS	there is no significant correlation between depression/anxiety and number of relapses or severity of MS symptoms

c. Poliomyelitis:

By studying 30 children with poliomyelitis and wearing lower limb orthosis and 30 children with poliomyelitis but not wearing any orthosis, **Khalil et al (1991)** found that behavioral disorders are more prevalent in multiple limb disability compared to single limb disability in both groups. Comparing between severely disabled children and children with single limb disability among children wearing orthosis, conduct disorder is diagnosed in 71.4% and 87.5% respectively, sleep disorder in 64.2% and 37.5% respectively, feeding disorder in 78.5% and 50% respectively, psychomotor disorder in 35.7% and 37.5% respectively, enuresis in 7.1% and 18.7% respectively, speech disorder in 21.4% and 6.2% respectively and social adaptation disorder in 71.4% and 56.2% respectively. Comparing between severely disabled children and children with single limb disability among children not wearing orthosis, conduct disorder is diagnosed in 91.6% and 72.2% respectively, sleep disorder in 75% and 61.1% respectively, feeding disorder in 83.3% and 72.2% respectively, psychomotor disorder in 50% and 27.7% respectively, enuresis in 16.6% and 11.1% respectively, speech disorder in 16.6% and 33.3% respectively and social adaptation disorder in 66.6% and 72.2% respectively.

Table 103: Severity of post-poliomyelitis disability as a risk factor for psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Results
Khalil et al (1991)	60 children with poliomyelitis (30 wearing lower limb orthosis and 30 not wearing)	Not stated	Psychiatric examination and self-concept scale	behavioral disorders are more prevalent in multiple limb disability compared to single limb disability

B. Phoniatic problems:

By studying 39 patients complaining of hearing defects (see appendix), **Morsi (1984)** found that as regards the degree of hearing loss, psychiatric symptoms are present in 3 out of 6 (50%) patients with mild hearing loss, 4 out of 11(36.36%) patients with moderate hearing loss, 3 out of 7 (42.85%) patients with severe hearing loss and 1 out of 4 (25%) patients with profound hearing loss, which is statistically significant. Patients with bilateral hearing loss have psychiatric symptoms (9 out of 23, 39.1%) significantly more than patients with unilateral hearing loss (2 out of 13, 14.6%).

Table 104: Severity of phoniatic problems as a risk factor for psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Results
Morsi (1984)	39 patients with hearing defects	audiology clinic in Ain Shams University Hospital	Psychiatric interview	there is a significant relation between type/degree of hearing loss and psychiatric morbidity

C. Burn:

Depression:

By studying 30 female patients 2 weeks after burn incident of 3rd or 4th degree and 20 controls without known physical or psychiatric illness, **Abdel-Hameed (1996)** found that depression evaluated by HDS is significantly related to burns of the face (42 ± 11.7), while burns affecting other parts of the body don't have any significant correlation with depression (burn chest patients: 31.4 ± 13.8 , upper limbs: 32.9 ± 13.7 , lower limbs: 31.4 ± 12.8 and abdomen: 30.5 ± 12.3). There is no significant correlation between depression and the percentage of burn.

Table 105: Severity of burn as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	HDS	depression is significantly related to burns of the face, while burns affecting other parts of the body don't have any significant correlation with depression

Anxiety:

Abdel-Hameed (1996) didn't find any correlation between anxiety and burn of specific area of the body (face: 30.6 ± 3.8 , chest: 25.5 ± 8 , upper limbs: 26.6 ± 9.2 , lower limbs: 28.6 ± 9.4 and abdomen: 28 ± 10.5). Also there is no significant correlation between anxiety and the percentage of burn.

Table 106: Severity of burn as a risk factor for anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	HAS	there is no correlation between anxiety and burn of specific area of the body or the percentage of burn

2. Recurrent hospitalization:

A. Medical diseases:

1. General medical diseases:

By studying 500 medically ill patients (including patients with cardiovascular, endocrinal, liver, chest, gastrointestinal, renal, hematological and central nervous system disorders), **El-Gamal (2001)** found significant correlation between psychiatric morbidity according to GHQ in medically ill patients and number of admission (once: 8.6 ± 6.9 , twice: 11 ± 7.2 and 3 or more: 17.2 ± 7.8).

Table 107: Recurrent hospitalization as a risk factor for psychiatric disorders in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	GHQ	there is a significant correlation between psychiatric morbidity in medically ill patients and number of admission

2. Diabetes mellitus:

Anxiety in DM:

El-Aswad (2005) studied 30 uncontrolled insulin dependent diabetic children and 30 controlled insulin dependent diabetic children. He found that IDDM children with recurrent hospitalization compared to IDDM children with no recurrent hospitalization are significantly more anxious (14/18, 77.8% have moderate to severe anxiety versus 15/42, 35.8%).

Table 108: Recurrent hospitalization of diabetic patients as a risk factor for anxiety

Author/s	Sample	Site	Diagnostic tools	Results
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CMA	IDDM children with recurrent hospitalization compared to IDDM children with no recurrent hospitalization are significantly more anxious

Depression in DM:

El-Aswad (2005) found that IDDM children with recurrent hospitalization compared to IDDM children without recurrent hospitalization are significantly more depressed (14/18, 77.8% versus 8/42, 19%).

Table 109: Recurrent hospitalization of diabetic patients as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CDI	IDDM children with recurrent hospitalization compared to IDDM children without recurrent hospitalization are significantly more depressed

Aggression in DM:

El-Aswad (2005) found that IDDM children with recurrent hospitalization compared to IDDM children without recurrent hospitalization are significantly more aggressive (5/18, 27.8% versus 7/42, 16.7% have moderate to severe aggression).

Table 110: Recurrent hospitalization of diabetic patients as a risk factor for aggression

Author/s	Sample	Site	Diagnostic tools	Results
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	Ain Shams scale for aggressive behavior in children	IDDM children with recurrent hospitalization compared to IDDM children without recurrent hospitalization are significantly more aggressive

3. Duration of physical diseases:

A. Medical diseases:

1. General medical diseases:

El-Gamal (2001) found that there is a significant correlation between psychiatric morbidity according to GHQ in medically ill patients and duration of illness (less than 6 months: 8.2 ± 6.9 , from 6 months to 2 years: 11.2 ± 7 and more than 2 years: 11.7 ± 7.6).

Table 111: Duration of general medical diseases as a risk factor for psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamal (2001)	500 medically ill patients	General medical departments of Kasr El Aini Hospital	GHQ	there is a significant correlation between psychiatric morbidity in medically ill patients and duration of illness

2. Diabetes Mellitus:

Anxiety in DM:

By studying 56 IDDM children, **Bishry et al (2003)** reported that there is a significant positive correlation between anxiety and duration of DM.

Table 112: Duration of DM as a risk factor for anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Bishry et al (2003)	56 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CMA	there is a significant positive correlation between anxiety and duration of DM

Depression in DM:

El-Mahallawy & Gad-Allah (1996) reported that there is no significant difference between the duration of DM in depressed diabetic patients (9.25 ± 2.63 years) and that in non-depressed diabetic patients (8.9 ± 2.63 years). **Bishry et al (2003)** reported that there is a significant positive correlation between depression and duration of DM.

Table 113: Duration of DM as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
El-Mehallawy & Gad-Allah (1996)	80 diabetic women	Diabetic clinic of Ain Shams University Hospital	Psychiatric interview	there is no significant difference between the duration of DM in depressed diabetic patients and that in non-depressed diabetic patients
Bishry et al (2003)	56 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CDI	there is a significant positive correlation between depression and duration of DM

3. Neurological diseases:

a. Parkinsonism:

By studying 17 depressed Parkinsonian patients, **Shama(1998)** found no significant relation between the presence of depression and the duration of Parkinson's disease (mean duration in years in parkinsonian patients with mild depression: 3.9 ± 2.9 , moderate depression: 2.7 ± 1.2 and severe depression: 3.2 ± 2.4).

Table 114: Duration of Parkinson's disease as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
Shama (1998)	17 depressed Parkinsonian patients	Neuropsychiatric department, Tanta University	HDS	No significant relation between the presence of depression and the duration of Parkinson's disease

b. Multiple Sclerosis:

El-Gamel (1995) studied 20 MS patients. He found no relation between the presence of psychiatric disorder in MS patients

and duration of illness as 85.7% (6/7) of patients with MS less than one year have psychiatric disorders, and 69.2% (9/13) of patients with MS more than one year have psychiatric disorder. In another study done on 31 MS patients (16 of relapsing remittent type and 15 of secondary progressive type), **Fat-hy (2004)** found no significant correlation between depression or anxiety and duration of MS.

Table 115: Duration of MS as a risk factor for psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	Psychiatric interview	there is no relation between the psychiatric disorder and duration of MS
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	BDI HAS	there is no significant relation between depression/anxiety and duration of MS

B. Phoniatic problems

By studying 39 patients complaining of hearing defects (see appendix), **Morsi (1984)** found 4 out of 15 (26.7%) patients complaining of hearing loss from months have psychiatric

symptoms, while 2 out of 12 (16.7%) patients complaining of hearing loss from 1-5 years have psychiatric symptoms and 5 out of 12 (41.7%) patients complaining of hearing loss from 5 years have psychiatric symptoms, with significant difference between the three groups.

Table 116: Duration of phoniatic problems as a risk factor for psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Results
Morsi (1984)	39 patients with hearing defects	audiology clinic in Ain Shams University Hospital	Psychiatric interview	there is a significant relation between duration of hearing loss and psychiatric morbidity

C. Infertility:

Radwan (2007) reported that the infertility duration isn't a risk factor for psychiatric disorders.

Table 117: Duration of infertility as a risk factor for psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV)	infertility duration isn't a risk factor for psychiatric disorders

4. Age of onset of physical disease:

A. Medical diseases:

1. Diabetes Mellitus:

Anxiety in DM:

By studying 56 IDDM children, **Bishry et al (2003)** reported that the age of onset of DM among children is significantly negatively correlated with anxiety.

Table 118: Age of onset of DM as a risk factor for anxiety among children

Author/s	Sample	Site	Diagnostic tools	Results
Bishry et al (2003)	56 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CMA	age of onset of DM among children is significantly negatively correlated with anxiety

Depression in DM:

By studying 80 diabetic women, **El-Mahallawy & Gad-Allah (1996)** reported that there is no significant difference between the age of onset of DM in depressed diabetic patients (35.8 ± 6.39) and that of non-depressed diabetic patients (35.26 ± 4.27). **Bishry et al (2003)** reported that the age of onset of DM is significantly negatively correlated with depression.

Table 119: Age of onset of DM as a risk factor for depression

Author/s	Sample	Site	Diagnostic tools	Results
El-Mehallawy & Gad-Allah (1996)	80 diabetic women	Diabetic clinic of Ain Shams University Hospital	Psychiatric interview	there is no significant difference between the age of onset of DM in depressed diabetic patients and that of non-depressed diabetic patients
Bishry et al (2003)	56 IDDM children	Diabetic clinic in Children Hospital of Ain Shams University	CDI	age of onset of DM is significantly negatively correlated with depression

2. Neurological diseases:

a. Multiple Sclerosis:

By studying 31 MS patients (16 of relapsing remittant type and 15 of secondary progressive type), **Fat-hy (2004)** found that there is no significant correlation between depression or anxiety and age of onset of MS.

Table 120: Age of onset of MS as a risk factor for depression and anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	BDI HAS	there is no significant correlation between depression/anxiety and age of onset of MS

iii. Biological factors:

A. Medical diseases:

1. Systemic Lupus Erythematosis:

By studying 50 patients with SLE, **Abdel-Mawella (2007)** reported that there is no relation between the presence of psychiatric manifestations in SLE and the presence of antiribosomal antibodies or that of immunoglobulin IgG. Yet, there is a non-significant correlation between psychiatric manifestations in SLE and serum level of IgM.

Table 121: Antibodies level in SLE patients with psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Mawella (2007)	50 SLE patients	Rheumatology and Rehabilitation clinic and department of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	there is no relation between the presence of psychiatric manifestations in SLE and the presence of antiribosomal antibodies or that of IgG. Yet, there is a non-significant correlation between psychiatric manifestations in SLE and serum level of IgM

2. Neurological diseases:

Noby (2006) studied 100 chronic psychiatric patients (see appendix). She found that 6% of chronic psychiatric patients have mental disorders due to a general medical condition: 33.3% (2/6) among them have organic delusion disorders (schizophrenia-like) one due to granulomata and the other due to an old infarction. 33.3% (2/6) have mental retardation with psychotic features, one associated with generalized myopathy and the other is due to tuberous sclerosis. 16.6% (1/6) has organic mood disorder due to

temporal lobe epilepsy, and 16.6% (1/6) has epilepsy (grand mal epilepsy) with psychotic features.

Table 122: Psychiatric disorders due to neurological diseases

Author/s	Sample	Site	Diagnostic tools	Results
Noby (2006)	100 chronic psychiatric patients	El-Abassia hospital	Psychiatric interview (DSM IV)	6% of chronic psychiatric patients have mental disorders due to a general medical condition

a. Cerebrovascular stroke:

Post-stroke depression:

By studying 17 depressed CVS patients with CT scan and MRI (see appendix), **Asaad (1992)** found that depression is significantly more related to the left hemisphere (13 out of 17 depressed patients, 76.47%). At the same time, more correlation with anterior lesions is shown, whether cortical or subcortical (basal ganglia, capsular or thalamic). In another study done on 6 depressed CVS patients (see appendix), **Hassan (2002)** reported that CVS is found to be due to cortical lesion among all the depressed patients. The depressed stroke patients have frontal lobe lesions in 67% (4 out of 6). In assessing the neurophysiological by Brain Electric

Activity Mapping (BEAM) and neuropsychological by Luria Nebraska Neuropsychological Battery (LNNB) dysfunctions, **Asaad (1992)** reported that BEAM demonstrates global and intense cerebral affection in most patients with major depression. By mean of BEAM and LNNB, the maximal dysfunction in the depressed stroke patients is distributed in the left frontal and left parieto-temporal regions. **Asaad (1992)** reported that EEG shows abnormal findings in 11 out of 17 (64.7%) of depressed stroke patients, with slowing on the left side (side of the lesion) in 6 out of 17 (35.29%) and bilateral slowing in 2 out of 17 (11.76%). Left temporal epileptic activity is reported in 5 patients and 3 of them have psychotic features.

Table 123: Anatomical localization, neurophysiological and neuropsychological dysfunctions in post-stroke depression

Author/s	Sample	Site	Diagnostic tools	Results
Asaad (1992)	17 depressed stroke patients	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	CT and MRI brain, BEAM, LNNB, EEG	depression is significantly more related to the left hemisphere, maximal dysfunction is distributed in the left frontal and left parieto-temporal regions, EEG shows abnormal findings in 64.7%

Hassan (2002)	6 depressed stroke patients	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	CT and MRI brain	CVS is found to be due to cortical lesion among all the depressed patients, depressed stroke patients have frontal lobe lesions in 67%
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Post-stroke mania:

By studying 5 manic and hypomanic stroke patients (see appendix), **Asaad (1992)** reported that all manic and hypomanic patients included in this study have their lesions in the right hemisphere, mainly the temporal lobe, followed by frontal and subcortical (eg. thalamic) regions as shown in CT scan, BEAM and LNNB. Temporal activity on EEG is reported in only 1 patient out of 5 (20%) (i.e. right temporal epileptic activity).

Table 124: Anatomical localization, neurophysiological and neuropsychological dysfunctions in post-stroke mania

Author/s	Sample	Site	Diagnostic tools	Results
Asaad (1992)	5 manic and hypomanic stroke patients	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	CT and MRI brain, BEAM, LNNB, EEG	all patients have their lesions in the right hemisphere, mainly the temporal lobe, right temporal epileptic activity is reported in 20%

Post-stroke anxiety:

Asaad (1992) reported that for the 18 anxious stroke patients, no significant correlation with a specific lesion is found by CT scan. Results of LNNB add more preference to right sided as well as bilateral occipital dysfunction. Clinical neurological history and examination show a tendency in a good number of those patients to have brainstem affection eg. as a part of vertebrobasilar insufficiency, with brainstem ischaemia. For the anxious depressed patients, higher frequency of left anterior lesions (especially left cortical) is found.

Table 125: Anatomical localization, neurophysiological and neuropsychological dysfunctions in post-stroke anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Asaad (1992)	18 anxious stroke patients	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	CT and MRI brain, BEAM, LNNB, EEG	no significant correlation with a specific lesion is found by CT, Results of LNNB add more preference to right sided as well as bilateral occipital dysfunction

Non-affective psychoses following stroke:

Asaad (1992) found that the lesion location of the 7 psychotic stroke patients with major depression is left anterior (left frontal, fronto-temporal and basal ganglia). In the patients with non-affective psychoses, left temporo-parietal lesion is found in 50% (2 out of 4) patients while right temporo-parietal and parieto-occipital in the remaining 50% (2 patients), as shown by CT and LNNB. So, 5 out of 7 (71.4%) patients of those having psychotic symptoms after stroke have left hemispheric lesions while only 2 out of 7 (28.6%) have right lesions. Left temporal epileptogenic activity has been

observed in 4 out of 7 (57.1%) patients and right temporal epileptic activity in only one out of 7 (14.28%).

Table 126: Anatomical localization, neurophysiological and neuropsychological dysfunctions in non-affective psychoses following stroke

Author/s	Sample	Site	Diagnostic tools	Results
Asaad (1992)	7 psychotic stroke patients with major depression	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	CT and MRI brain, BEAM, LNNB, EEG	the lesion is left anterior, Left temporal. Epileptogenic activity is reported in 57.1%

2. Multiple Sclerosis:

El-Gamel (1995), by studying 20 MS patients, found no correlation between the psychiatric disorder in MS patients and lesions detected by MRI. In another study done on 31 MS patients (16 of relapsing remittant type and 15 of secondary progressive type), **Fat-hy (2004)** didn't find any significant relation between depression or anxiety and total or regional lesions size in MRI.

Table 127: Anatomical localization of MS lesions in psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	MRI	there is no relation between the psychiatric disorder in MS patients and lesions detected by MRI
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	MRI	there is no significant relation between depression or anxiety and total or regional lesions size in MRI

B. Infertility

According to the study of **Radwan (2007)** (see appendix), we can conclude that the ovulatory (hormonal) disturbance is a risk factor of psychiatric disorders among the infertile females where the infertile patients due to ovulatory or hormonal factor (38 out of 62, 61.3%) are more likely to have psychiatric disorders, than those who have tubal, uterine or cervical factors (14 out of 62, 22.6%) and lastly the undiagnosed group (10 out of 62, 16.1%). Also the premenstrual dysphoric disorder is a risk factor for psychiatric disorders in infertile females, where **Radwan (2007)** found 46 out

of 107 (70.8%) of the infertile females with psychiatric morbidity and 16 out of 107 (38.1%) of the infertile patients without psychiatric morbidity have past history of pre-menstrual dysphoric disorder. Moreover patients with pre-menstrual dysphoric disorder obtained significantly higher mean scores on BDI (19 ± 9) and MAS (30 ± 8) than patients without history of pre-menstrual dysphoric disorder (12.8 ± 7.5 and 24.4 ± 8 respectively).

Table 128: Hormonal and pre-menstrual dysphoric disorder as a risk factor for psychiatric morbidity in infertile females

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV), BDI, MAS	ovulatory disturbance and pre-menstrual dysphoric disorder are risk factors for psychiatric disorders,

vi. Coping methods and strategies

A. Malignant diseases:

Breast cancer:

By studying 25 breast cancer female patients, **Fahmy et al (2000)** found that by using the dealing with illness coping inventory, breast cancer patients using avoidance-solitary/passive behavior coping strategy are significantly more anxious and depressed than those using active cognitive and active behavior methods of coping. In another study on 100 breast cancer female patients (see appendix), **El-Serafi (2008)** found that, by using the dealing with illness coping inventory, cancer breast patients with depressive disorders use significantly more frequently the avoidance coping method than those without psychiatric morbidity while breast cancer patients suffering from anxiety disorders use significantly more the solitary passive behavior than those without psychiatric morbidity.

Table 129: Coping methods as risk factor for psychiatric disorders in breast cancer patients

Author/s	Sample	Site	Diagnostic tools	Results
Fahmy et al (2000)	25 breast cancer females	Health Insurance oncology outpatient clinic at Port Said	dealing with illness coping inventory	breast cancer patients using avoidance-solitary/passive behavior coping strategy are significantly more anxious and depressed than those using active cognitive and active behavior methods of coping
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	dealing with illness coping inventory	cancer breast patients with depressive disorders use significantly more frequently the avoidance coping method while cancer breast patients suffering from anxiety disorders follows significantly more the solitary passive behavior

III. Clinical description of psychiatric disorders among physically ill patients

i. Clinical picture of psychiatric disorders in physically ill patients:

A. Medical diseases:

1. General medical diseases:

By studying 364 patients without genuine physical disorder attending the general medical clinic of El-Zagazig University Hospital, **Roshdy et al (2000)** found that the most common representing symptoms among non organic cases are pains, as 87% (301/364) of non organic patients complain of headache, 83.9% (290/ 364) complain of limb pain, 82.7% (286/364) of back pain, 72.3% (250/364) of chest pain and 70.2% (243/364) of abdominal pain. In another study done on 250 children attending pediatric clinic of Suez Canal University Hospital, **Magda et al (2000)** found that on Child Behavior Checklist, the mean score of the 37 children with psychiatric morbidity in internalizing (74.46 ± 19.64) and

externalizing (50.64 ± 14.82) problems are significantly higher than that of the 213 children without psychiatric morbidity (19.76 ± 16.51 and 18.63 ± 10.38 respectively). The children with psychiatric morbidity are significantly less socially competent than non-psychiatric children as regards worse relation with parents (19/37, 51.4% versus 23/213 10.7%), worse relation with siblings (21/37, 56.8% versus 35/213, 16.4%) and worse relation with others (24/37, 64.9% versus 34/213, 16%).

Table 130: Clinical picture of psychiatric disorders in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Results
Roshdy et al (2000)	364 patients without genuine physical disorder	General medical clinic of Zagazig University Hospital	Psychiatric interview	87% complain of headache, 83.9% of limb pain, 82.7% of back pain, 72.3% of chest pain and 70.2% of abdominal pain
Magda et al (2000)	250 children attending pediatric clinic	Pediatric clinic in Suez Canal University Hospital	Child Behavior Checklist	the mean score of children with psychiatric morbidity in internalizing and externalizing problems are significantly higher than that of children without psychiatric morbidity

a. Panic disorders:**Symptoms of panic disorders:**

By studying 30 patients with panic disorder who attended different medical clinics, **Abu El-Ela (2000)** reported that 76.6% (23/30) of panic patients complain of dizziness, 73.3% (22/30) of palpitation, 66.6% (20/30) of chest pain, 66.6% (20/30) of parasthesia, 60% (18/30) of dyspnea, 56.6% (17/30) of sweating, 53.3% (16/30) of fatigue and 46.6% (14/30) of abdominal pains. In another study done on 227 patients with panic disorders attending different medical clinics of Alazhar University Hospital (75 from chest clinic outpatients, 75 from heart clinic outpatients and 77 from general medecine outpatients), **El-Azzazy (2007)** reported that the most frequent panic symptoms are dyspnea (71.8%), followed by palpitation (64.8%), then fear of dying (63.4%) and finally chest pain (55.9%). Female gender significantly more suffers from chest pain, fear of dying, fear of losing control, parasthesia than males, while male patients significantly more complains of feeling of chocking and trembling.

Table 131: Clinical picture of panic disorders in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Results
Abu El-Ela (2000)	30 patients with panic disorder who attended different medical clinics	private clinic in Cairo	Psychiatric interview	76.6% complain of dizziness, 73.3% of palpitation, 66.6% of chest pain, 66.6% of parasthesia, 60% of dyspnea, 56.6% of sweating
El-Azzazy (2007)	227 patients with panic disorders attending different medical clinic	Chest, heart & general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	most frequent panic symptoms are dyspnea (71.8%), followed by palpitation (64.8%), then fear of dying (63.4%) and finally chest pain (55.9%)

Investigations done for panic patients:

Abu El-Ela (2000) reported that concerning the investigations done for panic patients in different medical clinics, ECG is done in 93.3% (28/30) of panic patients, echocardiography in 16.6% (5/30), cardiac catheterization in 13.3% (4/30), EEG in

50% (15/30), CT brain in 33.3% (10/30), MRI brain in 20% (6/30) and thyroid hormones assay in 16.6% (5/30). **El-Azzazy (2007)** reported that the most frequent number of investigations received by patients with panic disorder attending the medical clinics is 2 (104/227, 45.8%), followed by 3 types of investigations (39.2%, 89/227).

Table 132: Investigations done for panic patients in medical clinics

Author /s	Sample	Site	Diagnostic tools	Results
Abu El-Ela (2000)	30 patients with panic disorder who attended different medical clinics	private clinic in Cairo	Psychiatric interview	ECG is done in 93.3% of panic patients, echocardiography in 16.6%, cardiac catheterization in 13.3%, EEG in 50%, CT brain in 33.3%, MRI brain in 20% and thyroid hormones assay in 16.6%
El-Azzazy (2007)	227 patients with panic disorders attending different medical clinic	Chest, heart & general medicine clinic of Alazhar university hospital "Al zahraa hospital"	Psychiatric interview	2 types of investigations are done in 45.8%, and 3 in 39.2%

b. Depression:

By studying 33 children with chronic hemolytic anemia and 110 children without known physical or psychiatric illness, **El-Defrawi et al (2000)** found that on Johns Hopkins Depression scale, the scores of children with hemolytic anemia (48.5 ± 3.2) are significantly higher than that of controls (40.8 ± 5.2).

Table 133: *Clinical picture of depression in general medical diseases*

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	33 children with chronic hemolytic anemia	Outpatient clinics of Port Said and Port Fouad General Hospitals	Johns Hopkins Depression scale	the scores of children with hemolytic anemia (48.5 ± 3.2) are significantly higher than that of controls (40.8 ± 5.2)

c. Cognitive impairment:

Magda et al (2000) found that academic performance is significantly worse in the 37 psychiatric children than the 213 non-

psychiatric children regarding number of school failure (18/37, 58.1% versus 28/213, 13.1%). **El-Defrawi et al (2000)** found that on Goodenough scale for non-verbal intelligence, the scores of 33.3% (11/33) of children with hemolytic anemia are below 70, which is significantly more than controls (8.2%, 9/110).

Table 134: Cognitive impairment in psychiatric disorders in medical outpatients

Author/s	Sample	Site	Diagnostic tools	Results
Magda et al (2000)	250 children attending pediatric clinic	Pediatric clinic in Suez Canal University Hospital	Psychiatric interview	academic performance is significantly worse in psychiatric children than non-psychiatric children regarding number of school failure
El-Defrawi et al (2000)	33 children with chronic hemolytic anemia	Outpatient clinics of Port Said and Port Fouad General Hospitals	Goodenough scale for non-verbal intelligence	the scores of 33.3% of children with hemolytic anemia are below 70, which is significantly more than controls (8.2%)

2. Gastrointestinal diseases:

By studying 50 cases with gastrointestinal illnesses (see appendix), **Abdel-Wahab (1982)** reported that patients with organic and those with non-organic illnesses have high scores of neuroticism (mean=16.84 and 16.24 respectively) on Eysenck Personality Questionnaire (EPQ), with no significant difference between them.

Table 135: Clinical picture of psychiatric disorders in gastrointestinal diseases

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Wahab (1982)	50 cases with gastrointestinal illness	clinic of internal medicine	EPQ	patients with organic and those with non-organic illnesses have high scores of neuroticism

a. Duodenal ulcer:

By studying 100 patients with duodenal ulcer, 30 somatizers (patients complaining of symptoms simulating peptic ulcer with free endoscopic examination) and 30 controls without known psychiatric or physical illness, **Abdel-Gawad et al (1988)** found that there is no significant difference between the mean scores of patients with duodenal ulcer on BDI (19.22 ± 11.6) and that of somatizers (21.8 ± 12.7), while the mean score of duodenal ulcer patients is significantly higher than controls (6.63 ± 11.56). As regards anxiety, the mean scores of duodenal ulcer patients on HAS (20.66 ± 6.87) is significantly higher than that of controls (5.17 ± 5.92), but non-significant difference between their scores and that of somatizers (22.77 ± 7.33) is found.

Table 136: Clinical picture of psychiatric disorders in duodenal ulcer

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Gawad et al (1988)	100 duodenal ulcer patients, 30 somatizers and 30 controls	Not stated	BDI HAS	No significant difference between scores of duodenal ulcer patients and somatizers, while both are significantly higher than that of controls

b. Liver diseases:**Depression in liver diseases:**

By studying 80 patients with chronic hepatitis C and 80 controls without known physical or psychiatric illness, **Abou-Lughod (1997)** found no significant difference between the mean scores of hepatic patients and that of controls in depression on MSHQ (8.4 ± 3.4 versus 7.8 ± 3.4 respectively). In another study done on 30 children with chronic liver disease and 30 controls without known psychiatric or physical illness, **Kotb & Sabry (2003)** found that on CDI, circumstantial pessimism, anticipation, irritability and crying are all detected and more pronounced in the children with chronic liver disease than in controls. In chronic liver diseased children it seems that socialization represent a real problem that shows significant difference from the controls. The suicidal ideations are equal in both hepatic children and controls. There is a non-significant difference between hepatic children and controls in the somatic domain. Depth assessment of the body image concept (which includes self image perception, and accompanied emotional reactions and its reflections on interactions) by the Body Image scale showed significant difference, scores being higher in hepatic children than in controls.

Table 137: Clinical picture of depression in liver diseases

Author/s	Sample	Site	Diagnostic tools	Results
Abou-Lughod (1997)	80 patients with chronic hepatitis C and 80 controls	Internal Medicine Department in 9 hospitals in Cairo	MSHQ	no significant difference between the mean scores of hepatic patients and that of controls in depression
Kotb & Sabry (2003)	30 children with chronic liver disease	Hepatology Clinic of the New Children's Hospital, Cairo University	CDI	circumstantial pessimism, anticipation, irritability and crying are more pronounced in hepatic children than in controls

Other psychiatric symptoms:

Abou-Lughod (1997) found that the mean psychosomatic score on MSHQ of hepatic patients (9.8 ± 3.4) is significantly higher than controls (6.6 ± 3.5). He found no significant difference between the mean scores of hepatic patients and that of controls in phobia

(7.5 ± 2.5 versus 7.3 ± 2.7 respectively), in obsession (10.2 ± 2.8 versus 9.8 ± 3 respectively), in anxiety (6.1 ± 4 versus 6 ± 3.5 respectively) and in hysteria (5.6 ± 2.4 versus 6.1 ± 3 respectively). Using MMPI, the mean psychasthenia score of hepatic patients (22.2 ± 8.6) is significantly higher in than that of controls (17.8 ± 5.6).

Table 138: Clinical picture of psychiatric symptoms in liver diseases

Author/s	Sample	Site	Diagnostic tools	Results
Abou-Lughod (1997)	80 patients with chronic hepatitis C and 80 controls	Internal Medicine Department in 9 hospitals in Cairo	MSHQ MMPI	no significant difference between the mean scores of hepatic patients and that of controls in phobia, obsession, anxiety and in hysteria

3. Systemic Lupus Erythematosus:

Depression in SLE:

By studying 50 patients with SLE and 40 controls (20 with depressive disorder and 20 without known psychiatric or physical illness), **Abdel-Mawella (2007)** found that the mean score of SLE patients on HDS (9.2 ± 6.8) is significantly lower than that of the

depressed controls (20.23 ± 4.8). There is non-significant difference between the mean scores of SLE patients and the healthy controls (7.3 ± 6.3).

Table 139: Clinical picture of depression in SLE

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Mawella (2007)	50 SLE patients and 40 controls	Rheumatology and Rehabilitation clinic and department of Kasr El Aini Hospital	HDS	mean score of SLE patients is significantly lower than that of the depressed controls. There is insignificant difference between the mean scores of SLE patients and the healthy controls

Quality of life:

Abdel-Mawella (2007) reported that the quality of life in SLE patients with psychiatric manifestations assessed by PCASEE quality of life questionnaire is significantly more impaired than the SLE without psychiatric manifestations in the following: economic

(13.94±14 versus 23.8±16), affective (14±10 versus 23±9.3) and cognitive problems (23.5±12.5 versus 31.75±10).

Table 140: Quality of life of SLE patients with psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Mawella (2007)	50 SLE patients	Rheumatology and Rehabilitation clinic and department of Kasr El Aini Hospital	PCASEE quality of life questionnaire	quality of life in SLE patients with psychiatric manifestations is significantly more impaired than the SLE without psychiatric manifestations in the following: economic, affective and cognitive problems

4. Diabetes Mellitus (DM):

Depression:

By studying 80 diabetic women and a number of depressed non-medically ill depressed controls, **El-Mahallawy & Gad-Allah (1996)** found that on BDI, there is no significant difference between

the mean score of diabetic patients with major depressive disorder (24.4 ± 6.95) and that of depressed patients without medical illness (26.2 ± 6.5), and both are significantly higher than that of diabetic patients without major depressive disorder (5.5 ± 4.83). On BDI, the prevalence of health worries and decreased interest is significantly higher in the depressed diabetic patients than in the depressed non-medically ill patients. The prevalence of all measured symptoms except weight loss (ie. sadness, hopelessness, feeling a failure, anhedonia, guilt, feeling punished, self-hate, self-blame, suicidal ideation, crying spells, feeling irritated, not interested in people, decisiveness, attractiveness, inability to work, insomnia, fatigue, loss of appetite, health worries and no interest in sex) are significantly higher in depressed diabetic patients than in the non-depressed diabetic patients.

Table 141: Clinical picture of depression in DM

Author/s	Sample	Site	Diagnostic tools	Results
El-Mehallawy & Gad-Allah (1996)	80 diabetic women	Diabetic clinic of Ain Shams University Hospital	BDI	prevalence of all measured symptoms except weight loss is significantly higher in depressed diabetic patients than in the non-depressed diabetic patients, prevalence of health worries and decreased interest is significantly higher in the depressed diabetic patients than in the depressed non-medically ill patients.

Cognitive impairment:

By studying 48 diabetic patients and 25 controls without known physical or psychiatric illness (see appendix), **Omar (1984)** reported that on verbal similarities test, the block design test and the digit span test of the Wechsler-Belview test for intelligence for adults, the mean scores of females with early onset of DM are 11 ± 0.7 , 14.5 ± 3 and 1.25 respectively, females with late onset of DM are 5.4 ± 5.4 , 7.5 ± 7.8 and 1.44 respectively, males with early

onset of DM (insulin dependant type) are 12.7 ± 3.2 , 18.8 ± 7.5 and 0.9 respectively, males with early onset of DM (non-insulin dependant type) are 5.4 ± 4 , 13.8 ± 2.3 and 2.1 respectively and males with late onset of DM are 10.5 ± 8.4 , 14.6 ± 6 and 1.37 respectively, while that of female controls are 13.4 ± 5.7 , 16 ± 4.8 and 1.56 respectively and male controls are 14 ± 4.5 , 17.4 ± 6.1 and 1.6 respectively.

Table 142: Cognitive impairment in DM

Author/s	Sample	Site	Diagnostic tools	Results
Omar (1984)	48 diabetic patients	outpatient clinic of diabetes mellitus in Ain Shams University Hospital	verbal similarities test, the block design test and the digit span test of the Wecksler-Belvieu test	mean scores of females with early onset of DM are 11 ± 0.7 , 14.5 ± 3 and 1.25 respectively, females with late onset of DM are 5.4 ± 5.4 , 7.5 ± 7.8 and 1.44 respectively, males with early onset of DM (insulin dependant type) are 12.7 ± 3.2 , 18.8 ± 7.5 and 0.9 respectively, males with early onset of DM (non-insulin dependant type) are 5.4 ± 4 , 13.8 ± 2.3 and 2.1 respectively and males with late onset of DM are 10.5 ± 8.4 , 14.6 ± 6 and 1.37 respectively

5. Cardiovascular diseases:**a. Ischemic heart disease:****Depression in IHD:**

By studying 90 IHD patients (30 with old and 30 with recent myocardial infarction, and 30 with angina pectoris) and 50 controls without known physical or psychiatric illness (see appendix), **El-Dawla (1989)** reported that as to their scores on HDS, patients with recent myocardial infarction have significantly the smallest score (8.87 ± 4.89), followed by patients with old myocardial infarction (9.4 ± 7.62), while patients with angina pectoris are significantly the most depressed (14.43 ± 3.26). **Youssef (1998)** studied 30 cardiac patients with acute myocardial infarction, 20 cardiac controls admitted to the ordinary ward and 20 non-cardiac controls admitted to the ICU. The mean score of patients with myocardial infarction on BDI (17.93 ± 10.23) is significantly lower than that of non-cardiac controls admitted in ICU (26.35 ± 14.5) and non-significantly lower than that of cardiac controls (20.45 ± 12.5).

Table 143: Clinical picture of depression in IHD

Author/s	Sample	Site	Diagnostic tools	Results
El-Dawla (1989)	90 IHD patients	ICU of Ain Shams University Hospital	HDS	patients with recent myocardial infarction have significantly the smallest score, followed by patients with old myocardial infarction, while patients with angina pectoris are significantly the most depressed
Youssef (1998)	30 patients with acute myocardial infarction and 40 controls	ICU of Kasr El Aini Hospital	BDI	The mean score of patients with myocardial infarction is significantly lower than that of non-cardiac controls and non-significantly lower than that of cardiac controls

Anxiety in IHD

El-Dawla (1989) reported that patients with recent myocardial infarction have significantly the smallest score on HAS (12.1 ± 4.67), followed by patients with old myocardial infarction (15.9 ± 8.07), while the significantly most anxious are patients with angina pectoris (17.7 ± 5.17).

Table 144: Clinical picture of anxiety in IHD

Author/s	Sample	Site	Diagnostic tools	Results
El-Dawla (1989)	90 IHD patients	ICU of Ain Shams University Hospital	HAS	patients with recent myocardial infarction have significantly the smallest score, followed by patients with old myocardial infarction, while patients with angina pectoris are significantly the most anxious

Personality type in IHD:

Using a structured interview, **El-Dawla (1989)** reported that the type A personality is significantly more pronounced in the

patients (15.46 ± 4.7) than in the controls (13.2 ± 1.2). Furthermore, type A personality is insignificantly more marked in patients with old myocardial infarction (16.6 ± 5.1), then in patients with angina pectoris (15.4 ± 7.9) and lastly in patients with recent myocardial infarction (13.3 ± 5.3).

Table 145: Personality type in IHD

Author/s	Sample	Site	Diagnostic tools	Results
El-Dawla (1989)	90 IHD patients	ICU of Ain Shams University Hospital	Structured Interview	type A personality is significantly more pronounced in the patients than in the controls

Quality of life:

In a study done by **El-Tantawy et al (2007)** on 120 patients with coronary heart disease, he found that on assessing the quality of life, the mean SF-36 mental domain score (43.5 ± 11.9) and physical domain score (41.2 ± 13.3) for coronary heart disease patients with psychiatric disorder are significantly lower than those of coronary heart disease patients without psychiatric disorder (59.9 ± 12.6 and 52.3 ± 13.2 respectively). There is also high

significance regarding all domains; role function physical, pain, vitality, social function, role function emotional and mental health between the two groups, being lower in coronary heart disease patients with psychiatric disorder. The mean SF-36 mental domain score for the coronary heart disease patients with comorbid psychiatric disorder (41.4 ± 14.9) is significantly lower than that of the coronary heart disease patients with only one psychiatric disorder (50.7 ± 19.8). There is also high significance regarding pain, social function, role function, emotional and mental health between the two groups, being lower in coronary heart disease patients with comorbid psychiatric disorder.

Table 146: Quality of life in IHD patients with psychiatric morbidity

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Tantawy et al (2007)	120 patients with coronary heart disease	cardiology clinic of Suez Canal University Hospital	SF-36	In all domains, the score of patients with psychiatric disorder are significantly lower than those of coronary heart disease patients without psychiatric disorder

Other psychiatric symptoms:

Youssef (1998) reported that in MSHQ for obsession and for somatization, the mean scores of patients with myocardial infarction (10.47 ± 2.8 and 10.97 ± 3 respectively) are significantly higher than those of cardiac patients admitted in ordinary ward (8.4 ± 2.26 and 8.9 ± 3 respectively) and not significantly different from those of non-cardiac controls (10.5 ± 2.7 and 10.3 ± 3.2 respectively).

Table 147: Clinical picture of psychiatric symptoms in IHD

Author/s	Sample	Site	Diagnostic tools	Results
Youssef (1998)	30 patients with acute myocardial infarction and 40 controls	ICU of Kasr El Aini Hospital	MSHQ	the mean scores of patients with myocardial infarction for obsession and for somatization are significantly higher than those of cardiac patients admitted in ordinary ward and not significantly different from those of non-cardiac controls

b. Rheumatic heart disease:

By studying 100 children with rheumatic heart and 30 controls with acute febrile illness as tonsillitis, pharyngitis, etc, **Abdel-Aal et al (1995)** found that on MSHQ, rheumatic heart children score significantly higher mean scores than the controls on the scales of anxiety (8.85 ± 3 versus 5.6 ± 1.8 respectively), obsession (10.74 ± 2.54 versus 7.1 ± 2.4 respectively), and depression (10.06 ± 2.47 versus 8.56 ± 2.1 respectively). On the other hand, rheumatic heart children with heart failure score significantly lower scores on obsession (6.3 ± 5.5), depression (6.3 ± 2.5) and hysteria (6.3 ± 3) than children with compensated cardiac function (9.1 ± 2.8 , 8.1 ± 2.6 and 8.5 ± 5 respectively).

Table 148: Clinical picture of psychiatric symptoms in rheumatic heart disease

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Aal et al (1995)	100 children with rheumatic heart and 30 controls with acute febrile illness	Pediatric clinic- Assiut University Hospital	MSHQ	rheumatic heart children score significantly higher mean scores than the controls on the scales of anxiety, obsession and depression

c. Congenital heart diseases:**Depression:**

By studying 25 children with congenital heart disease and 110 children without known physical or psychiatric illness, **El-Defrawi et al (2000)** found that on Johns Hopkins Depression scale, the scores of children with congenital heart disease (44 ± 4.4) are significantly higher than that of controls (40.8 ± 5.2).

Table 149: Clinical picture of depression in congenital heart diseases

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	33 children with congenital heart diseases and 110 controls	Outpatient clinics of Port Said and Port Fouad General Hospitals	Johns Hopkins Depression scale	the scores of children with congenital heart disease are significantly higher than that of controls

Cognitive impairment:

El-Defrawi et al (2000) reported that on Goodenough scale for non-verbal intelligence, the scores of 24% (6/25) of children with congenital heart disease are below 70, which is significantly more than controls (8.2%, 9/110).

Table 150: Cognitive impairment in congenital heart diseases

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	33 children with congenital heart diseases and 110 controls	Outpatient clinics of Port Said and Port Fouad General Hospitals	Goodenough scale for non-verbal intelligence	scores of 24% of children with congenital heart disease are below 70, which is significantly more than controls (8.2%)

6. Respiratory diseases:

Depression

By studying 52 children with bronchial asthma and 110 children without known physical or psychiatric illness, **El-Defrawi et al (2000)** found that on Johns Hopkins Depression scale, the scores of children with bronchial asthma (46.8 ± 6.7) are significantly higher than that of controls (40.8 ± 5.2).

Table 151: Clinical picture of depression in bronchial asthma

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	52 children with bronchial asthma and 110 controls	Outpatient clinics of Port Said and Port Fouad General Hospitals	Johns Hopkins Depression scale	the scores of children with bronchial asthma are significantly higher than that of controls

Cognitive impairment:

El-Defrawi et al (2000) reported that on Goodenough scale for non-verbal intelligence, the scores of 25% (13/52) of children with bronchial asthma are below 70, which is significantly more than controls (8.2%, 9/110).

Table 152: Cognitive impairment in bronchial asthma

Author/s	Sample	Site	Diagnostic tools	Results
El-Defrawi et al (2000)	52 children with bronchial asthma and 110 controls	Outpatient clinics of Port Said and Port Fouad General Hospitals	Goodenough scale for non-verbal intelligence	the scores of 25% of children with bronchial asthma are below 70, which is significantly more than controls (8.2%)

7. Neurological diseases:**a. Epilepsy:**

By studying 20 children with primary generalized tonic clonic seizures and 20 children without known physical or psychiatric illness, **Saadani et al (2002)** found that on CDI, the mean score of GTCSS children (53.9+15.2) is significantly higher than that of

controls (38.5+3.7). Using Arabic Children Depression Inventory, the results are similar to those with CDI, as there is a significant difference between GTCSs children (54.2+16.7) and controls (37.9+3.5).

Table 153: Clinical picture of depression in GTCSs

Author/s	Sample	Site	Diagnostic tools	Results
Saadani et al (2002)	20 children with 1ry GTCSs and 20 controls	Not stated	CDI and Arabic Children Depression Inventory	the mean score of GTCSs children is significantly higher than that of controls

b. Brain tumours:

Altered emotions:

By studying 18 patients with brain tumours and 18 controls without known psychiatric or physical illness (see appendix), **Abdulghani (1981)** found that 13 (72.2%) subjects show altered emotions, 9 show mixed anxiety depression, one is severely depressed, one is labile and one is shallow. Ten controls show pictures of depression and anxiety.

Table 154: Clinical picture of altered emotions in brain tumour

Author/s	Sample	Site	Diagnostic tools	Results
Abdulghani (1981)	18 patients with brain tumours	Neuropsychiatric department, Ain Shams hospital	Psychiatric interview	9 show mixed anxiety depression, one is severely depressed, one is labile and one is shallow

Thought disorders

Abdulghani (1981) found that one brain tumour patient (5.5%) is affected in the form of incoherence, delusions of grandeur and persecution.

Table 155: Clinical picture of thought disorders in brain tumour

Author/s	Sample	Site	Diagnostic tools	Results
Abdulghani (1981)	18 patients with brain tumours	Neuropsychiatric department, Ain Shams hospital	Psychiatric interview	one patient is affected in the form of incoherence, delusions of grandeur and persecution

Behavioral disorders

Regarding behavioral disorders, **Abdulghani (1981)** reported that 3 brain tumour patients (16.7%) show bizarre behavior, insomnia, excessive eating, restlessness, aggressiveness, neglect of self hygiene and micturition in public.

Table 156: Clinical picture of behavioral disorder in brain tumour

Author/s	Sample	Site	Diagnostic tools	Results
Abdulghani (1981)	18 patients with brain tumours	Neuropsychiatric department, Ain Shams hospital	Psychiatric interview	3 patients show bizarre behavior, insomnia, excessive eating, restlessness, aggressiveness, neglect of self hygiene and micturition in public

Perceptual disorder:

Abdulghani (1981) found that one brain tumour patient (5.5%) have visual and auditory hallucinations.

Table 157: Clinical picture of perceptual disorder in brain tumour

Author/s	Sample	Site	Diagnostic tools	Results
Abdulghani (1981)	18 patients with brain tumours	Neuropsychiatric department, Ain Shams hospital	Psychiatric interview	one patient have visual and auditory hallucinations

Cognitive impairment:

Abdulghani (1981) reported that on Wechsler Belvue test, patients obtained a score of (78.92 ± 7.73) and intellectual deterioration (the discrepancy between verbal and performance I.Q.) is found in 3 out of 12 subjects.

Table 158: Cognitive impairment in brain tumour

Author/s	Sample	Site	Diagnostic tools	Results
Abdulghani (1981)	18 patients with brain tumours	Neuropsychiatric department, Ain Shams hospital	Wechsler Belvue test	patients obtained a score of (78.92±7.73)

Social deterioration:

Abdulghani (1981) reported that 3 brain tumour patients (16.7%) are affected in the form of loss of job, social impairment, divorce, and neglect of family affairs.

Table 159: Social deterioration in brain tumour

Author/s	Sample	Site	Diagnostic tools	Results
Abdulghani (1981)	18 patients with brain tumours	Neuropsychiatric department, Ain Shams hospital	Psychiatric interview	3 patients are affected in the form of loss of job, social impairment, divorce, and neglect of family affairs

c. Cerebrovascular stroke:**Post-stroke depression:**

By studying 103 patients with cerebrovascular stroke and 50 controls without known physical or psychiatric illness (see appendix), **Asaad (1992)** reported that depressed mood is found in all depressed stroke patients, followed by poor sleep, and appetite with diurnal variation, then feelings of hopelessness as well as anhedonia and lastly suicidal thoughts. The depression is more severe with subcortical lesions. For patients with milder depression or dysthymia, significant probability mapping reveals also lateralization of impairment to the left, though not as in patients

with severer depression. Maximal impairment is distributed in the left fronto-parieto-temporal region followed by right temporo-parieto-occipital region. In another study done on 30 patients with cerebrovascular stroke and 15 controls without known physical or psychiatric illness (see appendix), **Hassan (2002)** found that the mean score of depressed stroke patients on BDI (24.5 ± 4.9) and that of non-depressed stroke patients (11.4 ± 4.5) are significantly higher than controls (5.6 ± 2.7). Considering every depressive symptom in the BDI, he reported that there is a significant difference between the 3 groups as regards sadness, hopelessness, self hate, suicidal ideas, spontaneous cry, excitement, lack of interest, loss of value and angriness being more in depressed stroke patients.

Table 160: Clinical picture of post-stroke depression

Author /s	Sample	Site	Diagnostic tools	Results
Asaad (1992)	103 patients with CVS and 50 controls	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	Psychiatric interview	depressed mood is found in all depressed stroke patients, then poor sleep and appetite with diurnal variation, feelings of hopelessness, anhedonia and suicidal thoughts

Hassan (2002)	30 patients with CVS and 15 controls	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	BDI	depressed stroke patients complain of sadness, hopelessness, self hate, suicidal ideas, spontaneous cry, excitement, lack of interest, loss of value and angriness
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Post-stroke Anxiety:

By studying 30 patients with cerebrovascular stroke and 15 controls without known physical or psychiatric illness (see appendix), **Hassan (2002)** reported that on MAS, there is no significant difference between CVS patients and controls as regards physical symptoms of anxiety (3.1 ± 1.4 versus 3.4 ± 1.5 respectively), however, the psychological symptoms of anxiety are significantly higher in stroke patients (15.4 ± 3.3) than in controls (9.4 ± 2.9).

Table 161: Clinical picture of post-stroke anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Hassan (2002)	30 patients with CVS and 15 controls	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	MAS	there is no significant difference between CVS patients and controls as regards physical symptoms of anxiety, however, the psychological symptoms of anxiety are significantly higher in stroke patients than in controls

Non-affective psychoses following stroke:

By studying 103 patients with cerebrovascular stroke and 50 controls without known physical or psychiatric illness (see appendix), **Asaad (1992)** reported that with left hemispheric lesions, the psychotic picture is more towards the paranoid subtypes, with persecutory delusions, auditory hallucination, but preserved affect and no disintegration of personality. Impaired conceptualization, thought and memory disturbance, disorientation, confabulation and

morbid experience of space and time, all are among the symptoms common with right hemispheric lesions.

Table 162: Clinical picture of non-affective psychosis following stroke

Author/s	Sample	Site	Diagnostic tools	Results
Asaad (1992)	103 patients with CVS and 50 controls	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	Psychiatric interview	left hemispheric lesions is associated with persecutory delusions, auditory andhallucination, right hemispheric lesions are associated with impaired conceptualization, thought and memory disturbance, disorientation

Cognitive impairment:

Hassan (2002) found that on Mini-Mental State Examination (MMSE) there is a significant cognitive impairment among the stroke patients with mean score (21.1 ± 3.8) compared to non stroke subjects with mean score (27.7 ± 1.1). There is a significant

difference between MMSE in both depressed and non depressed stroke patients; the higher the depression score the lower the cognitive score. So the cognitive impairment in post-stroke depression may be mainly due to the depression and not due to the stroke itself.

Table 163: Clinical picture of cognitive impairment

Author/s	Sample	Site	Diagnostic tools	Results
Hassan (2002)	30 patients with CVS and 15 controls	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	MMSE	There is a significant difference between MMSE in both depressed and non depressed stroke patients; the higher the depression score the lower the cognitive score

d. Multiple Sclerosis (MS):**Depression in MS patients:**

By studying 20 MS patients, **El-Gamel (1995)** found that on Hopelessness scale, 55% (11/20) have low scores, 40% (8/20) have high score and 5% (1/20) has high risk with risk of suicide. In another study done on 31 MS patients (16 of relapsing remittant type and 15 of secondary progressive type) and 20 controls without known physical or psychiatric illness, **Fat-hy (2004)** found that the mean score of MS patients on BDI (13.9 ± 12.7) is significantly higher than that of controls (7.16 ± 3.3). There is no significant difference between the mean scores of MS patients of relapsing remittant type (14.75 ± 13.6) and that of MS patients of secondary progressive type (13 ± 12) on BDI.

Table 164: Clinical picture of depression in MS patients

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	Hopelessness scale	55% have low scores, 40% have high score and 5% has high risk with risk of suicide

Fat-hy (2004)	31 MS patients and 20 controls	Outpatient clinic of Nasser Institute Hospital	BDI	There is no significant difference between the mean scores of MS patients of relapsing remittant type and that of MS patients of secondary progressive type
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Anxiety in MS patients:

Fat-hy (2004) reported that on HAS, the mean score of MS patients (8.8 ± 9) is significantly higher than that of controls (7.4 ± 2.3). There is no significant difference between the mean scores of MS patients of relapsing remittant type (8.6 ± 10.7) and that of MS patients of secondary progressive type (9 ± 7.4) on HAS.

Table 165: Clinical picture of anxiety in MS patients

Author/s	Sample	Site	Diagnostic tools	Results
Fat-hy (2004)	31 MS patients and 20 controls	Outpatient clinic of Nasser Institute Hospital	HAS	There is no significant difference between the mean scores of MS patients of relapsing remittant type and that of MS patients of secondary progressive type

e. Brain trauma:

By studying 36 patients with mild traumatic brain injury and 20 controls without known physical or psychiatric illness, **Fahmy et al (2001)** reported that on Dissociative Experience Scale, the mean score of brain trauma patients (21.16 ± 3.79) 3 months following the trauma is significantly higher than that of controls (18.01 ± 3.06). 45.5% (5/11) of Acute Stress Disorder patients with mild traumatic brain injury, 50% (3/6) of PTSD, and 100% (2/2) of panic disorder are significantly associated with high scores on Dissociative Experience Scale.

Table 166: Clinical picture of psychiatric diagnoses in brain trauma

Author/s	Sample	Site	Diagnostic tools	Results
Fahmy et al (2001)	36 patients with mild traumatic brain injury	emergency department of Suez Canal University Hospital	Dissociative Experience Scale	45.5% of ASD patients, 50% of PTSD, and 100% of panic disorder are significantly associated with high scores

f. Migraine:

By studying 20 children with migraine and 20 children without known physical or psychiatric illness, **Saadani et al (2002)** found that on CDI, the mean score of migraineurs (47.7+9.8) is significantly higher than that of controls (38.5+3.7). Using Arabic Children Depression Inventory, the results are similar to those with CDI, as there is a significant difference between migraine children (48.4+11.6) and controls (37.9+3.5).

Table 167: Clinical picture of depression in migraine

Author/s	Sample	Site	Diagnostic tools	Results
Saadani et al (2002)	20 children with migraine and 20 controls	Not stated	CDI and Arabic Children Depression Inventory	the mean score of migraineurs is significantly higher than that of controls

B. Dermatological diseases:**Depression:**

By studying 65 children with skin diseases (17 acne vulgaris, 15 alopecia areata, 13 atopic dermatitis, 10 psoriasis and 10 urticaria) and 60 children without known psychiatric or physical

illness, **El-Shourbaghi & Farid (1999)** reported that the mean score of depression in total skin diseased children (12.6 ± 5.4) is significantly higher than that of controls (9.5 ± 4.3) on D-test for depression for children. The mean scores on D-test for depression for children are significantly higher in psoriasis (16.3 ± 4.1), urticaria (14.1 ± 4.6), atopic dermatitis (12.7 ± 5.2), acne (12.2 ± 6.1) than controls but not alopecia (9.6 ± 5.2).

Table 168: Clinical picture of depression in dermatological diseases

Author/s	Sample	Site	Diagnostic tools	Results
El-Shourbaghi & Farid (1999)	65 children with skin diseases and 60 controls	outpatient clinic at Mahalla Kobra General Hospital	D-test for depression for children	The mean scores are significantly higher in psoriasis, urticaria, atopic dermatitis, acne than controls but not alopecia

Anxiety:

El-Shourbaghi & Farid (1999) reported that the mean score of CMA scale in skin diseased children (20.7 ± 8.3) is significantly

higher than that of controls (12.2 ± 6.3). The mean scores on CMA are significantly higher than controls in psoriasis (27 ± 4.3), alopecia areata (20.2 ± 6.6), urticaria (20 ± 6.8), atopic dermatitis (19.8 ± 7.7) and acne vulgaris (18.8 ± 7.5).

Table 169: Clinical picture of depression in dermatological diseases

Author/s	Sample	Site	Diagnostic tools	Results
El-Shourbaghi & Farid (1999)	65 children with skin diseases and 60 controls	outpatient clinic at Mahalla Kobra General Hospital	CMA	The mean scores are significantly higher than controls in psoriasis, alopecia areata, urticaria, atopic dermatitis and acne vulgaris

C. Infertility:

Depression:

By studying 107 infertile women and 100 fertile controls (see appendix), **Radwan (2007)** found that on BDI, the infertile females are significantly more depressed (16.5 ± 9) than the fertile females (10.15 ± 8.2).

Table 170: Clinical picture of depression in infertile women

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	BDI	infertile females are significantly more depressed than the fertile females

Anxiety:

Radwan (2007) reported that on MAS, the infertile females are significantly more anxious (27.4 ± 8.3) than the fertile females (18 ± 8.8).

Table 171: Clinical picture of anxiety in infertile women

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	MAS	infertile females are significantly more anxious than the fertile females

Quality of life:

Radwan (2007) found that on the PCASEE quality of life questionnaire, the infertile females have significantly lower quality of life (73.75 ± 13.7) than fertile females (80.4 ± 10). Using Fertility Adjustment Scale (FAS), infertile patients with psychiatric morbidity have significantly lower quality of life (48.5) than infertile patients without psychiatric morbidity (52.6).

Table 172: Quality of life in infertile women with psychiatric disorders

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	PCASEE FAS	infertile patients with psychiatric morbidity have significantly lower quality of life than infertile patients without psychiatric morbidity

D. Burn:

Attia (1991) studied 60 patients with acute burns (between their 2nd and 21st day of injury), 40 patients with chronic burn (at least 6 months after the injury) and 50 orthopedic patients as controls. He found that on BPRS, burn patients show significantly higher depressive mood, anxiety, somatic concern, guilt feeling, suspiciousness, hallucinatory behavior, motor retardation, uncooperativeness, blunt affect, excitement and disorientation than controls. Acute burn patients have significantly higher scores than

chronic burn patients in tension, hostility, grandiosity, emotional withdrawal, hallucinatory behavior and uncooperativeness. In another study done by **Kandil et al (1998)** on 50 burn patients (30 acute and 20 chronic), he reported that on BPRS, acute burn patients have significantly higher scores on motor retardation (2.2 ± 1.42) and excitement (1.5 ± 0.78) than chronic burn patients (1.45 ± 0.69 and 1.1 ± 0.45 respectively). Chronic cases show significantly more somatic concern (4.35 ± 1.5) than acute cases (3 ± 1.93).

Table 173: Clinical picture of psychiatric symptoms in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Attia (1991)	60 acute burns patients, 40 chronic burn patients and 50 controls	Burn unit of AlAzhar university hospital	BPRS	burn patients show higher depressive mood, anxiety, somatic concern, guilt feeling, suspiciousness, hallucinatory behavior, motor retardation, uncooperativeness, blunt affect, excitement and disorientation than controls

Kandil et al (1998)	50 burn patients	Not stated	BPRS	acute burn patients have higher scores on motor retardation and excitement than chronic burn patients, chronic cases show significantly more somatic concern than acute cases
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Anxiety in burn patients:

Attia (1991) found that burn patients have significantly more anxiety (7.4 ± 3.2) than controls (6.68 ± 4.3) on the MSHQ. By studying 30 female patients 2 weeks after burn incident of 3rd or 4th degree and 20 controls without known physical or psychiatric illness, **Abdel-Hameed (1996)** found that the mean score of burn females on HAS (26.8 ± 9.8) is significantly higher than that of controls (9.25 ± 5.82).

Table 174: Clinical picture of anxiety in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Attia (1991)	60 acute burns patients, 40 chronic burn patients and 50 controls	Burn unit of AlAzhar university hospital	MSHQ	burn patients have significantly more anxiety than controls
Abdel-Hameed (1996)	30 burn females and 20 controls	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	HAS	mean score of burn females is significantly higher than that of controls

Depression in burn patients:

Abdel-Hameed (1996) found that the mean score of burn females on HDS (31.13) is significantly higher than that of controls (8.15). In assessing depression by HDS and Self-Concept Questionnaire, a significant negative correlation is found between depression and attractiveness, contentment, self-regard and self-efficacy. There is no correlation between depression and the value

of existence. While measuring depression by HDS and Abbreviated Burn Specific Health scale, a significant negative correlation is found between depression and body image, sexual relation and social relation.

Table 175: Clinical picture of depression in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Hameed (1996)	30 burn females and 20 controls	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	HDS	mean score of burn females is significantly higher than that of controls

Other psychiatric symptoms in burn patients:

Attia (1991) found that burn patients have significantly more hysteria (7.65 ± 2.12) and less obsession (8.2 ± 2.6) than controls (6.24 ± 2.9 and 9.5 ± 2.5 respectively) on MSHQ. Acute burn patients have significantly higher score on hysteria (8 ± 2.4) than chronic burn patients (7.1 ± 1.5).

Table 176: Clinical picture of hysteria and obsession in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Attia (1991)	60 acute burns patients, 40 chronic burn patients and 50 controls	Burn unit of AlAzhar university hospital	MSHQ	burn patients have significantly more hysteria and less obsession than controls

Personality assesment:

Attia (1991) found that on EPQ, the psychoticism score of burn patients (6.7 ± 3.4) is significantly higher than that of controls (5.3 ± 2.5). There is no significant difference between acute and chronic patients in EPQ. In another study done by **Kandil et al (1998)**, he reported that chronic burn patients have higher scores in neuroticism in EPQ (15.7 ± 6.48) than acute burn patients (10.13 ± 6.94).

Table 177: Personality assesment in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Attia (1991)	60 acute burns patients, 40 chronic burn patients and 50 controls	Burn unit of AlAzhar university hospital	EPQ	psychoticism score of burn patients is significantly higher than that of controls, there is no significant difference between acute and chronic patients
Kandil et al (1998)	50 burn patients	Not stated	EPQ	chronic burn patients have higher scores in neuroticism than acute burn patients

E. Malignant diseases:**1. Cancer bladder:****Anxiety:**

By studying 148 newly diagnosed cancer bladder patients and 124 controls without physical or psychiatric illness, **Akram (2000)** found that the mean scores of cancer bladder patients (46.92) on

Zahar and Spielberger questionnaire for trait anxiety is significantly higher than that of controls (45.64).

Table 178: Clinical picture of anxiety in cancer bladder

Author/s	Sample	Site	Diagnostic tools	Results
Akram (2000)	148 cancer bladder patients and 124 controls	National Cancer Institution in Cairo	Zahar and Spielberger questionnaire for trait anxiety	mean scores of cancer bladder patients is significantly higher than that of controls

Depression:

Akram (2000) found that the mean scores of cancer bladder patients (72.29) on Zung self rating scale for depression is non-significantly higher than that of controls (43.59).

Table 179: Clinical picture of depression in cancer bladder

Author/s	Sample	Site	Diagnostic tools	Results
Akram (2000)	148 cancer bladder patients and 124 controls	National Cancer Institution in Cairo	Zung self rating scale for depression	mean scores of cancer bladder patients is insignificantly higher than that of controls

2. Breast cancer:

In a study done on 25 breast cancer female patients, **Fahmy et al (2000)** reported that assessment of fatigue using MFI-20 scale shows that general fatigue get the highest mean score (14.28 ± 2.99), followed by reduced activity (13.88 ± 3.5), physical fatigue (13.52 ± 3.34), mental fatigue (13.12 ± 3.73) and lastly reduced motivation (12.20 ± 3.84).

Table 180: Clinical picture of psychiatric symptoms in breast cancer

Author/s	Sample	Site	Diagnostic tools	Results
Fahmy et al (2000)	25 breast cancer females	Health Insurance oncology outpatient clinic at Port Said	MFI-20 scale	general fatigue get the highest mean score, followed by reduced activity, physical fatigue, mental fatigue and lastly reduced motivation

Depression:

By studying 40 patients with breast cancer and 20 healthy controls (see appendix) **Allam (2003)** reported that the mean score of breast cancer patients for depression on HADS (13.5 ± 4) is significantly higher than in controls (3.3 ± 1). By studying 100 breast cancer female patients (see appendix), **El-Serafi (2008)** reported that depression state on BDI is found to be significantly more relevant in the recurrent stage of breast cancer patients representing about 80% (20/25) of the examined cases, in contrast to the early post-operative group which represent 65% (49/75). Severe form of depression occurs significantly more in the recurrent stage of cancer breast (3/25, 12%) than in the early postoperative phase (3/75, 4%).

Table 181: Clinical picture of depression in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Allam (2003)	40 breast cancer patients and 20 controls	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	HADS	mean score of breast cancer patients for depression is significantly higher than in controls
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	BDI	Severe form of depression occurs significantly more in the recurrent stage of cancer breast than in the early postoperative phase

Anxiety:

Allam (2003) reported that the anxiety score in HADS is significantly higher in the patients with breast cancer (13 ± 4) than in controls (3.55 ± 1).

Table 182: Clinical picture of anxiety in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Allam (2003)	40 breast cancer patients and 20 controls	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	HADS	the anxiety score is significantly higher in breast cancer patients than in controls

Personality assesment:

By studying 20 breast cancer patients, 20 patients with benign breast diseases and 20 controls without known physical or psychiatric illness (see appendix), **El-Hennawy (1999)** reported that on EPQ, scores of cancer patients are significantly higher on extraversion (14.95 ± 4.019) than benign breast diseases patients (10.6 ± 4.21) and controls (9.75 ± 2.899). On the other hand, breast cancer patients score significantly less on neuroticism (8.95 ± 3.06) than benign breast diseases patients (13.9 ± 4.47) and controls (16.25 ± 3.683).

Table 183: Personality assesment in breast cancer

Author/s	Sample	Site	Diagnostic tools	Results
El-Hennawy (1999)	20 breast cancer females and 40 controls	Not stated	EPQ	scores of cancer patients are significantly higher on extraversion and less on neuroticism than controls

ii. Severity of psychiatric disorders in physically ill patients:

A. Medical diseases:

1. General medical diseases:

Anxiety:

Haggag et al (2000) studied 74 medical referrals to psychiatric clinics with unexplained physical complaints. He found that on HADS, 12.16% (15/74) of medical referrals have mild anxiety, 28.38% (21/74) have moderate anxiety and 39.2% (29/74) have severe anxiety. By studying 227 patients with panic disorders

attending different medical clinics of Alazhar University Hospital (75 from chest clinic outpatients, 75 from heart clinic outpatients and 77 from general medicine outpatients), **El-Azzazy (2007)** reported that by HAS, 26.4% (60/227) of panic patients have mild anxiety. 56.8% (129/227) have moderate anxiety and 16.7% (38/227) have severe anxiety.

Table 184: Severity of anxiety in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Results
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	HADS	12.16% have mild anxiety, 28.38% have moderate anxiety and 39.2% have severe anxiety
El-Azzazy (2007)	227 patients with panic disorders attending different medical clinic	Chest, heart & general medicine clinic of Alazhar university hospital "Al zahraa hospital"	HAS	26.4% of panic patients have mild anxiety. 56.8% have moderate anxiety and 16.7% have severe anxiety

Panic disorders:

El-Azzazy (2007) reported that 81.1% (184/227) of panic patients have moderate panic disorder, and 18.9% (43/227) have severe panic disorder according to Sheehan Patient Rated Anxiety Scale (SPRAS).

Table 185: Severity of panic disorder in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Results
El-Azzazy (2007)	227 patients with panic disorders attending different medical clinic	Chest, heart & general medicine clinic of Alazhar university hospital “Al zahraa hospital”	SPRAS	81.1% of panic patients have moderate panic disorder, and 18.9% have severe panic disorder

Depression:

Haggag et al (2000) found that 29.73% (22/74) of medical referrals have mild depression, 21.62% (16/74) have moderate depression and 14.86% (11/74) have severe depression on HADS.

Table 186: Severity of depression in general medical diseases

Author/s	Sample	Site	Diagnostic tools	Results
Haggag et al (2000)	74 medical referrals to psychiatric clinics	Not stated	HADS	29.73% of medical referrals have mild depression, 21.62% have moderate depression and 14.86% have severe depression

2. Gastrointestinal diseases:**a. Duodenal ulcer:**

By studying 100 patients with duodenal ulcer, 30 somatizers (patients complaining of symptoms simulating peptic ulcer with free endoscopic examination), **Abdel-Gawad et al (1988)** found that on BDI, 21% (21/100) of duodenal ulcer patients have mild depression,

29% (29/100) have moderate depression and 12% (12/100) have severe depression. While 43.3% (13/30) of somatizers have mild depression, 20% (6/30) have moderate depression and 20% (6/30) have severe depression.

Table 187: Severity of depression in duodenal ulcer

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Gawad et al (1988)	100 duodenal ulcer patients and 30 somatizers	Not stated	BDI	21% of duodenal ulcer patients have mild depression, 29% moderate depression and 12% severe depression. While 43.3% of somatizers have mild depression, 20% moderate depression and 20% severe depression

3. Diabetes Mellitus:

Anxiety in DM:

By studying 30 uncontrolled insulin dependant diabetic children, 30 controlled insulin dependant diabetic children and 30 children without known psychiatric or physical illness, **El-Aswad**

(2005) found that on CMA, 80% (24/30) of uncontrolled IDDM children have moderate to severe anxiety, significantly more than controlled IDDM (16.7%, 5/30) and controls (56.7%, 17/30).

Table 188: Severity of anxiety in DM

Author/s	Sample	Site	Diagnostic tools	Results
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CMA	80% of uncontrolled IDDM children have moderate to severe anxiety, significantly more than controlled IDDM (16.7%) and controls (56.7%)

Aggression in DM:

El-Aswad (2005) found that on Ain Shams scale for Aggressive Behavior in children, aggression is significantly higher in uncontrolled IDDM children (23.4%, 7/30 have moderate to severe score) than in controlled IDDM children (16.7%, 5/30 have moderate to severe score) and in controls (3.3%, 1/30).

Table 189: Severity of aggression in DM

Author/s	Sample	Site	Diagnostic tools	Results
El-Aswad (2005)	30 uncontrolled IDDM children and 30 controlled IDDM children	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	Ain Shams scale for Aggressive Behavior in children	aggression is significantly higher in uncontrolled IDDM children than in controlled IDDM children and in controls

4. Cardiovascular diseases:

a. Ischemic heart disease:

Youssef (1998) studied 30 cardiac patients with acute myocardial infarction, 20 cardiac controls admitted to the ordinary ward and 20 non cardiac controls admitted to the ICU. He found that on BDI, the patients with myocardial infarction show mild depression, while both groups of controls show moderate depression.

Table 190: Severity of depression in IHD

Author/s	Sample	Site	Diagnostic tools	Results
Youssef (1998)	30 patients with acute myocardial infarction and 40 controls	ICU of Kasr El Aini Hospital	BDI	patients with myocardial infarction show mild depression, while both groups of controls show moderate depression

b. Cardiac valvular diseases:**Depression:**

By studying 50 cardiac patients undergoing cardiac surgery, assessed pre and postoperatively at 7th and 14th day, **Morsy (1998)** found that on HDS, preoperatively, 15 out of 50 (30%) cardiac patients have mild depression, 18 (36%) have moderate depression and 8 (16%) have severe depression.

Table 191: Severity of depression in cardiac valvular diseases

Author/s	Sample	Site	Diagnostic tools	Results
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	HDS	30% have mild depression, 36% have moderate depression and 16% have severe depression

Anxiety:

Morsy (1998) found that on HAS, preoperatively 15 out of 50 (30%) cardiac patients have mild anxiety, 23 (46%) have moderate anxiety and 9 (18%) have severe anxiety.

Table 192: Severity of anxiety in cardiac valvular diseases

Author/s	Sample	Site	Diagnostic tools	Results
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	HAS	30% have mild anxiety, 46% have moderate anxiety and 18% have severe anxiety

5. Neurological diseases:**a. Cerebrovascular stroke:****Post-stroke depression:**

Hassan (2002) studied 6 depressed stroke patients (see appendix). He found that 50% (3 out of 6) of the patients are found to have mild depression, 33% (2 out of 6) have moderate depression and 16% (1 out of 6) have severe depression by BDI.

Table 193: Severity of post-stroke depression

Author/s	Sample	Site	Diagnostic tools	Results
Hassan (2002)	6 depressed stroke patients	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	BDI	50% have mild depression, 33% moderate depression and 16% severe depression

Post-stroke Anxiety:

By studying 30 patients with cerebrovascular stroke (see appendix), **Hassan (2002)** reported that on MAS, 26.6% (8/30) of CVS patients have mild anxiety, 10% (3/30) have moderate anxiety and 66% (2/30) have severe anxiety.

Table 194: Severity of post-stroke anxiety

Author/s	Sample	Site	Diagnostic tools	Results
Hassan (2002)	30 CVS patients	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	MAS	26.6% have mild anxiety, 10% moderate anxiety and 66% severe anxiety

b. Multiple Sclerosis:**Depression in MS patients:**

By studying 20 MS patients, **El-Gamel (1995)** found that by HDS, 35% (7/20) have mild depression, 10% (2/20) have moderate depression and 10% (2/20) have severe depression. In another study

done on 31 MS patients (16 of relapsing remittant type and 15 of secondary progressive type), **Fat-hy (2004)** found that moderate depression is diagnosed in 9 out of 31 (28.8%) MS patients, while severe depression is diagnosed in 4 out of 31 (12.8%) MS patients.

Table 195: Severity of depression in MS

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	HDS	35% have mild depression, moderate depression and 10% severe depression
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	BDI	28.8% have moderate depression and 12.8% severe depression

Anxiety in MS patients:

El-Gamel (1995) found that by HAS, 30% (6/20) of MS patients have mild anxiety and 15% (3/20) have moderate anxiety. No MS patient presents with severe anxiety. **Fat-hy (2004)** reported that on HAS, mild, moderate, and severe anxiety are present each in 3.2% (1/31) of MS patients.

Table 196: Severity of anxiety in MS

Author/s	Sample	Site	Diagnostic tools	Results
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	HAS	30% have mild anxiety and 15% moderate anxiety
Fat-hy (2004)	31 MS patients	Outpatient clinic of Nasser Institute Hospital	HAS	mild, moderate, and severe anxiety are present each in 3.2% of MS patients

B. Infertility:**Depression in infertile women:**

By studying 107 infertile women (see appendix), **Radwan (2007)** found that by using BDI, 27% (29/107) of infertile females have mild depression, 37% (40/107) have moderate depression and 7.5% (8/107) have severe depression.

Table 197: Severity of depression in infertile women

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	BDI	27% have mild depression, 37% moderate depression and severe depression

Anxiety in infertile women:

Radwan (2007) found that on MAS, 29% (31/107) of infertile females have mild anxiety, 44.9% (48/107) have moderate anxiety and 15% (16/107) have severe anxiety.

Table 198: Severity of anxiety in infertile women

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	MAS	29% have mild anxiety, 44.9% moderate anxiety and 15% severe anxiety

C. Burn:**Depression in burn patients:**

By studying 30 female patients 2 weeks after burn incident of 3rd or 4th degree, **Abdel-Hameed (1996)** found that 26.7% (8/30) of the burn females have mild depression, 26.7% (8/30) have moderate depression and 36.6% (11/30) have severe depression on HDS.

Table 199: Severity of depression in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	HDS	26.7% have mild depression, 26.7% moderate depression and 36.6% severe depression

Anxiety in burn patients:

Abdel-Hameed (1996) found that on HAS, 23.3% (7/30) of the burn females have mild anxiety, 46.7% (14/30) have moderate anxiety and 16.7% (5/30) have severe anxiety.

Table 200: Severity of anxiety in burn patients

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Hameed (1996)	30 burn females	Burn units of Kasr El-Aini Hospital, Shobra General Hospital and Ahmed Maher Hospital	HAS	23.3% have mild anxiety, 46.7% moderate anxiety and 16.7% severe anxiety

D. Malignant diseases:**1. Breast cancer:****Depression in breast cancer**

By studying 25 breast cancer female patients, **Fahmy et al (2000)** reported that on HADS, 8 out of 25 (32%) cancer breast patients have mild depression, 6 out of 25 (24%) have moderate depression and 5 out of 25 (20%) have severe depression. In another study done on 100 breast cancer female patients (see appendix), **El-Serafi (2008)** reported that on BDI, 32% of cancer breast patients have mild depression, 31% have moderate depression and 6% have severe depression.

Table 201: Severity of depression in breast cancer

Author/s	Sample	Site	Diagnostic tools	Results
Fahmy et al (2000)	25 breast cancer females	Health Insurance oncology outpatient clinic at Port Said	HADS	32% have mild depression, 24% moderate depression and 20% severe depression
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	BDI	32% have mild depression, 31% moderate depression and 6% severe depression

Anxiety in breast cancer

Fahmy et al (2000) reported that on HADS, 9 out of 25 (36%) cancer breast patients have mild anxiety, 3 out of 25 (12%) have moderate anxiety and 6 out of 25 (24%) have severe anxiety. **El-Serafi (2008)** reported that on MAS, 49% of cancer breast patients have mild anxiety, 48% have moderate anxiety and 2% have severe anxiety.

Table 202: Severity of anxiety in breast cancer

Author/s	Sample	Site	Diagnostic tools	Results
Fahmy et al (2000)	25 breast cancer females	Health Insurance oncology outpatient clinic at Port Said	HADS	36% have mild anxiety, 12% moderate anxiety and 24% severe anxiety
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	MAS	49% have mild anxiety, 48% moderate anxiety and 2% severe anxiety

IV. Psychological responses to specific treatment

i. Prevalence of psychiatric symptoms and disorders in response to specific treatment:

A. Medical diseases:

1. Interferon therapy in treatment of chronic hepatitis C:

By studying 30 patients with chronic hepatitis C assessed 4 months after the start of interferon (M4), again at the end of treatment which is 12 months after the start of interferon (M12) and assessed lastly 6 months after the last injection (M18), **Essawy et al (2003)** found that at M4, 23% (7/30) of hepatic patients have depression and 11% (4/30) have anxiety according to DSM-IV. At M12, 45% (13/30) of hepatic patients have depression including 2 with suicidal ideation and 20% (6/30) have anxiety. At M18, 8%

(2/30) of hepatic patients have depression with suicidal ideation and 10% (3/30) have anxiety.

Table 203: Prevalence of psychiatric disorders in response to interferon therapy

Author/s	Sample	Site	Diagnostic tools	Prevalence
Essawy et al (2003)	30 hepatic patients on interferon	Not stated	Psychiatric interview (DSM IV)	At M4, 23% have depression and 11% have anxiety. At M12, 45% have depression and 20% have anxiety. At M18, 8% of hepatic patients have depression and 10% have anxiety.

2. Self and non-self injectors in Diabetes Mellitus:

El-Aswad (2005) studied 60 IDDM children including 23 self-injectors and 37 non-self injectors. He found that 39.1% (9/23) of self-injectors have depression versus 35.1% (13/37) of non-self injectors, according to CDI, without significant difference. On Behavioral and Affective scale for children, 34.8% (8/23) of self-injectors have behavioral affective symptoms versus 29.7% (11/37) of non-self injectors, without significant difference.

Table 204: Prevalence of psychiatric disorders in self and non-self injectors in DM

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Aswad (2005)	60 IDDM children including 23 self-injectors and 37 non-self injectors	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CDI, Behavioral and Affective scale for children	39.1% of self-injectors have depression versus 35.1% of non-self injectors. 34.8% of self-injectors have behavioral affective symptoms versus 29.7% of non-self injectors

3. Hemodialysis in chronic renal failure:

By studying 120 patients on hemodialysis and 120 controls without known physical or psychiatric illness, **El-Mahallawy et al (1991)** found that 40 out of 120 (33%) patients on hemodialysis have adjustment disorders with depressed mood according to DSM III-R, which is significantly higher than controls (17/120, 14%). On suicidal feelings questionnaire, 53% (64/120) of patients on hemodialysis have suicidal feelings which is significantly higher than controls (17/120, 14%).

Table 205: Prevalence of adjustment disorder in patients on hemodialysis

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Mahallawy et al (1991)	120 patients on hemodialysis and 120 controls	Renal dialysis units of Ain Shams University Hospitals	Psychiatric interview (DSM III-R)	33% have adjustment disorders with depressed mood

Compliance as regards the frequency of sessions:

El-Mahallawy et al (1991) reported that the prevalence of adjustment disorders with depressed mood is significantly higher among patients doing hemodialysis sessions less frequent than the opinion of the physician (28/60, 47%) than in those doing hemodialysis as frequent as the opinion of the physician (12/60, 20%), according to DSM III-R.

Table 206: Prevalence of adjustment disorder in patients on hemodialysis according to compliance

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Mahallawy et al (1991)	120 patients on hemodialysis and 120 controls	Renal dialysis units of Ain Shams University Hospitals	Psychiatric interview (DSM III-R)	47% of non-compliant patients have adjustment disorder with depressed mood, versus 20% of compliant patients

4. Cardiac surgeries:

By studying 20 cardiac patients with age ranging from 16 to 53 years after they underwent open heart surgery (including 8 mitral valve replacement, 5 aortic valve replacement, 3 double valve replacement, 3 closure of atrial septal defect and 1 open pulmonary valvotomy) (see appendix), **Gharib (1982)** found that 5 out of 20 (25%) cardiac patients present post-operatively with psychiatric disorders according to DSM III (2 with subacute delirious state and 3 with depressive disorder). As for the type of operation, psychiatric complications are more common in mitral valve replacement (3 out of the 5 cardiac patients with psychiatric morbidity, 60%), then aortic valve replacement (2/5, 40%) and least common in aortic

septal defect (1/5, 20%). By studying 50 cardiac patients undergoing cardiac surgery (mitral, aortic and tricuspid valve replacement), **Morsy (1998)** found that 9 out of 50 (18%) of cardiac patients develop delirium postoperatively and 3 out of 50 (6%) develop adjustment disorder depressive type according to DSM IV.

Table 207: Prevalence of psychiatric disorders in post-cardiac surgeries patients

Author/s	Sample	Site	Diagnostic tools	Prevalence
Gharib (1982)	20 cardiac patients	cardiac surgery department in Ain Shams University Hospital	Psychiatric interview (DSM III)	25% present post-operatively with psychiatric disorders
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	Psychiatric interview (DSM IV)	18% develop delirium and 6% adjustment disorder

5. Neurological disorders:

a. Cortisone treatment in Multiple Sclerosis (MS):

El-Gamel (1995), by studying 20 MS patients, found that 72.7% (8/11) of MS patients on cortisone treatment have psychiatric

disorders versus 77.7% (7/9) of those not on cortisone treatment according to DSM III, without significant difference between them

Table 208: Prevalence of psychiatric disorders in MS patients on cortisone therapy

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Gamel (1995)	20 MS patients	Neurology department, Kasr El-Aini Hospital	Psychiatric interview (DSM III)	72.7% of MS patients on cortisone treatment have psychiatric disorders

b. Wearing lower limb orthosis after poliomyelitis:

By studying 30 children with poliomyelitis and wearing lower limb orthosis and 30 children with poliomyelitis but not wearing any orthosis, **Khalil et al (1991)** found that behavioral disorders are less prevalent in the children wearing orthosis (45.9%) than in children not wearing orthosis (53.5%). There is no significant difference between children wearing orthosis and children not wearing orthosis in behavioral disorders, as conduct disorder represents 29.8% and 34% respectively, sleep disorders (insomnia, nightmares and terrors) represent 29.4% and 39.6% respectively, feeding disorders (food refusal and polyphagia) represent 28.4% and 29.3% respectively, psychomotor disorders (hyper and hypoactivity)

represent 21% and 11.9% respectively, excretory function disorders (nocturnal and diurnal enuresis) represent 16.15% and 9.75% respectively, speech disorders (delayed speech and stuttering) represent 9.6% and 16.4% respectively and social adaptation disorders (depending, withdrawal, dark and school phobias) 22.5% and 35.5% respectively.

Table 209: Prevalence of psychiatric disorders in children with poliomyelitis wearing lower limb orthosis

Author/s	Sample	Site	Diagnostic tools	Prevalence
Khalil et al (1991)	60 children with poliomyelitis (30 wearing lower limb orthosis and 30 not wearing)	Not stated	Psychiatric examination and self-concept scale	behavioral disorders are less prevalent in the children wearing orthosis (45.9%) than in children not wearing orthosis (53.5%)

B. Gynecological problems:

1. Infertility:

Assisted reproductive technology (ART):

By studying 107 infertile women (see appendix), **Radwan (2007)** found that the ART is the commonest treatment modality in

infertility which can lead to psychiatric disorders as 72% (18/25) of infertile females treated with ART have psychiatric disorders. Generalized anxiety disorder is the commonest disorder among the infertile females treated with ART (9/25, 36%), also the mean score of the BDI (19) is high among the infertile females treated with ART.

Table 210: Prevalence of psychiatric disorders in infertile women treated with ART

Author/s	Sample	Site	Diagnostic tools	Prevalence
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV)	72% of infertile females treated with ART have psychiatric disorders

Surgical intervention:

Radwan (2007) reported that 64% (27/42) of infertile females treated with surgical intervention have psychiatric disorders, and that infertile females treated with surgical intervention show significant deterioration in the total score of the

PCASEE quality of life (69) as well as its cognitive (75), affective (54) and ego functioning (66.66) subscales.

Table 211: Prevalence of psychiatric disorders in infertile women treated with surgical intervention

Author/s	Sample	Site	Diagnostic tools	Prevalence
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV)	64% of infertile females treated with surgical intervention have psychiatric disorders

Conservative therapy:

Radwan (2007) reported that 42.5% (17/40) of infertile females under the conservative therapy have psychiatric disorders.

Table 212: Prevalence of psychiatric disorders in infertile women treated with conservative therapy

Author/s	Sample	Site	Diagnostic tools	Prevalence
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	SCID I (DSM IV)	42.5% of infertile females under the conservative therapy have psychiatric disorders

2. Hysterectomy:

By studying 30 female patients who will carry on hysterectomy and 30 female controls who will undergo cholecystectomy, assessing both group 1-2 weeks preoperatively and 1-3 months post-operatively, **Omar (1998)** found that 18 out of 30 (60%) of hysterectomy patient show psychiatric disorders preoperatively according to DSM-IV distributed as follows: 20% (6/30) have generalized anxiety, 16.67% (5/30) have dysthymia, 10% (3/30) have major depression, 10% (3) have sleep disorder and 3.33% (1/30) have conversion. The psychiatric morbidity in hysterectomy females is significantly higher preoperatively (18/30, 60%) than in cholecystectomy females (6/30, 20%). Post operatively, the psychiatric morbidity falls to 20% (6/30) in addition

to one new case of major depression who didn't show psychiatric disorders preoperatively. The postoperative psychiatric diagnoses are: 6.67% (2/30) have generalized anxiety, 6.67% (2/30) have dysthymia, 6.67% (2/30) have major depression and 3.33% (1/30) have conversion.

Table 213: Prevalence of psychiatric disorders in post-hysterectomy women

Author/s	Sample	Site	Diagnostic tools	Prevalence
Omar (1998)	30 female patients who will carry on hysterectomy	Obstetric and Gynecology department of Kasr El Aini Hospital	Psychiatric interview (DSM IV)	6.67% have generalized anxiety, 6.67% dysthymia, 6.67% major depression and 3.33% conversion

3. Female sterilization by tubal ligation:

By studying 30 females coming for sterilization and 30 controls without known physical or psychiatric illness (see appendix), **Sowmail (1983)** found that psychiatric morbidity among women who asked for sterilization reaches 26.7% (8/30) compared to 20% (6/30) of the controls. Nevertheless these figures are not of statistical difference. Psychiatric illness declines from 26.7% (8/30)

to 20% (6/30) after the operation in women who did tubal ligation, and no new psychiatric illness develops. Anxiety neurosis is the most common psychiatric illness as it represents 16.7% (5/30) of the females coming for tubal ligation compared to 10% (3/30) of controls. Depressive neurosis comes in second where it represents 6.7% (2/30) of females coming for sterilization and 3.3% (1/30) of controls and last comes hypochondriacal neurosis which represents 3.3% (1 out of 30) of females coming for tubal ligation and controls. Three months after the operation, cases of anxiety neurosis decline from 16.7% (5/30) to 10% (3/30), and depressive neurosis from 6.7% (2/30) to 3.3% (1/30).

Table 214: Prevalence of psychiatric disorders in females sterilized by tubal ligation

Author/s	Sample	Site	Diagnostic tools	Prevalence
Sowmail (1983)	30 females coming for sterilization	gynecological clinic of Ain Shams University	Psychiatric interview	3 months after the operation, cases of anxiety neurosis decline from 16.7% to 10%, and depressive neurosis from 6.7% to 3.3%

4. Oral Contraceptive Pills (OCPs):

By studying 30 females on oral contraceptive pills and 30 controls without known physical or psychiatric illness (see appendix), **Sowmail (1983)** reported that psychiatric morbidity among women using OCPs reaches 33.3% (10 out of 30) compared to 20% (6/30) of the controls which is statistically insignificant. Anxiety neurosis is the most common psychiatric illness in women taking OCPs where it represents 20% (6/30) of them and 10% (3/30) of controls. Depressive neurosis comes in second where it represents 10% (3/30) among women taking OCPs and 3.3% (1/30) of controls and last comes hypochondriacal neurosis which represents 3.3%(1/30) of each group.

Table 215: Prevalence of psychiatric disorders in females on OCPs

Author/s	Sample	Site	Diagnostic tools	Prevalence
Sowmail (1983)	30 females on OCPs	gynecological clinic of Ain Shams University	Psychiatric interview	33.3% have psychiatric morbidity, 20% have anxiety neurosis, 10% have depressive neurosis

C. Malignant diseases:**1. Irradiation and chemotherapy in lymphoblastic leukemia:**

By studying 52 children with Acute Lymphoblastic Leukemia (ALL) subdivided into 3 groups (group Ia consisting of 15 children treated with intravenous and intrathecal chemotherapy, group Ib of 26 children treated with intravenous, intrathecal chemotherapy and prophylactic cranial irradiation and finally group Ic consisting of 11 children treated with intravenous, intrathecal chemotherapy and curative craniospinal irradiation), **Abdel-Baky et al (1997)** found that on CMA, 20 % (3/15) of group Ia patients have anxiety, 19.2% (5/26) of group Ib have anxiety and 45.5% (5/11) of group Ic patients have anxiety. On CDI, 20% (3/15) of group Ia are found to have depression, 19.2% (5/26) of group Ib have depression and 45.5 (5/11) of group Ic have depression. Children with CNS relapse are found to have a significant increase in depression as compared to those without CNS relapse in Children Depression Inventory. While in Children Anxiety scale, there is no significant difference.

Table 216: Prevalence of psychiatric disorders in ALL under irradiation and chemotherapy

Author/s	Sample	Site	Diagnostic tools	Prevalence
Abdel-Baky et al (1997)	52 children with ALL	Hematological/Oncology clinic, Children's Ain Shams University Hospital	CMA CDI	Anxiety is present in 20 % of group Ia, 19.2% of group Ib and 45.5% of group Ic. Depression is found in 20% of group Ia, 19.2% of group Ib and 45.5 of group Ic

2. Breast cancer:

a. Surgical treatment:

By studying 100 breast cancer female patients (see appendix), **El-Serafi (2008)** reported that 49.1% of the breast cancer patients who underwent surgical treatment have anxiety disorder and 47.3% of these patients have mood disorder according to DSM IV.

Table 217: Prevalence of psychiatric disorders in breast cancer patients treated by surgical intervention

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	49.1% of the breast cancer patients treated with surgical treatment have anxiety and 47.3% have mood disorder

Lumpectomy

By studying 11 breast cancer patients treated with lumpectomy (see appendix), **Allam (2003)** found that clinical anxiety is diagnosed in 4 out of 11 (36.7%) patients treated with lumpectomy, borderline anxiety in 2 out of 11 (18.1%), major depressive disorder in 2 out of 11 (18.1%), and adjustment disorder in 1 out of 11(9%) according to DSM IV.

Table 218: Prevalence of psychiatric disorders in breast cancer patients treated by lumpectomy

Author/s	Sample	Site	Diagnostic tools	Prevalence
Allam (2003)	11 breast cancer patients treated with lumpectomy	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	SCID I	36.7% have clinical anxiety, 18.1% borderline anxiety, 18.1% major depressive disorder, and 9% adjustment disorder

Modified Radical Mastectomy

By studying 29 breast cancer patients treated with modified radical mastectomy (see appendix), **Allam (2003)** found that 15 out of 29 (51.7%) patients treated with modified radical mastectomy have major depressive disorder, 6 out of 29 (25%) have adjustment disorder, 4 out of 29 (13.8%) have borderline anxiety and 4 out of 29 (13.8%) have clinical anxiety. The difference of the results between patients treated with lumpectomy and those treated with modified radical mastectomy are significant in major depressive disorder and in clinical anxiety.

Table 219: Prevalence of psychiatric disorders in breast cancer patients treated by modified radical mastectomy

Author/s	Sample	Site	Diagnostic tools	Prevalence
Allam (2003)	29 breast cancer patients treated with modified radical mastectomy	outpatient clinic of Oncology and Nuclear Medicine Department, Ain Shams University	SCID I	51.7% have major depressive disorder, 25% adjustment disorder, 13.8% borderline anxiety and 13.8% clinical anxiety

b. Surgical treatment and post-operative chemotherapy, radiotherapy or combined chemo-radiotherapy:

El-Serafi (2008) reported that 60.5% of breast cancer patients treated with surgery and post-operative chemotherapy, radiotherapy or combined chemo-radiotherapy experience mood disorders, and 34.9% have anxiety disorder. By studying 40 breast cancer patients treated with mastectomy and chemotherapy (20 within the first 6 months of their treatment and 20 patients within 2 years of their treatment) and 20 controls with non-malignant breast mass treated with lumpectomy, **El-Azzazy (2000)** found that according to DSM-IV, 9 out of 20 (45%) breast cancer patients 6 months from their treatment have psychiatric morbidity versus 5 out of 20 (25%)

breast cancer patients 2 years from their treatment and 1 out of 20 (5%) non-malignant breast mass controls.

Table 220: Prevalence of psychiatric disorders in breast cancer patients treated by surgical intervention and postoperative radio or chemotherapy

Author/s	Sample	Site	Diagnostic tools	Prevalence
El-Serafi (2008)	100 breast cancer female patients	radiotherapy and nuclear medicine center in Ain Shams University	SCID I	60.5% of breast cancer patients treated with surgery and post-operative chemotherapy and/or radiotherapy have mood disorders, and 34.9% have anxiety disorder
El-Azzazy (2000)	40 breast cancer patients treated with mastectomy and chemotherapy	Alazhar university hospital	Psychiatric interview (DSM IV)	45% breast cancer patients 6 months from their treatment have psychiatric morbidity versus 25% of breast cancer patients 2 years from their treatment

ii. Clinical picture of psychiatric disorders in response to specific treatment:

A. Medical diseases:

1. Cardiovascular diseases:

a. Propranolol treatment in hypertension:

By studying 30 male hypertensive patients divided into 2 groups (the 1st group received placebo for 21 days then Propranolol for 21 days - 40 mg t.d.s. for 1 week then 80 mg t.d.s. for 2 weeks, and the 2nd group started with Propranolol then received the drug), **Ashour et al (1984)** found that using the BPRS, variables that improve under propranolol therapy are somatic concern, anxiety, tension and emotional withdrawal while the variables that deteriorate under Propranolol are depressive mood, guilt feelings, motor retardation and psychological impotence.

Table 221: Clinical picture of psychiatric symptoms in hypertensive patients under Propranolol treatment

Author/s	Sample	Site	Diagnostic tools	Results
Ashour et al (1984)	30 male hypertensive patients	Fayoum General Hospital	BPRS	somatic concern, anxiety, tension and emotional withdrawal while the variables that deteriorate under Propranolol are depressive mood, guilt feelings, motor retardation and psychological impotence improve under propranolol therapy

b. Cardiac surgeries:

Depression in cardiac surgeries:

By studying 50 cardiac patients undergoing cardiac surgery (mitral, aortic and tricuspid valve replacement), assessed pre and postoperatively at 7th and 14th day, **Morsy (1998)** found that the mean score of cardiac patients on HDS preoperatively (25 ± 10.7) is non-significantly higher than the mean score of cardiac patients at the 7th day postoperatively (24.6 ± 12.57) while it is significantly

higher than that at the 14th day postoperatively (19.2 ± 8.6). There is significant difference between both scores at the 7th and 14th day postoperatively, being higher in the 7th day.

Table 222: Clinical picture of depression in post-cardiac surgeries patients

Author/s	Sample	Site	Diagnostic tools	Results
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	HDS	the preoperative mean score is higher than the mean score at the 7 th day postoperatively while it is higher than that at the 14 th day postoperatively

Anxiety in cardiac surgeries:

Morsy (1998) found that the mean score of cardiac patients on HAS preoperatively (27.14 ± 7.9) is significantly higher than the mean score of cardiac patients at the 7th day postoperatively (22.45 ± 9) and it is significantly higher than that at the 14th day postoperatively (18.18 ± 6). There is significant difference between the scores at the 7th and 14th day postoperatively, being higher in the 7th day.

Table 223: Clinical picture of anxiety in post-cardiac surgeries patients

Author/s	Sample	Site	Diagnostic tools	Results
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	HAS	the preoperative mean score is higher than the mean score at the 7 th day postoperatively while it is higher than that at the 14 th day postoperatively

B. Malignant diseases:

1. Irradiation and chemotherapy:

By studying 52 children with Acute Lymphoblastic Leukemia (ALL) subdivided into 3 groups (group Ia consisting of 15 children treated with intravenous and intrathecal chemotherapy, group Ib of 26 children treated with intravenous, intrathecal chemotherapy and prophylactic cranial irradiation and finally group Ic consisting of 11 children treated with intravenous, intrathecal chemotherapy and curative craniospinal irradiation) and 30 children without known physical or psychiatric illness, **Abdel-Baky et al (1997)** found that assessed by Wechsler Intelligence Scale for Children-Revised, the

cognitive functioning of children treated with chemotherapy alone falls within the average range except in vocabulary (10.33 ± 3.45) where there is a significant decrease compared to controls (12.2 ± 3.6). In group Ib patients, there is a significant decrease compared to controls in full scale IQ (102.6 ± 15.9 versus 111.6 ± 12.7), in verbal IQ (107.4 ± 17.2 versus 114.7 ± 15) particularly in arithmetic and digit span, in performance IQ (93.5 ± 14.3 versus 106 ± 10.44) and its subtests picture completion, block design and digit symbol. Also, there is a significant decrease in children with CNS relapse who have been treated with therapeutic craniospinal irradiation (group Ic) in comparison to controls in full scale IQ (102.1 ± 11.05 versus 111.66 ± 12.7), performance IQ (93.5 ± 10.8 versus 106 ± 10.4) and its subtests picture completion, block design and digit symbol, and in the following subtests of verbal IQ: arithmetic and digit span. Children with CNS relapse (group Ic) have significant decrease in performance IQ compared to non irradiated children (group Ia). There is a significant decrease in digit symbol subtests of performance IQ in patients with CNS relapse treated with high dose of therapy (group Ic) than in children treated with prophylactic radiotherapy.

Table 224: Cognitive dysfunction in ALL under irradiation and chemotherapy

Author/s	Sample	Site	Diagnostic tools	Results
Abdel-Baky et al (1997)	52 children with ALL and 30 controls	Hematological/Oncology clinic, Children's Ain Shams University Hospital	Wechsler Intelligence Scale for Children-Revised	cognitive functioning of children treated with chemotherapy alone falls within the average range except in vocabulary where there is a significant decrease compared to controls

2. Breast cancer:

By studying 40 breast cancer patients treated with mastectomy and chemotherapy (20 within the first 6 months of their treatment and 20 patients within 2 years of their treatment) and 20 controls with non-malignant breast mass treated with lumpectomy, **El-Azzazy (2000)** found that on BDI, depression is significantly higher among breast cancer patients within 6 months of being treated with mastectomy and chemotherapy (22.8 ± 12.3) than in patients after 2 years post-operative (15.3 ± 14.1) and controls (10.4 ± 9.3). On HAS, breast cancer patients 6 months post-operative are significantly more anxious (16.6 ± 8.2) than breast cancer patients 2 years post-operative (11.6 ± 9.6) than controls (6.8 ± 6.2). On scale

for body image, breast cancer patients 6 months post-operative have significantly more disturbed body image (19.3 ± 12.5) than breast cancer patients 2 years post-operative (11.8 ± 10.7) than controls (4.7 ± 5.8).

Table 225: Clinical picture of psychiatric disorders in breast cancer patients treated by surgical intervention and postoperative radio or chemotherapy

Author/s	Sample	Site	Diagnostic tools	Results
El-Azzazy (2000)	40 breast cancer patients treated with mastectomy and chemotherapy and 20 controls	Alazhar university hospital	BDI HAS	breast cancer patients 6 months from their treatment are more depressed, anxious and have more disturbed body image than patients 2 years post-operatively

ii. Severity of psychiatric disorders in response to specific treatment:

A. Medical diseases:

1. Self and non-self injectors in Diabetes Mellitus:

El-Aswad (2005) studied 60 IDDM children including 23 self-injectors and 37 non-self injectors. He found that 26.1% (6/23) of self-injectors have mild anxiety, 47.8% (11/23) have moderate anxiety, and 8.7% (2/23) have severe anxiety on CMA, while 27.1% (10/37) of non-self injectors have mild anxiety, 35.1% (13/37) have moderate anxiety, and 8.1% (3/37) have severe anxiety, without significant difference between them.

Table 226: Severity of anxiety in self and non-self injectors in DM

Author/s	Sample	Site	Diagnostic tools	Results
El-Aswad (2005)	60 IDDM children including 23 self-injectors and 37 non-self injectors	Diabetes Endocrine and Metabolic Pediatric clinic of Abu El-Reesh Hospital	CMA	26.1% of self-injectors have mild anxiety, 47.8% moderate anxiety, and 8.7% severe anxiety, while 27.1% of non-self injectors have mild anxiety, 35.1% moderate anxiety, and 8.1% severe anxiety

2. Hemodialysis in chronic renal failure:

By studying 40 patients on hemodialysis who have adjustment disorders with depressed mood, **El-Mahallawy et al (1991)** found that on HDS, 47.5% (19/40) of the patients have mild depression, 32.5% (13/40) have moderate depression and 20% (8/40) have severe depression.

Table 227: Severity of adjustment disorder in patients on hemodialysis

Author/s	Sample	Site	Diagnostic tools	Results
El-Mahallawy et al (1991)	40 patients on hemodialysis who have adjustment disorders with depressed mood	Renal dialysis units of Ain Shams University Hospitals	HDS	47.5% have mild depression, 32.5% moderate depression and 20% severe depression

Compliance as regards the frequency of sessions:

El-Mahallawy et al (1991) reported that on HDS, 46.43% (13/28) of the 28 patients doing hemodialysis sessions less frequent than the opinion of the physician and suffering from adjustment disorders with depressed mood have mild depression, 32.14% (9/28) have moderate depression and 21.43% (6/28) have severe depression, while 50% (6/12) of the 12 patients doing hemodialysis as frequent as the opinion of the physician and suffering from adjustment disorders with depressed mood have mild depression, 33% (4/12) have moderate depression and 17% (2/12) have severe depression, without significant difference between them.

Table 228: Severity of adjustment disorder in compliant and non-compliant patients on hemodialysis

Author/s	Sample	Site	Diagnostic tools	Results
El-Mahallawy et al (1991)	28 non-compliant and 12 compliant patients on hemodialysis who have adjustment disorders	Renal dialysis units of Ain Shams University Hospitals	HDS	46.43% of non-compliant patients have mild depression, 32.14% moderate depression and 21.43% severe depression, while 50% of compliant patients have mild depression, 33% moderate depression and 17% severe depression

3. Cardiac surgeries:

Depression in cardiac surgeries:

By studying 50 cardiac patients undergoing cardiac surgery (mitral, aortic and tricuspid valve replacement), assessed pre and postoperatively at 7th and 14th day, **Morsy (1998)** reported that on HDS, assessment of the cardiac patients on the 7th day following cardiac surgery shows that 13 out of 47 (27.7%) have mild depression, 16 out of 47 (34%) have moderate depression, and 7 out

of 47 (14.9%) have severe depression. On the 14th day, 22 out of 47 (46.8%) have mild depression, 7 out of 47 (14.9%) have moderate depression and 4 out of 47 (8.5%) have severe depression.

Table 229: Severity of depression in post-cardiac surgeries patients

Author/s	Sample	Site	Diagnostic tools	Results
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	HDS	on the 7 th day: 27.7% have mild depression, 34% moderate depression, and 14.9% severe depression. On the 14 th day: 46.8% have mild depression, 14.9% moderate depression and 8.5% have severe depression

Anxiety in cardiac surgeries:

Morsy (1998) found that on HAS, assesment of the cardiac patients on the 7th day following cardiac surgery shows that 25 out of 47 (53.2%) have mild anxiety, 11 out of 47 (23.4%) have moderate anxiety, and 4 out of 47 (8.5%) have severe anxiety. On

the 14th day, 26 out of 47 (55.3%) have mild anxiety, 7 out of 47 (14.9%) have moderate anxiety and no patients have severe anxiety.

Table 230: Severity of anxiety in post-cardiac surgeries patients

Author/s	Sample	Site	Diagnostic tools	Results
Morsy (1998)	50 cardiac patients undergoing cardiac surgery	National Cardiac Institute	HAS	on the 7 th day: 53.2% have mild anxiety, 23.4% moderate anxiety, and 8.5% severe anxiety. On the 14 th day: 55.3% have mild anxiety, and 14.9% moderate anxiety

B. Gynecological problems:

1. Hysterectomy:

By studying 30 female patients who will carry on hysterectomy and 30 female controls who will undergo cholecystectomy, assessing both group 1-2 weeks preoperatively and 1-3 months post-operatively, **Omar (1998)** found that on BDI, before the operation, 10% (3/30) of hysterectomy females have mild depression, 23.33% (7/30) have moderate depression and 6.67% (2/30) have severe depression. Post-operatively, 10% (3/30) show

mild depression, 6.67% (2/30) show moderate depression and no patients show severe depression.

Table 231: Severity of depression in post-hysterectomy women

Author/s	Sample	Site	Diagnostic tools	Prevalence
Omar (1998)	30 female patients who will carry on hysterectomy	Obstetric and Gynecology department of Kasr El Aini Hospital	BDI	10% show mild depression and 6.67% moderate depression

C. Malignant diseases:

b. Surgical treatment and post-operative chemotherapy, radiotherapy or combined chemo-radiotherapy:

By studying 40 breast cancer patients treated with mastectomy and chemotherapy (20 within the first 6 months of their treatment and 20 patients within 2 years of their treatment), **El-Azzazy (2000)** found that on BDI, 40% of breast cancer 6 months post-operatively have mild depression and 10% have moderate depression and 25% of patients after 2 years post-operatively have

mild depression. On HAS, 45% of breast cancer patients assessed 6 months post-operatively have mild anxiety, 45% have moderate anxiety and 10% have severe anxiety, while, 70% of breast cancer patients assessed 2 years post-operatively have mild anxiety, 20% have moderate anxiety and 10% have severe anxiety.

Table 232: Severity of psychiatric disorders in breast cancer patients treated by surgical intervention and postoperative radio or chemotherapy

Author/s	Sample	Site	Diagnostic tools	Results
El-Azzazy (2000)	40 breast cancer patients treated with mastectomy and chemotherapy	Alazhar university hospital	BDI HAS	40% of breast cancer 6 months post-operatively have mild depression, 10% moderate depression and 45% have mild anxiety, 45% moderate anxiety and 10% severe anxiety. while 25% of patients after 2 years post-operatively have mild depression, 70% have mild anxiety, 20% moderate anxiety and 10% severe anxiety

V. The influence of the psychiatric disorders on the outcome of the physical illness

A. Medical diseases:

1. Diabetes Mellitus (DM):

By studying 40 girls with IDDM, **Hassanein (2002)** found that diabetic girls with eating disorders have significantly higher HbA1c ($10.8 \pm 2.6\%$) than diabetic girls without eating disorders (7.48 ± 1.8).

Table 233: Influence of eating disorders on diabetic control

Author/s	Sample	Site	Diagnostic tools	Results
Hassanein (2002)	40 IDDM girls	Pediatric Diabetes Clinic, Children's Hospital, Ain Shams University	Eating disorder inventory, symptom checklist	diabetic girls with eating disorders have significantly higher HbA1c than diabetic girls without eating disorders.

2. Neurological disorders:

a. Cerebrovascular stroke:

Post-stroke Anxiety:

By studying 30 patients with cerebrovascular stroke (see appendix), **Hassan (2002)** reported that the anxious stroke patients are found to have significantly more severe physical impairment compared to non anxious stroke patients.

Table 234: Influence of post-stroke anxiety on physical impairment

Author/s	Sample	Site	Diagnostic tools	Results
Hassan (2002)	30 patients with CVS stroke	outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals	Neurological and Psychiatric examination	anxious stroke patients are found to have significantly more severe physical impairment compared to non anxious stroke patients

B. Infertility:

By studying 107 infertile women (see appendix), **Radwan (2007)** found that infertile women with psychiatric disorder are significantly at risk for poor response to fertility treatment, as 48 out of 62 (77.4%) of infertile women with psychiatric morbidity fail to achieve pregnancy in comparison to 16 out of 45 (35.6%) of infertile ladies without psychiatric morbidity. Moreover, the infertile females with comorbid psychiatric disorders have the most poor response and outcome (pregnancy rate=11.8%); the pregnancy rate in mood disorders patients is 15.8% then the anxiety disorders patients 28.6% while the pregnancy rate reaches 64.4% among infertile patients without psychiatric morbidity. Also **Radwan (2007)** reported that the outcome of infertility is bad with severe depression (mean score on BDI=20) or severe anxiety (mean score on MAS=30). And there is a significant relation between high neuroticism and impulsivity and the poor outcome of infertility.

Table 235: Influence of psychiatric morbidity on pregnancy rate

Author/s	Sample	Site	Diagnostic tools	Results
Radwan (2007)	107 infertile women	Obstetrics and Gynecology department and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals	Psychiatric examination	77.4% of infertile women with psychiatric morbidity fail to achieve pregnancy in comparison to 35.6% of infertile ladies without psychiatric morbidity

CRITICAL APPRAISAL

Jones (2002) put standardized appraisal questions which should be asked for all research papers, and they consist of:

1. Was the aim of the study clearly stated?
2. Was there an explanation why the study was carried out (need for the study)?
3. What is the study design? Is it appropriate to the aim of the study?
4. Was the study preceded by a pilot study to justify the proper?
5. What is the sample size? Was it mentioned? Was it statistically calculated (power of the study)?
6. Was the sample representative?
7. How were cases selected?
8. What were the characters of the sample?
9. What were the methods of assessment and measurements? Were they discussed?

10. What were the statistical methods used? Were they discussed?
11. Were the results presented in a clear way (tables, figures, etc...)?
12. Were the results compared with other researches whether supporting the same findings or establishing other findings with explanation of different findings?
13. What were the limitations of the study?
14. Were significant recommendations generated?

1. Subject: Mental disorders with brain tumours (Abdulghani, 1981)

- The title is clear but it isn't specific, as it doesn't precise that the target of the study is an Egyptian sample.
- The aim of the work isn't stated.
- Study design: it is mentioned by the author.
- The setting of the study is stated.
- Time of the study: Only the duration is mentioned.
- Study population: is mentioned.
- The sample design: it isn't mentioned. It is a non probability convenient sample.
- Sample size: is mentioned but not calculated.
- Methods of assessment are clearly mentioned and referenced.
- Statistical methods: They are stated. P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly presented, drawn in tables and in charts. They are compared with other researches.
- The recommendations are mentioned.
- No limitations are stated.

- The general appearance is appealing, well ordered. The number of pages is 173.

2. Subject: Neuropsychiatric complications following open heart surgery (Gharib, 1982)

- The title is not specific as neither the neuropsychiatric complications nor the cardiac surgeries are specified.
- The aim of the work is not clearly stated, it lacks the same points as the title, in addition to the cardiac diagnosis.
- Study design: is not mentioned.
- The setting of the study is stated.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible, reliable.
- The statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.

- The results are presented in tables and discussed and compared with other studies.
- The conclusion is clearly presented, covering all the findings of the study.
- The limitations are clearly discussed.
- Helpful recommendations for further studies are mentioned.
- Generally, the study appearance is appealing and organised. The number of pages is 185.

3. Subject: Comparative psychiatric study between organic and non-organic gastrointestinal illnesses (Abdel-Wahab, 1982)

- The title is clear and to the point.
- The aim of the work is clearly stated.
- The study design is mentioned.
- The setting of the study is not clearly mentioned as the researcher mentioned only the clinic but no information is given on which hospital the study is carried in.
- The time of the study: It isn't mentioned.
- Study population: it's mentioned.
- Sample design: It is not mentioned by the researcher and it is a non probability convenient sample.

- Sample size: It's mentioned, but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible, reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. However one of the aims of the study which is to find the incidence of psychiatric complaints in the gastroenterology clinic is not reflected in the results. The results of the study are compared to previous studies.
- The conclusion covers all the findings of the study.
- The author doesn't discuss the limitations of the study.
- No recommendations for further studies are mentioned.
- The general appearance of the study is appealing. Data are well presented in clear form. The number of pages is 137.

4. Subject: Psychiatric complications of female sterilization (Sowmail, 1983)

- The title is clear but not specific as the authors should have mentioned that the target population is an Egyptian sample.

- The aim of the work is clearly stated.
- Study design: is not mentioned.
- The setting of the study is stated.
- The time of the study is stated.
- Study population: it's mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible, reliable.
- The statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- In table number 10 p.69 presenting the psychiatric diagnoses postoperatively, the percentages of depression and hypochondriachal neurosis are wrong. The results are discussed and compared with other studies.
- The conclusion is clearly presented, covering all the findings of the study.
- The limitations are clearly discussed.
- Helpful recommendations for further studies are mentioned.
- Generally, the study appearance is appealing and organised. The number of pages is 122.

**5. Subject: *Psychiatric aspects of clinical neurology*
(Derias, 1984)**

- The title is not to the point as it doesn't specify which neurological disorders are chosen in this study.
- The aim of the work doesn't address a focused issue with identified population as it is too much generalizing the neurological disorders.
- The study design is not mentioned.
- The setting of the design is clearly mentioned.
- The time of the study is not mentioned.
- The study population is mentioned, yet the researcher doesn't mention the exact different neurological diagnoses encountered.
- The sample design is not mentioned by the researcher, it is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned in details and referenced.

- The statistical methods aren't mentioned.
- No consent was taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The conclusion is clearly presented.
- The recommendations are mentioned.
- The limitations are mentioned.
- Generally, the study appearance is good and data are well presented in clear form. The number of pages is 181.

6. Subject: Cognitive deficits in Egyptian Diabetics (Omar, 1984)

- The title is clear and specific.
- The aim of the work is clearly stated.
- The study design is not mentioned.
- The setting of the study is mentioned.
- The time of the study: not mentioned
- Study population: is mentioned
- Sample design: not mentioned. It can be considered as non probability convenient sampling.
- The sample size is mentioned but not calculated.

- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated however P value is not used to indicate the level of significance.
- No consent was taken.
- The study isn't preceded by a pilot study.
- The author doesn't give the mean results for the diabetic sample as a whole before separating the sample according to sex and to the type of DM. No percentages are calculated for the majority of the findings. In the discussion, the results are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are mentioned.
- Helpful recommendations are mentioned.
- The general appearance of the study is good. The number of pages is 167.

7. Subject: Psychiatric morbidity in hearing clinic patients (Morsi, 1984)

- The title is clear but it should have mentioned that it is a sample of Egyptian patients.
- The aim of the work is clearly stated.

- The study design is not mentioned.
- The setting of the study is mentioned.
- The time of the study: not mentioned
- Study population: is mentioned
- Sample design: not mentioned. It can be considered as non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent was taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables. Yet percentages are not calculated for some of the results, and the researcher doesn't specify the nature of psychiatric symptoms associated with each degree, type and duration of hearing loss. In the discussion, the results are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The author doesn't discuss the limitations of the study.
- Helpful recommendations are mentioned.

- The general appearance of the study is appealing. It is well organized. The number of pages is 103.

8. Subject: *Psychiatric complications of Propranolol Therapy in Essential Hypertensives (Ashour et al, 1984)*

- The title is clear and specific.
- The aim is not mentioned.
- The study design is mentioned (double blind crossover study).
- The setting of the study is mentioned, however, choosing Fayoum General Hospital limits the study mostly to Fayoum outpatients, so the researchers either had to delineate in the title that the study is limited to El-Fayoum or to choose another setting receiving a larger population or multiple settings.
- The time of the study isn't mentioned.
- Study population: mentioned.
- Sample design: not mentioned. It's a non probability convenient sampling.
- The sample size is mentioned but not calculated.

- The methods of assesment used are reliable and referenced, but not mentioned in details.
- The statistical method are mentioned. P value isn't used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly mentioned.
- Recommendations are clearly exposed.
- No imitations are stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 13.

9. Subject: Anxiety, depression and ego-strength assesment in duodenal ulcer and somatizer patients (Abdel-Gawad et al, 1988)

- The title is clear and specific.
- The aim is clearly stated.
- The study design is not mentioned, it is a cross-sectional case-control study.
- The setting of the study is not mentioned.

- The time of the study isn't mentioned.
- Study population: mentioned.
- Sample design: it is not mentioned, it is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned and referenced. They are reproducible and reliable.
- The statistical method aren't mentioned. P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract I clearly mentioned.
- Recommendations are not discussed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 16.

10. Subject: Psychological profile of a sample of Egyptian patients with ischemic heart disease (El-Dawla, 1989)

- The title is clear and specific.

- The aim of the work is clearly mentioned.
- The study design is not mentioned.
- The setting of the study is mentioned.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: It is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible, reliable. However, the researcher didn't apply all of them to the controls, which if done, would have given additional data to compare with the obtained results.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study is preceded by a pilot study which findings have been taken into account.
- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are clearly discussed.

- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 234.

11. Subject: Study of the psychiatric aspects of burned adult patients (Attia, 1991)

- The title is clear and specific.
- The aim of the work is clearly mentioned.
- The study design is not mentioned. It's a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study isn't stated.
- Study population is mentioned.
- Sample design: isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study isn't preceded by a pilot study.

- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 164.

12. Subject: Psychological sequelae of wearing lower limb orthosis in children (Khalil et al, 1991)

- The title is clear and to the point, but the authors should have mentioned that the target population is an Egyptian sample.
- The aim is clearly stated.
- The study design is not mentioned, it is a cross-sectional case-control study.
- The setting of the study is not mentioned.
- The time of the study isn't mentioned.
- Study population: mentioned.

- Sample design: it is not mentioned, it is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned and referenced. They are reproducible and reliable.
- The statistical methods aren't mentioned. P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results: In table 1 comparing between study and control groups as regards behavioral disorders, only the percentages are written, not the numbers of cases as well. On the other hand, if the numbers of cases for each psychiatric disorder in table 2 and 3 are summed up, the percentages obtained are different from the percentages mentioned in table 1. In the discussion, the results are compared to previous studies.
- The abstract is not complete as it does not include a summary of the results.
- Recommendations are mentioned.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. The number of pages is 9.

13. Subject: Depression in haemodialysis patients and their risk of suicide (El-Mahallawy et al, 1991)

- The title is clear and to the point, but the authors should have mentioned that the target population is an Egyptian sample.
- The aim is clearly stated.
- The study design is not mentioned, it is a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study isn't mentioned.
- Study population: mentioned.
- Sample design: it is not mentioned, it is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned and referenced. They are reproducible and reliable.
- The statistical methods aren't mentioned. P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly stated.
- Recommendations are mentioned.

- Limitations of the study are not stated.
- The general appearance of the study is appealing. The number of pages is 9.

14. Subject: Psychiatric morbidity after cerebrovascular accidents (Asaad, 1992)

- The title is clear and specific.
- The aim of the work is clearly stated.
- The study design is mentioned.
- The setting of the study is stated.
- The time of the study: The duration isn't stated.
- Study population is mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent was taken.
- The study isn't preceded by a pilot study.

- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The author doesn't discuss the limitations of the study.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 198.

15. Subject: Psychiatric correlates of infertility (El-Defrawi & Lotfi, 1992)

- The title is clear but it is generalized as it doesn't specify that the target population will be female patients in Suez.
- The aim of the work is clearly stated.
- The study design is not mentioned, it is a cross sectional study.
- The setting of the study is mentioned.
- The time of the study: The duration isn't stated.
- Study population: is mentioned.
- Sample design: is not mentioned. It is a non probability convenient sample.

- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are only enumerated, not mentioned in details or referenced. They are reproducible and reliable.
- Statistical methods are not stated. P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables, but the mean scores of patients on both MAS and BDI are not mentioned. They are compared to previous studies.
- The abstract is clearly mentioned.
- The author doesn't discuss the limitations of the study.
- No recommendations for are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 8.

16. Subject: Depression and intellectual state in children with renal failure (Abdel-Baki et al, 1994)

- The title is clear and to the point, but the authors should have mentioned that the target population is an Egyptian sample.
- The aim is clearly stated.

- The study design is not mentioned, it is a cross-sectional study.
- The setting of the study is mentioned.
- The time of the study isn't mentioned.
- Study population: mentioned.
- Sample design: it is not mentioned, it is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned and referenced. They are reproducible and reliable.
- The statistical methods aren't mentioned. P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly stated.
- Recommendations are mentioned.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. The number of pages is 7.

17. Subject: Psychiatric assesment of multiple sclerosis (El-Gamel, 1995)

- The title is clear but it is generalized as it doesn't specify the target population.
- The aim of the work is clearly mentioned yet generalization of the population is done.
- The study design is not mentioned, it's a cross-sectional study.
- As for the setting of the study, the researcher mentioned in the methodology that they are selected from the neurology department in Kaser El-Aini Hospital, while in the discussion, he mentioned that they are selected from various medical centers.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned, but not calculated.
- The methods of assessment used in this study are just enumerated, not mentioned in details or referenced. They are reproducible, reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study is not preceded by a pilot study.

- The results are presented in tables. The results of scale for suicidal ideation are not interpreted in the discussion.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 120.

18. Subject: Psychological impact of Rheumatic heart disease on affected children and their mothers (Abdel-Aal et al, 1995)

- The title is clear but it is generalized as it doesn't specify that the target population is limited to Assiut University Hospital.
- The aim of the work is clearly mentioned but the age range of the identified population is not mentioned as well as the limitation to Assiut Hospital.
- The study design is not mentioned. It's a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study is mentioned.
- Study population: it's mentioned.

- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are not stated. P value is used to indicate the level of significance.
- No consent is taken.
- The study is not preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The abstract is clearly mentioned.
- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 10.

19. Subject: Psychiatric assesment of female burn patients during hospitalization (Abdel-Hameed, 1996)

- The title is clear and specific.
- The aim of the work is clearly mentioned.
- The study design isn't mentioned. It is a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study is not stated.
- Study population is mentioned. The author doesn't precise why they are assessed 2 weeks after the burn incident.
- Sample design: It isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.

- The general appearance of the study is appealing. It is well organized. The number of pages is 135.

**20. Subject: Depression in women with type 2 diabetes
(El-Mahallawy et al, 1996)**

- The title is clear but it is generalized as it doesn't specify the target population.
- The aim of the work is clearly mentioned.
- The study design is not mentioned. It's a cross-sectional case-control study. The number of controls is not mentioned.
- The setting of the study is mentioned.
- The time of the study is mentioned.
- Study population: it's mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are not stated. P value is used to indicate the level of significance.
- No consent is taken.
- The study is not preceded by a pilot study.

- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The abstract is clearly mentioned.
- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 13.

21. Subject: *Psychiatric disorders and falling hair* (Mahmoud, 1997)

- The title is vague as the word “and” in it should have been replaced by “in” in order to suggest that the study is done on patient with hair fall to assess the psychiatric morbidity and not vice-versa. On the other hand, the author doesn’t specify that the target population is an Egyptian sample.
- The aim of the work is clearly stated.
- The study design is not mentioned.
- The setting of the study is mentioned.
- The time of the study: is stated.
- Study population: is mentioned.
- Sample design: is mentioned. It’s a simple random sampling.

- The sample size is mentioned and calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent was taken.
- The study isn't preceded by a pilot study.
- The results are presented in tables. No percentages are calculated for the majority of the findings. In the discussion, the results are compared to previous studies.
- The summary and conclusion are recapitulative, covering all the findings of the study.
- The author doesn't discuss the limitations of the study.
- Helpful recommendations are mentioned.
- The general appearance of the study is appealing. It is not well organized. The number of pages is 98.

22. Subject: Psychiatric aspects of liver diseases (Abou-Lughod, 1997)

- The title is not to the point. It is generalized as the target population is not specified.
- The aim of the work is clearly mentioned.

- The study design is mentioned (a cross-sectional case-control study).
- The setting of the study is mentioned.
- The time of the study is not stated.
- Study population is mentioned.
- Sample design: not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 109.

23. Subject: Psychosocial aspects of cancer pain in Egyptian patients (Kamal, 1997)

- The title is not to the point. It doesn't show that the effect of psychotherapy on cancer pain will be studied, and it is generalized as the author doesn't specify that the target population is an Egyptian sample.
- The aim of the work is clearly mentioned.
- The study design is not mentioned (a comparative study).
- The setting of the study is mentioned.
- The time of the study is stated.
- Study population is mentioned.
- Sample design: mentioned. It is a simple random sampling.
- The sample size is mentioned and calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.

- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 136.

24. Subject: Cross-Sectional study of psychiatric disorders in pediatric outpatient clinic (Kashaba et al, 1997)

- The title is clear and specific.
- The aim of the work is clearly mentioned.
- The study design is mentioned.
- The setting of the study is clearly mentioned.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced.
- Statistical methods are not stated. P value is used to indicate the level of significance.

- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are presented objectively in tables and in sufficient details, however, the results in the table showing age distribution of psychiatric diagnosis p.267 are different from those written in the discussion.
- The abstract of the paper is clearly stated.
- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 6.

25. Subject: *Psychiatric aspects of cardiac surgery* (Morsy, 1998)

- The title is generalized as it doesn't specify the target population.
- The aim of the work is clearly mentioned but the author doesn't specify which types of cardiac surgeries are included.
- The study design is mentioned. It is a prospective cohort study.
- The setting of the study is not mentioned.
- The time of the study isn't stated.
- Study population: it's mentioned.

- Sample design: it is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible, reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study is not preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 128.

26. Subject: Psychological aspects of hysterectomy (Omar, 1998)

- The title is generalized as it doesn't specify the target population.
- The aim of the work is clearly mentioned.
- The study design is not mentioned, it is a prospective cohort study.
- The setting of the study is mentioned.
- The time of the study is stated.
- Study population: it's mentioned.
- Sample design: The author mentioned that the cases are randomly selected without specifying how the randomization was done.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.

- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 172.

27. Subject: Psychiatric aspects of ICU patients with recent myocardial infarction (Youssef, 1998)

- The title is clear and specific.
- The aim of the work is clearly mentioned.
- The study design is not mentioned, it is a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study is stated.
- Study population: is mentioned.
- Sample design: It is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.

- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 86.

28. Subject: Psychiatric aspects of burns (Kandil et al, 1998)

- The title is generalized as it doesn't specify the target population.
- The aim of the work is clearly stated.
- The study design is not mentioned, it's a cross-sectional, case-control study.
- The setting of the design is not mentioned.
- The time of the study is not mentioned.
- The study population is mentioned, but the author refers to *acute* and *chronic* burned patients without giving an explanation for the meaning of chronicity in that case.

- The sample design is not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable, referenced, yet not discussed. The author doesn't state the psychiatric diagnoses will be made based on which criteria.
- The statistical methods aren't mentioned, P value is not used in assessing the majority of the results
- No consent was taken.
- The study isn't preceded by pilot study.
- The results are presented objectively in tables. They are compared to previous studies.
- The abstract is clearly mentioned.
- The recommendations are mentioned.
- The limitations are not mentioned.
- Generally, the study appearance isn't that good as phrases and an entire paragraph are repeated. The number of pages is 6.

29. Subject: Depression in Parkinsonin's disease: A clinical study (Shama, 1998)

- The title is clear but it is generalized as it doesn't specify the target population.

- The aim is clearly stated.
- Study design: It is not mentioned by the researcher. It's a cross-sectional, case-control study.
- The setting of the study is stated.
- The time of the study is not mentioned.
- The study population is mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sample.
- Sample size: It is mentioned but not calculated.
- The methods of assessment are not discussed.
- The statistical methods are not mentioned. P value is used to measure the significance.
- No consent was taken.
- No pilot study is preceding the study.
- The results are presented objectively in tables. The results are compared to previous studies.
- The abstract is clearly mentioned.
- There are no recommendations.
- The researcher doesn't discuss the limitations of his study.
- The general appearance is appealing and data are well presented. The number of pages is 6.

30. Subject: Psychological profile of a sample of Egyptian female patients with breast cancer (El-Hennawy, 1999)

- The title is clear and specific.
- The aim of the work is clearly mentioned.
- The study design is not mentioned, it is a cross-sectional case-control study.
- The setting of the study is not mentioned.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are clearly discussed.
- Helpful recommendations for further studies are mentioned.

- The general appearance of the study is appealing. It is well organized. The number of pages is 132.

31. Subject: Depression and anxiety in children with dermatological diseases (El- Shourbagy & Farid, 1999)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim is clearly stated.
- Study design: It is mentioned by the researcher. It's a cross-sectional, case-control study.
- The setting of the study is stated.
- The time of the study is mentioned.
- The study population is mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sample.
- Sample size: It is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.

- The statistical methods are mentioned. P value is used to measure the significance.
- No consent was taken.
- No pilot study is preceding the study.
- The results are presented objectively in tables. The results are compared to previous studies.
- The abstract is clearly mentioned.
- There are no recommendations.
- The researchers don't discuss the limitations of the study.
- The general appearance is appealing and data are well presented. The number of pages is 7.

32. Subject: Psychological and psychiatric impact of cancer diagnosis and management of children (Habib, 2000)

- The title is clear and specific.
- The aim is clearly stated. Yet, the author doesn't precise the age range.
- The study design is not stated. It is a cross sectional study.
- The setting of the study is mentioned.
- The time of the study is mentioned.
- Study population: mentioned

- Sample design: It is mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned in details and referenced.
- The statistical methods are mentioned, and P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in figures and in tables. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- Recommendations are clearly exposed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 207.

33. Subject: Psychological aspects of breast cancer (El-Azzazy, 2000)

- The title is clear but it doesn't specify the target population.
- The aim of the work is clearly mentioned.

- The study design is not mentioned, it is a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study isn't stated.
- Study population is mentioned.
- Sample design: It is not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 96.

34. Subject: The psychological sequel of breast cancer and their relationships to locus of control, fatigue, coping styles and treatment (Fahmy et al, 2000)

- The title is clear and specific, yet it lacks specifying that the female patients chosen are limited to Port Said.
- The aim of the work is clearly mentioned.
- The study design is not mentioned, it's a cross-sectional study.
- The setting of the study is stated.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: it is not mentioned, it is a non probability convenient sample.
- The sample size is mentioned, but not calculated.
- The methods of assessment used in this study are mentioned and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study is not preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The abstract is clearly mentioned.
- The limitations of the study are not discussed.

- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 15.

35. Subject: Utilization of Non-Psychiatric Medical Services by a Sample of Egyptian Patients with Panic Disorder (Abu El-Ela, 2000)

- The title is clear and to the point.
- The aim is clearly stated.
- Study design: It is mentioned by the researcher. It's a retrospective cohort study.
- The setting of the study is stated.
- The time of the study is mentioned.
- The study population is mentioned.
- Sample design: it is mentioned. It is a non probability consecutive sampling.
- Sample size: It is mentioned.
- The methods of assessment used in this study are enumerated and not referenced.
- The statistical methods are not mentioned. P value is used to measure the significance.
- No consent was taken.

- No pilot study is preceding the study.
- The results are presented objectively in tables. The results are compared to previous studies.
- The abstract doesn't include the results.
- The recommendations are stated.
- The limitations of the study are mentioned.
- The general appearance is appealing and data are well presented. The number of pages is 9.

36. Subject: Psychiatric morbidity among children 6-12 years attending pediatric outpatient clinic in Suez Canal University Hospital (Magda et al, 2000)

- The title is clear and to the point as it specifies the target population.
- The aim is clearly stated.
- The study design isn't mentioned. It is a cross-sectional study.
- The setting of the study is clearly mentioned.
- The time of the study is mentioned.
- Study population: mentioned.
- Sample design: It is mentioned as simple random sampling without specifying how the randomization was done.
- The sample size is mentioned but not calculated.

- The methods of assesment used are reliable and mentioned and referenced.
- The statistical methods are mentioned and P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results: In table 4 showing the distribution of psychiatric disorders among children p 280, the authors don't precise the dominant on which the percentages are calculated as it is neither the 250 children of the sutdy, nor the 37 children with psychiatric disorders. In table 5 presenting the medical diagnosis among children with psychiatric disorders, the total is inscribed as 37, but the percentages are calculated upon 250. They are compared to previous studies.
- The abstract is clearly mentioned.
- Only one recommendation is exposed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 14.

37. Subject: A Study of Life Events, Personality and Anxiety Traits and Depression in Egyptian Patients with Cancer Bladder (Akram et al, 2000)

- The title is clear and specific.
- The aim is clearly stated.
- The study design: the author described it as a retrospective case-control cohort while in fact it is a cross-sectional case-control study, as he doesn't bring any previous information about the patients.
- The setting of the study is mentioned.
- The time of the study isn't mentioned.
- Study population: mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned and referenced.
- The statistical methods are mentioned and P value is used to assess the level of significance.
- Verbal consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly mentioned.
- Only one recommendation is exposed.
- Limitations of the study are not stated.

- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 7.

38. Subject: Somatization disorder among medical outpatients in Zagazig University Hospital (Roshdy et al, 2000)

- The title is clear and to the point as it specifies the target population.
- The aim is clearly stated, however in the aim, the target population is not specified as in the title.
- The study design isn't mentioned. It is a cross-sectional study.
- The setting of the study is clearly mentioned.
- The time of the study is mentioned.
- Study population: mentioned.
- Sample design: It is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned and referenced.
- The statistical methods are mentioned and P value is used to assess the level of significance.
- No consent is taken.

- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly mentioned.
- Only one recommendation is exposed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 6.

39. Subject: Medical referrals with unexplained physical complaints: Psychosocial and dynamic characteristics (Haggag et al, 2000)

- The title is vague as it doesn't specify that the patients are referred to psychiatric clinics nor that it is a sample of Egyptian medical referrals.
- The aim is mentioned.
- The study design isn't mentioned. It is a cross-sectional case-control study.
- The setting of the study is not stated.
- The time of the study is mentioned.
- Study population: mentioned.

- Sample design: not mentioned. It's a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned and referenced.
- The statistical methods are mentioned and P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly mentioned.
- No recommendation is exposed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 12.

40. Subject: Behavioral and cognitive functions in children with chronic illness in Port-Said (El-Defrawi et al, 2000)

- The title is clear and specific.
- The aim of the work is clearly mentioned.

- The study design is not mentioned, it's a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study is stated.
- Study population: it's mentioned.
- Sample design: not mentioned. It's a non probability consecutive sampling.
- The sample size is mentioned.
- The methods of assessment used in this study are mentioned in details and referenced, except for Goodenough scale. They are reproducible, reliable.
- Statistical methods are not stated. P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are not discussed, only shown in tables.
- The abstract is clearly mentioned.
- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 16.

41. Subject: Cognitive and Non-cognitive (Anxiety and Depression) Functioning in children treated with cranial irradiation for acute leukemia (Abdel-Baky et al, 2000)

- The title is clear and specific.
- The aim is clearly stated.
- The study design is mentioned (a cross-sectional case-control study).
- The setting of the study is mentioned.
- The time of the study is mentioned.
- Study population: mentioned. Yet the age range of the target population is not mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned and referenced.
- The statistical methods are mentioned and P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceded by pilot study which.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly mentioned.

- Helpful recommendations are exposed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 14.

42. Subject: Psychiatric sequelae in children with chronic lymphatic leukemia (El-Shahawy, 2001)

- The title is clear but it should have mentioned that the target population is an Egyptian sample.
- The aim is clearly stated.
- The study design is not stated. It is a cross sectional case-control study.
- The setting of the study is mentioned.
- The time of the study is mentioned.
- Study population: it is mentioned.
- Sample design: It is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assesment used are mentioned, reliable and referenced.
- The statistical methods are mentioned, and P value is used to assess the level of significance.

- Verbal consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The conclusion cover all the findings of the study.
- Recommendations are clearly exposed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 152.

43. Subject: Psychiatric morbidity in general medical departments of Kasr El Aini Hospital (El-Gamal, 2001)

- The title is clear and to the point as it specifies that the study is limited to Kasr el Aini Hospital.
- The aim of the work is clearly mentioned.
- The study design is not mentioned. It is a cross-sectional study.
- The setting of the study is mentioned.
- The time of the study is stated.
- Study population: it's mentioned..
- Sample design: not mentioned. It's a non probability convenient sampling.

- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible, reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results presented in the discussion for prevalence of psychiatric morbidity are different from those shown in table 14.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 330.

44. Subject: A study of the impact of stress in chronic illness on children and their parents (El-Shinnawy, 2001)

- The title is clear but it should have mentioned that the study population is an Egyptian sample.
- The aim is clearly state.
- The study design is not stated. It is a cross-sectional study.

- The setting of the study mentioned.
- The time of the study is not mentioned.
- Study population: it is mentioned.
- Sample design: It is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned in details and referenced.
- The statistical methods are mentioned, and P value is used to assess the level of significance.
- Verbal consent is taken.
- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- Recommendations are clearly exposed.
- Limitations of the study are stated.
- The general appearance of the study is appealing and data are well presentd.The number of pages is 136.

45. Subject: Psychiatric Assessment of Patients with Mild Traumatic Brain Injury (Fahmy et al, 2001)

- The title is clear but it should have mentioned that the target population is an Egyptian sample.
- The aim of the work is clearly stated.
- The study design is not stated, it is a prospective cohort study.
- The setting of the study is mentioned.
- The time of the study is mentioned.
- Study population: is mentioned.
- Sample design: it is not mentioned, it is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent was taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The conclusion is recapitulative.
- The author doesn't discuss the limitations of the study.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 14.

46. Subject: Psychiatric manifestations in cerebrovascular stroke (Hassan, 2002)

- The title is clear and specific.
- The aim is clearly stated.
- The study design is mentioned.
- The setting of the study is mentioned.
- The time of the study isn't mentioned in details.
- Study population: mentioned. The author doesn't justify why he recruited his cases in a period from 2 weeks to 6 months post-stroke.
- Sample design: it isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned in details and referenced.
- The statistical method aren't mentioned.P value is used to assess the level of significance.
- No consent is taken.
- The study isn't preceeded by pilot study.
- The results are clearly described and presented objectively in figures and in tables. They are compared to previous studies.
- The conclusion is recapitulative.
- Recommendations are clearly exposed.

- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 165.

47. Subject: Effect of eating attitude and behavior on metabolic control in children and adolescents with Insulin Dependant Diabetes Mellitus (Hassanein, 2002)

- The title is clear but it doesn't specify that it is an Egyptian sample.
- The aim is clearly stated.
- The study design is mentioned.
- The setting of the study is mentioned.
- The time of the study isn't mentioned.
- Study population: mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned in details and referenced.
- The statistical method are mentioned. P value is used to assess the level of significance.
- No consent is taken.

- The study isn't preceded by pilot study.
- The results are clearly described and presented objectively in figures and in tables. They are compared to previous studies.
- The conclusion is recapitulative.
- Recommendations are clearly exposed.
- Limitations of the study are stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 124.

48. Subject: Depression in Epilepsy and Migraine: A Comparative Study in Children (Saadani et al, 2002)

- The title is clear and specific.
- The aim of the work is clearly stated.
- The study design is stated.
- The setting of the study is not mentioned.
- The time of the study is not mentioned.
- Study population: is mentioned.
- Sample design: The author mentioned that the cases are randomly selected without specifying how the randomization was done.
- The sample size is mentioned but not calculated.

- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent was taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly mentioned.
- The author doesn't discuss the limitations of the study.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 10.

49. Subject: Psychological profile and quality of life (QoL) assessment in cancer breast patients (Allam, 2003)

- The title is clear and specific.
- The aim of the work is clearly mentioned.
- The study design is not mentioned.
- The setting of the study is mentioned.
- The time of the study isn't stated.
- Sample population is mentioned.

- Sample design: it isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 207.

50. Subject: Psychiatric disorders in children and adolescents with type I diabetes mellitus (Shaker, 2003)

- The title is clear and to the point, although not mentioning that it is an Egyptian sample.
- The aim of the work is clearly mentioned.
- The study design is mentioned.
- The setting of the study is mentioned.
- The time of the study is stated.
- Sample population is mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study is preceded by a pilot study.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The conclusion doesn't cover all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.

- The general appearance of the study is appealing. It is well organized. The number of pages is 153.

51. Subject: Quality of life and emotional disturbances in children with type 1 diabetes mellitus: the impact of glycemic control (Salem et al, 2003)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim is clearly stated.
- Study design: It is not mentioned by the researcher. It's a cross-sectional study.
- The setting of the study is stated.
- The time of the study is mentioned.
- The study population is mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sample.
- Sample size: It is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- The statistical methods are mentioned. P value is used to measure the significance.
- Verbal consent was taken.

- No pilot study is preceding the study.
- The results are presented objectively in tables. The results are compared to previous studies.
- The abstract is clearly mentioned.
- There are no recommendations.
- The researchers don't discuss the limitations of the study.
- The general appearance is appealing and data are well presented. The number of pages is 7.

52. Subject: Depression and body image in children with chronic liver disease A cross section study (Kotb & Sabry, 2003)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim is clearly stated.
- The study design is stated, however, the author only mentioned that it is a cross-sectional study without mentioning that it is also a case-control study.
- The setting of the study is mentioned.
- The time of the study is not mentioned.
- Study population: mentioned.

- Sample design: It is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assesment used are reliable and mentioned and referenced.
- The statistical methods are mentioned and P value is used to assess the level of significance.
- Verbal consent is taken.
- The study isn't preceeded by pilot study.
- The results are clearly described and presented objectively in tables. They are compared to previous studies.
- The abstract is clearly stated.
- Recommendations are clearly exposed.
- Limitations of the study are not stated.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 13.

53. Subject: Psychiatric side effects during interferon therapy in hepatitis C patients (Essawy et al, 2003)

- The title is clear but it should have included that the study is limited to the depressive and anxiety side effects of the interferon.

- The aim of the work is clearly mentioned.
- The study design is not mentioned. It is a prospective cohort study.
- The setting of the study is not mentioned.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: not mentioned. It is a non probability convenient sampling.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are just enumerated, not referenced.
- Statistical methods are not stated. P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are confusing since the results shown in table2 for the psychiatric diagnoses are different from those written in the Results and both differ from those written in the discussion. Table 3 discussing the scores of patients on HDS, BDI and Spielberg state-trait anxiety inventory shows their scores on 8th month from the start of treatment while the author doesn't specify in the methodology that the 8th month will be assessed. On the other hand, their scores on the 12th and 18th month are not stated.
- The conclusion doesn't cover all the findings of the study.

- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 7.

54. Subject: *Psychiatric clinical profile in patients with multiple sclerosis (Fat-hy, 2004)*

- The title is clear yet it lacks specifying the population of the study.
- The aim of the work is clearly mentioned, however the identified population as Egyptian is not specified.
- The study design is not mentioned, it is a cross-sectional case-control study.
- The setting of the study is mentioned.
- The time of the study is stated.
- Study population: it's mentioned.
- Sample design: it isn't mentioned, it is a non probability convenient sample.
- The sample size is mentioned, but not calculated.
- The methods of assessment: the author used HAS as a tool to diagnose anxiety while it is not fit for that use, as it assesses only the severity of anxiety.

- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study is not preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. However, on table 12, the author specifies that there is 3 MS patients with anxiety, while in the discussion their number is 4. In the discussion, the results are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 107.

55. Predictors of neuropsychological dysfunction in children with diabetes mellitus (Bishry et al, 2004)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim is clearly stated.

- Study design: It is mentioned by the researcher. It's a cross-sectional, case-control study.
- The setting of the study is stated.
- The time of the study is mentioned.
- The study population is mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sample.
- Sample size: It is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- The statistical methods are mentioned. P value is used to measure the significance.
- Verbal consent was taken.
- The study is preceded by a pilot study.
- The results are presented objectively in tables. The results are compared to previous studies.
- The abstract is clearly mentioned.
- The recommendations are clearly stated.
- The limitations of the study are mentioned.
- The general appearance is appealing and data are well presented. The number of pages is 10.

56. Subject: Psychosocial characters of Insulin Dependant Diabetic Children and its relation to coping strategies of their primary caregivers (El-Aswad, 2005)

- The title is clear but it doesn't specify that the target population is an Egyptian sample.
- The aim of the work is clearly mentioned, but the age range of the identified population is not mentioned.
- The study design is not mentioned. It is a cross-sectional case-control study.
- The setting of the study is stated.
- The time of the study isn't stated.
- Study population: it's mentioned..
- Sample design: not mentioned. It is a non probability convenient sample.
- The sample size is mentioned, but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study is not preceded by a pilot study.

- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 115.

57. Subject: Assessment of depressive symptoms among asthmatic children (Essawy et al, 2005)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim is clearly stated.
- Study design: It is mentioned by the researcher. It's a cross-sectional, case-control study.
- The setting of the study is stated.
- The time of the study is mentioned.
- The study population is mentioned.
- Sample design: it isn't mentioned. It is a non probability convenient sample.
- Sample size: It is mentioned but not calculated.

- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- The statistical methods are mentioned. P value is used to measure the significance.
- Verbal consent was taken.
- The study is preceded by a pilot study.
- The results are presented objectively in tables. The results are compared to previous studies.
- The abstract is clearly mentioned.
- The recommendations are clearly stated.
- The limitations of the study are mentioned.
- The general appearance is appealing and data are well presented. The number of pages is 9.

58. Subject: Mental disorders due to a general medical condition among long stay patients (Noby, 2006)

- The title is clear and specific.
- The aim of the work is clearly mentioned.
- The study design is mentioned.
- The setting of the study is mentioned.
- The time of the study isn't stated.
- Study population: it's mentioned.

- Sample design: it is mentioned. it is a stratified random sampling.
- The sample size is mentioned and calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are discussed compared to previous studies.
- The summary and conclusion are recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 160.

59. Subject: Emotional Disturbances and Quality of Life in Type-1 Diabetic Children and Adolescents (2006)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim is clearly stated.
- Study design: not mentioned. It is a cross-sectional study.
- The setting of the study is stated.
- The time of the study is stated.
- Study population is mentioned.
- The sample design: The author mentioned that the cases are randomly selected without specifying how the randomization was done.
- The sample size is mentioned but not calculated.
- The methods of assessment are mentioned and referenced.
- The statistical methods are mentioned and P value is used to measure the significance.
- Consent was taken.
- No pilot study was preceding the study.
- The results are presented objectively and clearly designed tables are available. They are compared to previous studies.
- The abstract is clearly exposed.
- Recommendations are generated.
- No limitations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 13.

60. Subject: Psychiatric morbidity in infertility in a sample of Egyptian females (2007)

- The title is clear and to the point.
- The aim of the work is clearly stated.
- Study design: It is mentioned..
- The setting of the study is mentioned.
- The time of the study: It is mentioned.
- Study population: It is clearly mentioned.
- Sample design: It is not mentioned. The author doesn't justify why specific days of the week are chosen, if it is under random base or not, so the sample design is considered here as a non probability convenient sample.
- Sample size: It is mentioned and calculated.
- The methods of assessment used in this study are mentioned in details and referenced.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study is preceded by a pilot study which findings are taken into account.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.

- The conclusion is recapitulative and covers all the findings of the study.
- Limitations of the study are discussed, highlighting the drawbacks of the study
- There are helpful recommendations for further studies.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 159.

61. Subject: Systemic Lupus Erythematosus: Psychological and Immunological study (Abdel-Mawella 2007)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim of the work is clearly mentioned.
- The study design is not mentioned. It's a cross-sectional case-control study.
- The setting of the study is stated.
- The time of the study isn't stated.
- Study population: it's mentioned.
- Sample design: It is not mentioned. It is a non probability convenient sample.
- The sample size is mentioned but not calculated.

- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- No verbal consent is taken.
- The study isn't preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative, covering all the findings of the study.
- The limitations of the study are not discussed.
- Helpful recommendations for further studies are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 182.

62. Subject: Prevalence of panic disorder in a medical outpatient Egyptian sample (El-Azzazy, 2007)

- The title is clear and specific.
- The aim of the work is clearly stated.

- The study design is stated, however, the author only mentioned that it is a cross-sectional study without mentioning that it is also a case-control study.
- The setting of the study is mentioned.
- The time of the study is mentioned.
- Study population: is mentioned.
- Sample design: not mentioned. It's a non probability convenient sample.
- The sample size is mentioned but not calculated.
- The methods of assessment used in this study are mentioned in details and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Oral consent is taken.
- The study is preceded by a pilot study which findings have been taken into consideration.
- The results are clearly described and presented objectively in tables, but it is not mentioned according to which criteria the psychiatric diagnoses are done. They are compared to previous studies.
- The conclusion is recapitulative and covers all the findings of the study.
- Limitations of the study are discussed, highlighting the drawbacks of the study.
- Helpful recommendations are mentioned.

- The general appearance of the study is appealing. It is well organized. The number of pages is 195.

63. Subject: Multiple Psychiatric Disorders among Patients with Stable Coronary Heart Disease Affecting Their Quality Of Life (El-Tantawy et al, 2007)

- The title is clear but it is generalized as it doesn't specify that target population is an Egyptian sample.
- The aim of the work is clearly mentioned.
- The study design: the author describes it as being a prospective study, while in fact no follow-up of the patients is done so it is a cross sectional study.
- The setting of the study is mentioned.
- The time of the study isn't stated.
- Study population: it's mentioned..
- Sample design: it isn't mentioned. It is a non probability convenient sampling.
- The sample size is mentioned, but not calculated.
- The methods of assessment used in this study are mentioned and referenced. They are reproducible and reliable.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.

- Verbal consent is taken.
- The study is not preceded by a pilot study.
- The results are clearly described and presented objectively in tables and in sufficient details. They are compared to previous studies.
- The conclusion is recapitulative.
- The limitations of the study are not discussed.
- No recommendations are mentioned.
- The general appearance of the study is appealing. It is well organized. The number of pages is 11.

64. Subject: Psychiatric morbidity and Coping Strategies in a Sample of Egyptian Cancer Breast Female Patients (El-Serafi, 2008)

- The title is clear and to the point.
- The aim of the work is clearly stated.
- Study design: It is mentioned.
- The setting of the study is mentioned.
- The time of the study: It is mentioned.
- Study population: It is clearly mentioned.

- Sample design: The author mentioned that it is a stratified random sample without specifying how the randomization was done.
- Sample size: It is mentioned and calculated.
- The methods of assessment used in this study are mentioned in details and referenced.
- Statistical methods are clearly stated and P value is used to indicate the level of significance.
- Verbal consent is taken.
- The study is preceded by a pilot study which findings are taken into account.
- The results are clearly described and presented objectively in tables and figures and in sufficient details. They are compared to previous studies.
- The summary is recapitulative and covers all the findings of the study.
- Limitations of the study are not discussed.
- There are helpful recommendations for further studies.
- The general appearance of the study is appealing. It is well organized and comprehensible. The number of pages is 236.

DISCUSSION

Sixty-nine Egyptian psychiatric studies on Liaison-psychiatry are collected in this work. They include 7 MD & 12 MSc thesis from Ain Shams University, 2 MD & 11 MSc thesis from Cairo University, 4 MD & 4 MSc thesis from Al-Azhar University, 10 papers from the Egyptian Journal of Psychiatry, 17 papers from the Current psychiatry journal, 1 paper from Ain Shams medical Journal and 1 paper from Menoufiya Medical Journal. These studies discuss different aspects of Liaison psychiatry and different medical disorders in Egyptian samples. After collecting them, we reviewed the results, and critically appraised the findings to make use of the effort done by Egyptian researchers and to identify the missing points in Egyptian researches in order to overcome these defects in the future.

The data collected from available studies are categorized as follows:

I. Epidemiology of psychiatric symptoms and disorders in physically ill patients:

Forty-nine Egyptian Studies are found on this subject. Egyptian studies discussing the epidemiology of psychiatric disorders in physically ill patients are restricted to large hospitals and are essentially done in Cairo. The majority of the samples were collected from out-patients and inpatients of universities hospitals as Ain Shams, Kasr El Aini, Al Azhar and Suez Canal universities hospital. Few studies were done on rural areas and none included different hospitals allover the Egyptian towns. No large surveys involving many geographical areas in Egypt were found.

This lack of diversity of samples leads to deficiency in the epidemiological data that could help and be taken as a base for Liaison Psychiatry in Egypt, as the studied populations are not representative of the entire Egyptian community.

On the other hand, the prevalence of psychiatric disorders in different physical illnesses are available and discussed in a number of Egyptian studies, but informations about other epidemiological data are lacking. Few Egyptian studies account about age distribution and sex distribution, but rare are the

Egyptian studies reporting on the residence and marital status of the physically ill patients with psychiatric disorders.

Concerning the studied physical diseases in the domain of Liaison Psychiatry, the epidemiology of psychiatric disorders in different medical fields are discussed, as general and special branches of medicine, gynecological disorders and pediatric disease. A large number of Egyptian studies cover the neurological disorders. However, some medical diseases, although clinically commonly presenting with psychiatric symptoms and disorders and representing a fair proportion of Liaison psychiatry efforts, are underdiscussed in the Egyptian studies.

For example, patients with Systemic Lupus Erythematosus commonly present with psychiatric symptoms, either due to the pathogenesis of the disease itself, or owing to the corticosteroid therapy, but only one Egyptian study is found discussing the prevalence of the psychiatric disorders in SLE patients.

Other disorders can be stated as partial complex seizures, thyroid disorders either in hypothyroidism and hyperthyroidism and blood diseases as leukemias.

II. Etiology of psychiatric symptoms and disorders in physically ill patients:

Twenty-one researches studied the etiology of psychiatric disorders in physically ill patients, whether the stress factors as **Abdel-Wahab (1982)** who accounted on psychosocial risk factors of non-organic illness, coping mechanisms of patients with breast cancer like **Fahmy et al (2000)**, risk factors related to the physical illness itself, as **Abdel-Hameed (1996)** who studied the relation of the psychiatric diagnosis with the distribution of burn in specific areas of the body, and its percentage, and **Radwan (2007)** who studied the correlation of psychiatric disorders with the different infertile oetiologies. Only one study is found discussing the interaction between the laboratory findings in the physical diseases and the psychiatric morbidity which is the study of **Abdel-Mawella (2007)** who accounted on the laboratory findings in SLE and its relation to psychiatric manifestations. The neuroimaging investigations related to the psychiatric diagnoses in CVS are discussed in **Abdou (1992)** and **Hassan (2002)**.

Even if the etiology of psychiatric symptoms and diagnoses in physically ill patients are covered in different angles of view, nevertheless each view needs to be further explored in different physical illnesses as each one of them is only exposed in a few physical illnesses.

III. Clinical description of psychiatric symptoms and disorders in physically ill patients:

The Egyptian studies found covering the clinical description of psychiatric disorders in physically ill are thirty-eight studies. They are covering a fair number of physical diseases, nevertheless the same reproach is noted in the Egyptian studies covering the clinical description as in those covering the epidemiology of psychiatric morbidity in Liaison Psychiatry, i.e. some of the diseases largely covered clinically in the field of Liaison Psychiatry are not discussed fair enough in the Egyptian studies.

Concerning the aspects of clinical description of psychiatric diagnoses in physical illness, the clinical picture including the core symptoms of psychiatric morbidities and their frequencies, and the severity of depression and anxiety and the

percent of mild, moderate and severe cases in different physical illness are largely covered in a number of Egyptian studies. Many psychometric tools are used for these prospectives.

IV. Psychological responses to specific treatment

The psychological responses to specific treatment are discussed in fifteen studies. Different treatment modalities are exposed whether taken orally as the study on psychiatric morbidity of oral contraceptive pills **Sowmail (1983)** or parenterally as **Essawy et al (2003)** who covered the psychiatric effects of interferon. Irradiation and chemotherapy in children with acute leukemia and its psychiatric morbidity are discussed in **Abdel-Baky et al (1997)**. The psychiatric diagnoses following different surgical procedures in diverse physical diseases are covered as cardiac surgeries **Gharib (1982)** and mastectomy and chemotherapy in **El-Azzazy (2000)**. Other modalities of treatment are discussed as hemodialysis (**El-Mahallawy, 1991**) and assisted reproductive technique in infertile females (**Radwan, 2007**)

V. The influence of the psychiatric disorders on the outcome of the physical illness:

Only 3 Egyptian studies discussing the influence of psychiatric disorders on the outcome of the physical illness are found. One is the study of **Hassanein (2)** on the influence of eating disorders on the control of blood sugar in Dm, another one is the study of **Hassan (2002)** who discussed the effect of post-stroke anxiety on the outcome of CVS and the degree of impairment, and the last one is that of **Radwan (2007)** who highlighted the importance of psychiatric diagnoses as well as their degree of severity on the outcome of infertility and response to fertility treatment.

Although the importance of the influence of psychiatric disorders on the outcome of physical illness, it was evidently underdiscussed. If further studied, it would highlight the consequences of psychiatric morbidity in physically ill and largely expand the field of Liaison Psychiatry.

The treatment of the psychiatric disorders in the physically ill patients:

Would the treatment of the psychiatric morbidity in the physically ill patients have an impact on their medical condition in the Egyptian population? Would it be mainly depending upon psychotherapy or pharmacotherapy? And what about the choice of pharmacotherapy in the different physical illness? Would the treatment and improvement of the physical illness be enough for the resolution of the psychiatric morbidity in the Egyptian community? So many questions left unanswered as no Egyptian study discussing the treatment of psychiatric disorders in the physically ill was found, regretfully.

After reviewing the Egyptian studies discussing Liaison Psychiatry, critical appraisal of these studies was done. In an overview of the critical appraisal of the previous studies, the following observations are made:

Concerning the title of the Egyptian studies, many of them are not specific, and included generalization as most of them don't specify the target population.

The aim of the work is clearly stated in the majority of the studies and generally it is fulfilled in the studies.

The study designs in the majority of the Egyptian studies discussed are not mentioned, decreasing the credibility of these

studies. Most of the study designs are cross-sectional case-control studies. A few number of the studies are prospective cohort and one double blind crossover study is found (**Ashour et al, 1984**), discussing the effect of Propranolol on different psychiatric symptomatology.

As for the setting of the studies, it is clearly stated in most of the studies. As mentioned before, the majority of the studies are limited to the attending University Hospital to which the research is registered. A large geographical area of Egypt is not represented in the studies, contributing to sampling bias.

The time of the study is mentioned in a fair number of the studies.

Sampling design is not mentioned in most of these Egyptian studies. In most of the studies, it is a non probability convenient sample. The sample size (the power of the study) is not calculated in most of the studies.

No consent is taken in the majority of the studies. Very few of the studies are preceded by a pilot study. The results are generally well presented in tables, with complementary comments and sometimes figures, and they are discussed and compared with previous studies. However, the studies compared to are usually foreign studies, while it would be more appropriate

to have also comparison with Egyptian studies discussing the same subject.

Finally, as regards the recommendations, they are usually exposed in the studies, but on the other hand, the limitations are not.

ENGLISH SUMMARY

Consultation-liaison psychiatry is the study, practice, and teaching of the relation between medical and psychiatric disorders. Consultation-liaison psychiatry is associated with all the diagnostic, therapeutic, research, and teaching services that psychiatrists perform in the general hospital and serves as a bridge between psychiatry and other specialities. **(Sadock & Sadock, 2007)**

So, Consultation-liaison psychiatry has an important role in the identification and management of psychological problems in patients with medical disorders in general hospitals. **(Porcelli & Sonino, 2007)**

View the importance of Liaison Psychiatry, it was essential to have a coverage of all the Egyptian studies discussing the subject. The aim of this work is to systematically review and appraise the available Egyptian studies on Liaison Psychiatry, to generate recommendations for further studies, and to provide a

summary of clinical M.S.c thesis and M.D. Thesis on Liaison Psychiatry done in Ain-Shams University, Neuro-psychiatry Department.

In order to fulfill this goal, the following databases were explored to gather Egyptian studies on Liaison Psychiatry: the library of Faculty of Medicine Ain Shams University, library of Faculty of Medicine Cairo University, libraries of Faculty of Medicine Al Azhar University (boys, girls and the central library), Egyptian journal of psychiatry Current psychiatry journal and other Egyptian Journal.

During collection of the studies, some difficulties aroused: in the library of Faculty of medicine in Cairo University, no MD & MSc thesis anterior to 1990 are available. As regards gathering of data from Al Azhar University libraries, the studies are not indexed properly in the library of Medicine (boys), on the other hand, the central library of Al Azhar University is developing a computer database but it is still under construction.

After collecting the data, these studies were systematically reviewed and categorized into the following: epidemiology, etiology, clinical description, the psychological response to specific

treatment and the influence of psychiatric disorders on the outcome of physical illness.

As for the Egyptian studies covering the epidemiology of psychiatric disorders in physical illness, they were further subdivided into researches on the prevalence, those on the age distribution, sex distribution, marital status residence and occupation.

1. Epidemiology of psychiatric symptoms and disorders in physically ill patients

37.4% of non-organic medical patients attending the general medical clinic of El-Zagazig University Hospital have somatoform disorders (**Roshdy et al, 2000**). The prevalence of non organic gastrointestinal illnesses is 50% among the outpatients of internal medicine clinic in Ain Shams University Hospital (**Abdel-Wahab, 1982**). 32% of SLE patients have adjustment disorders with depressed mood, 10% have major depressive disorders with psychotic features (**Abdel-Mawella, 2007**). As regards DM, 15% of diabetic patients have major depressive disorder (**El-Mehallawy & Gad-Allah, 1996**). 30% of epileptic children have psychiatric

disorder: 10% major depression, 10% dysthymia and 10% adjustment disorder (**Saadani et al, 2002**). 47% of renal failure children have depression (**Abdel-Baki et al, 1994**). 29.17% of patients with coronary heart disease have GAD, 14.17% have panic disorder and 9.17% have PTSD (**El-Tantawy et al, 2007**). 2.2% of IHD patients have major depressive disorder (**El-Dawla, 1989**). 5.8% of asthmatic children have depression (**Essawy et al, 2005**). 56.67% of patients with Parkinson's disease present with depression (**Shama, 1998**). After 4 to 16 weeks from the onset of cerebrovascular stroke, 16.5% of the patients develop major depression (**Asaad, 1992**). 15% of MS patients have generalized anxiety (**El-Gamel, 1995**). Anxiety disorders are the most frequent psychiatric diagnosis in infertile females reaching 19.6% (**Radwan, 2007**). As regards the post burn psychiatric illness, PTSD is found in 28% of the patients and mood disorders in 20%, including 10% with major depression (**Kandil et al, 1998**). 56% of cancer children have psychiatric morbidity, the most frequent diagnosis is adjustment disorder (38%) followed by PTSD (16%) then major depression (2%) (**Habib, 2000**). 21% of breast cancer females have adjustment disorder, whether the depressive type (18%) or the anxiety type (3%) (**El-Serafi, 2008**).

Regarding the other parameters of epidemiology, **Magda et al (2000)** found that most of the children with psychiatric disorders (15/37, 40.5%) present in the age group 8-10 years, followed by the age group 6-8 years (12/37, 32.4%) then the age group 10-12 years (10/37, 27%). **El-Mahallawy & Gad-Allah (1996)** reported that the mean age of depressed diabetic patients is 43.5 ± 7.9 and that of non-depressed diabetic patients is 44.1 ± 6.94 . **Shama (1998)** found that the mean age of Parkinsonian patients with mild depression according to HDS is 59.56 ± 7.63 , the mean age of patients with moderate depression is 41.25 ± 14.03 , and that of patients with severe depression is 56.5 ± 9.85 . **Hassan (2002)** reported that male to female ratio in post stroke anxiety is 6:7 while in CVS without anxiety, it is 14:3. **Mahmoud (1997)** reported that females with hair fall have significantly more psychiatric morbidity (23/53, 43.4%) than males with hair fall (8/21, 38%). **El-Gamal (2001)** found that medically ill patients coming from urban areas have significantly higher psychiatric morbidity (11.7 ± 7.3) than those coming from rural areas. **Abdel-Hameed (1996)** found that there among burn females with psychiatric disorders, 26.7%, 8/30 are married and 13.3%, 4/30 aren't.

2. Etiology of psychiatric symptoms and disorders in physically ill patients

Abdel-Wahab (1982) reported that 17 out of 25 (68%) patients with non-organic gastrointestinal complaints have history of psychological stress one month before the onset and acute exacerbation of the gastrointestinal complaints. **El-Serafi (2008)** found that 54.8% of breast cancer patients subjected to mild form of life event stresses and 52.2% of the patients subjected to moderate life events stresses have mood disorder. **Bishry et al (2003)** reported that there is a significant positive correlation between anxiety and frequency of hypoglycemic attacks as well as poor glycemic control. **El-Defrawi et al (2000)** found significant positive correlation between the severity of congenital heart disease and the severity of depression. **Abdel-Hameed (1996)** found that depression evaluated by HDS is significantly related to burns of the face, while burns affecting other parts of the body don't have any significant correlation with depression. **El-Gamal (2001)** found significant correlation between psychiatric morbidity according to GHQ in medically ill patients and number of admission. **Bishry et al (2003)** reported that there is a significant positive correlation between anxiety and duration of DM. **Morsi**

(1984) found 4 out of 15 (26.7%) patients complaining of hearing loss from months have psychiatric symptoms, while 2 out of 12 (16.7%) patients complaining of hearing loss from 1-5 years have psychiatric symptoms and 5 out of 12 (41.7%) patients complaining of hearing loss from 5 years have psychiatric symptoms. **Abdel-Mawella (2007)** reported that there is no relation between the presence of psychiatric manifestations in SLE and the presence of antiribosomal antibodies or that of immunoglobulin IgG. 6% of chronic psychiatric patients have mental disorders due to a general medical condition. **Asaad (1992)** found that depression is significantly more related to the left hemisphere.

3. Clinical description of psychiatric disorders in physically ill patients

Roshdy et al (2000) found that the most common representing symptoms among non organic cases are pains. **Magda et al (2000)** found that academic performance is significantly worse in the 37 psychiatric children than the 213 non-psychiatric children attending pediatric clinic in Suez Canal University

Hospital. **Kotb & Sabry (2003)** found that on CDI, circumstantial pessimism, anticipation, irritability and crying are all detected and pronounced in the children with chronic liver disease. On BDI, the prevalence of health worries and decreased interest is significantly higher in the depressed diabetic patients than in the depressed non-medically ill patients. The type A personality is significantly more pronounced in the IHD patients. Regarding behavioral disorders, **Abdulghani (1981)** reported that 16.7% of brain tumour patients show bizarre behavior, insomnia, excessive eating, restlessness, aggressiveness, neglect of self hygiene and micturition in public. **Asaad (1992)** reported that depressed mood is found in all depressed stroke patients, followed by poor sleep, and appetite with diurnal variation. **Radwan (2007)** reported that on MAS, the infertile females are significantly more anxious (27.4 ± 8.3) than the fertile females. **Abdel-Gawad et al (1988)** found that on BDI, 21% of duodenal ulcer patients have mild depression, 29% have moderate depression and 12% have severe depression. **El-Aswad (2005)** found that on CMA, 80% of uncontrolled IDDM children have moderate to severe anxiety.

4. Psychological responses to specific treatment

El-Mahallawy et al (1991) found that 33% of patients on hemodialysis have adjustment disorders with depressed mood according to DSM III. **Gharib (1982)** found that 25% of cardiac patients present post-operatively with psychiatric disorders according to DSM III. 72.7% of MS patients on cortisone treatment have psychiatric disorders. **Radwan (2007)** reported that 64% of infertile females treated with surgical intervention have psychiatric disorders. The post-hysterectomy psychiatric diagnoses are: 6.67% have generalized anxiety, 6.67% have dysthymia, 6.67% have major depression and 3.33% have conversion. 26.1% of self-injector diabetic patients have mild anxiety, 47.8% (11/23) have moderate anxiety, and 8.7% (2/23) have severe anxiety.

5. The influence of the psychiatric disorders on the outcome of the physical illness:

Hassanein (2002) found that diabetic girls with eating disorders have significantly higher HbA1c ($10.8 \pm 2.6\%$) than diabetic girls without eating disorders. **Hassan (2002)** reported that

the anxious stroke patients are found to have significantly more severe physical impairment compared to non anxious stroke patients. **Radwan (2007)** found that infertile women with psychiatric disorder are significantly at risk for poor response to fertility treatment.

Critical appraisal of the Egyptian studies discussing Liaison psychiatry followed the systematic review, and of the most prevalent points is that neither the study design or the sampling design is mentioned in most of the researches, and that the sample size (the power of the study) is not calculated in the majority of the cases.

RECOMMENDATIONS

Recommendations to improve the search through Egyptian studies:

1. A common database for all Egyptian researches is a must in order to facilitate researches and to make the researches all over the country available from anywhere.
2. Measures to facilitate search in the faculties of Medicine libraries have to be established as a computer database.

Recommendations for further researches:

1. Further systematic reviews of Egyptian studies are needed in the different psychiatric domains. Moreover, the future systematic reviews have to be concentrated on a narrower scope of research in order to collect more data and to be more specific. Narrower scope would allow us to compare the results of Egyptian studies with the results found in foreign studies.

2. Establishing periodic research strategies aiming to complete the previous works done, making use of the previous effort and detecting the missed points.

Recommendations for further studies:

1. There is a need for large Egyptian surveys involving different governorates in order to complete the previous studies done on liaison psychiatry as the studied populations do not represent the entire Egyptian community.
2. Certain aspects of liaison psychiatry need to be researched, specially in the domain of treatment of the psychiatric disorders in the physically ill.
3. Research methodology training is needed to prevent the previous noted gaps as uncalculated sample size, unmentioned study and sampling designs.

LIMITATIONS OF THE STUDY

1. In the library of Faculty of medicine in Cairo University, no MD & MSc thesis anterior to 1990 are available or indexed, so that are missing in this study.
2. In Al Azhar University libraries, the studies are not indexed properly in the library of Medicine (boys). On the other hand, the studies aren't allowed to be borrowed or printed, limiting the work on Al-Azhar studies during the opening hours of the libraries.
3. Some of the listed Al-Azhar studies are written in arabic so they are not discussed in the review.

APPENDIX

Appendix 1:

Subject: Comparative psychiatric study between organic and non-organic gastrointestinal illnesses (1982)

- 1. Author:** Abdel-Wahab YM
- 2. Supervisors:** Prof. El-Zeiady A & Assist. Prof. Bishry Z
- 3. Document:** MSc thesis Faculty of medicine-Ain Shams University
- 4. Site:** gastroenterology clinic
- 5. Time of the work:** not stated
- 6. Aim of the work:** To estimate the ratio of non-organic gastrointestinal diseases to cases showing organic changes, to compare both categories from the psychiatric, social, and psychometric point of view, to find out any difference between patients having upper and lower gastrointestinal diseases and finally to see the incidence of psychiatric complaints in the gastroenterology clinic
- 7. Study design:** cross-sectional study

- 8. Method:** 50 cases were studied from the gastroenterology clinic and all were subjected to complete clinical examination, endoscopic study and psychiatric study, as well as psychometric study using EPQ
- 9. Results:** The prevalence of non organic gastrointestinal illnesses is 50%. All the cases attending the outpatient clinic complaining of lower gastrointestinal tract are proved to be non-organic in origin. Both cases of organic and non-organic illnesses have high scores of neuroticism.
- 10. Conclusion:** Non-organic gastrointestinal illnesses are common and are associated with high neuroticism and presence of psychological stress.

Appendix 2:

Subject: Cognitive deficits in Egyptian Diabetics (1984)

- 1. Author:** Omar KA
- 2. Supervisors:** Prof. Okasha A
- 3. Document:** MSc thesis Faculty of medicine-Ain Shams University
- 4. Site:** outpatient clinic of diabetes mellitus in Ain Shams University Hospital

5. **Time of the work:** not mentioned
6. **Aim of the work:** Verification that psychological stress and emotional conflicts are predisposing factors in aetiology of diabetes; verification that specific personality types are more prone to diabetes; verification of the exact relationship of adaptation to life events to the course, control and complications of diabetes; verification of the degrees and quality of cognitive deficits in diabetes.
7. **Study design:** not mentioned, but we can consider it as cross-sectional, case-control study
8. **Method:** 48 diabetic patients and 25 controls are subjected to EPQ, Holmes (1967), Verbal similarities test and block design test of Wechsler-Bellevue test for abstraction and visio-spatial ability respectively, as well as other tests to assess perception ability, immediate memory and attention and concentration.
9. **Results:** On verbal similarities test, the block design test and the digit span test of the Wechsler-Bellevue test for intelligence for adults, the mean scores of females with early onset of DM are 11 ± 0.7 , 14.5 ± 3 and 1.25 respectively, females with late onset of DM are 5.4 ± 5.4 , 7.5 ± 7.8 and 1.44 respectively, males with early onset of DM (insulin dependant type) are 12.7 ± 3.2 , 18.8 ± 7.5 and 0.9 respectively, males with early onset of DM (non-insulin dependant type) are 5.4 ± 4 , 13.8 ± 2.3 and 2.1 respectively and males with late onset of DM are 10.5 ± 8.4 , 14.6 ± 6 and 1.37 respectively.

10. Conclusion: Diabetics as a group can be put in the normal range of intelligence for the general population.

Appendix 3:

Subject: Psychiatric disorders in children and adolescents with type 1 diabetes mellitus (2003)

- 1. Author:** Shaker NM
- 2. Supervisors:** Prof. El-Mahallawy N, Prof. El-Dawla AS, Assist. Prof. Hasanein S & Assist. Prof. El-Sayed N
- 3. Document:** MD thesis Faculty of medicine-Ain Shams University
- 4. Site:** outpatient pediatric clinic of diabetes mellitus and inpatients in Ain Shams University Children's Hospital
- 5. Time of the work:** from may 2001 to november 2002
- 6. Aim of the work:** To study psychiatric disorders among children and adolescents with type 1 DM
- 7. Study design:** Cross-sectional, case-control study
- 8. Method:** 85 IDDM patients with age range 6-18 years old and 40 controls are subjected to the following: detailed psychiatric interview, pediatric clinical examination,

Modified Social Score of Egyptian community and laboratory routine investigations

9. **Results:** 44.7% (31/69) of diabetic children and adolescents have psychiatric disorder. 22.4% (15/69) of diabetic children and adolescents have depression, the most common being major depression in 17.6% (12/69). 11.8% (8/69) of diabetic children and adolescents have oppositional defiant disorder.
10. **Conclusion:** Diabetic children are liable to develop psychiatric disorders. Major depressive disorder is the most prevalent disorder among them followed by oppositional defiant disorder.

Appendix 4:

Subject: Effect of eating attitude and behavior on metabolic control in children and adolescents with insulin dependant diabetes mellitus (2002)

1. **Author:** Hassanein SM
2. **Supervisors:** Prof. Sadek A, Prof.Saad A & Prof. El-Sayed N
3. **Document:** MSc thesis Faculty of medicine-Ain Shams University

4. **Site:** outpatient pediatric clinic of diabetes mellitus in Ain Shams University Children's Hospital
5. **Time of the work:** not mentioned
6. **Aim of the work:** To detect the prevalence of eating disorders in children and adolescent girls with type 1 DM starting in childhood and the causes leading to such disorder and to evaluate the relation between the degree of metabolic control and disordered eating behavior.
7. **Study design:** Cross-sectional study
8. **Method:** 40 IDDM females are subjected to full history taking, laboratory investigations (blood glucose level and HbA1c), Eating Disorder Inventory and the Symptom checklist.
9. **Results:** 72.5% of diabetic girls have eating disorders. Atypical bulimia nervosa is the most common form (40%). 1 girl has atypical anorexia nervosa. Diabetic girls with eating disorders have significantly higher HbA1c (10.8 ± 2.6) than diabetic girls without eating disorders (7.48 ± 1.8).
10. **Conclusion:** Disturbed eating attitude are common among IDDM girls. Eating disorders lead to poor glycemic control.

Appendix 5:

Subject: Psychological profile of a sample of Egyptian patients with ischemic heart disease (1989)

- 1. Author:** El-Dawla AS
- 2. Supervisors:** Prof. Okasha A & Prof. Abdel-Daiem K
- 3. Document:** MD thesis Faculty of medicine-Ain Shams University
- 4. Site:** ICU of Ain Shams University Hospital
- 5. Time of the work:** not mentioned
- 6. Aim of the work:** To assess whether coronary heart disease in the Egyptian population could be predisposed to by a certain personality and to assess whether coronary heart disease is associated with any specific psychiatric morbidity
- 7. Study design:** This study is a cross-sectional, case control study
- 8. Method:** 90 IHD patients with (30 with old and 30 patients with recent myocardial infarction, and 30 patients with angina pectoris) are subjected to a structured interview, HAS and HDS and the EPQ. 50 healthy controls are assessed only by means of the structured interview.
- 9. Results:** 35 out of the 90 (38.88%) IHD patients have psychiatric morbidity. On HAS, patients with recent myocardial infarction have significantly the smallest score, followed by

patients with old myocardial infarction, while the most anxious are patients with angina pectoris. The scores on HDS show a similar distribution. EPI reveals that IHD patients are more extravert and much more neurotic. According to the Structured Interview, Type A personality is common in IHD patients.

10. **Conclusion:** 38.88% of patients with IHD show psychiatric symptoms. Patients with angina pectoris are the most anxious and depressed. Type A personality is common in IHD patients.

Appendix 6:

Subject: Psychiatric aspects of clinical neurology (1984)

1. **Author:** Derias SF
2. **Supervisors:** Prof. Abou-Zied Y & Prof. Sadek A
3. **Document:** MSc thesis Faculty of medicine-Ain Shams University
4. **Site:** Neurological ward, Ain Shams University Hospitals
5. **Time of the work:** not stated
6. **Aim of the work:** To throw a beam of light on the prevalence of psychiatric symptoms among patients suffering from the different neurological diseases
7. **Study design:** not mentioned, but we can consider it as cross-sectional study

- 8. Method:** 90 patients with different neurological diagnoses are submitted to full history and medical examination, full history and neurological examination, psychiatric history and examination, Mini-Mental State test for cognitive disorders and the GHQ for detection of emotional disorder.
- 9. Results:** 37.7% of neurologically diseased patients have emotional disorders, Epilepsy being commonly associated with irritability and sleep disorders, right hemiplegia and Parkinsonism with depression.
- 10. Conclusion:** Neurologically diseased patients are at high risk of psychiatric disorders, and they must be subjected to a screening test for emotional disorders.

Appendix 7:

Subject: Mental disorders with brain tumors (1981)

- 1. Author:** Abdulghani MO
- 2. Supervisors:** Prof. Moustafa M, Assist. Prof. Bishry Z & Dr. Ashour A
- 3. Document:** MSc thesis Faculty of medicine-Ain Shams University
- 4. Site:** Neuropsychiatric department, Ain Shams hospital

5. **Time of the work:** not stated, but the duration of collection of the cases took 12 months
6. **Aim of the work:** not stated
7. **Study design:** cross-sectional, case control study.
8. **Method:** 18 patients with intracranial tumours, 10 males and 8 females, age ranging from 19 to 60 years together with a 18 controls taken from other hospitals wards and matching the patient group for sex and age. The main bulk of the control group consists of cases of paraplegia due to local spinal causes and hepatosplenomegaly. Each subject is assessed by full neurological examination, EEG, angiogram, CAT, full psychiatric examination, Cairo version of Nottingham screening version of the original Present State Examination and Wechsler Belevue Scale
9. **Results:** Mood disorders happens in 72.2% of the patients; behavioral disorders and social deterioration in 16.7%, thought disorders and hallucinations in 5.5%, and on present state examination the subjects obtained a total score of symptoms (18.5 ± 8.47).
10. **Conclusion:** Psychiatric symptoms including mood disturbances, thought disorders, behavioral disorders, social deterioration and hallucination are associated with different percentages in intracranial tumours, compared with control group.

Appendix 8:

Subject: Psychiatric morbidity after cerebrovascular accidents (1992)

- 1. Author:** Asaad TA
- 2. Supervisors:** Prof. Okasha A, Prof. Kamel M & Dr. Zakaria M
- 3. Document:** MD thesis Faculty of medicine-Ain Shams University
- 4. Site:** outpatient clinics and inpatients in Neurology department in Ain Shams University Hospitals (including Ain Shams University Specialized Hospital)
- 5. Time of the work:** in the year 1990.
- 6. Aim of the work:** To study the relation between the site of cerebral dysfunction in patients with cerebrovascular accidents and the resulting psychiatric morbidity
- 7. Study design:** cross-sectional, case control study
- 8. Method:** 103 patients with cerebrovascular stroke within the year preceding the assesment were selected, and only patient with definite psychiatric diagnoses are subjected to further assesment for the site of dysfunction in the form of Physical and neurological examination, SCID I, CT scan of the brain,EEG for all patients and BEAM in 30 patients, LNNB, Harris test Barthel index and SCID-II. In addition, a control group(50 individuals)

matching for demographic data and that has no neurologic or psychiatric disorders is subjected to physical examination and CT scan in some cases, conventional EEG and BEAM (done in 13 cases), SCID-II and LNNB.

- 9. Results:** In patients with post-stroke depression, CT scan shows significant association with left anterior lesions (cortical and subcortical), followed by right posterior lesions. However, BEAM and LNNB show broader extent of dysfunction involving also left temporal, left centroparietal as well as other hemispheric affection. EEG shows increased temporal activity in patients with right hemispheric lesions and major depression. Post-stroke mania is associated with right hemispheric dysfunction, mainly right temporal. Patients with post-stroke anxiety and associated major depression show left hemispheric dysfunction and in patients with anxiety disorder alone, no significant difference between both hemispheres is found by CT scan. Psychotic symptoms after stroke is found to occur with both right and left hemispheric lesions.
- 10. Conclusion:** Post-stroke depression is mainly associated with left sided lesion while post-stroke mania is mainly associated with right sided lesion. Psychotic symptoms are not associated with specific side lesions.

Appendix 9:

Subject: Psychiatric manifestations in cerebrovascular stroke (2002)

- 1. Author:** Hassan MM
- 2. Supervisors:** Prof. El-Mahallawy NN, Assist. Prof. Omar AM & Dr. El-Khayat NM
- 3. Document:** MSc thesis Faculty of medicine-Ain Shams University
- 4. Site:** neurology outpatients clinics and inpatients in the neurology department Ain Shams University Hospital (including Ain Shams University Specialized Hospital)
- 5. Time of the work:** year 2001
- 6. Aim of the work:** To evaluate the extent of psychiatric manifestations in cerebrovascular stroke and to correlate the psychiatric manifestations with the anatomical sites of the lesions.
- 7. Study design:** cross-sectional, case-control study
- 8. Method:** 30 patients with cerebrovascular stroke diagnosed within 2 weeks and 6 months before the assesment and a control group including 15 volunteers are evaluated as regards history taking and clinical examination including neurological and psychiatric examinations. Then the anatomical localization of the

brain lesions is carried out by means of brain CT and/or MRI in the first group. The clinical diagnosis of psychiatric disorders is carried out using the ICD-10 symptom checklist for both groups. Also, neuropsychiatric assessment is done for both groups using the Mini-Mental State Examination, BDI and MAS.

- 9. Results:** After CVS, 20% of the patients developed depression and 43.6% developed anxiety. 53.7% among them have generalized anxiety disorder, while 46.3% have agoraphobia. Depressed stroke patients are mainly associated with cortical lesions specially frontal.
- 10. Conclusion :** Patients with cerebrovascular stroke are liable to develop psychiatric morbidity, mainly depression and anxiety.

Appendix 10:

Subject: Psychiatric disorders and falling hair (1997)

- 1. Author:** Mahmoud LS
- 2. Supervisors:** Prof. Kamel M, Prof. Ghanem M & Assist. Prof. Effat S
- 3. Document:** MSc thesis Faculty of medicine-Ain Shams University

- 4. Site:** outpatient dermatologic clinic of El-Mattaria general hospital
- 5. Time of the work:** February till July 1996
- 6. Aim of the work:** To determine the nature and the degree of co-morbidity of psychiatric disorders and falling hair
- 7. Study design:** not mentioned, but we can consider it as cross-sectional study
- 8. Method:** 74 patients with hair fall are subjected to clinical interview for psychiatric evaluation using Ain-Shams University semistructured interview. Clinical diagnosis is made according to DSM-III. They are also assessed by GHQ, HAS, HDS, and if less than 16 yrs old, they are assessed by CMA and CDI.
- 9. Results:** Psychiatric morbidity is present in 41.8% of the patients with hair fall. 40.5% of patients with hair fall have anxiety, and 41.8% have depression, and there is high comorbidity between both anxiety and depression. Psychiatric morbidity in patients with hair fall is associated with younger age and females more than males.
- 10. Conclusion:** Patients with hair fall are associated with anxiety and depression, both being more common in young age and female sex.

Appendix 11:

Subject: Psychiatric morbidity in hearing clinic patients
(1984)

1. **Author:** Morsi HH
2. **Supervisors:** Prof. Kamel M & Prof. Soliman S
3. **Document:** MSc thesis Faculty of medicine-Ain Shams University
4. **Site:** audiology outpatient clinic in Ain Shams University Hospital
5. **Time of the work:** not mentioned
6. **Aim of the work:** To examine a sample of patients presenting to audiology outpatient clinic to find out the relationship between degree, type and duration of hearing loss and psychiatric disturbance.
7. **Study design:** not mentioned, but we can consider it as cross-sectional study
8. **Method:** 39 patients with hearing complains are subjected to audiological assessment, psychiatric interview and EPQ.
9. **Results:** 11 out of 39 patients with hearing complain have psychiatric symptoms. 39.1% of patients with bilateral hearing loss have psychiatric symptoms which is significantly more than patients with unilateral hearing loss (14.6%). 26.7% of patients

complaining for months have psychiatric symptoms, while 16.7% of patients complaining for 1-5 years have psychiatric complains and 41.7% of patients complaining for 5 years have psychiatric symptoms.

10. Conclusion: There is a significant relationship between hearing loss and psychiatric disturbance and between type, degree and duration of hearing loss and psychiatric morbidity.

Appendix 12:

Subject: Psychiatric morbidity in infertility in a sample of Egyptian females (2007)

- 1. Author:** Radwan DN
- 2. Supervisors:** Prof. Khalil AH, Prof. Mohamed MM, Prof. Sayed MM, Assist. Prof. Ramy HA & Assist. Prof. Moussa KS
- 3. Document:** MD thesis Faculty of medicine-Ain Shams University
- 4. Site:** Obstetrics and Gynecology department, and the Assisted Reproductive Technique Unit. Ain Shams University Hospitals
- 5. Time of the work:** from June 2005 to July 2006.
- 6. Aim of the work:** To assess the psychological aspects commonly affecting Egyptian infertile females and their

variables. To find the relationship between the type of infertility, treatment modality and psychiatric morbidity and the effect of the later on the outcome of infertility treatment. As well as to assess the need of Egyptian infertile females for advanced psychiatric help.

7. **Study design:** cross-sectional, case control, observational longitudinal study
8. **Method:** 110 infertile women and 100 fertile healthy females. They are matched for age and other demographic variables as far as possible with the infertile group. All are requested to answer the following: SCID I, SCID II, FAS, BDI, MAS, PCASEE quality of life questionnaire, EPQ, D- scale of Guilford inventory of personality factors; Fahmy and El-Sherbini's Social Classification Scale. Then, follow up phone calls are made to assess outcome of infertility treatment, as regards conception duration only. 3 out of the initial 110 patients are dropped out being unreachable. The remaining 107 subjects are enrolled in the study.
9. **Results:** 57.9% of infertile women have psychiatric diagnosis, anxiety disorders being the most frequent reaching (19.6%), followed by mood disorders (17.8%). Infertile ladies show a significant high prevalence of personality disorders (59.9%). On BDI, it's obvious that infertile females are more depressed than control group. High anxiety scores on Taylor's manifest anxiety scale are obtained by the infertile females. Infertile women have

depressive tendency in the form of higher scores on D- scale of Guilford inventory of personality factors. Infertile females due to tubal, uterine or cervical factors (73.7%) are more likely to have psychiatric disorder, anxiety state (mean scores on Tailor Manifest Anxiety Scale) appears higher in such patients. 72.0% of females undergoing ART have psychiatric disorder compared to 64.3% of patients treated with surgical intervention and 42.5% of infertile patients receiving conservative therapy. 77.4% of all infertile females with psychiatric morbidity fail to achieve pregnancy in comparison to 35.6% of infertile ladies without psychiatric morbidity.

10. Conclusion: There is high prevalence of psychiatric morbidity among the infertile women. Psychiatric morbidity negatively influence infertility treatment outcome.

Appendix 13:

Subject: Psychiatric sequelae in children with chronic lymphatic leukemia (2001)

- 1. Author:** El-Shahawy HH
- 2. Supervisors:** Prof. Bishry Z, Prof. Ghanem M, Prof. Effat S, Prof. Khalifa A & Prof. Abdel-Gawad A

3. **Document:** MD thesis Faculty of medicine-Ain Shams University
4. **Site:** Hematology/Oncology clinic in Ain Shams University Children Hospital
5. **Time of the work:** from january 1999 to june 2000
6. **Aim of the work:** To test the hypothesis whether acute lymphoblastic leukemia, its long and hazardous treatment and outcome produce psychological trauma affecting both the children and the parents or not.
7. **Study design:** This study is a cross-sectional, case control study
8. **Method:** 103 children with acute lymphoblastic leukemia and their 97 parents and 22 controls and their parents are subjected to semi structured questionnaire according to ICD-10.
9. **Results:** 59% of leukemic children have psychiatric disorders, the most common being adjustment disorder in 15%, followed by depressive disorder in 11.4% according to ICD-10.
10. **Conclusion:** Leukemic children are prone to psychiatric disorders the most common being adjustment disorder.

Appendix 14:

Subject: Psychological profile of a sample of Egyptian female patients with breast cancer (1999)

1. **Author:** El-Hennawy HS
2. **Supervisors:** Prof. Sadek A, Prof. El-Mahallawy NN & Assist. Prof. El-Dawla AS
3. **Document:** MSc thesis Faculty of medicine-Ain Shams University
4. **Site:** not mentioned
5. **Time of the work:** not mentioned
6. **Aim of the work:** To investigate a sample of Egyptian female patients with breast cancer, trying to get a psychosocial profile
7. **Study design:** This study is a cross-sectional, case control study
8. **Method:** 20 patients with breast cancer, 20 patients with benign breast diseases and 20 healthy controls are subjected to EPQ and ICD-10 symptom checklist
9. **Results:** 65% of patients with cancer breast have psychiatric disorder according to ICD-10. The most frequent diagnosis is adjustment disorder followed by anxiety disorders, affective disorders and lastly OCD. There is also a higher prevalence of certain psychiatric symptoms in breast cancer patients, specially, loss of libido, and persistent somatic complaints. On EPI, scores

of cancer patients are higher on extraversion and least on neuroticism.

10. Conclusion: There is high prevalence of psychiatric morbidity and symptoms among breast cancer patients. They show high scores extraversion and low on neuroticism.

Appendix 15:

Subject: Psychiatric morbidity and Coping Strategies in a Sample of Egyptian Cancer Breast Female Patients (2008)

- 1. Author:** El-Serafi DM
- 2. Supervisors:** Prof. Khalil AH, Prof. Saad A, Prof. El-Nahas GM, Assist. Prof. Zaki N
- 3. Document:** MD thesis Faculty of medicine-Ain Shams University
- 4. Site:** radiotherapy and nuclear medicine center in Ain Shams University
- 5. Time of the work:** from September 2005 to December 2006
- 6. Aim of the work:** To study the psychiatric morbidity among breast cancer Egyptian female patients in early diagnosis and recurrence of breast cancer.
- 7. Study design:** This study is a cross-sectional, case control study

- 8. Method:** 100 cancer breast patients are assessed by Fahmy and El-Sherbini's Social Classification Scale, SCID I, SCID II, BDI, MAS, D- scale of Guilford inventory of personality factors, Rotter Internal-External Control Scale, dealing with illness coping inventory, MOS Social Support Survey and the Social Readjustment Rating Questionnaire. 100 healthy controls are assessed by the GHQ, GMHR, Social Readjustment Rating Questionnaire, Guilford D Questionnaire and Rotter Internal-External Control Scale.
- 9. Results:** 96% of the cancer breast patients have psychiatric morbidity: 32% suffer from mood disorders, 25% from anxiety disorders, 21% from adjustment disorder and finally 15% of the patients suffer from anxiety with co-morbid depression. On BDI, 32% of cancer breast patients have mild depression, 31% have moderate depression, and 6% have severe depression.
- 10. Conclusion:** Psychiatric morbidity is commonly associated with cancer breast, the most common being mood disorder, with mild to moderate severity.

Appendix 16:

Subject: Psychological profile and quality of life (QoL) assessment in cancer breast patients (2003)

- 1. Author:** Allam MA
- 2. Supervisors:** Prof. Bishry Z, Prof. Khalifa A, Prof. Saad A & Prof. Abdou TA
- 3. Document:** MD thesis Faculty of medicine-Ain Shams University
- 4. Site:** outpatient clinic of the Department of Oncology and Nuclear Medicine in Ain Shams University
- 5. Time of the work:** not mentioned
- 6. Aim of the work:** To investigate and highlight the quantitative and qualitative psychological profile and quality of life changes taking place in the lives of the breast cancer patients to supply a guide to the intervention strategies for better coverage of the patient's suffering and subsequently better understanding of the factors affecting the quality of life of the breast cancer survivors.
- 7. Study design:** This study is a cross-sectional, case control study
- 8. Method:** 40 patients with breast cancer and 20 healthy controls are subjected to full psychiatric interview, SCID, BPI, HADS, FLIC (this last questionnaire isn't done in controls).

- 9. Results:** The prevalence of major depressive disorder among breast cancer patients is 42.5%, that of anxiety is 70% and 17.5% of the patients with breast cancer have adjustment disorder. Patients below the age of 50 have more severe symptoms than the patients above 50 and worst quality of life. Lumpectomy is commonly associated with clinical anxiety while modified radical mastectomy is commonly associated with major depression.
- 10. Conclusion:** Cancer breast and its surgical treatment are commonly associated with psychiatric morbidity, being more severe in patients below the age of 50.

Appendix 17:

Subject: Mental disorders due to a general medical condition among long stay patients (2006)

- 1. Author:** Noby SI
- 2. Supervisors:** Prof. El-Mahallawy NN, Assist. Prof. Abou El-Ela E & Dr Khalifa DA
- 3. Document:** MSc thesis Faculty of medicine-Ain Shams University
- 4. Site:** El-Abassia hospital

- 5. Time of the work:** not mentioned
- 6. Aim of the work:** To diagnose “mental disorders due to a general medical condition” in long stay hospital
- 7. Study design:** cross-sectional study
- 8. Method:** 100 chronic psychiatric patients are subjected to full psychiatric sheet, psychiatric, physical and neurological examination and routine laboratory investigations (CBC, renal and liver function, urine analysis and ECG). Further radiological and laboratory investigations are done according to medical condition. Mental disorders due to a general medical condition is diagnosed according to DSM-IV-TR.
- 9. Results:** 6% of chronic psychiatric patients have mental disorders due to general medical condition, 33.3% of them have organic delusion disorders, 33.3% have mental retardation with psychotic features, 16.6% have organic mood disorders, and 16.6% have Epilepsy with psychotic features.
- 10. Conclusion:** 6 out of 100 chronic psychiatric patients have mental disorders due to general medical condition

Appendix 18:

Subject: Neuropsychiatric complications following open heart surgery (1982)

1. **Author:** Gharib HH
2. **Supervisors:** Prof. Moustafa M, Prof. Okasha A & Lect. Bassiouni M
3. **Document:** MSc thesis Faculty of medicine-Ain Shams University
4. **Site:** department of cardiac surgery in Ain Shams University Hospital.
5. **Time of the work:** not stated
6. **Aim of the work:** To investigate the incidence and determinants of post-operative neuropsychiatric disorders after open heart surgery and to compare these disorders with the pre-operative neurologic, psychiatric, electroencephalographic and psychological tests findings.
7. **Study design:** cross sectional study
8. **Method:** 20 cardiac patients with age ranging from 16 to 53 years, operated upon by open heart surgery (including 8 mitral valve replacement, 5 aortic valve replacement, 3 double valve replacement, 3 closure of atrial septal defect and 1 open pulmonary valvotomy) are subjected to pre-operative (2-3 days

prior to the operation) and post-operative(4 days after) full neurological and psychiatric assessments as well as Taylor Anxiety Scale, Healdreth scale for mood, Digit span of Wechsler and Bender Gestalt test for organicity and EEG. Diagnosis of post-operative psychiatric cases is done clinically according to DSM III (1980).

9. **Results:** Five out of 20 patients studied present post-operatively with psychiatric complications as follows: 2 with subacute delirious state and 3 with depressive disorder.
10. **Conclusion:** Psychiatric disorders can develop as a complication to open heart surgery.

Appendix 19:

Subject: Psychiatric complications of female sterilization (1983)

1. **Author:** Sowmail FB
2. **Supervisors:** Assist. Prof. Lotaif F & Prof. El-Kaparity H
3. **Document:** MSc thesis Faculty of medicine-Ain Shams University
4. **Site:** outpatient clinic(family planning center) of the gynecological department of the Ain Shams University
5. **Time of the work:** from April 1982 to September 1982

- 6. Aim of the work:** To examine a sample of women at the time of referral for sterilization and 3 months after the operation, in order to assess their mental state.
- 7. Study design:** cross-sectional, case-control longitudinal study
- 8. Method:** 30 women coming for sterilization, 30 women on oral contraceptive pills, and 30 controls without known psychiatric or physical illness are submitted to an inquiry about present history of psychiatric illness as well as HAS and Heldreath Scale for mood, and EPQ before and 3 months after the operation. Cases of psychiatric illness are diagnosed by Egyptian Diagnostic Manual of Psychiatric Disorders (1979).
- 9. Results:** Psychiatric morbidity among women who asked for sterilization by tubal ilgation reaches 26.7%. Psychiatric illness declines from 26.7% to 20% 3 months after the operation. Three months after the operation, cases of anxiety neurosis decline from 16.7% to 10%, and depressive neurosis from 6.7% to 3.3%.
- 10. Conclusion:** Psychiatric morbidity among women who asked for sterilization by tubal ligation reaches 26.7%. Psychiatric illness declines from 26.7% to 20% 3 months after the operation.

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الملخص العربي

الطب النفسي الاتصالي هو عبارة عن دراسة ومباشرة وتدرّيس العلاقة بين الاضطرابات الطبية والاضطرابات النفسية. ففي هذا الطب النفسي الخاص بالمشورة والاتصال، يقوم الطبيب النفسي بدور المستشار لزملائه الأطباء أو غيرهم من العاملين في مهنة الصحة العقلية (الأطباء النفسيون أو الأخصائيون الاجتماعيون أو الممرضون العاملون في مجال الطب النفسي). وبالإضافة إلى ذلك، يقوم الأطباء النفسيون بتقديم المشورة بشأن المرضى الموجودين في أوضاع طبية أو جراحية وتقديم علاج نفسي لغرض المتابعة عند الحاجة. وهذا الطب النفسي يرتبط بجميع خدمات التشخيص والمعالجة والبحوث والتدرّيس التي يؤديها الأطباء النفسيون في المستشفى العام كما يعمل كهمزة وصل بين الطب النفسي والتخصصات الأخرى

في مجال الطب النفسي الاتصالي، يكون الطبيب النفسي قابل لابتداء رايه في المرضى المبعوثون من اطباء غير نفسيين وجراحين و يعتبر الطبيب النفسي عضو ضمن فريق عمل طبي او جراحى و يقدم النصائح عندما يستطيع مساعدة اى مريض . ويساعد ايضا الطبيب

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النفسي الاتصالي المجالات الطبية الاخرى في المشاكل النفسية الاتى يواجهونها يوميا متضمنا مشاكل المرضى الذين قد تشاوروا في حالتهم اطباؤهم ولكن لم يقابلهم الطبيب النفسى. نظرا لاهمية الطب النفسى الانصالى كان من اللازم ان يكون لدينا تغطية للدراسات المصرية التى تناقش هذا الموضوع. الهدف من هذا العمل استعراض و تقييم الدراسات المصرية المتاحة فى مجال الطب النفسى الاتصالى و ذلك للحصول على توصيات للدراسات القادمة و ملخص وافى لرسائل الماجستير و الدكتوراة المتعلقة بهذا الموضوع و التى تمت بقسم النفسية و العصبية بجامعة عين شمس.

و لتحقيق هذا الهدف تم جمع هذه الدراسات من مكتبات كليات الطب بجامعة عين شمس و القاهرة و الازهر و بعض الدوريات المصرية.

و كان هناك بعض الصعوبات مثل عدم توافر المادة العلمية فيما قبل عام 1990 و عدم وجود فهرسة

الدراسات فى جامعة الأزهر.

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بعد جمع المادة العلمية تم تقسيمها إلى التالي: معدل الانتشار, الأسباب, الوصف الأكلينيكي, الأثر النفسي لأساليب العلاج المختلفة و تأثير الاضطرابات النفسية الأمراض الجسدية.

أما بالنسبة للدراسات المصرية التي تغطي معدل انتشار الاضطرابات النفسية في الأمراض الجسدية و قد تم تقسيمها إلى دراسات على معدل الانتشاري, دراسات على التوزيع العمري, التوزيع النوعي, الحالة الاجتماعية, مكان الإقامة و الوظيفة.

1) معدل إنتشار الأعراض و الاضطرابات النفسية في اصحاب الأمراض الجسدية:

37.4% من المرضى في عيادات الباطنة بمستشفى جامعة الأزهر لديهم اضطرابات الجسدية , 32% من مرض الذئبة الحمراء يعانون من اضطراب التكيف , 10% منهم يعانون من اكتئاب حسيم المصاحب باعراض ذهانية , 15% من مرضى السكر يعانون من الاكتئاب الجسيم , 30% من الأطفال المصابين بالصرع لديهم اضطرابات نفسية , 10% اضطراب

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جسيم , 10% عسر المزاج , 10% اضطراب التكيف . 29.17% من مرضى القصور الشرياني التاجي لديهم اضطراب القلق العام , 14.17% منهم لديهم اضطراب الهلع و 9.17% يعانون من اضطراب كرب ما بعد الصدمة . 56.67% من المصابين بمرض الشلل الرعاش يعانون من اكتئاب . 15% من مرضى الالتهاب المتناثر يعانون من اضطراب القلق العام . تصل نسبة اضطرابات القلق الى 19.6% من الاناث المصابين بالعقم . 56% من الاطفال المصابين بالسرطان لديهم اضطرابات نفسية مصاحبة , 38% يعانون من اضطرابات التكيف , 16% من اضطراب كرب ما بعد الصدمة و 2% من الاكتئاب.

في دراسة قامت بها ماجدة وآخرون عام 2000 وجد ان معظم الأطفال الذين يعانون من اضطرابات نفسية (15\37, 5\40%) كانوا في الفترة العمرية من 8-10 سنوات ثم في الفترة العمرية من 6-8 سنوات (12\37, 4\32%) ثم المرحلة العمرية 10-12 عام (10\37, 27%). و في دراسة اخرى عام 1996 اظهرت أن متوسط العمر في مرضى السكر المصابون بالأكتئاب 43,5+ أو - 7,9 بينما في مرضى السكر الغير مكتئبين 44,1+ أو - 6,9 , إحدى الدراسات اظهرت متوسط العمر لمرضى الشلل الرعاش المصاحب بإكتئاب بسيط هو 59,56+ أو - 7,73 و متوسط العمر لمرضى الأكتئاب المتوسط 41.25+ أو - 9,85. كما وجد ان المصابون بالأمراض العضوية القادمون من المدن

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لديهم إضطرابات نفسية مصاحبة أعلى بدرجة ملحوظة من القادمون من المناطق الريفية. وجد ايضا أن 26,7% من الأناث المصابون بالحروق المصاحبة باضطرابات نفسية من المتزوجات بينما 13,3% من غير المتزوجات.

2) اسباب الأعرلض و الأضطرابات النفسية في المصابين بالأمراض العضوية:

86%(25\17) من المرضى الذين يعانون من شكوى بالجهاز الهضمي كانوا يعانون من ضغوط نفسية في الشهر السابق لبداية أو تفاقم الأعراض. 54,8% من مرضى سرطان الثدي الذين يتعرضون لضغوط الحياة من الدرجة البسيطة و 52,4% من الذين يتعرضون لضغوط الحياة من الدرجة المتوسطة يعانون من اضطراب المزاج.

هناك ايضا علاقه وثيقة بين القلق و معدل حدوث نوبات إنخفاض السكر و صعوبة التحكم في نسبة السكر بالدمز و هناك علاقة وثيقة اخرى بين شدة العيوب الخلقية بالقلب و شدة

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الإكتئاب. كما وجد علاقة وثيقة أخرى بين وجود اضطرابات نفسيه مصاحبة للمرض العضوي و بين عدد مرات الحجزز بينما اثبتت دراسة عدم وجود علاقة بين وجود امراض نفسية في مرض الذئبة الحمراء و بين وجود اجسام مضادة جي. كما وجد أن الأكتئاب لة علاقة وطيدة بالفص الأيسر للمخ.

3) الوصف الاكليني للأضطرابات النفسية للمصابين بالأمراض العضوية:

يعتبر الألم هو أكثر الأعراض النفسية شيوعا في المرضى الصليبين بالأمراض العضوية. احد الدراسات وجدت أن الأداء الأكاديمي للأطفال الذين يعانون يعانون من الاضطرابات النفسية اكثر تدهورا من الأطفال الذين لا يعانون من الاضطرابات النفسية. كما وجد ان التشائم و الترقب و العصبية و البكاء متواجدين بصفة واضحة في الأطفال الذين يعانون من الأمراض العضوية المدمنة.

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يعد القلق الخاص بالمتاعب الصحية أكثر شيوعاً في مرضى الأكتئاب المصابين بالسكر أكثر من غير المصابين بالسكر. و في دراسة قام بها عبد الغني سنة 1981 وجد ان 16,7% من المصابين بوزن المخ يعانون من الأرق, الشراهة في الطعام, العنف, عدم الاهتمام بالمظهر الشخصي و التصرفات غير الطبيعية مثل التبول في الأماكن العامة.

21% من المصابين بقرح الأثنى عشر يعانون من الأكتئاب البسيط, 29% من الأكتئاب المتوسط و 12% من الأكتئاب الشديد.

4) الأثر النفسي لأساليب العلاج المختلفة:

33% من المرضى الذين يخضعون للغسيل الكلوي يعانون من اضطرابات التكيف و المزاج الأكتابي. 25% من المرضى المصابين بأمراض القلب عانوا من الاضطرابات النفسية في فترة ما بعد العمليات.

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72,7% من مرضى التصلب المتناثر الذين يتم معالجتهم بالكورتيزون يعانون من اضطرابات نفسية و في دراسة اخرى وجد انه بعد استئصال الرحم يعاني 6,67% من المرضى من اضطراب القلق العام , 6,67% من عسر المزاج , 6,67% من الأكتئاب الجسيم و 3,33% من اعراض تحويلية.

5) تأثير الاضطرابات النفسية على نتائج الأمراض العضوية:

الفتيات المصابات بمرض السكر و اضطرابات الأكل لديهم نسبة أعلى من الهيموجلوبين السكري من الفتيات غير المصابات باضطرابات الأكل.

مرضى الجلطات المصابون بالقلق لديهم نسبة إعاقة بدنية أعلى من غير المصابين بالقلق.

و في نهاية الدراسة تم عمل تقييم للدراسات المصرية الخاصة بالطب النفسي الاتصالي و من اهم النقاط التي اتضحت هو عدم ذكر تصميم الدراسة أو تصميم إنتقاء العينات في معظم الدراسات بالإضافة لعدم إحتساب حجم العينة في معظم الدراسات.

المراجعة النظامية للدراسات المصرية فى مجال "الطب النفسى الاتصالى"

رسالة

توطنه للحصول على درجة الماجستير فى الأمراض النفسية والعصبية
مقدمة من

الطبيبة /الشيمااء على حسن رضوان

تحت إشراف

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