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Mental Health Problems in Residential Care for Street Children

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ABSTRACT

Background: Previous research has established high mental health problems in residential care for children. However, in Zambia little is known about the mental health of this peculiar group of young people. The study prescribed in this paper therefore, aimed to explore the mental health problems of street children in residential care and examine the relationship between multiple mental health problems (co-morbidity) and levels of stress.

Methodology: *The* study utilized a sample of 74 street children (6 girls and 68 boys) in residential care aged 7-17 years. To collect data on children's mental health problems the Strengths and Difficulties Questionnaire (SDQ) was administered to agency carers and adolescents (if older than 11).

Results*:* Nearly three quarters of street children in residential care were rated as having a mental health problem, as indicated by findings from both the self rated SDQ and the Carers' SDQ i.e. 48 children (76.1%) and 54 children (73.0%) respectively. Out of this population approximately one third were assessed as having multiple mental health problems i.e. 22 children (34.9%) and 33(44.6%) respectively. The study also found a significant relationship between multiple mental health problems (co-morbidity) and levels of stress.

Conclusion: Street children in residential care are a high risk population to mental health problems. In addition, children with multiple mental health problems are much more likely to have high levels of stress.

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INTRODUCTION

The number of children and adolescents living in Zambian residential care homes is approximately 2,500[1]. Multiple risk factors such as poverty, broken homes, neglect, sexual and physical abuse, discontinued relationships and genetic factors have an impact on the mental health of children and adolescents in residential and foster care[2]. International prevalence rates for mental health problems/disorders in residential care for children and adolescents are estimated to be between 44 percent and 96 percent, with large studies reporting a prevalence of 60 percent to 70 percent[3]. In addition research evidence indicates that a considerable number of this group of children has multiple mental health problems/disorders (co-morbidity) and exhibit high levels of mental health needs and poor functioning[4].

Although in Zambia, research in the field of child mental health is limited, similar studies to the present study have been done with a focus on HIV adolescents in Zambia[5], mental illness[6] and the situation analysis of Orphans and Vulnerable Children (OVCs)[7].

The current study was conducted to explore the mental health problems amongst street children in residential care and to examine the relationship between multiple mental health problems (co-morbidity) and levels of stress.

Key words: *street children, residential care, mental health problems, stress*

Hypothesis

The foregoing analysis of previous research studies led to the formation of the hypothesis that children with multiple mental health problems (co-morbidity) have high levels of stress.

METHODS

Study design and sampling

The study was a cross-sectional survey which provided numeric or quantitative descriptions of mental health problems in residential care for street children. The study used a wide age range to enable the researcher capture different age groups of children and young people in care and to collect all the needed data at a single point in time, taking into consideration the fact that the study had a time limit.

The study utilized a sample of 74 street children in residential care (68 boys and 6 girls) between the age of 7 and 17 years which constituted all children from five different residential placements for street children in Lusaka. The number of girls was smaller than that of males because most of the centres visited mainly looked after male children. The sample size was similar to that used in earlier studies[8] and was considered adequate to reflect a range of mental health problems, while also fitting in the time-frame set for the research.

The centres were identified through the Lusaka District Social Welfare Office Directory for Child Care facilities. For each identified child, the key care worker [carer] (informant) most involved in delivery of care to the child was asked to complete a brief questionnaire (Strengths and Difficulties Questionnaire [SDQ]) to measure the child's mental health status. In addition to the questionnaire that was completed by key carers, older children (11-17) were required to give a self report using a similar questionnaire though the wording was slightly different in order to have more reliable information. The researcher administered the self-rated [SDQ] to the children who could not read. The wording for the self-rated SDQ was slightly altered without changing the meaning of the statements. This was because during the pilot study some participants were not comfortable with some phrases in the questionnaire.

Instruments

Participant information and consent form

This is a written information and consent form which stated the purpose of the study, the need for the participants' involvement, what their participation would entail and issues pertaining to ethics and confidentiality. The form also elicited information that the respondents had agreed to be part of the study. Prior to the administration of all parameters, the willingness of the subjects to participate to participate in the study was ascertained and they were made to sign the consent form.

The Strengths and Difficulties Questionnaire[9,10]

The Strengths and Difficulties Questionnaire (SDQ) was used to assess mental health and the levels of mental health need. The SDQ is a brief behavioural questionnaire administered to parents/caregivers of 4-to-17-years olds and to 11-to- 17-year olds themselves. Besides covering common areas of emotional and behavioural problems, it also enquires whether the key informant thinks that the child has a problem in these areas and so, asks about the distress and social impairment. It comprises 25 items (some positive others negative), with answers being rated on a 3-point scale. The SDQ provides total difficulties score (TDS) as well as five (5) individual subscale scores of emotional problems, conduct problems,

hyperactivity/inattention problems, peer relationship problems and pro-social behaviour. With the exception of the pro-social subscale, the sum of the other subscales generates the TDS. The scores are classified as normal, borderline and abnormal.

Good reliability and validity of the SDQ has been well documented[9, 10, 11]

Ethical considerations

The research gained ethical approval by the University of Zambia Research Ethics Committee. Informed written consent was obtained by all individuals participating in the study. In addition, Anonymity codes were assigned to all participants to protect personal and organizational identity. All data obtained were kept under strict confidence.

Data Analysis

The software Statistical Package for Social Sciences (SPSS) was used to analyse quantitative data. Frequencies and percentages were used to describe the data because the goal was to know the prevalence rate of mental health problems. Already existing computerised algorithms for predicting mental health problems were used to bring together information on symptoms and impact from the completed SDQs (http.//www.sdq.com). Correlation tests (Bivariate-Spearman Rank Order correlation and partial correlation) were used to test the research hypothesis.

RESULTS

The Study Group

The 74 cases recruited for the study constituted all the children from five street children centres in Lusaka District. The age range was 7-17 years with a mean of 14 years (SD=2.69). Boys made up approximately 92 percent (91.9%) of the sample. Approximately 85 percent (85.1%) of the sample was over10 years of age.

Age	Girls	Boys
7-10	1 (1.4%)	10 (13.5%)
11-17	5 (6.7%)	58 (78.4%)
Total	6 (8.1%)	68 (91.9%)

Source: Author's calculations from the field data

Prevalence of Mental Health Problems

Figure 1 shows the prevalence of mental health problems among street children in residential care. Findings from the self rated SDQ (n = 63) indicated that 15 children (23.8 percent) were unlikely to have a mental health problem, 26 (41.3 percent) were assessed as having a single mental health problem and 22 (34.9 percent) were assessed as having multiple mental health problems (co-morbidity). On the other hand, findings from the carers' SDQ (n = 74) indicated that 20 children (27.0 percent) were unlikely to have a mental health problem, 21 (28.4 percent) were assessed as having a single mental health problem and 33 (44.6 percent) were rated as having multiple mental health problems.

Figure 1: Prevalence of mental health problems

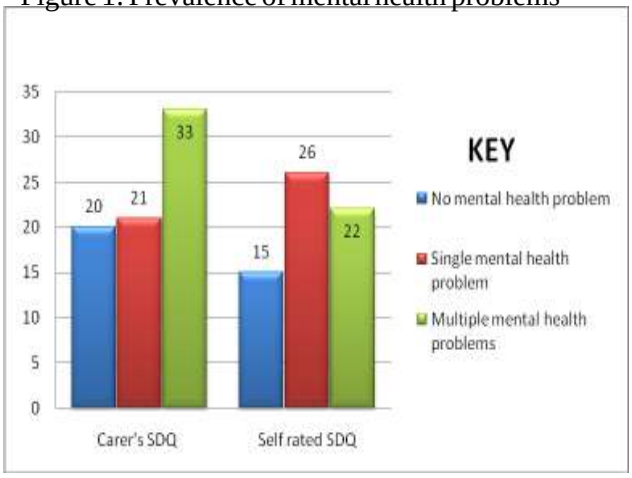

Table 2, shows specific mental health problems based on the self rated SDQ scores as well as the scores from carer's SDQ. The results shown include the scores obtained on the 'abnormal range' (significant problems) scale for specific mental health problems, including the average total difficulties score. The findings from the self rated SDQ (n=63) indicated that on average, 17 children (27.0 percent) scored in the 'abnormal range' with regards to the total difficulties score (overall stress), 30 (47.6 percent) scored for emotional problems, 10 (15.8 percent) scored for conduct problems, 29 (46.0 percent) scored for peer problems and 2 (3.2 percent) scored for pro-social problems. The results indicated no score for hyperactivity.

Results from the carer's SDQ (n= 74) indicated that on average, 16 children (21.7 Percent) scored in the 'abnormal range' with regards to the total difficulties score (overall stress), 12 (16.2%), scored for emotional problems, 24 (32.5 percent) scored for peer problems, 5 (6.8) scored for hyperactivity and 40 (54.0 percent) scored for pro-social problems.

	SDQ Self rated scores n (%)	SDQ Carer's scores n (%)
Total difficulties (overall stress)	17 (27.0%)	16 (21.7%)
Emotional symptoms	30 (47.6 %)	12 (16.2%)
Conduct problems	10 (15.8%)	24 (32.5%)
Hyperactivity	0 (0%)	5 (6.8%)
Peer problems	29 (46.0%)	33 (44.6%)
Pro-social scores	2 (3.2%)	40 (54.0%)

Co-morbidity of Mental Health Problems in Relation to levels of stress

As indicated in table 3 below, the findings indicated a strong correlation between co-morbidity and overall stress, rho = 68, n=74, p < .01 i.e. co-morbidity helps to explain 46 percent shared variance in respondent's scores on overall stress. Even after controlling for age (table 3), the findings indicated a strong partial correlation between co-morbidity and overall stress, rho = .61, n = 74, P < .01. As shown in table 3, an inspection of the zero order correlation (rho = .64) suggested that controlling for age responding had very little effect on the strength of the relationship between these two variables.

DISCUSSION

Prevalence of Mental Health problems

Nearly three quarters of street children in residential care were rated as having a mental health problem, as indicated by findings from both the self rated SDQ and the Carers' SDQ i.e. 48 children (76.1 percent) and 54 children (73.0 percent) respectively. Out of this population a considerable number had multiple mental health problems which indicated significant levels of impairment. The findings of the study support previous research evidence which indicated that looked after children are characterised by high rates of mental health problems[3]. However, the results of the present study could probably represent an underestimate in one way i.e. internalizing disorders (such as emotional problems) may have gone undiagnosed in some of those instances when only a carer was interviewed as they may not be able to precisely describe the child's emotions and cognitions.

Findings with regards to specific mental health problems as reported by both the children and carers indicated a high prevalence of behavioural problems (conduct and peer problems) and emotional problems. This finding was consistent with results from previous studies[12]. According to the Speciality Advisory Committee[13], such mental health problems can manifest in various distressing behaviours such

Table 3: Spearman's Rank Order Correlation between co-morbidity and stress

		Impact of Problems
Co-morbidity	Correlation Coefficient	.680**
	Sig. (2 tailed)	.000
	n	74

N.B ** Correlation is significant at level .01 (2 tailed)

Table 4: Partial and Zero Order correlation between co-morbidity and stress controlling for: Age

			Impact of Problems
Partial correlation -	Co-morbidity	Coefficient	.6065
		Sig. (2tailed	.000
		d.f	71
Zero Order Correlation -	Co-morbidity	Coefficient	.6368
		Sig. (2 ailed)	.000
		d.f	71

as aggression, self harm, substance misuse and other activity that compromises sexual health.

The self rated SDQ score for emotional problems in the current study was higher than that of the carer's SDQ i.e. 30 children (47.6 percent) and 12 children (16.2 percent) respectively). As earlier stated this could present an under estimation as the carers may not be able to precisely describe the child's emotions. The sample had low scores on the hyperactivity scale for both the self rated SDQ and the carers' SDQ, a finding which was similar to Meltzer et al.'s study[14].

Findings for the pro-social scale were striking in that the scores from the self rated SDQ showed that 2 children (3.2 percent) were rated with pro-social problems against 40 children (54.0 percent) from the carers SDQ. There would be need for more research in order to find an explanation for the huge margin between the self rated SDQ score and the carers' SDQ score on this scale. It can therefore be assumed that if children were able to assess their mental health using valid and reliable instruments, it would seem that children disagree with their carers concerning their mental health problems. These findings underlie the importance of using multi-informants in assessing mental health problems in children if one is to yield valid and reliable results.

Co-morbidity of Mental Health Problems in Relation to Stress

The study found that at least a quarter of the study population had high levels of stress which indicated the vulnerable mental health status of the children. In addition the study found a strong relationship between multiple mental health problems (co-morbidity) and levels of stress among the children. The implication of the finding is that children in residential care who have multiple and complex problems are at the apex of professionals' and carers' concern and thus need more formal assessment for effective targeting of resources, including exploration and development of appropriate interventions[4].

Strengths and Limitations of the Study

The findings of the study have to be considered in the methodological strengths and limitations of the study. The major strength of the study is that it was the first one of its nature to look at the mental health of street children in residential care. The study recruited all the children in the identified five residential centres for street children. The response rate was very good, despite previous studies indicating that looked after children and adolescents were a difficult group to study[2].

Methodological limitations include failure of the study to use the earlier proposed sample size of 100 children i.e. 20 from each identified institution, because four of the institutions identified had less than 20 children at the time of the study. With regards to informants for the study, teachers were not included in the study because not all the children were in school and in some instances, the carers happened to be the teachers to the children. To this effect, there was no possibility to cross validate the data with a teacher assessment. In addition, no mental health interview was conducted with the children for cross validation of the results. One study revealed that using observations, interviews and questionnaires in their research found that data from the child interview and observational data confirmed the between-group difference resulting from the parent and teacher questionnaires[15].

CONCLUSION

In summary, street children in residential care are a high risk population to mental health problems. A considerable proportion of this population of children were rated as having multiple mental health problems and high levels of stress which reflected significant impairment.

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