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Psychosocial and Developmental Status of Orphanage Children: Epidemiological Study

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ABSTRACT

Objective: Determination of emotional and developmental disorders among orphanages children in Sharkia governorate.

Subjects and Methods: The sample includes 294 children recruited from 4 orphanages in Sharkia governorate. All children aged between 6-12 years old, from both sex and have no social limitation. All participants were subjected to psychiatric assessment for depression by Child Depression Inventory (CDI), anxiety by Revised Children's Manifest Anxiety Scale (RCMAS), self-esteem by Rosenberg's Self-Esteem Scale (SES) and pediatric assessment for developmental disorders by Pediatric Symptom Checklist (PSC).

Results: The prevalence rate of depression was 21%, anxiety was 45%, low self-eastem was 23% and developmental disorder was 61%.

Conclusion: This study concluded that there is high rate of emotional and developmental disorders among orphanages children and strongly inter-related with sociodemographic characteristics.

Key Words: Psychosocial status, developmental status, orphanage, vulnerable children,Egypt.

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INTRODUCTION

In Egypt before examining the circumstances of orphanages, it is worth noting that modernization, increasing urban economy[1,2], increases in educational levels and an intertwining of Islam with the secular state are relevant variables in this nation's shape in the 21st century[3]. Yet, to be an orphan in Egypt, is still to live in a region of the world where adoption and promote care are unrealistic options and where unwanted children may be left on the street. Institutional care is often examined through the problematic psychosocial functioning of children[4,5]. The age distribution of orphans was fairly consistent across countries, with approximately 12% of orphans being 0–5 years old, 33% being 6–11 years old and 55% being 12–17 years old[6]. It has been found that developmental processes inside the institution, when enhanced with length of time, can make for blocked cognitive activity and limiting patterns of cultural expression[7]. Similarly, Dowdney et al.[8] show that children raised in institutions can demonstrate that they will be less sensitive to their own children's needs later. Where outside organizations can develop partnerships with community groups, helping them to respond to the impact of Orphan[9,10]. Poor caregiving, lack of stimulation and the absence of a consistent caregiver have been implicated in the negative outcomes among institutionalized children, orphanage placement puts young children at increased risk of serious infectious illness and delayed language development. In early childhood the long term, institutionalization increases the likelihood that impoverished children will grow into psychiatrically impaired and economically unproductive adults[11]. Mental health problems continued to increase within the orphanage sample, even among internationally adopted children; those who had previously lived in orphanages were more likely to have developmental and mental health problems, at least in the short and medium-term, than those previously in foster care[12]. About 5 percent of children and adolescents in the general population suffer from depression at any given point in time. Children under stress, who experience loss, or who have learning attention, conduct or anxiety disorders are at a higher risk for depression[13]. A study of Ahmad et al.[14] was found that orphans were more likely to be anxious, depressed and to display anger and showed significantly higher feelings of hopelessness and suicidal ideation, research indicates that depression onset is occurring earlier in life today than in past decades[15]. The early-onset depression often persists, recurs and continues into adulthood and indicates that depression in youth may also predict more severe illness in adult life; also anxiety symptoms and disorders are ranging from a simple adjustment disorder to more difficult and debilitating disorders such as panic disorder and posttraumatic stress disorder. According to the most recent data, the lifetime prevalence for anxiety disorders as a whole in adults is about 25%[16]. Depression in young people commonly co-occurs with other mental disorders, anxiety, disruptive behavior, or

substance abuse disorders and with physical illnesses, such as diabetes[17].

SUBJECTS AND METHODS

This study was done in the period from 1-6-2009 to 1-2-2010, the study sample includes 294 children recruited from three male and one female orphanage in Sharkia governorate. Children included in the study aged between 6-12 years old, from both sex, with no social and educational limitation and child lose one or both parents, the exclusive criteria were children with mental retardation, past history of psychiatric or physical disorder. A formed written permission was performed from the Ministry of Social Welfare in Sharkia governorate and written consent was received from the caregivers or legal guardians of participating children, also oral permission from the children. Mental state examination of participants was done according to DSM-IV TR criteria, a semi Structured Psychiatric Interview was introduced to children and caregivers and collecting information which concerning sociodemographic data, clinical and family history by using the child Follow-up Schedule.

A. Psychiatric assessment:

- **Detection of Depression:** By the Child Depression Inventory (CDI): it is a standardized self-report questionnaire of depression[18]. This has been developed for children and young people aged 6-17 years. The CDI includes 27 items, each scored on a 0-2 scale (from 'not a problem' to 'severe'), for the previous two weeks. The total score ranges between 0-54 and a score of 19 has been found to indicate the likelihood of a depressive disorder. The Arabic version of CDI has been adapted for use with Arab children[19].

- **Detection of Self-Esteem:** By the Rosenberg's Self-Esteem Scale (SES)[20], it was used to evaluate the psychological well-being of the children; was developed to assess self-worth and self-acceptance of children and adolescents. It contains 10 items which each investigate a feeling. Statement for items 1, 2, 4, 6 and 7: is answered as (3) strongly agree, (2) agree, (1) disagree or (0) strongly disagree, but for items 3, 5, 8, 9 and 10 (reversed in valence). The scale ranges from 0-30. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem[21].

- **Detection of Anxiety:** By Revised Children's Manifest Anxiety Scale (RCMAS), it is a standardised 37-item self-report questionnaire for children aged 6-19 years[22]. It measures the presence or absence of anxiety-related symptoms ('yes/no' answers) in 28 anxiety items and 9 lie items. The Arabic version items. A cut-off total score of 18 has been found to predict the presence of anxiety disorder in an Arab population[23].

B. Developmental Screens: By Pediatric Symptom Checklist (PSC). The Pediatric depressive disorder. Symptom Checklist obtains parents' reports of children's behavioral/emotional problems on 35 items that describe specific behaviors and emotions. Parents or caregivers rate their child for how true each item is using the following scale: 0= not true (as far as you know); 1=somewhat or sometimes true; 2=very true or often true. For school aged children 6- 16 years, a total score of 28 or higher is taken as an indication of significant and psychosocial impairment. It has high rates of sensitivity (95%) and specificity (68% to 100%)[24].

C. Statistical methods: Chi–square analysis was utilized to compare the socio–demographic characteristics of the study between groups.

$$\alpha = \sum \frac{(0-E)^2}{E} \quad where \sum = summation$$

O = observed value E= Expected value

Correlation between depression, anxiety, Low self-esteem and developmental disorder was done according to Pearson's Correlation and analyzed by the personal computer using the statistical software program (version 13.0)[25].

RESULTS

(Table 1) represent socio - demographic characteristics for study group.

Table 1: Sociodemographic data:

Variable		No294	100%
Sex	Male	227	77%
	Female	67	23%
Residence before admission	Rural	88	30%
	Urban	206	70%
Education	Received	222	75%
	Unreceived	72	25%
Lost parent	One	49	16.5%
	Both	245	83.5%
Family communication with child in orphanage	Positive	164	56%
	Negative	130	44%

Variable	Mean
Age of sample	8.7
Age at orphanage admission	1.8
Years of orphanage residence	6.6

(Table 3, 4) represent statistically significant difference was observed between depressed, anxious children and female, uneducated, children who lose both parents in addition those anxious children who have not Family communication and lived in urban area before admission.

Table 2: Comparison between orphans depression and Socio - demographic data.

Variable	Depressed 62(21%)		Normal 232 (79%)		X^2	P value
Sex: Male	37	16%	190	84%	13.73	0.000*
Female	25	37%	42	63 %		
Communication: Positive	30	18%	134	82%	1.74	0.186
Negative	32	25%	98	75%		
Residence: Rural	20	23%	68	77%	0.20	0.652
Urban	42	20%	164	80%		
Education: Received	60	27%	162	73%	19.21	0.000*
Unreceived	2	2.5%	70	97.5%		
Dead parent: One	4	8%	45	92%	5.90	0.015**
Both	58	23%	187	77%		

* Statistically highly significant: p value <0.001. ** Statistically significant: p value >0.05

Table 3: Comparison between orphans anxiety and Socio - demographic data.

Variable	Anxity124 (45%)		Normal 170(55%)		X^2	P value
Sex: Male	69	30%	158	70%	13.73	0.000*
Female	55	82%	12	18%		
Communication: Positive	42	25.5%	122	74.5%	31.71	0.000*
Negative	82	63%	48	37%		
Residence: Rural	19	21.5%	69	78.5%	21.82	0.000*
Urban	105	51%	101	49%		
Education: Received	100	45%	122	55%	3.06	0.081
Unreceived	24	33%	48	67%		
Dead parent: One	7	14%	42	86%	18.67	0.000*
Both	117	47%	128	53%		

Table 4: Comparison between orphans law self-esteem and Socio - demographic data.

Variable	Low selfesteem 68 (23%)		Normal 226(77%)		X^2	P value
Sex: Male	37	16%	190	84%	26.13	0.000*
Female	31	46%	36	54%		
Communication: Positive	34	21%	130	79%	1.20	0.273
Negative	34	26%	96	74%		
Residence: Rural	12	13%	76	87%	6.30	0.011**
Urban	56	27%	150	73%		
Education: Received	47	21%	175	79%	1.95	0.162
Unreceived	21	29%	51	71%		
Dead parent: One	7	14%	42	86%	2.59	0.107
Both	61	25%	184	75%		

(Table 5) represent statistically significant difference between children has law self-esteem and female, Urban Residence before admission.

Table 5: Comparison between orphans developmental disorder and Socio - demographic data.

Variable	Developmental disorder 180(61%)		Normal 114(39%)		X^2	P value
Sex: Male	125	55%	102	45%	15.91	0.000*
Female	55	82%	12	17%		
Communication: Positive	68	41%	96	59%	61.01	0.000*
Negative	112	86%	18	14%		
Residence: Rural	69	78%	19	22%	15.62	0.000*
Urban	111	53%	95	47%		
Education: Received	116	52%	106	48%	30.74	0.000*
Unreceived	64	89%	8	11%		
Dead parent: One	7	14%	42	86%	54.57	0.000*
Both	173	70%	72	30%		

(Table 6) represent statistically significant difference between children with developmental disorder and female, uneducated; Negative Family communication with child in orphanage, rural Residence before admission and children who lose both parents.(Table 6) Correlation represents a significant positive correlation between depression scores, Low self-esteem scores and anxiety scores and no correlation between Low self-esteem score Developmental disorder.

Table 6: Correlation between depression, anxiety, Low self-esteem, and developmental disorder s**.**

Variable	Depression	Low self-esteem	Anxiety	Developmental disorder
Depression :	1	+0.735* 0.016	0.721 0.019	+0.545* 0.028
Low self-esteem:	+0.735* 0.016	1	0.721* 0.019	0.436 0.065
Developmental disorder	+0.545* 0.028	0.436 0.065	0.654* 0.011	1
Anxiety	0.721* 0.019	0.721* 0.019	1	0.654* 0.011

*Statistically significant according to r- value

DISCUSSION

There is a high rate of mental health problems, predominantly those of emotional nature. This appear consistent with findings from studies with other groups of neglected, traumatised and institutionalised children, although the mechanisms may well differ. The most studied factor has been institutional privation and its impact on children's social, cognitive and emotional development[11]. The current study found that the prevalence rate of depression and Anxiety in orphan children were respectively 21% and (58.5 %) These rates are somewhat lower than those found in other studies, as in Egypt the sympathy, social support and the advices in holly Quran to care orphan and behave them kindly as profit Mohamed do with orphan child, help to decrease psychiatric disorder and socio-culture burden among orphans, However the study of Musisi and Kinyanda[26] reported high rates of major psychiatric disorders such as depression and anxiety, were respectively (49%) and (65%) where their study performed on sample of HIV sero-positive Adolescents in Kampala, where there is low socioeconomic state and forms of abuse and neglect due to AIDS stigma, other published study of[27] reported high rates of major psychiatric disorders such as Depression(41.5%) where the study performed on Children admitted to orphanages in Gaza strip where (39.3%)suffered from post traumatic stress disorder(PTSD), Therefore, orphaned children are likely to have been affected by both direct exposure to trauma and family loss due to wars and occupation. Also low psychosocial support made them vulnerable to depression. The current study represents statistically significant difference between depressed, anxious children and female, uneducated, children who lose both parents in addition to those anxious children who have not Family communication and lived in urban area before admission. Otherwise, The current study represent statistically significant difference between children has law self-esteem, female and Urban Residence before admission. Conversely, the results of Ntozi study[28] show that Orphans had markedly less selfesteem and were more depressed; but these differences mainly existed in boys, which was incompatible with the studies. Perhaps girls, due to their nature, provide more care, support and communication to each other than boys and would also receive more concern, sympathy and help from others[29]. But in The current study we attributed this change to that first; girls were probably more vulnerable and likely to be affected by major life events than boy orphans in life quality. Secondly, the increase in emotional problems was chronic rather than an acute reaction of awareness issues because the direct consequence of orphanhood would be the decline of the overall living conditions mainly including family life, living environment and school life. As schooling is important for normal child development and even more important for bereaved children, as it affords children the opportunity to socialize with their peers and to overcome the negative feelings/emotions of grieving[30]. Lower quality of life was mainly observed in orphans regarding family life, school life, living environment and self-awareness. The current study represent statistically significant difference between children with developmental disorder and female, uneducated; Negative Family communication, rural Residence and children who lose both parents.Orphans who are unhappy with their living circumstances frequently develop emotional problems which are associated with an increasing risk of adult mental illness. Although family communication may not be possible or appropriate for many children, in this study the circumstances appeared to vary and many children were visited by or spent brief periods with their family of origin and putting the child's needs first and establishing their expectations. Children depend on their parents to provide food, shelter and stable living circumstances. Although orphans in this study were as physically healthy but Orphans are at greater risk of being infected by a variety of infectious diseases without parents' care, such as diarrhea, anemia and upper respiratory disease, all of which threaten normal growth and nutritional status. Besides infection status of the child, other possible predictors of emotional development and nutritional status may include identity of parent(s) who died: mother only; father only; both parents, age of the child when either or both parents died and the impact of orphanhood on growth and nutritional status seems obvious[31].

We found that although the basic material needs could be met, orphans in orphanages were almost totally separated from the outside world and could not access normal families and society relations. This would very likely harm their personality in adulthood and social skills[32,33]. These results show distinct association between less selfesteem and depression were certain consequences of orphanhood and played a significant role in lowering the children's life quality. Self-esteem and depression could be considered as intermediate variables on the causal pathway between orphanhood and quality of life and being an orphan and depression were the negative ones.

CONCLUSION

This study concluded that there is high rate of emotional and developmental disorders among orphanages children and strongly inter-related with sociodemographic characteristics.

Recommendations

Future research should develop and establishing official system to address the orphans problems in the community and enhancing social support services. Considering the fact that psychosocial management is an important component of psychiatric care, and called for a need to establish a National Orphan Policy

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