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Original Research Article

A Hybrid Type of Cross-Sectional Study to Assess Loneliness, Coping Mechanisms and General Wellbeing and their Correlation in Adolescent Orphans Residing in Orphanages of Western-Maharashtra

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Abstract

Background: Adolescence is the period of growth between childhood and adulthood, and it plays a significant influence in determining how an individual's life will turn out. Children between the ages of 12 and 18 go through several physical and mental milestones during this time. Adolescents are undergoing a variety of psychological and physical transitions, and they also have a strong need to understand their place in the complex system known as "society," even if it is as small a part as a gear. They are prone to making mistakes unless they have the proper instruction and ongoing assistance. Orphans, who are a more susceptible group, must deal with this turbulent time alone.

Aim: to assess loneliness, coping mechanisms and general wellbeing and their correlation in adolescent orphans residing in orphanages of Western-Maharashtra.

Methods and Materials: Cross-sectional study for assessing loneliness, coping mechanisms and general well-being through questionnaires. (Quantitative analysis) In-depth interviews of the parents of the randomly selected children from the study population and previous residents of orphanages. (Qualitative analysis). In order to achieve our third goal, we conducted in-depth interviews with the parents of 10 randomly chosen children to understand the circumstances that led to their admission into institutions, as well as with five former orphanage residents to obtain insight into their current situations.To accomplish our initial goal of data collecting, the children's levels of loneliness and coping were assessed using the R-UCLA and BRCS measures, respectively. Our second goal was achieved after we analysed the data and connected the results from the R-UCLA and BRCS scales with the replies on our self-made scale for general wellbeing based on the personal hygiene, nutritional, reproductive, and sexual health of our focus population.

Results: 2x2 contingency table is made for finding the association between different variables such as R-UCLA and low BMI (p= 0.002), R-UCLA and undernourishment (p= 0.002), R-UCLA and frequency of sudden high fever (p= 0.040), R-UCLA and frequency of headaches (p=0.002) and BRCS and sleep deprivation (p=0.015). Then after applying Pearson's Chi Square test, it is found out that there is significant association between the two variables under study.

Conclusion: Our study projected that, high degree of loneliness and poor coping mechanisms have a direct impact on the general wellbeing of adolescent orphans. Through the interviews we learnt their reasons for admission to the orphanage and how the variables of our study affect their lives beyond the orphanage.

Keywords: Loneliness, Coping Mechanisms, General Wellbeing, Adolescent Orphans, Orphanages, Western-Maharashtra.

Introduction

There are 15.1 billion orphans in the world today, of which each fifth orphan is an Indian , and 4% of its youth. Adolescence is the period of growth between childhood and adulthood, and it plays a significant influence in determining how an individual's life will turn out. Children between the ages of 12 and 18 go through several physical and mental milestones during this time. Adolescents are undergoing a variety of psychological and physical transitions, and they also have a strong need to understand their place in the complex system known as "society," even if it is as small a part as a gear. They are prone to making mistakes unless they have the proper instruction and ongoing assistance. Orphans, who are a more susceptible group, must deal with this turbulent time alone [1-3].

According to the WHO, people are starting to understand the importance of mental health in a person's total development. Parts of mental health include social wellbeing, psychological wellbeing, and emotional wellbeing. The likelihood of developing mental health problems is significantly influenced by a person's life experiences and family history, and growing up in an orphanage makes one more lonely [4-6].

Loneliness has a number of harmful effects on both physical and emotional health. Loneliness is a significant, underutilised pre-disease pathway for a number of adult health outcomes. Loneliness affects early adult depression, anxiety, self-esteem, sleep patterns, and general wellbeing. We intend to gain knowledge on the teenagers' general well-being, as well as their fundamental grooming, oral hygiene, nutritional health, reproductive health, and sexual health.

The frequent influx of volunteers has a negative psychological impact on the orphanage's young residents. With these visits, they attempt to establish emotional bonds, but because these bonds are transient, they lead to an unending cycle of desertion. They are prone to character defects and temptations as a way to deal with the loneliness and isolation they feel [7-10].

We are here to investigate a hitherto unexplored area by combining a study on the effects of loneliness on adolescent orphans' physical, reproductive, and sexual health. illuminating the broad picture while attempting to comprehend their backgrounds This study examined the association between loneliness, coping strategies, and overall wellbeing among adolescent orphans living in orphanages in Western Maharashtra.

Methods and Materials

Methodology

Before the study began, an ethical approval was requested from the institutional ethical committee. After describing the purpose and parameters of the study to the participants, their written informed consent was obtained. Data collected and participant information were kept in strict confidence.

Type of study: Observational study

Study Design: A Hybrid type of Cross-Sectional study.

Cross-sectional study for assessing loneliness, coping mechanisms and general well-being through questionnaires. (Quantitative analysis)

In-depth interviews of the parents of the randomly selected children from the study population and previous residents of orphanages. (Qualitative analysis)

Study Population: Orphan Adolescents of 12 to 18 years age group.

Study setting: 3 different Orphanages of Western Maharashtra.

Sampling type: non-probability universal convenient sampling technique.

Sample size: All the children residing in the orphanages who are satisfying the inclusion and exclusion criteria.

Selection Criteria:

Inclusion Criteria

1. Children residing in the orphanages.
2. Age group of 12 to 18 years.

Exclusion Criteria

1. Kids who have been given a psychiatric or psychological condition diagnosis.
2. Global Delay in Development and Disabilities (vision or hearing Impairment, neuromotor impairment, motor delay, cognitive delay, language delay, behaviour disorder, learning disorders, attention deficit hyperactivity disorder)
3. Children in the target age range who are unwilling to participate in the study or those who have just joined the orphanage.

Data Collection:

Following institutional ethical committee approval and ethical clearance, we began our study by gaining permission from the relevant orphanages and guardians. Adolescent kids who met the inclusion and exclusion requirements were included in the study. To accomplish our initial goal of data collecting, the children's levels of loneliness and coping were assessed using the R-UCLA and BRCS measures, respectively. Our second goal was achieved after we analysed the data and connected the results from the R-UCLA and BRCS scales with the replies on our self-made scale for general wellbeing based on the personal hygiene, nutritional, reproductive, and sexual health of our focus population.

In order to achieve our third objective, we conducted in-depth interviews with the parents of 10 randomly chosen children in order to understand the circumstances that led to their admission into institutions. We also interviewed five children who had previously resided in orphanages in order to gain insight into their current lives.

Instruments used:

1. Revised- University of California, Los Angeles (R-UCLA)8 scale for assessment of subjective feeling of loneliness or social isolation

2. BRCS (Brief Resilience Coping Scale) [9]

3. Self-made questionnaire on general well-being includes questions from;

a) Knowledge About Sexual and Reproductive Health in Adolescent School-Going Children [10]

b) Nutritional health assessment [11]

c) Health Status of Children Residing at Orphanages for Personal hygiene [12]

d) Oral Health-Related Perceptions, Attitudes, and Behaviour in Relation to Oral Hygiene Conditions in an Adolescent Population [13]

Plan of analysis and Statistical tools:

Quantitative data was represented using mean+/-SD and median and IQR(interquartile range). Following this, analysis of quantitative data was done using unpaired T test past normality test.

Qualitative data was represented in the form of frequency and percentage. Association between the qualitative variables was assessed by Chi square test with 2X2 contingency tables.

Predictiveness of independent tables was assessed using Binary Logistic Regression analysis. The list of predictives was based on references, theoretical assumptions and results of univariate analysis of the present study were graphically represented where deemed necessary.

Appropriate statistical software, including but not restricted to MS Excel, SPPS was used for statistical analysis. Station was done in MS Excel.

Results

With the mentioned inclusion criteria,134 children from different orphanages were taken for the study after obtaining the ethical approval. Data is collected through means of the questionnaires as mentioned above in the "Data-collection".

Through the unpaired Two Tail T-Test (p value= 0.000, as taken to 3 significant digits), the null hypothesis (H0) is rejected and it is concluded that there is a significant difference between the scores of R-UCLA and BRCS. An inverse relation between degree of loneliness and the coping mechanisms was established.

2x2 contingency table is made for finding the association between different variables such as R-UCLA and low BMI (p= 0.002), R-UCLA and undernourishment (p= 0.002), R-UCLA and frequency of sudden high fever (p= 0.040), R-UCLA and frequency of headaches (p=0.002) and BRCS and sleep deprivation (p=0.015). Then after applying Pearson's Chi Square test, it is found out that there is significant association between the two variables under study.

Also, to understand the circumstances of admittance of the study-population to the orphanage,10 parents were interviewed and it was found that: 50% of the participants were victims of domestic violence irrespective of intoxication. 40% abandoned their children due to unaffordability of whom 3/4th were single parents, 20% because of remarriage. 60% were underage when they had their first child. out of all the interviewees, only 3 had studied above 7th grade, while few never went to school.

Interviews of 5 previous residents of the orphanage to understand their lives now, revealed: the females get married after leaving the orphanage, fate is similar for most of them. 20% who had direction and got the right guidance are in colleges, rest are struggling to make a living. Most of them still feel lonely.(table 1 to 10)

Table 1: Age

	Frequency	Percent
Early Adolescence	**90**	**67.2**
Late Adolescence	9	6.7
Middle Adolescence	35	26.1
Total	134	100.0

Table 2: Education

Education	Frequency	Percent
Higher Secondary	13	9.7
Middle School	**83**	**61.9**
Secondary School	38	28.4
Non School Going	0	0
Total	134	100.0

Table 3: How frequently do you experience skin problems?

	Frequency	Percent
Never	**64**	**47.8**
Often	5	3.7
Regularly	6	4.5
Sometimes	59	44.0
Total	134	100.0

Table 4: How frequently do you experience muscle and joint pain in 3 months?

	Frequency	Percent
Always	7	5.2
Never	79	59.0
Regularly	11	8.2
Sometimes	37	27.6
Total	134	100.0

Table 5: Hydration status of the child

	Frequency	Percent
Dehydrated	**107**	**79.9**
Hydrated	27	20.1
Total	134	100.0

Table 6: Conditions of nails

	Frequency	Percent
Biting	12	8.9
Biting + Signs Of Infection	1	0.7
Biting + Signs Of Infection + Bleeding	13	9.7
Brittle + Biting + Signs Of Infection	**16**	**11.9**
Brittle + Properly Trimmed	6	4.6
Brittle + Signs Of Infection + Bleeding	5	3.7
Brittle + Biting	5	3.7
Deformity + Biting	5	3.7
Properly Trimmed	71	53.1
Total	134	100.0

Table 7: healthy eating habits

	Frequency	Percent
K	**11**	**8.2**
K, A	6	4.4
K, A, P	**99**	**73.9**
NONE	18	13.5
Total	134	100

Table 8: Knowledge about female reproductive organs

	Frequency	**Percent**
Babies are delivered through vagina	5	3.7
Menstruation is not a disease	7	5.2
None	**68**	**50.7**
Ovaries are female gonads	10	7.5
Vagina is a female organ for sexual intercourse	10	7.5
Vagina is a female organ for sexual intercourse+babies are delivered through vagina+ menstruation is not a disease	20	14.9
Vagina is a female organ for sexual intercourse+ menstruation is not a disease	5	3.7
Vagina is a female organ for sexual intercourse+ ovaries are female gonads + babies are delivered through vagina+ menstruation is not a disease	6	4.5
Vagina is a female organ for sexual intercourse+ ovaries are female gonads+ menstruation is not a disease	3	2.2
Total	134	100

Table 9: Knowledge About Male Reproductive Syst

	Frequency	**Percent**
None	**82**	**61.2**
Penis is a male organ for sexual intercourse	10	7.5
Penis is a male organ for sexual intercourse+ penis serves the functions of ejaculation and micturition	15	11.2
Penis is a male organ for sexual intercourse+ testes are male gonads+ penis serves the functions of ejaculation and micturition	24	17.9
Testes are male gonads+ penis serves the functions of ejaculation and micturition	3	2.2
Total	134	100.0

Table 10: Do you feel comfortable discussing your problems w.r.t reproductive and sexual health?

	Frequency	Percent
No	95	70.9
Yes	39	29.1
Total	134	100.0

Discussion

The teenage years are a crucial time for survival and prosperity [1,11]. Children's health and disease are significantly influenced by their family and guardians. Teenagers' development and progress are also influenced by their environment, particularly if they have lost a parent [2,12,13]. Adolescents need a supportive environment at home, at school, and in the society to establish and uphold healthy social and emotional routines [3,14,15]. In orphanages, orphans and susceptible adolescents suffer considerable obstacles due to societal prejudice and discrimination, as well as a high probability of physical abuse, sexual abuse, and psychological abuse or violence [4,16,17].

Deficiency of assistance and care throughout the grieving period, as well as an unsuitable environment without parents, are the root causes of these issues in this core group of teenagers, which can dramatically increase the probability of mental and behavioural disorders, especially depression.[18-21] According to earlier research, depression affects orphans at rates ranging from 20.0 percent to 68.0 percent.[12,22] According to the World Health Organization (WHO), depression is the primary factor in sickness and disability. In addition, contrasted to people who do not experience depression, sad individuals are double as likely to attempt suicide and pass away before their time. The third highest cause of death for those between the ages of 15 and 19 is suicide, which disproportionately affects depressed people. Teenagers with major depression have difficulty interacting with their relatives and friends, as well as performing poorly at work or school. It has an adverse effect on their physical as well as social well-being, as well as their human rights, as well as their economic freedom educational freedom, productive freedom, cultural freedom, and reproductive freedoms. This is especially true for teenagers between the ages of 15 and 17 years old [23-32].

In our study, women were more likely than men to experience depressed symptoms. The data from study of Egypt [5], study of Southwest Ethiopia [4], and study of Cameroon [33] all lend credence to this conclusion. The internal behaviours of girls, how they handle stress, the effects of adolescence, and the effects of cultural prejudice could all play a role in why females experience depression at higher rates than males.

According to Moeini *et al* [34], there are a number of potential psychological risk factors for depression throughout the puberty era, especially in girls. According to Schimelpfening [35], depression risk factors include gender differences, the social and socialisation role of women, coping strategy, traumatic experiences, and hormone imbalances in women. But according to Demoze *et al*.[29], sex was not substantially linked to sadness in orphans.

WHO reports that the significance of mental health in a person's overall development is becoming increasingly recognised. Emotional wellbeing, psychological wellbeing, and social wellbeing are all parts of mental health. A person's personal experiences and family background are significant risk factors for mental health issues, and being raised in an orphanage increases one's vulnerability to loneliness.

Physical and emotional health are both negatively impacted by loneliness in a variety of ways. An key, underutilised pre-disease route for a variety of adult health consequences is loneliness. Early adult sadness, anxiety, self-esteem, sleep patterns, and general wellbeing are all impacted by loneliness [36-40]. The adolescents' general well-being, as well as their basic grooming, oral hygiene, nutritional health, reproductive

health, and sexual health, is what we hope to learn in this study.

The orphanage's children suffer psychological damage as a result of being around a constant stream of volunteers. They try to form emotional connections with these visits, but because these connections are fleeting, they result in a cycle of abandonment that never ends. They are susceptible to character flaws and temptations as a means of coping with the isolation and loneliness they experience. The current study's findings regarding the prevalence of symptoms of depression among adolescent orphans were lower than those reported by studies involving teenagers in Ethiopia (36.4%) [29] and the Gaza Strip (67.9%)[12], both of which are developing nations.

A systematic analysis indicated that adolescants in the Japan orphan homes had a frequency of the depressive disorder of 11.0% [32], but in the developed nation of Japan, 43.3percent of total of living in residential foster care were revealed to have depressed symptoms [31]. These studies' varying findings regarding the presence of depressive symptoms can be somewhat attributed to discrepancies in sample sizes, research populations, and assessment techniques.

Conclusion

Our study projected that, high degree of loneliness and poor coping mechanisms have a direct impact on the general wellbeing of adolescent orphans. Through the interviews we learnt their reasons for admission to the orphanage and how the variables of our study affect their lives beyond the orphanage

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