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DESCRIPTIVE STUDY OF ATTEMPTED SUICIDE IN CAIRO

BY

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Abstract

A sample of 91 persons who were admitted for attempted suicide to the casuality department of three hospitals in Cairo during the year 1981-1982 were thoroughly studied. The vast majority of the suicide attempters were young women (age range 15-34 years) belonging to large overcrowded families. They showed a higher tendency to be single, literate and unemployed than the corresponding age group in the general population. Drug overdose was the commonest method used. The majority made their attempts at home when there was somebody nearby, and 31% had previous non serious attempts. Dysthymic disorders, adjustment, affective and personality disorders were the most common diagnoses encountered. Attempters scored higher in neuroticism, extraversion and psychoticism and they tended to be more flexible.

Introduction

Suicidal behaviour is a human problem in most

societies whether contemporary or old (Malinowski, 1949); Benedict, 1953). However, references to suicide are very rare in Ancient Egyptians as they viewed suicide as a passage from one form of existence to another. Apart from Cleopatra's suicide, this problem was not an issue in Egyptology (Okasha, 1978).

The deliberate taking of one's life is strongly condemned by Judaism, Christianity and Islam (Hankoff, 1979). The definition of attempted suicide has a long history of difficulties, alternative words usually freely interchanged but they all have the same meaning that attempted suicide is an act deliberately undertaken by a person which mimics the act of suicide but does not result in fatal outcome.

Self damage is not always intended but has other significance (Stengel et al., 1958; Wexler et al., 1978; Goldney, 1981;Kreitman,1981,and Newson and Smith, 1984). Motivations are very ambiguous but are temporary escape from an unbearable situation. At one time this may have been generally true, though Shakespeare recognized the importance of the threat of suicide in manipulating the environment (A Mid Summer Night's Dream, Act V, Scene I).

The sociodemographic characteristics of suicide attempters tend to be different than those who completed suicide. Assessment and management of suicide attempters are described in various publications (Morgan, 1979; Howton and Catalan, 1982 and Gardener, 1983). Okasha et al. (1981) gave a crude estimate of suicidal attempts in Cairo as 35/100,000, but the understanding of the clinical and social factors which predispose to such behaviour is the aim of this work.

Materials and Methods

The operational definition of attempted suicide

used in this study is the deliberate self infliction of injury or poisoning with the intention of injury or in order to give an impression of such intention.

Subjects were selected as all the suicide attempters admitted in the first week of each month during the year 1981-1982 to the casuality departments of three different hospitals located in the catchment area of East Cairo serving a population of about four millions (Cairo is now about 12 millions).

All suicide attempters were subjected to the following:

1. A special semistructured interview based on Barraclough collecting sheet for suicidal cases (Barraclough, 1974) with some modifications to investigate:
   a) the sociodemographic variables
   b) the suicidal attempt itself
   c) the psychiatric symptomatology
   The diagnosis was made according to the DSM III classifications of psychiatric disorders (1979).
2. The suicidal feeling questionnaire to investigate the prevalence of suicidal feelings in suicide attempters (Paykel et al.,1974).
3. The Suicidal Risk Scale designed by Pallis (1977), which provides an estimate of the attempters' risk for subsequent suicide.
4. A battery of psychometric tests:
   a) The Arabic version of the Eysenck Personality Questionnaire which provides an assessment of neuroticism,(N), extraversion, (E), psychoticism, (P) and criminality (C) (Eysenck and Eysenck, 1976) (Farag, 1980).
   b) The Extreme Response test designed by Soueif (1968), to estimate the degree of inflexibility.
5. Clinical assessment by Hamilton scale for depression and anxiety (Hamilton, 1960, 1959).
6. The spouses of married suicide attempters were also investigated by psychological assessment for their

personality traits.

The study of every subject started after his or her physical management and was scheduled to suit the patient's convenience. The effect of each variable upon the suicide attempt was analysed by the suitable statistical parameters.

Results

The highest peak of suicide attempt was during May, June and July.

Sociodemographic data

Teenagers and those in their early twenties had the highest rate of attempted suicide (60%), followed by the older age group from 25 to 44 years with a decline until it disappears after the age of 65.

The vast majority of the suicide attempters were significantly women (69%) compared to their proportion in the general population (49%) (Table I).

Table (I): Sociodemographic data

		Suicide attempters	General Pop.
Sex	Males	31%	51%
	Females	69%	49%
Marital status	Married	29%	60%
	Single	71%	40%
Education	Illiterate	29%	59%
	Literate	71%	41%
Economic position	Employed	31%	32%
	Unemployed	14%	9%
	Student	37%	31%
	Housewife	18%	28%

N.B.: All percentages are approximated.

Single individuals (unmarried, divorced, and widowed) predominated among suicide attempters (71%) than in the corresponding age group in the general population (40%).

93% of those who are married have children with a mean number (3.27 ± 1.72).

Attempted suicide is a phenomenon that seems to be more prevalent among educated people than illiterates as 71% of the attempters in this study received different degrees of education.

Data revealed that suicide attempters belonged to overcrowded large families (mean number 7.8 ± 2.2). They lived in a small mean number of rooms (2.2 ± 6.6).

Those who belonged to the lower social classes showed a higher percentage of attempts (59%) followed by the middle class (24%) then the upper class individuals (17%).

Students and unemployed subjects were more commonly prevalent in the group of suicide attempters than in the general population. Unemployment is not a major problem in Egypt as youth are either recruited in the army or they will be employed through the Training of Manpower Ministry which does not resort to the competition system, so there may be a form of masked unemployment.

Table (II): Data about the attempt

	Male (28)	Female (63)	Total (91)
Suicidal Feelings	%	%	%
Positive	7	19	15
Negative	93	81	85
Suicidal Intent			
Determined	18	21	20
Undetermined	82	79	80
Suicidal Threats			
Positive	75	68	70
Negative	25	32	30
Previous Attempts			
No	82	64	69
Yes	18	36	31
Place of Attempt			
Residence	75	86	82
Outside	25	14	18
Isolation			
Yes	95	97	97
No	5	3	3
Method			
Hypnotics analgesics	46	67	60
Liquids Disinfectants	21	24	23
Cutting Piercing	18	3	8
Burning Jumping	15	6	9

Table II demonstrates that 85% of the total suicide attempts reported suicidal ideation and feelings, yet only 20% of them had determined intent to die. 70% made an unequivocal clear suicidal threat one or two days prior to the act, moreover 31% made previous non-serious attempts. 82% of them, made their attempts at home and in 97% there was some body near by or in contact, however, only 34 were alone and isolated during the act.

Items concerning the life events and stressful situations that preceed the act clarify that bereavement, love problems and marital problems were the most common psychological stressors for female attempters while earning problems, work stresses and academic difficulties were the most common reported problems precipitating the suicide attempts in male subjects.

Poisoning by overdosage of analgesics, hypnotics and disinfectants were the commonest methods of attempts. Aspirin (acetyl salicylic acid) was by far the most preferred drug. Other violent methods as cutting, piercing, burning, jumping etc... were much less frequently used.

Table (III): Psychiatric morbidity

n =	Males (28)	Females (63)	Total (91)
	%	%	%
Major Affective Disorders			
Unipolar	6	3	3
Bipolar	4	2	4
Dysthymic Disorders	16	9	12
Adjustment Disorders	32	25	27
Schizophrenic Disorders	7	6	5
Anxiety Disorders	4	9	7
Conversion Disorders	1	3	2
Personality Disorders	18	2	20
Others	0	3	3
No psychiatric Diagnosis	12	19	17

The psychiatric diagnoses of the suicide attempters are presented in Table III. Dysthymic disorders, Adjustment disorders and Affective disorders were the most common main diagnoses among the males, while females showed higher tendency to be diagnosed as.Anxiety, Conversion disorders and Personality disorders.

Attempters scored higher for psychoticism, neuroticism and criminality than the average mean of normal population. Data in Table IV revealed that males were more introvert than females.

Table (IV):

	Mean Score For Male Attempters	Mean Male Norm	Mean Score For Female Attempters	Mean Female Norm
P	8 ± 3.5	3.9 ± 3.3	6.5 ± 3.2	2.8 ± 2.3
N	17 ± 4.0	9.7 ± 5.1	17.1 ± 3.8	12.9 ± 4.9
E	9.9 ± 3.8	13.1 ± 4.9	12.7 ± 4.3	12.7 ± 5.07
C	18.8 ± 2.1	9 ± 4	18.1 ± 2	9 ± 4

Those who attempted suicide were found to be flexible, less rigid individuals as they scored lower in the extreme response items and higher in the moderate response items than the average normal population and this indicates that they are more liable to escape from the situations which need a clear opinion.(Table V).

Table (V): Extreme response test

	Mean Score for Attempters	Mean Score for General Population
Extreme ± 2	20.9 ± 9.5	33.3 ± 13.4
Moderate ± 1	34.4 ± 8.7	23.6 ± 12.6
Zero	14.7 ± 6.4	13.05± 8.8

Spouses of the suicide attempters scored higher for psychoticism than the average mean of normal population (6.3±2.79 for males and 5.2±2.17 for females). The mean score for extraversion of male spouses is 13.2±3.5 which is slightly higher than the average norms, while female spouses showed marked tendency to be more introverted (11.9±4.3)

On applying the short suicidal risk scale (6Item scale) is was observed that only 27% of the suicide attempters had high suicidal risk, on the contrary when applying the long suicidal risk scale (18 items), we found that 56% had high risk and this indicates that the latter scale may be more reliable. We are in agreement with Pallis et al. (1984) and Murphy (1977) and Sheindman (1976) that the group of attempters must be considered at high risk and ought to be taken seriously as persons who poison or injure themselves and have a suicide rate 100 times greater than the population at large.

Discussion

In the present study there is evidence of seasonal variation suicidal attempts being more common in the spring and summer than at other times of the year. This higher peak could be explained by the increasing incidence of affective disorders in early summer or by the accumulating stresses that young people face prior to the final year examination which is usually set up at that time in Egyptian schools and universities together with parental nagging over their academic performance. They were subjected also to adverse criticism within homes because of the short time devoted to studying.

We can support the previously reported data that attempted suicide is a phenomena mainly occurring among young persons, (Samaan, 1964; Okasha and Lotaif, 1979 and Nadim et al., 1983), due to the fact that youth is subjected to stresses and here the suicidal attempt

is a way of dramatizing the distress that others have ignored.

Intentional self harm is particularly a problem of females. Table II shows that they outnumber males and this preponderance has been found everywhere the problem of attempted suicide has been studied (Kennedy et al., 1974 and Sainsbury, 1975).

Our results coincide with those of other investigators (Bill Barhe et al., 1985, Kreitman, 1981 and Murphy, 1977), that for both sexes the unmarried and divorced persons have higher rates of attempts possibly due to the unsettled emotional life or owing to the lovers' quarrels and it is clear here that the aim of the attempt is to induce guilt over the other partner. Durkheim has contended that marriage shields against suicidal impulses(Bill Brahe, 1982).

The effects of social classes are equally striking. In the present study it was illustrated that the rates for the lower social classes are higher than those for the other social groups. Moreover there is a tendency for the attempters to come from overcrowded large families who live an uncomfortable life characterized by poor social functioning and continuous intrafamilial conflicts and frictions that boil over in acute frustration and as it was reported by Samaan (1964) the educated people showed the highest rate of attempts.

The previous data led to the suggestion that people who received a degree of education and belonged to overcrowded large families of lower social class are considered to be a high risk group and that there are aspects of their life style which might be powerful contributors to the high propensity to parasuicide. They appear to have unrealistic high aspirations and expectations. They lack future orientation, they may have a greater potential for impulsive and acting out

behaviou·, they tend also to be nonverbal, so the attempted suicide is recognized here as a means of conveying a certain kind of information. Although the majority of attempters had suicidal feelings, they actually did not want to die, it was just a cry for help to alter a life situation. The minority had determined suicidal intent and also they had high medical lethality. Regarding the seriousness of the medical consequences of the attempt, we are not in agreement with Stengel and Cook (1958), that the degree of medical lethality is not a reliable measure of the seriousness of the intent but we consider Sheindman's opinion (1967), that we ought to take seriously the degree of danger to life as a marker to the intensity of the suicidal intent. As was reported from different centers in the world that the majority of parasuicide involves drug overdose and the drug which is taken tends to be dependent upon the prescribing habits of medical practitioners and a drug which can be obtained easily as aspirin.

Our data revealed that males p fer the more violent methods whereas females use the more passive ones, but it has not been clearly shown whether this gender difference in the method of suicide attempts reflects a real difference between them in their death intent or merely reflects a gender difference in aggression and impulsive behaviour, this is a matter of argument in the previous studies (Kreitman, 1981; Neuringer, 1982; Lester, 1972).

The majority of attempted suicides took place at their homes and when somebody was around or nearby which may give the attempters the chance to be rescued. Moreover they gave unequivocal suicidal threats one or two days before the attempt which indicates that their behaviour was not more than an impulsive act without preparatory steps.

One third of our series made previous attempts but males showed a non-significant higher percentage

of repeating the act which reflects their seriousness. This figure is much higher than that reported by Nadim et al.(1983), in Quatar but similar to that of WHO (1968). It is apparent that a variety of psychiatric disorders can lead to suicidal attempts in our study. Major psychoses represent a small minority but much commoner are the adjustment disorders with depressed mood, dysthymic disorders and personality disorders (Paykel et al., 1971; Urvin and Gibbon, 1979).

The assessment of depression by Hamilton scale for depressed patients revealed mild and moderate degrees of depression.

Patients with anxiety disorders, schizophrenic disorders did not attempt suicide so commonly and this result coincides with that of Woodruf et al. (1972), and Sainsbury, (1975).

In about 17% there are no grounds other than the act itself for making a diagnosis of psychiatric illness. This percentage is much lower than that found by Kessel, (1965). Despite the fact that more than 4/5 of the attempters labelled a psychiatric diagnosis, yet less than 1/8 of them had received psychiatric care prior to their act. Attempters scored higher than the mean average of normal population for psychoticism and criminality, which reflects their personality traits described by Eysenck, (1973) as being impulsive, aggressive, hostile even to the loved ones, even liking for odd and unusual things, disregard for danger. Moreover they liked to make fools of other people and to upset them. The mean score of suicide attempters in neuroticism is higher than the mean of normals which reflects that they are moody, worriers, have considerable anxiety, frequently depressed, overtly emotional, reacting too strongly to all sorts of stimuli. Their strong emotional reaction interferes with their proper adjustment making their reaction in an irrational way (Eysenck, 1973; White, 1974).

The mean score for "Extreme Response" of the suicide attempters is lower than the average mean of Egyptian normals which gives an idea that those subjects are not rigid. Also their mean score for moderate and zero responses are higher than the mean of normals which is an indication that they are more flexible and liable to escape from the situations which need clear decision.

Conclusion

Persons who attempted suicide are often facing interpersonal problems, their acts may be interpreted more as a trial to remedy an intolerable situation than a desire to die but this should never lead to neglect of the considerable psychiatric morbidity and social difficulties of the attempters.

A strong need remains for the establishment of a more objective tool that provides an estimated risk of such an event.

References

Barraclough, B.M.(1974): Poisoning cases. Suicide or accident. Brit. J. Psychiat. 124, 526-580.

Benedict, R.(1953): Patterns of Culture. N.Y.N. at Amer Library. 11th ed. pp. 107 & 199-203.

Bill Brahe(1982): Persons attempting suicide as clients in the Danish Welfare system. Soc. Psychiatry 17:181-187.

Bill Brahe, Eansen, W., Kolmos, L. and Wang, A.G.(1985): Attempted suicide in Denmark. Acta Psychiat. Scand. 71: 217-226.

DSM-III (1979): Diagnostic and Statistical Manual of Mental Disorders (3rd edition) by the American Psychiatric Association.

Eysenck, H.J. (1973): Handbook of Abnormal Psychology, 2nd ed. Sevenoaks: Pitman Medical.

Eysenck, H.J. and Eysenck,S.B.G. (1976): Manual of the Eysenck Personality Questionnaire. London: Holder and Stoughton.

Farag, S.(1980): Psychological Measurement. Arabic Dar El Fikr, Cairo pp. 614-618 (In Arabic).

Gardner, R.(1983):Psychiatric aspects of self poisoning. Hospital update, 9, 485-491.

Goldney, R.D. (1981): Parental loss and repeated childhood stress in young women who attempt suicide. Acta. Psychiat. Scand. 64, 34-59.

Hamilton,M.(1959): The assessment of anxiety states by rating: Brit. J. Medical Psychology 32, 50-55.

Hamilton,M.(1960): A rating scale for depression J. Neurol. Psychiat. 23, 56-63.

Kennedy, P.;Kreitmer, N.; Ovenstone, I.M.K.(1974): The prevalence of suicide and parasuicide in Edinbourgh, Brit. J. Psychiat. 124, 36-41.

Hawton, K. and Catalon, J.(1982): Attempted suicide. A practical guide to its nature and management. Oxford University Press. Oxford.

Kreitman, N.(1981): The epidemiology of suicide and parasuicide. Crisis International J. Suicide and Crisis Studies. V.2, N:1, 113.

Lester, D.(1972): Why people kill themselves? Springfield, Illinois:C.C. Thomas.

Malinowski, B.(1949):Crime and Custom in savage society. London, Routledge and Com. pp. 94-97.

Morgan, H.G.(1979):Death wishes? The understanding and management of deliberate self harm. John Wiley & sons Ltd. Chichester.

Murphy, G.E.(1977):Suicide and attempted suicide. Hospital practice, V.12 N:11, 73-80.

Nadim, A.A.; El Akabawy, A.S.; Aziz, H.A.; Al Mottassem, D. and Ali, S.K. (1983): Suicide in Quatar. The Egypt. J. Psychiat. V.6, N:2,

Neuringer, G. (1982): Suicidal Behaviour in women, crisis, International J. Suicide and crisis studies. V.3, N:1, 41-49.

Newson-Smith,J.B.C.(1984): Assessment of suicidal risk. The Islamic World Medical J. Vol. I, N:4, 28-31.

Okasha, A.(1978): Mental disorders in Pharaonic Egypt. Egypt. J. Psychiat Vol.1, 3-12.

Okasha, A. Lotaif, F. (1979):Attempted suicide:An Egyptian investigation. Acta. Psychiat. Scand. 60, 69-79.

Okasha,A. (1981): Depression and suicide in Egypt. Proceedings of the 12th International Congress of Suicide Prevention,Paris.

Pallis, D.J.(1977): The psychiatric assessment of attempted suicides: Personality, intent and suicide risk, M.D. Thesis Aberdeen University.

Pallis, D.J.;Gibbons, J.S.and Pierce, D.W. (1984): Estimating suicide risk among attempted suicide II. Efficiency of predictive scales after the attempt. Brit. J. Psychiat., 144-139-148.

Paykel, E.S.; Dienelt, M.N. (1971): Suicide attempts following acute depression. J. Nervous, mental diseases., 153, 234-243.

Paykel, E.S.; Myers, J.K.; Lindenthal, J.J. and Tanner, J. (1974): Suicidal feelings in the general population: A prevalence study. Brit. J. Psychiat. 124, 460-469.

Sainsbury, P. (1975): Suicide and attempted suicide. Psychiatric der Gegenwart, 558-606.

Samaan, M. (1964): Suicidal behaviour in Cairo. A psychosocial study. Dar El Maaref, Cairo.

Shneidman, E.S.(1976):Introduction: current overview? of suicide in Suicidology: Contemporary developments (eds. Shneidman and M. Greenblatt). New York: Grune and Stratton.

Stengel, E. and Cook, N.G.(1958): Attempted suicide: Oxford University Press. Maudsley Monograph N: 4, London: Chapman and Hall.

Soueif, M.I.(1968): Extreme Responses. Anglo Egyptian Bookshop Cairo.

Urwin, P. and Gibbons, J.L.(1979): Psychiatric diagnosis in self poisoning patients. Psychological Medicine, 9, 501-507.

World Health Organization(WHO)(1968): Prevention of suicide. Public Health papers. No.35, Geneva.

Wexler, L. Weissman, M. Kasl, S. (1978):Suicide attempts 1970-1975. Brit. J. Psychiat. 132, 180-185.

White, H.G. (1974):Self poisoning in adolescents. Brit. J. Psychiat. 124, 24-35.

Woodruf, R.A.; Clayton, P.J. and Guze, S.B.(1972):Suicide attempts and psychiatric diagnosis. Diseases of the nervous system, 33, 617-621.

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دراسة وصفية لمحاولة الانتحار في القاهرة

« مـــوجـــز »

الهدف من الدراسة هو فهم العوامل الاكلينيكية والاجتماعية التى تشكل الاستهداف لسلوك محاولة الانتحار.

تمت الدراسة على عينة من ٩١ شخصا محجوزا بأقسام الطوارىء بالمستشفى نتيجة سلوك محاولة الانتحار. تم اختيار العينة بحيث تمثل عاما كاملا وتمثل مستشفيات شرق القاهرة.

شملت الدراسة الفحص الاكلينيكى النفسى وتطبيق بطارية من الاختبارات تشمل :ـ

١ ـ مقابلة خاصة لحالات الانتحار وصفها باراكلاف.
٢ ـ استبيان مشاعر الانتحار لبايكل.
٣ ـ مقياس الاستهداف للانتحار لباليس.

٤ ــ بطارية اختبارات للشخصية مكونة من :ــ

(أ) مقياس ايزنك للشخصية.

(ب) اختبار الاستجابات المتطرفة لسويف.

٥ ــ مقياس هاملتون للاكتئاب. وتم كذلك فحص الأزواج.

أثبتت الدراسة ان أغلب محاولى الانتحار هم من الاناث بين سن ١٥ــ٣٤ سنة. ويغلب ان تكون غير متزوجة ومتعلمة وغير عاملة بالمقارنة بمستويات نفس الفئة من مجموع السكان. أكثر الوسائل شيوعا هى تناول جرعات كبيرة من الأدوية. أغلب محاولات الانتحار تمت بالمنزل فى وجود آخرين. كانت هناك محاولات سابقة فى ٣١٪ من الحالات.

أكثر التشخيصات شيوعا فى حالات محاولة الانتحار هى اضطراب الوجدان، التكيف، واضطراب الشخصية. كذلك حصلت محاولات الانتحار على درجات أعلى على العصابية، الانبساطية والذهانية.

ABSTRAIT

Tentative de suicide au Caire

(une étude descriptive)

L'étude consistait d'un echantillon de 91 individus admis à cause d'un tentative de suicide dans les services d'urgence de trois hôpitaux au Cairo durant l'annee 1981-1982. La majorité comprenait des femmes jeunes (l'age était entre 15 et 34 ans) venant des familles encombrées. Les patients avaient une tendance d'être celibataire et eduqué plus que le groupe d'age correspondant dans la population. La methode la plus utilizée a été les drogues. La majorité ont tenté le suicide dans leurs domiciles surtout quand les gens étaient proches. 31% des cas avaient un tentative

prealable qui n'était pas suffisament serieuse. Les diagnostics les plus frequents étaient les desordres dysthymiques, les desordres d'adaptation, les maladies de l'humeur et les troubles de personalité. Les patients ont marqué des resultats élevés dans les épreuves de neuroticism, psychoticism et extraversion. Ils avaient aussi une tendance à être plus flexible.