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University of Zimbabwe

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## **A preliminary investigation into psychological disorders among Mozambican refugees: prevalence and clinical features**

AP REELER

### **SUMMARY**

Psychological disorders are common in refugee samples, with several studies showing high rates of Post Traumatic Stress Disorder. The present study examined the prevalence and factors associated with psychological disorders in Mozambican refugees in Zimbabwe. The findings indicated a very high prevalence rate (62 pc), which is considerably higher than that obtained from other settings within Zimbabwe. The demographic characteristics were similar in most respects to other Zimbabwean samples, but there was a trend towards greater social adversity (more relationship difficulties, less schooling and higher employment).

Clinically, refugees were severe, with high scores on the SRQ-20, a presenting picture of multiple somatic complaints, and a high rate of rated suicidal risk. There were a significant number of refugees who had had an experience with violence in their recent past, as well as there having been frequent life events in the past six months. The implications of these findings are discussed with reference to Post Traumatic Stress Disorder, and the management of psychological disorders generally.

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*Rhoda Immerman  
AMANI  
26 Connaught Road  
Avondale  
Harare, Zimbabwe*

### **INTRODUCTION**

The study of psychological disorders in refugees and displaced people has a respectable history, largely beginning during the Second World War. This interest has been maintained over the post war period,<sup>1</sup> but with renewed interest in recent years, spurred both by the increased numbers of refugees in Western countries and the general rise in the number of refugees globally.

There are a growing number of epidemiological studies of psychological disorders in refugees, most of which make the observation of a comparatively higher incidence and prevalence of disorders in refugees and displaced persons.<sup>2-5</sup> The features identified in these studies have much in common with the features generally identified in the field of general psychiatry, but there are suggestions that the elderly may be particularly vulnerable, that lack of education may be a vulnerability factor, and rates of Post Traumatic Stress Disorder may be higher in refugee populations.<sup>6</sup>

The syndrome, "Post Traumatic Stress Disorder" (PTSD), was invented to describe the signs and symptoms seen in people who experience or witness trauma or violence.<sup>7</sup> The term is now applied to a more or less clear set of behaviours and emotions that follow a clearly traumatic event, whether this event is natural or man made.

The disorder is classified as an Anxiety Disorder, but it is recognised that symptoms of both anxiety and depression are common.<sup>8</sup> It may also be argued that PTSD is an insufficient description of the consequences of organised violence, particularly of deliberately inflicted harm.<sup>9</sup>

The disorder has yet to receive extensive epidemiological investigation, but there are encouraging beginnings in this direction.<sup>10-12</sup> Certain aspects of the definition of PTSD have already been questioned, and a recent examination of the stressor component of PTSD concluded that the severity of the stressor is unrelated to the development of the disorder.<sup>13</sup> However, the same study concluded that perceived severity of the stressor was highly related to the development of psychological disorder and PTSD at six months.

Thus, stressors remain important, but the DSM-III (R) definition does require a stressor to be outside of the normal range of experience. The Feinstein and Dolan

study suggests that the effect of the stressor is dependent on characteristics of the sufferer rather than on any objective criterion.

Thus, features such as "resilience" and "vulnerability", which are of general interest in psychopathology, may be equally important in the study of PTSD and psychological disorders in refugees and other at risk populations.<sup>14</sup>

Mozambican refugees now comprise 10 pc of the world's refugees, but little is yet understood epidemiologically about psychopathology in this population. This population of refugees has been subject to multiple trauma from war, drought and displacement, and has been the subject of considerable international and regional concern.

The present study attempts to answer some basic questions about psychological disorders in refugees outlined above, and focuses on several fundamental questions:

- (i) Are psychological disorders common in refugees or not?
- (ii) What are the clinical characteristics of refugees?
- (iii) Do refugees show the features of Severity and Social Adversity?
- (iv) Do refugees show PTSD?

The study was conducted during training workshops in Mozambican refugee camps in Zimbabwe. The training workshops were aimed at giving camp workers skills for managing psychological disorders in the refugee population.

## MATERIALS AND METHODS

Patients were screened from those attending outpatient medical clinics at the primary care clinics in the refugee camps. All patients older than 16 were included, except those who were acutely ill. The primary care clinics provide first line management to both refugees and the surrounding rural population, but are situated within the refugee camps. Screening was done in all of the five refugee camps in Zimbabwe: Chambuta, Mazoe Bridge, Nyangombe, Nyamatakiti and Tongogara.

Patients were screened using the Self Reporting Questionnaire (SRQ-20), a 20 item psychiatric screening instrument originally developed by the World Health Organisation,<sup>15</sup> but widely used throughout Africa.<sup>16</sup> The instrument has been widely used within Zimbabwe,<sup>17,18</sup> and was supplemented with a clinical inter-

view using a Structural Assessment Form developed elsewhere.<sup>19,20</sup>

The assessments were carried out by the camp workers who were participants in the training workshop mentioned above. The workshop was aimed at giving camp workers skills in the management of psychological disorders. The workshop involved a five day structured training programme aimed at teaching the principles of detection and identification, assessment and management. Participants received didactic, role play and practical teaching. In addition, all participants received a manual, which had been developed elsewhere for primary care nurses.<sup>19,20</sup>

A simple two stage procedure was adopted during screening. Consecutive patients were administered the SRQ-20. All patients who scored more than seven on the SRQ-20, or who indicated suicidal ideation on the same instrument, were then given the Structured Assessment Form.

### Measures taken.

The measures were taken from the instruments described above and are described in more detail below.

**Demographic measures:** A series of measures were taken from the Structured Assessment Form, and were included to provide comparison with samples from other settings. These measures included age, gender, marital status, number of children, employment status and level of education.

**Clinical measures:** A series of measures were taken from the Structural Assessment Form and the SRQ-20. Both the number of symptoms and the number of psychological systems were taken from the Structured Assessment Form, these measures having been previously shown to be associated with the presence of psychological disorder.<sup>15,17</sup>

Three measures were taken from the SRQ-20, these too having been shown to be useful.<sup>17</sup> SRQ-TOTAL represents the definition of "caseness", with all scores in excess of seven being taken as indicative of disorder, whilst scores in excess of 10 are taken as a measure of severity. The SRQ subscales, SRQ-ANXIETY and SRQ-DEPRESSION, were previously used in a WHO study, and subsequently in a Zimbabwean study.<sup>17</sup>

Suicidal risk was calculated from the Sad Persons Scale, a list of 10 features identified in a patient's history: Sex, Age, Depression, Previous attempt, Ethanol abuse, Rational thinking loss, Social support lack-

ing, Organized plan, No spouse, and Sickness present. Two thresholds were taken as indicative of suicidal risk: a low threshold (3/10) and high threshold (5/10).

**Social measures:** Since both severity of symptoms and social adversity have been shown to adversely affect prognosis,<sup>21,22</sup> it seemed worth attempting to estimate the effects of social variables. A series of measures of various social factors were taken from the Structured Assessment Form. A social adversity score (Adversity — Score) was calculated, measured as the number of the following areas in which a patient reported difficulties. In addition, the presence of life events (“exists” and “entrances”) in the past six months, and recent experience with violence were noted from the history.

Statistical analysis, where possible, was conducted by means of OXSTAT, and means, standard deviations and correlations between various measures were calculated.

### RESULTS

Table I shows the prevalence rates obtained from the various camps, and indicates a very high overall prevalence rate of 62,5 pc. The demographic data, summarised in Table II, suggest that refugees with psychological disorders are older, show a higher percentage of relationship dysfunctions (divorce and widowhood), have little education and pronounced unemployment. These are not unexpected findings in this sample.

*Table I: Prevalence rates for psychological disorder in Mozambican refugee camps.*

Camp	Case	Noncase	pc Prevalence
Chambuta	14	8	63
Mazoe Bridge	14	14	50
Nyangombe	15	4	79
Nyamakuti	8	1	82
Tongogara	14	12	54
Overall	65	39	62

Table III summarises the clinical data. This shows refugees complaining of many symptoms and many organ systems, scores in the severe range on the SRQ-20, and frequent suicidal risk. In general, the measures

are all elevated in comparison to Zimbabwean samples. The measures of social adversity, summarised in Table IV, show most patients reporting problems in their lives, frequent life events (predominantly exits) in the past six months and significant numbers reporting some experience with violence in their recent past.

*Table II: Demographic features of Mozambican refugees.*

AGE:	mean	40,9
	standard deviation	15,5
GENDER:	male	46 pc
	female	54 pc
MARITAL STATUS:	married	60 pc
	single	8 pc
	divorced	11 pc
	widowed	21 pc
CHILDREN:	mean number	3,0
EDUCATION:	mean years	2,3
EMPLOYMENT:	employed	14 pc
	unemployed	86 pc

*Table III: Clinical features in Mozambican refugees.*

SYMPTOMS	mean number	3,8
	standard deviation	2,0
SYSTEMS:	mean number	2,9
	standard deviation	1,3
SRQ-20 (TOTAL):	mean score	11,8
	standard deviation	2,9
SRQ-20 (ANXIETY):	mean score	4,6
	standard deviation	1,6
SRQ-20 (DEPRESSION):	mean score	5,4
	standard	2,0
SUICIDAL RISK:	mean score	3,7

Table IV: Social adversity and other features in Mozambican refugees.

SOCIAL ADVERSITY:	
mean score	2,5
standard deviation	0,9
LIFE EVENTS:	
exists	40 pc
entrances	15 pc
VIOLENCE IN HISTORY	
percentage	26 pc

Table V summarises the correlations between various measures, and, as can be seen, there are two separate clusters; one from the Structured Assessment Form and the other from the SRQ-20. Of particular interest is the correlation between SRQ-DEPRESSION and the measure of suicidal risk, the SAD PERSONS Scale, and the correlation between the latter measures and the measures of the presenting complaint, SYMPTOMS AND SYSTEMS.

Table VI shows the classification of cases according to the direction of the SRQ-20 subscale scores, and, as can be seen, there is a preponderance of cases with mixed emotional symptoms, and rather more depression than anxiety.

Table V: Correlations between clinical measures (SRQ-20 and interview).

	Systems	SRQ (TOT)	SRQ (ANX)	SRQ (DEP)	Adversity	Suicide
Symptoms	0,55**	—	—	—	0,36*	0,23#
Systems	—	—	—	—	0,31*	0,19#
SRQ (TOT)			0,47**	0,78**	—	—
SRQ (ANX)			—	—	—	—
SRQ (DEP)				—	—	0,30#
Adversity						—

\*\*( $p = 0,001$ ) \*( $p = 0,01$ ) # ( $p = 0,5$ )

Table VI: Distribution of anxiety and depression (SRQ-20 subscales).

	Anxiety Alone	Anxiety & Depression	Depression Alone
Zimbabwean PHC: (Reeler <i>et al</i> , 1993 <sup>17</sup> )	4 (5 pc)	58 (74 pc)	18 (21 pc)
Mozambican refugee:	2 (3 pc)	46 (71 pc)	17 (26 pc)

## DISCUSSION

At the outset, it is important to note the remarkably high prevalence rates found. Elsewhere in Zimbabwe rates of 20 to 25 pc are commonly found, but such high rates are very uncommon. In fact, the prevalence rate is considerably higher than even those obtained in vulnerable populations in Zimbabwe, such as commercial farm workers. There is a great deal of variation in the prevalence rates, but this is also commonly found in Zimbabwean samples.<sup>23</sup> However, in answer to our first question above, psychological disorders seem very common in Mozambican refugees.

The trend overall is towards elevated scores on all demographic measures in comparison with other samples. The family sizes were rather smaller than might be expected in a rural sample. Most families had had children die, but whether this was due to poverty, starvation, or war was very difficult to ascertain. Most refugees had little formal education, with most women having have attended formal school, and there were a large number of people with relationship dysfunctions. All of these indices seem to be worse than comparative Zimbabwean samples.

Clinically, the sample, showed SEVERITY in their SRQ-20 scores, and most clinical measures were elevated in comparison with Zimbabwean primary care samples. Most patients presented with multiple somatic symptoms, which accords with the general findings from African primary care samples and other primary care samples.<sup>16</sup>

However, Mozambican refugees seem to present with more symptoms than their Zimbabwean counterparts which probably reflects both physical and psychological disorders, since morbidity due to physical disease is also high in this population. In fact, the picture of multiple pathology seems more common in refugees than in ordinary primary care samples.

In answer to our second question above, it would seem that there are differences between Mozambican refugees and other Zimbabwean samples, but these differences seem quantitative rather than qualitative. Mozambican refugees show the same trends, albeit in more severe fashion. It is important to note here that this sample was prescriptively screened, and that virtually none of the sample had ever received a psychiatric diagnosis of any kind. It seems that very few persons with psychological disorder are detected as such, which

again is similar to the findings from other primary care settings.<sup>19,24</sup>

In the refugee care setting, there is an undoubted over emphasis upon the physical to the exclusion of possible psychological factors or disorders, and the presenting picture of multiple somatic symptoms probably reinforces this orientation towards the physical.

The data from the SRQ-20 subscales indicates a group with mixed emotional symptoms, which is in line with the findings from other Zimbabwean settings,<sup>17,18</sup> and, interestingly, with the findings from the UK.<sup>25</sup>

Anxiety symptoms alone are less common than descriptive symptoms, but both are considerably less common than the mixed disorder profile. This suggests that considerable caution should be taken when studying either anxiety or depression alone, and there is a need for careful descriptive studies of these disorders and their relationship. Recent studies have had a rather uncritical view of the prevalence of depression.<sup>26-28</sup>

The correlations between the measures (Table VI) suggest two distinct instruments with different properties. SYMPTOMS/SYSTEMS is associated with social adversity (ADVERSITY SCORE), whilst the SRQ-20 shows good internal consistency with no significant correlation between the subscales.

The measure of suicidal risk shows an association with depression (SRQ-DEP) with SYMPTOMS/SYSTEMS. On the whole, the two forms of assessment seem useful, echoing work done elsewhere, and there can be little argument now about the ease of detecting psychological disorders in refugees.

The measure of social adversity seems useful, but no claims can yet be made for its reliability or validity. Most Mozambican refugees report problems in their lives, with Personal problems (82 pc) and Financial difficulties (73 pc) being more common than Family (50 pc) or Marital (49 pc) problems.

For many patients, concerns about their health and their symptoms were dominant amongst their Personal problems, and this probably reflects both the worries produced by their current life situation, as well as the failure by health workers to detect and treat their psycho-social difficulties. Life events were again common amongst the refugees, with exits being twice as common as entrances, and, here, death of family member seemed to be the most commonly reported exit.

Thus, the answer to our third question above seems affirmative: Mozambican refugees show both severity and social adversity, and it is of interest that there is also the suggestion that these factors are more severe in refugees. Amongst the factors of social adversity, experience with violence is common, and hence interesting for any consideration of PTSD.

A fair proportion of the morbid group reported some experience with violence in the recent past, and, indeed, violence was a major reason for many leaving Mozambique and going into exile. We cannot make any clear statement about PTSD among refugees, but a significant number report a stressor that would fall within the ambit of the DSM-III (R) definition. It is worth commenting here that a significant number of refugees were resident in the refugee camp because of economic displacement within Zimbabwe rather than drought or war within Mozambique. Many of the elderly had not been resident in Mozambique for more than two decades, so it is difficult to accurately estimate the magnitude of violence as stressor.

Most cases present with a mixed emotional disorder, complicated by concurrent physical illness, and, for the remaining cases, depression alone is more common than anxiety. However, it is noteworthy that the overwhelming majority of cases report both anxiety and depressive symptoms, and a significant proportion report violence as a possible stressor. Our data thus do not allow us to make any conclusive statement about the existence of PTSD in Mozambican refugees, but our results would accord with the kind of typology advocated by Turner.<sup>8</sup> Turner has previously argued for a four dimensional model to replace the DSM-III (R) definition of PTSD.

Although we did not specifically assess these Mozambican refugees for PTSD, it is noteworthy that they did report multiple somatic symptoms and depressive reactions more frequently than anxiety symptoms. However, our data do not allow us to make any conclusive assertion about either the prevalence of PTSD among Mozambican refugees, nor about the validity of the DSM-III (R) definition.

Thus, we can give no conclusive answer to our fourth question, but the indications are that the sequelae of organized violence will be found amongst Mozambican refugees, and probably among displaced persons within Mozambique. Our findings suggest morbidity of considerable magnitude, for which little is currently being done.

This present study emerged out of a training programme to meet this need. It does seem clear that, with such substantial morbidity, community based interventions using primary care workers should be the approach of preference. This has been argued generally for psychological disorders in African populations,<sup>29</sup> and is the preferred approach of the World Health Organization.<sup>30</sup> Community based management would seem to be the approach of choice for the management of Mozambican refugees, and probably for the Mozambique of the future.

### CONCLUSION

Psychological disorders have been shown to be common amongst Mozambican refugees, with the tentative conclusion that the prevalence of such disorders may be an order of magnitude greater than non-refugee samples. Furthermore, most measures appear elevated in comparison with samples drawn from the normal Zimbabwean population. The overall picture is of a sample that has both greater clinical severity and social adversity than in a comparable Zimbabwean population.

It is not possible from these results to make any definitive statements about the incidence of particular disorders among the refugees, but, generally, there is the picture of many patients presenting with multiple physical complaints, a mixture of anxious and depressive symptoms, frequent suicidal risk, and a history of recent life events or experience with violence. Some of these features are suggestive of Post Traumatic Stress Disorder, but this is only a tentative suggestion.

Given these findings, the management of psychological disorders among refugees must be a higher priority than it is at present, and it seems evident that this approach will have to be community or primary care based, using general health and camp workers. Understanding the psychological needs and managing the psychological problems of refugees may have to be part of the skills needed by all workers in refugee settings.

This may not be as awesome a task as the estimates of morbidity suggest, and since these findings suggest that there are only quantitative differences between refugees and populations, the field of primary health care may have something to contribute to the field of refugee studies.

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