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Exploring the Food Security and Growth Status of the Orphaned Children in the Four Selected Orphanages of Khyber Pakhtunkhwa, Pakistan

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Abstract: *In Pakistan, 0.543 million children have been placed in residential care facilities. This study has been carried out to explore whether or not the orphans in the orphanages of Khyber Pakhtunkhwa have been provided with enough nutritious food. For this purpose, four orphanages, i.e. Peshawar, Kohat, Abbottabad, and Swat, were selected from five zones in KP. The Child Status Index was used to collect rich data from the participants and was then analyzed by using SPSS (V.22). It was found that a significant majority of the orphans were being provided with good food and found to be well fed and eating regularly. Similarly, it was also found that the majority of the participants were well-grown and had good height and energy levels. The one-way ANOVA shows that there was no significant difference between food security and nutrition and growth. In light of Bowlby's (1951) theory of attachment, it was found that due to deprivation from an attachment figure, i.e. their mothers and primary caregivers, some orphaned children were found to be stunted and underweight. It is recommended that orphaned children should be placed into orphanages for a minimum period of time; however, such placement shall be the last resort.*

Introduction

Family is the best option for the caring and rearing of each and every child. However, unluckily not all children are cared for and nurtured in the family environment owing to separation from parental care. Orphans are the most vulnerable children across the globe as orphanhood may severely affect the entire life of the orphans. Death of parents, absolute poverty, drug addiction, hate and rejection, disease, separation or divorce, and natural and man-made disasters have been the responsible factors for the increased number of orphans across the world (Browne, 2009; Dillion, 2008). The present world has more than 153 million orphans (Desmond, Watt, Saha, Huang, & Lu, 2020) wherein; 61 million are living in Asia, followed by Africa, i.e. 52 million (UNICEF, 2020). Among the total orphan population, approximately 2.7 million children between the age of 0 and 17 years are living in orphanages or residential care institutions (Petrowski, Cappa, & Gross, 2017). Researches reveal that 120 children per 100,000 are living in residential care. These statistics indicate that orphanhood is not a bizarre or a new phenomenon but is a universal issue (Abebe, 2009).

Food security, love and care, and nutrition are the prerequisite for the healthy development of

the children. In contrast, food insecurity and malnutrition may lead to morbidity and mortality, reduced productivity, and poor cognitive development (Elizabeth et al., 2011). As a common practice, orphans and vulnerable children are placed in orphanages and residential care institutions in order to provide them with basic needs, i.e. food, shelter, and other necessities of everyday life (Khoo, Mancinas, & Skoog, 2015). However, studies suggest that orphans and vulnerable children are less likely to report food insecurity (Kuku, Gundersen, & Garasky, 2011). Food insecurity further leads to malnutrition which is an extreme form of food insecurity.

One of the major reasons for the poor health of orphans in orphanages is malnutrition, poor diet, and insufficient energy intake (Kuku et al., 2011). Malnutrition further causes early child morbidity and mortality. Researchers suggest that orphaned children have a higher rate of morbidity and mortality if they are compared to non-orphans in the same community (O'Donnell et al., 2009). In most cultures of the world, malnutrition is instigated by poor crop harvest and a lack of financial resources to pay for food (Elizabeth et al., 2011). In order to provide orphans and vulnerable children with food, shelter, health, and other necessities of life, residential care is regarded to be one of the well-known measures across the globe.

Studies have revealed that owing to inadequate food and ignorance on the part of care providers, children experience developmental delays (Browne, Hamilton-Giachritis, Johnson, & Ostergren, 2006). Likewise, being underweight and stunting are issues being repeatedly reported by orphaned children in residential care facilities. WHO (2021) and UNICEF (2017) have reported that 45 % of under-5 children in the world are stunted. However, children, particularly in orphanages, are the most vulnerable to suffering from stunting, underweight, and diarrheal disease. Owing to malnutrition, 20 % of the orphans in the orphanages of Zimbabwe have been found to be malnourished and underweight when it was compared with 18 % of the non-orphaned children (Watts et al., 2007). Similarly, Alam (2021) has also concluded that 42 % of the orphans in the selected orphanages of Khyber Pakhtunkhwa (hereinafter KP) had concerns regarding their weight and height as they were wasted, stunted, and malnourished. Furthermore, biological orphans are more likely to be underweight than non-orphans (Watts et al., 2007).

Statement of the Problem

In Pakistan, there are 4.2 million orphaned children wherein, and 0.543 million are residing in orphanages and other residential care institutions (Desmond et al., 2020). Until now, the research being carried out in the province of Khyber Pakhtunkhwa, Pakistan, has focused on the social, psychological, and health-related problems of the orphaned children in various orphanages of KP. Nonetheless, such studies did not focus on the availability of food and the nutritional status of the orphaned children. This research study has been carried out with the purpose of exploring the availability of food and the nutrition status of the orphaned children in the selected orphanages of KP. Furthermore, so far, the Child Status Index (a reliable survey questionnaire) has not been used by any social scientist to understand the food and nutrition status of orphaned children in Pakistan.

Objective of the study

The objective of this study is to investigate the availability of food and the nutrition status of orphaned children in four selected orphanages in Khyber Pakhtunkhwa, Pakistan.

Research questions

- Whether or not the orphans are provided with enough food in the selected orphanages of Khyber Pakhtunkhwa?

- What is the status of the nutrition and physical growth of orphans in the selected orphanages of Khyber Pakhtunkhwa?

Methodology

Sampling Strategy

The main purpose of this study is to investigate the availability of food and the nutrition status of children in government-sponsored orphanages in KP, Pakistan. In order to serve this purpose, four government-sponsored orphanages were selected from four zones in KP. As per the KP Public Services Commission (KPPSC), the entire province of KP has been divided into five zones. Here it is worth mentioning that those orphanages were selected from each zone which had the highest number of orphaned children. According to KPPSC, Zone-1 has all the merged districts of the Federally Administered Trible Area (FATA) or X-FATA. Nevertheless, Zone 1 was not included in the study's population since the security situation in the area was not normal due to militancy and terrorism. Owing to such a situation, it was risky and could be harmful to the researcher to approach the area. Furthermore, the district of Peshawar was selected from Central Zone, i.e. (Zone-2). The district of Swat was selected from Zone-3. Likewise, the district of Kohat was selected from the Southern region, i.e. Zone-4. Lastly, the district of Abbottabad was selected from the Hazara region, i.e. Zone-5.

Sample Size

The Census method was used to select the participants for this study. Therefore, the data were collected from all the available 190 orphaned children who were residing in four orphanages.

Table 1. Name of district, zone, orphanage, and total population

S. No.	Name of District	Name of Zone	Orphanage	Population
01	Peshawar	02	Orphanage (01)	59
02	Swat	03	Orphanage (02)	71
03	Kohat	04	Orphanage (03)	32
04	Abbottabad	05	Orphanage (04)	28
		Total		190

Among the above-mentioned four orphanages, two, i.e. orphanages (01) and (02), are sponsored by the federal government (Pakistan Bait-ul-Maal), whereas the orphanage (03) and (04) are financed by the Provincial government (KP government).

Besides, all the orphanages have been shown in the form of numbers to ensure the confidentiality of the participants as well as of the orphanages. In addition, since all the participants were children, therefore, the assent of all the orphans was taken before data collection. Furthermore, all the information has been kept secret and confidential as sharing such information is unethical and could hurt the trust of the participants.

Tool of Data Collection

The data were collected through a survey questionnaire. However, the researchers did not develop a new questionnaire; rather, the Child Status Index (CSI) was used. The CSI was designed by O'Donnell, Nyangara, Murphy, and Nyberg after regular consultation with the child wellbeing expert (O'Donnell, Nyangara, Murphy, Cannon, & Nyberg, 2009). It is an internationally recognized and well-accepted research tool. In order to make it fit to be used in the local context, some changes were made. Therefore, for this study, the CSI has been used as CSI-P. The "P" here stands for Pakistan. The CSI- has six domains, i.e. food and nutrition, shelter and care, protection, health, psychosocial, education and

skills training. Nevertheless, keeping the objectives and research questions in consideration, the domain of "food and nutrition" was focused. The basic purpose of the domain of food and nutrition is to know whether the orphans have sufficient nutritious food or not. The domain of food and nutrition has two further factors, i.e. food security and nutrition and growth. Furthermore, each factor is rated on four different levels of well-being. The higher score indicates the better status of the child in the orphanage and vice-versa (O'Donnell et al., 2009).

Tool of Data Analysis

Similarly, the Statistical Package for Social Sciences (SPSS-V22) was used to analyze the collected data. Descriptive data analysis has been used, which includes frequency and percentage distribution. Furthermore, the data also shows the mean score and standard deviation. Likewise, one-way ANOVA has been used in order to see how the factor of food security is different from the factor of nutrition and growth.

Data Analysis

Table 2. Age and duration being spent by the orphans in the orphanages

Time/duration (in years) spent in orphanages	Age of the respondent		Total
	6-10	11-15	
1-3	46	35	81 (42.63 %)
4-6	12	59	71 (37.36 %)
7-9	0	38	38 (20 %)
Total	58 (30%)	132 (70%)	190 (100%)

Description and Explanation of Table 2: The data shows that 81 (42.63 %) orphans had spent 1-3 years in their respective orphanages. Among them, 46 orphans belonged to the age group of 6-10 years, whereas 35 children were from the age group of 11-15 years. The table further illustrates that 71 (37.36 %) of the respondents were living in orphanages for the last 4-6 years, wherein 12 orphans were from the age group of 6-10 years, and the rest of the 59 belonged to the age group of 11-15 years. Lastly, 38 (20 %) orphans had spent 7-9 years of their life in their respective orphanages, and they were all from the age group of 11-15 years. The table also shows that 58 (30%) orphans belong to the age group of 6-10 years, while a significant majority were from the age group of 11-15 years.

Table 3. Education level and type of orphan

Education Level	Type of orphan		Total
	Biological Orphan	Social Orphan	
Primary	06	120	126 (66.31 %)
Middle	03	54	57 (30 %)
Matric	03	04	07 (3.68 %)
Total	12 (6.3 %)	178 (93.7 %)	190 (100 %)

Description and Explanation of Table 3: The above table shows that among the total orphans, 12 (6.3 %) were biological orphans. Here it is worth mentioning that biological orphans are

children who have lost both their father and mother. Among the biological orphans, 6 were enrolled in primary, 03 in the middle, and 3 were enrolled in matric. Besides the biological orphans, 178 (93.7 %) were social orphans. Social orphans are children who have at least one parent alive or both are alive but are unable to take care of their children due to some reasons (Browne, 2009). The reason may be poverty, imprisonment, alcoholism, disability, negligence, and those who cannot be traced (Dillon, 2008; Abdullah et al., 2015). Among the social orphans, a significant majority (i.e. 120) were enrolled in primary schools, 54 were in the middle, and only 4 were enrolled in matric.

Food Security

As per the CSI-P, food security means the ability of the orphanages to provide the child with adequate food to eat all the time whenever they are hungry. The goal of the factor of food security is to know whether the child has access to sufficient food to eat at all times of the year or not. Furthermore, food should be obtained through socially acceptable ways without stealing, scavenging, or other coping strategies (O'Donnell et al., 2009).

Table 4. Food Security

S.	Statement	F/%age	Very Bad	Bad	Fair	Good	Total
1	Are you well-fed and eat regularly?	F	00	00	19	171	190
		%	00	00	10	90	100
2	You eat some of the time, depending on the season or food supply.	F	00	00	11	179	190
		%	00	00	5.8	94.2	100
3	Do you frequently have less food to eat?	F	00	00	6	184	190
		%	00	00	3.2	96.8	100
4	Do you go to bed hungry most nights?	F	00	00	1	189	190
		%	00	00	0.5	99.5	100

Description and explanation of Table 4: According to the results, 90 % (n=171) of the orphans reported that they were well-fed and ate regularly. Whereas 10 % (n=19) agreed to report their situation as fair. Here it is to be noted that the term "fair" means that the situation of the child is generally acceptable; however, there are some concerns on the part of the care providers. Likewise, 94 % (n=179) of the participants reported that they had enough food to eat and that the availability of the food did not depend on the season or food supply. Nevertheless, 5.8 % reported that their situation is fair. Furthermore, 96 % (n=184) of the respondents revealed that they had good food to eat as needed. Whereas, 3.2 % (n=6) reported that they had some concerns in this regard. In addition, 99.5 % (n=189) of the orphans agreed to report that they had adequate food to eat and that they did not go to bed hungry. However, only 0.5 (n=1) of the respondents revealed that they had some concerns in this regard.

Nutrition and Growth

To a great extent, the mental and motor development and growth of the child depend upon the nutrition status of the child. However, orphaned children may suffer from nutritional issues. Studies have also reported that children in orphanages are malnourished and underweight. According to the CSI-P, the goal of the factor of nutrition and growth is to confirm whether or not the child is growing well if they are compared to other children of his/her age in the community.

Table 5. Nutrition and Growth

S.	Statement	F/%age	Very Bad	Bad	Fair	Good	Total
1	You have good height and energy level	F	00	6	73	111	190
		%	00	3.2	38.4	58.4	100
2	You are less active	F	00	7	72	111	190
		%	00	3.7	37.9	58.4	100
3	You have low weight, look shorter and/or are less energetic	F	00	4	79	107	190
		%	00	2.1	41.6	56.3	100
4	You are wasted or stunted for your age (malnourished).	F	00	7	80	103	190
		%	00	3.7	42.1	54.2	100

Description and Explanation of Table 5: The above table shows that 58.4 % (n=111) of the respondents had good height and energy levels. While 38.4 % (n=73) of the orphans agreed to report their situation as fair. Furthermore, a fraction, i.e. 3.2 % (n=6), reported that they had a bad situation which reveals that neither they were grown well nor they had good height and energy levels. Besides, 111 % (n=58.4) of the participants reported that they were active. Nevertheless, 72 % (n=37.9) reported that they had a fair situation in this regard. Whereas 3.7 % (n=7) of the orphans revealed that they were less active. In addition, 56.3 % (n=107) of the respondents mentioned that they had good height and energy. Among the total, 41.6 % (n=79) reported that they had fair weight, looked fair, and were fairly energetic. However, 2.1 % (n=4) of the participants revealed that they had low height, they were looking shorter and were less energetic. Additionally, 54.2 % (n=103) of the orphans reported that they had good weight and height for their age. Whereas 42.1 % (n=80) agreed to mention that they had fair weight and height for their age. This means that there were some concerns on the part of the care providers. Nevertheless, 3.7 % (n=7) of the participants reported that they had very low weight and were too short. This also means that they were wasted, stunted, and malnourished.

Table 6. Food Security

Food Security Variables	N	Mean	St. Deviation
Food Security	190	15.80	.67
Nutrition and Growth	190	14.14	2.13

One-Way ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	5.691	8	.711		
Within Groups	80.709	181	.446	1.595	.129
Total	86.400	189			

Description and Explanation of Table 6: The domain of food security has been measured by two factors, i.e. food security and nutrition and growth of the orphans. The data reveals how the factor of food security is significantly different (worse) to other factors, i.e. nutrition and growth. The first factor is the food security of the orphaned children. The mean score for the same

factor is 15.80, while the standard deviation is .67. While the mean score for nutrition and growth is 14.14, whereas the standard deviation is 2.13. The one-way ANOVA suggests that the value of F (1.595) was not noted to be significant (.129) at the 0.05 level. Thus, it was concluded that no significant difference was found between the food security and the nutrition growth of the orphans in the selected orphanages of KP.

Discussion

United Nations Convention on the Rights of the Child (UNCRC), under Article 27, states that the child has the right to a standard of living that is adequate for the child's physical, spiritual, mental, moral, and social development (Ali, 2017). Though the healthy development of a child is more likely to be ensured within the child's own home, nevertheless, numerous factors, including the death of the parents, disasters, poverty, negligence etc., have deprived children of their parental care (Serey et al., 2011). Ultimately, such children have been placed into orphanages and residential care institutions across the globe. Stockholm (2003) noted that residential care for children has negative consequences not only for children but for society at large. This study reveals that 90 % (n=171) of the orphans are well-fed and eat regularly. In Pakistan, in order to provide the children with proper food, most of the orphanages have prepared a weekly food menu, and others follow a monthly menu (Haq et al., 2012).

The availability of enough food for children can also be gauged from the physical growth of the children (O'Donnell et al., 2009). The more a child is well fed up, the more he/she will have chances to grow well. The findings of this study suggest that a significant majority, i.e. 58.4 % of the orphans were well-grown and had good height and energy levels for their age (for detail, see table: 05). Kuku et al., (2011) have revealed that orphans in the resource-poor countries are significantly more likely to have food insecurity than those who are living with their parents. Though Pakistan is a lower middle-income state (Pasha, Pasha2018); however, children in orphanages are provided with enough food. Despite the numerous negative consequences associated with residential care, researchers have also confirmed that residential care institutions for children are more likely to provide the inhabitants with basic material needs than families (Embleton et al., 2014). The results of this study further suggest that 3.2 % of the orphans had not good height and energy levels; nevertheless, this could not be identified whether this was the result of a lack of proper and nutritious food or it was due to the loss of the primary figure, i.e. their parents. Studies suggest that the placement of children, particularly in early childhood, into residential care institutions has such deleterious and harmful effects that it should be considered a form of violence against children (Browne, 2009).

The Bowlby (1951) theory has been used as a theoretical framework for this study. Bowlby was a well-known psychoanalyst who had the view that there is always an emotional and attachment relationship between a child and his/her parents, specifically the mother. He further states that it is hard for a child to be grown up with a healthy personality without the attachment and emotional bond with his primary caregiver (Bretherton, 1992). He observed that an infant or a young child would grow up physically and mentally healthy when the child experiences an intimate, positive, and continuous relationship with his mother or primary caregiver. Such a relationship creates a sense of satisfaction between the mother and her child. While in contrast, children, particularly infants and young, who have been deprived of attachment bonds with their mothers or who have been raised in institutional care will develop physical under-development, psychosocial, and emotional problems (e.g., Ali et al., 2021a; Alvi, Nausheen, Kanwal, & Anwar, 2017). Bowlby also noted that prolonged detachment or separation of the child from his/her primary caregiver, i.e.

the mother, particularly during the first five years, creates in children delinquent characters and persistent misbehavior. Bowlby (1951) concluded that attachment and bonding of a mother with her child are imperative milestones for a child's physical and emotional development, while disruption or detachment will lead to disruption and disorder (Ali et al., 2021b). Keeping in view the Bowlby (1951) attachment theory, it can be safely concluded that though children in the orphanages were provided with enough food, however, those who were stunted or malnourished were merely the result of being separated from their mothers or primary caregivers.

Recommendations

Following are some of the recommendations that could help provide the orphans with a positive environment within and outside of the orphanages and even can be helpful in the successful reintegration of orphaned children in our society.

The state and society at large should support the orphans and their families so that the orphans and vulnerable children can remain in their own homes and can enjoy a normal and healthy life.

Children in all orphanages should be provided with nutritious and healthy food so that their physical and mental growth may be ensured.

As warned by the UNCRC, the placement of orphans and vulnerable children, particularly at young ages, into residential care facilities should be used as a last resort and must be for a short minimum period of time.

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