

Assessing Trauma in Sierra Leone

Psycho-Social Questionnaire Freetown Survey Outcomes

11 January 2000

Kaz de Jong Maureen Mulhern Saskia van der Kam

Médecins Sans Frontières P.O. Box 10014 1001 EA Amsterdam Netherlands

Acknowledgements

This report is the product of close co-operation and hard work by a multinational team motivated to bear witness to the anguish suffered by the Sierra Leone population.

Warm thanks to MSF-Holland's medical co-ordinator in Freetown, Maureen Mulham, for skilfully guiding the survey process. Lo van Beers was instrumental during the data entry process. Special thanks go to the group of Sierra Leonian counsellor/interviewers and their respondents for the difficult and often painful work of asking and answering the survey questions. For reasons of security, the names of the counsellor/interviewers cannot not be released.

Kaz de Jong Mental Health Advisor, MSF-Holland

January 2000

I. Summary

This report is based on a mental health survey of persons in Freetown, Sierra Leone in May 1999. Several months earlier the city saw fierce fighting that left more than 6000 people dead, an untold number injured and mutilated, and tens of thousands homeless. Many of those affected had gone through similar experiences before, and had fled to Freetown for its relative safety.

The findings only touch on the sufferings of the country's population. The civil war in Sierra Leone began in 1991 and no region has been spared. The residents of Freetown were not alone in their trauma: the country's town and village dwellers too, have often been repeated victims of war, displaced time and again from their homes and subjected to terrible and long-lasting hardships.

Although fighting in the country has largely ceased since the Lome Peace Accord of July 1999, the effects of that war will be with the population for a long time. As this survey makes clear, few escaped the mental trauma of the war zone that Freetown became for more than three weeks in January 1999.

MSF found, among other things, that 99% of those surveyed suffered some degree of starvation, 90% witnessed people being wounded or killed, and at least 50% lost someone close to them. The intensity of the fighting is indicated by the numbers: 65% endured shelling, 62% the burning of their property, and 73% the destruction of their homes. Physical harm was also great: 7% had been amputated (typically a limb, hand, foot or ear), 16% were tortured by a warring faction, 33% had been held hostage, 39% had been maltreated in some way or another.

The psychological impact of actually witnessing horrific events imposes a serious psychological stress. Deliberately or not, witnessing at least once events such as torture (54%), execution (41%), (attempted) amputations (32%), people being burnt in their houses (28%) and public rape (14%) often results in traumatic stress or even PTSD. Almost all respondents reported to have seen wounded people at least once (90%).

MSF also found, through a technique called the Impact of Event Scale, that the population showed very high levels of traumatic stress. Traumatic stress associated with physical complaints like headaches (38%) and body pains (12%) are reported most frequently.

The psycho-social and mental health consequences of war on civilians are all too often neglected. Even after hostilities cease, the war may continue in people's minds for years, decades, perhaps even generations. To address only the material restoration and physical needs of the population denies the shattered emotional worlds; ignores the broken basic assumptions of trust and benevolence of human beings and leaves unaddressed the shattered moral and spiritual consequences of war.

After severe conflicts, people seek to forget or deny what happened to avoid painful memories of the past and to escape the sense of hopelessness, humiliation and anger. But for the direct survivors of violence, acknowledgement of the suffering is a crucial element for making sense of and addressing traumatic experiences. To help a traumatised person there is a need to restore the bonds between the individual and their surrounding system of family, friends, community and society. Overcoming the extreme stress and sometimes even severe mental health problems associated with mass traumatisation such as occurred in Sierra Leone, tests the healing capacity of family and community.

II. Background

1. Political Context

In May 1997, military officers of the self-proclaimed Armed Forces Revolutionary Council (AFRC) overthrew the democratically elected government of President Ahmed Tejan Kabbah and formed a junta with the insurgent Revolutionary United Front (RUF). In February 1998, the West African peacekeeping force ECOMOG ousted the combined AFRC/RUF forces, whose remaining fighters fled to the countryside. President Kabbah was reinstated in office on March 10, 1998. In December 1998 the combined RUF/AFRC forces launched a massive offensive that brought the fighting into the capital, Freetown.

The fighting in Freetown in January 1999 was an intense, violent repetition of the brutality that has become common in Sierra Leone. The rebel forces committed indiscriminate attacks on the civilian population – thousands of executions, abductions, and rapes. Arson and looting were widespread. ECOMOG forces were implicated in the summary execution of hundreds of suspected RUF fighters. Altogether, some 6000 people died in Freetown over a three-week period and some 150,000 were displaced from their homes. When the rebels were forced to retreat, they cruelly amputated arms and legs and ears of civilians in their custody.

On 7 July 1999 the various parties signed a Peace Accord in Lome. Since then, armed clashes have been sporadic, travel through most of the country is now possible and Freetown is being rebuilt. But insecurity remains. An inadequately funded and ill-functioning Disarmament, Demobilisation and Reintegration program has meant that too many armed soldiers and exsoldiers roam the countryside. Too few of those abducted, including hundreds of children, have been allowed to return home. And continued lawlessness by the armed factions has sharply limited humanitarian access in those regions, particularly in the north and east, where assistance is most needed.

2. Medical Context

Since 1994 MSF has provided medical and nutritional programs in Sierra Leone, including surgery, primary health care support, and water and sanitation. At the end 1997 a psycho-social program was implemented around Magburaka in central Sierra Leone, but because of the security situation, the program was suspended. After the January 1999 events, MSF, through trained local counsellors, started psycho-social care to amputees in the hospital in Freetown.

Until recently, emergency medical programs have been dominated by a perspective emphasising physical health and immediate relief. Behavioural, mental and social problems were neglected. Since the genocide in Rwanda and the conflict in the Former Yugoslavia, it has become recognised that mental health and psycho-social programs can greatly contribute to the alleviation of the suffering of people in war and disaster-stricken areas (e.g. Ajdukovic, 1997). Focused primarily on the effects of post-traumatic stress, these programs have put the psychological consequences of massive man-made violence on individuals and populations on the agenda of the international community.

Research has shown that nearly all war victims experience recurrent and intrusive recollections, dreams, and sudden feelings of reliving the event (e.g. Bramsen, 1996). These responses are combined with increased arousal, avoidance of stimuli associated with the trauma, and numbing. Through the oscillation between intrusions and avoidance, the psychological integration of the traumatic experience is realised, which has been made clear in cognitive processing models (e.g. Creamer, 1995). Physical symptoms such as headaches, stomach pains, back pains are often part of this process. These physical symptoms frequently cause persons to seek medical attention. The occurrence of mass PSTD can have a debilitating effect on communities. Daily experience in the field demonstrates that traumatised people impede the restoration of ordinary life and jeopardise conflict resolution.

Besides the mental and physical suffering that people experience, on a spiritual level their fundamental assumptions of control and certainty, as well as basic beliefs in the future and in the benevolence of other people, are also shattered often beyond repair (Janoff-Bulman, 1992; Kleber & Brom, 1992). Research indicates that the duration and the frequency of traumatic experiences negatively influences physical, mental and spiritual coping mechanisms (e.g. Kleber & Brom, 1992).

Post-Traumatic Stress Disorder (PTSD) is frequently used in connection with traumatic events. The concept is well-fitted to describe the serious and prolonged disturbances of individuals confronted with major life events. The distinctive criteria of PTSD (Diagnostic and Statistical Manual of Mental Disorders, 4th ed. (DSM-IV); APA, 1994) are (1) an extreme stressor, (2) intrusive and re-experiencing symptoms, (3) avoidance and numbing symptoms, (4) symptoms of hyperarousal, and (5) symptoms of criteria 2, 3, and 4 should be present at least one month. The concept is also included in the International Classification of Diseases (ICD-10) of the World Health Organisation (1992). PTSD is strongly associated with dissociation and somatisation (McFarlane, Atchinson, Rafalowicz & Papay, 1994; Van der Kolk et al., 1996).

The concept of PTSD should be considered with care for several reasons. First, not all disorders after traumatic events can be described in terms of PTSD. It is not the one and only possible disorder after traumatic events, even according to the DSM system. Co-morbidity has been found to be more prominent in trauma patients than was originally assumed (Kleber, 1997). Second, whether western conceptual frameworks on psychological stress and mental disorders can be transferred to different areas of the world are practical as well as theoretical and ethical questions (Kleber, Figley & Gersons, 1995; Summerfield, 1996).

MSF has been addressing the psycho-social problems of the survivors of violence in Sierra Leone before, during and after the January 1999 events. MSF is very concerned that neglect of the mental health and psycho-social problems of the large number of people who are suffering from

prolonged traumatic experiences may cause serious problems for the future of Sierra Leone. Simply ending the war does not eliminate the problem.

MSF decided to start a psycho-social program in Freetown. As part of its program, a population survey was conducted in Freetown to learn what people experienced, to what extent the events resulted in traumatic stress, and what other medical needs the inhabitants had. In the absence of other psycho-social surveys in emergency situations to serve as a model, the survey instruments were composed and partly designed by MSF.

III. Methodology

1. Target Population & Sample

The survey was conducted after the permission of the appropriate authorities, during the first two weeks of May 1999. Which is four months after the atrocities in Freetown. Because everyone in Freetown had been subjected to traumatic experiences both Internally Displaced Persons (IDP's) and residents were included in the sample.

A two-stage cluster sampling method was used, a methodology based on health surveys. The methodology is extensively described in the various handbooks (WHO 1994; Bennet 1991). The sampling method entails a first phase where 30 clusters are chosen. In the second phase a preset number of individuals are chosen per cluster. The sampling technique itself ensures that every individual has an equal chance to be chosen. The result obtained through sampling techniques is an approximation of the real value in the entire population. The real population value is in a range around the value obtained by the sampling method. The narrower the range, the more precise is the estimation. The precision depends on the sample size and the intercluster variation and the intra-cluster variation of the specific survey. The precision of the results with this two-stage sampling technique is less than the precision one would get with a random sampling technique.

The sample consisted of 30 clusters of 8 respondents, as the intra-cluster variation was thought to be reasonably small as most traumatic events take place on a community level and not on an individual level. The sampling frame is based on the 1997 census of Ministry of Health and UNICEF which gives a population of 600.000. The rural part of the Western area (encompassing Freetown and its peninsula) were excluded because most of the area was not accessible during the survey for security reasons.

The areas (clusters) were chosen with a chance proportional to the population size. The teams went to the centre point of these areas; a pen was spun to determine the direction and every tenth house to the right was selected until the eight necessary for the cluster had been identified. The most senior member of the household present would be interviewed. Any refusals were noted and the selection process continued to the next tenth house. There was a note made on each questionnaire of the displaced or resident status of the interviewee. Where the cluster was in a displaced camp one person from each section of the camp was interviewed, depending on the layout of the camp.

Four survey teams were selected. Each team had to conduct eight interviews each day. All interviews were all scheduled in the first two weeks. Eight interviews per day per team was the maximum due to the difficult nature of the information gathered.

2. Training

The survey teams consisted of two trained local counsellors who did the interviews and a support team of one expatriate staff member and a driver. The training consisted of the following elements: introduction to MSF, the nature and purpose of survey, confidentiality of

the data and information, survey technique, data registration and task division among crews. Some survey questions may provoke strong emotions so the counsellors received special training on how to deal with them. They were also informed on referral possibilities for those in need of follow-up psychosocial support.

Counsellors practised interviewing skills on each other. The items of the questionnaire were discussed in depth until a final interpretation was agreed on each question. A pilot study of eight interviews was carried out by the teams in the National Stadium IDP site, Kingtom area, Aberdeen Junction and Murray Town. After the pilot interviews, problems of interviewing, sampling and approaching people were discussed. Ambiguities in the questionnaire were addressed. The training (including the pilot study) lasted two days.

3. The Interview

The counsellors worked in pairs. After the counsellors introduced themselves and MSF the purpose of the survey was explained to the potential participant. In the introduction it was clearly stated that the participant would not receive any compensation, that the data were treated confidential and that the interview would last for maximum of 40 minutes. After the introduction the participant could decide to co-operate. The timing of the interviews was crucial for people had to be at home and not busy.

It was important the participants completed the survey. To avoid exceeding the interview time it was explained that direct and short answers were necessary. Extra discussions or conversations were avoided. However, the counsellors were permitted to stop or interrupt the interview when they deemed the questions for the participant to be too emotionally upsetting. When the counsellor believed that the participant needed follow-up support, referral to professional counsellors was facilitated.

All teams had a daily technical and emotional debriefing. Further emotional support for the counsellors was provided through the MSF psychosocial peer support system for national staff which was trained by the MSF Amsterdam Public Health Department and Psychosocial Care Unit.

4. The Psychosocial Questionnaire

The structured interview was based on a questionnaire consisting of 35 questions with subdivisions.

To control the time of the interview most questions offered a limited number of alternatives from which the participant could choose. Only two questions in the health section of the questionnaire were open ended. To limit the emotional burden the questions were put as factually and simply as possible. When unclear, a short explanation was allowed. Participants were not allowed to fill the questionnaire later nor were they permitted to study the questionnaire in advance. Interviewers had to respect confidentiality at all times.

No trans-cultural tools to measure traumatic stress are available. To assess the level of trauma three important indicators of traumatic stress were measured. The first indicator is the presence of a potential traumatic event. The second indicator is the impact of event scale which expresses the extent of traumatic stress response. The third indicator appraises physical complaints which likely are correlated to traumatic stress. When all three indicators of traumatic stress were positive at least strong circumstantial evidence for the prevalence of traumatic stress was found.

The psychosocial questionnaire is composed of four sections.

The first section assesses the demographics and personal background of the participant. A second section appraises traumatic events such as exposure to violent situations, who was lost and the traumatic events witnessed. Both the number of traumatic experiences and their length are important risk factors in the development of PTSD (Kleber & Brom, 1992).

The third section measures the impact of these events. To measure the prevalence of traumatic stress responses the Impact of Event Scale was used (Horowitz, Wilner & Alvarez, 1979). This psychometric instrument assesses two central dimensions of coping with drastic life events: intrusion and denial. It has been used world wide and generally consistent structures have been found across samples and situations (Dyregrov, Kuterovac & Barath, 1996; Joseph, Williams, Yule & Walker, 1992; Robbins & Hunt, 1996; Schwarzwald, Solomon, Weisenberg & Mikulincer, 1987; Silver & Iacono, 1984; Zilberg, Weiss & Horowitz, 1982). Despite its wide use, interpretations of the outcomes should be done with appropriate care for the Impact of Event Scale is not validated either for Western Africa or for Sierra Leone.

The final section of the questionnaire evaluates current physical health complaints and needs. PTSD is frequently associated with somatization. Physical symptoms like headaches, stomach problems, general body pain, dizziness or palpitations are often expressed by people suffering from traumatic stress. A high prevalence indicates a possible high level of traumatic stress or PTSD. Physical are registered by means of open ended questions. The access to health care, the perceived health were registered using Lickerd scale.

5. Data registration

The forms were registered anonymously. Data were entered in a spreadsheet in EXEL, data were analysed by EXEL and EPIINFO-6.

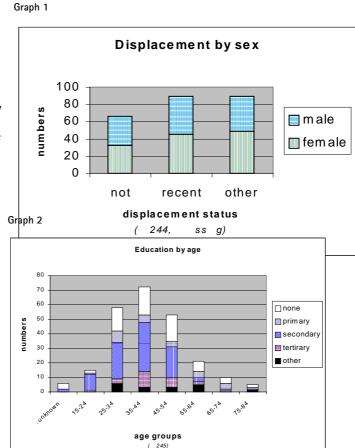
IV. Results

All four teams contributed equally to the survey (each 25%). The fixed number of interviews in each cluster (N=80) was extended in four clusters (Old Warf, Aberdeen, Approved School/Kuntoloh, National Workshop). The total number of respondents is 248 (N= 248), of which three respondents were excluded because they were younger than 15 years.

1. Demographics (First section)

In total 91 (37%) respondents were recently displaced; only 66 (27%) were residents. The others (37%) could not be placed in one of these categories. A possible explanation is that many people had been displaced in earlier years. About half (52%) of the respondents were female (Confidence interval 95% level: 46,4 – 56,8).

The age of the respondents varies from 15 up to 81 years with a majority of the respondents in the middle age group of 35-44 years (29%). The majority has attended primary school, also in the older age groups; on average 30% have not had formal education.

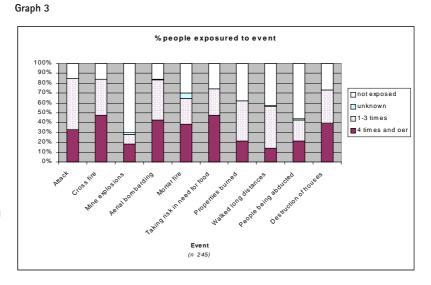


2. Appraisal of traumatic experiences (Second section)

2.1 Exposure to traumatic events

Graph 3 shows what situations the respondents have faced. Incidents include: attack on village

(84%), exposed to cross fire (84%), explosion of mines (28%), aerial bombing (83%), mortar fire (65%). burning of properties (62%) and destruction of houses (73%) indicate that large groups of the population of Freetown have been caught in direct war. In addition to the direct threats caused by the



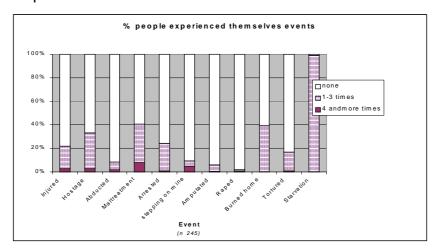
hostilities the lack of food and other commodities forced people to take extra risks (74%). A smaller number of people (57%) had to walk long distances to find a safer place. The risk of abduction was clearly present since 43% of the respondents reported to have been abducted. Generally half of the respondents indicate that the event had taken place more than three times.

Coping with traumatic events is more difficult when people themselves experience immediate life-threatening circumstances (Kleber, Brom; 1992). Graph 4 shows what life-threatening traumatic experiences some of the respondents have survived.

The respondents were allowed to report on all items. The percentages are related to the number of people having experienced that event as a proportion of the total number of respondents. Several people suffered from multiple life threatening experiences.

A high percentage of respondents experienced directly at least once for their physical integrity either by maltreatment (39%), torture (16%) or amputations (7%). 40% of the respondents have seen their houses burned down; 33% were taken hostage. The percentage of people reporting abduction is in contrast to the above relatively low (7%). The relatively low report on rape (2%) should not be misinterpreted. Rape is, as in most other countries, a taboo topic. Rape victims do usually not report this crime to avoid serious repercussion from their family or to evade the stigma communities and society impose on these victims.

Graph 4



The dire food situation is by far the highest life threatening experience reported by almost all the respondents (99%).

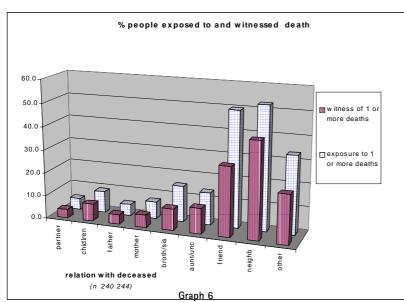
2.2 Loss and witnessing

Conflict and violence are

closely related to loss. Loss of loved ones and witnessing their violent death might be one of the most serious risk factors for PTSD. Graph 5 gives an overview of both.

The percentage of people lost increases with the number available. The loss in the nucleus family (partner (5%), father (5%), mother (7%), child(ren) (9%) and siblings (16%)) is reported less then the loss of more "distant" family members (aunt, uncles (14%)). The percentages

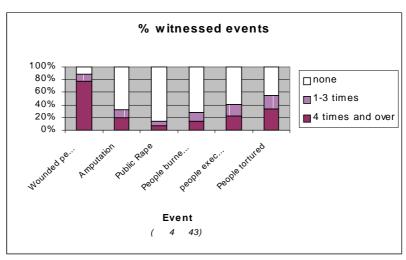
Graph 5



reported on death of neighbours (53%) and friends (50%), is clearly higher for there are more of them. These data indicate that at least 50% of the respondents lost someone they knew very closely. Many respondents witnessed the death of a close person: 30% witnessed the death of a friend; 41 % of a neighbour. Additionally 7% witnessed the death of their child.

To create terror a perpetrator often demands others to

witness the atrocities. The psychological impact of actually witnessing horrific events imposes a serious psychological stress. Deliberately or not, witnessing at least once events such as torture (54%), execution (41%), (attempted) amputations (32%), people being burnt in their houses (28%)

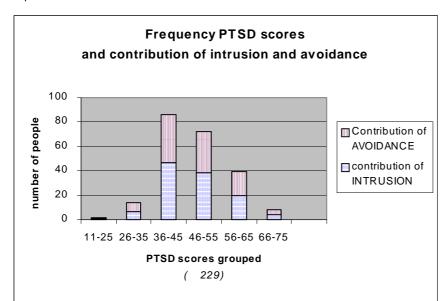


and public rape (14%) often results in traumatic stress or even PTSD. Almost all respondents reported to have seen wounded people at least once (90%). Graph 6 gives an overview.

3. Impact of Event Scale (Third section)

The inhabitants experienced horrific events. The third section measures the prevalence of traumatic stress responses through the Impact of Event Scale questionnaire (Horowitz, Wilner & Alvarez, 1979). The PTSD score as outcome of the Impact of Event Scale (I.E.S.), is constructed around two clusters of reactions. Intrusions such as flashbacks, nightmares and reliving the event are indicators of the preoccupation with the events survivors of violence often characterise. Complaints like "I can stop thinking about it" combined with the unpredictable occurrence of flashbacks often provoke feelings of having lost control or becoming crazy. To compensate the agony of ongoing intrusions survivors try to avoid situations, places, conversations or people that remind them of the events. The avoidance as well as the intrusions have a debilitating effect on the survivors' social life. Social withdrawal and a life obsessed by

Graph 7



fear and avoidance may be the destiny of those that suffer from severe, chronic PTSD.

The overall PTSD scores registered on the I.E.S. are high. When the cut of scores (no problem: 0-10, at risk: 11-25, PTSD: 26-75) for Western Europe are applied no one reports to having "no problem." Two people have scores indicating a risk for developing PTSD. All other respondents (99%) have scores on the I.E.S. that are associated with

PTSD in a West European setting. In the current survey most people (111, 27%) have scores between 36 and 45, which is close to the number of people having scores between 46 and 55. Graph 7 shows the scores on the I.E.S. No significant differences were found between the contribution of intrusions and avoidance on the overall PTSD score. There were 16 respondents who were not able to give a clear answer on one of the questions composing the PTSD scale; these respondents are excluded from the total PTSD score. The average score on the PTSD scale was 47.6, with a confidence interval of 45,6-49,6 (95% confidence level). This result shows a good precision.

The results on the I.E.S. are consistent with the conclusions on the appraisal of traumatic experiences. The reported high numbers of traumatic experiences may explain the high scores on the I.E.S. However, this conclusion has to be read with care. The I.E.S. is not validated in Sierra Leone and may therefore be subject to differences in understanding some questions. Moreover the cut-off scores may prove to be quite different then the ones used by us. Despite these considerations, high levels of traumatic stress are evident for even when the cut of score is raised to 55 (more then doubled), 63 people (25%) still suffer from severe traumatic stress or even PTSD.

4. Physical health (Section 4)

People suffering from traumatic stress and PTSD often have physical complaints, like headache, stomach problems, body pain, dizziness or palpitations. Frequently the complaints cannot be related to a physical disease or disorder. Nevertheless, the physical complaints are expressed in frequent visits to the overburdened health care settings. People continue to search for a physical cure to alleviate their emotional problems. Medical people are not aware or feel powerless against the somatizing patient and offer medication. Despite the costs both to the patient and the health system, it is frequently found in health settings in violent contexts. Some indicators of physical health and medical needs are described below.

Since the onset of the violence, the majority of the respondents (85%) perceive their health to be worse then before. Consistent with this finding is the occurrence of unclear physical symptoms reported by the majority of the respondents (78%). As result, 42% of the respondents visited the health post or clinic at least twice in the four weeks prior to the survey.

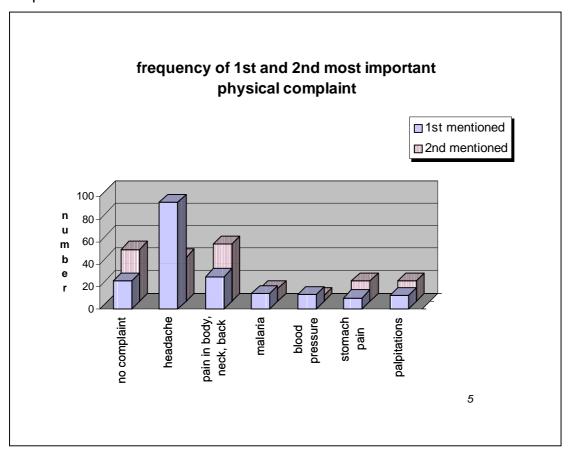
Table 1.

	NOT AT ALL	RARELY	SOMETIMES	OFTEN	n
UN-HEALTHIER	19	19	132	74	244
	(8%)	(8%)	(54%)	(31%)	
UNCLEAR	33	21	125	66	245
SYMPTOMS	(13%)	(9%)	(51%)	(27%)	
HEALTH POST	100	35	76	27	238
VISIT	(41%)	(14%)	(31%)	(11%)	

Table 1 is an overview of perceived health, the occurrence of unclear symptom and the number of health post/clinic visits (Rarely = 1; Sometimes = 2,3; Often = 4+).

The results of the fourth section (physical health) confirm the tendencies reported earlier. Traumatic stress associated with physical complaints (like headache (39%) and body pains (12%)) are reported most frequently. The visits of health facilities is relatively high (42%). The majority takes medication (e.g. paracetamol, panadol, vitamins, chloroquine).

Graph 8



V. Conclusions

The survey among respondents from all suburbs of Freetown indicates high levels of traumatic stress among the population survey. Every indicator (experienced events, Impact of Event Scale and Physical Health) points in the same direction. The indicators are discussed below.

The responses on the second section appraise the traumatic experiences of the respondents. The high percentages on certain events (starvation (99%), witnessing wounded people (90%), having lost someone close (at least 50%) results in a clear conclusion that most respondents living in all parts of Freetown have experienced at least one traumatic experience. It is likely they have been subjected to many more.

The Impact of Event Scale (Horowitz, Wilner & Alvarez, 1979) indicates high levels of traumatic stress and PTSD in the survey population (99%). The final score on the I.E.S. is constructed around two clusters of reactions: intrusions (e.g. flashbacks, reliving of events) and avoidance (e.g. evasion of situations, amnesia). Neither of them contributed significantly more to the overall PTSD score.

The outcome of the Impact of Event Scale (I.E.S.) is not conclusive and should be considered with care since the I.E.S. questionnaire is not validated for Sierra Leone and the cut-off scores applied in this report are based on West European data. The outcomes on the I.E.S. should not lead to the conclusion that almost everybody in Sierra Leone is traumatised and suffers from PTSD or other mental health problems. However, the high scores on the I.E.S. are supported by the outcomes on the appraisal of traumatic experiences (second section).

The results of the last section (physical health) confirm the tendencies reported earlier. Traumatic stress associated with physical complaints (like headache (39%) and body pains (12%)) are reported most frequently. The visits of health facilities is relatively high (42%).

The high levels of traumatic stress or even PTSD indicate a clear need for psychosocial or mental health interventions to address the needs of the survivors of violence in Freetown. To focus humanitarian aid only to material restoration and physical needs denies the shattered emotional worlds, ignores the ruined basic assumptions of trust and the benevolence of the human beings. It leaves unaddressed the broken morale and the spiritual consequences of war.

A population that is in general psychologically healthy can prosper and overcome the burdens of the past. Psychologically healthy people can also solve their disagreements in less violent ways. Helping traumatised people is a matter of restoring the bond between the individual and the surrounding system of family, friends, community and society. To overcome mass traumatisation as in the case of Sierra Leone the healing capacity of family and community systems supports people in their coping with extreme stress and more severe mental health problems. Psychosocial and mental health programs are evident tools in this process that should not be overlooked. The involvement of Sierra Leonians in these programs is of crucial importance.

==========

LITERATURE

- Ajdukovic, D. (1997) (Ed.). *Trauma recovery training: Lessons learned.* Zagreb: Society for Psychological Assistance.
- APA (1994). *Diagnostic and Statistical Manual of Mental Disorders*. Fourth Edition. Washington, DC: American Psychiatric Association.
- Bramsen, I. (1995). *The long-term psychological adjustment of World War II survivors in the Netherlands.* Delft: Eburon Press.
- Bennet, S., Woods, T., Liyanage, W.M., Smith D.L. (1991) A simplified general method for cluster sample surveys of health in developing countries. *Rapp.trimest.statist.sanit.mond*, **44**, 98-106
- Dyregrov, A., Kuterovac, G. & Barath, A. (1996) Factor analysis of the impact of event scale with children in war. *Scandinavian Journal of Psychology*, **37**, 339–350.
- Janoff-Bulman, R. (1992). *Shattered assumptions: Towards a new psychology of trauma*. New York: Free Press.
- Joseph, S.A., Williams, R., Yule, W. and Walker, A. (1992) Factor analysis of the Impact of Events Scale with survivors of two disasters at sea. *Personality and Individual Differences*, **13**, 693–697.
- Kleber, R.J. and Brom, D. (1992). *Coping with trauma: Theory, prevention and treatment.* Lisse, The Netherlands: Swets & Zeitlinger.
- Kleber, R.J., Figley, Ch.R. & Gersons, B.P.R. (1995) (Eds.). Beyond trauma: Cultural and societal dimensions. New York: Plenum.
- Kleber, R.J. (1997). Psychobiology and clinical management of posttraumatic stress disorder. In: J.A. den Boer (Ed.), *Clinical management of anxiety: Theory and practical applications* (pp. 295–319). New York: Marcel Dekker Inc.
- Robbins, I. & Hunt, N. (1996) Validation of the IES as a measure of the long-term impact of war trauma. *British Journal of Health Psychology*, 1, 87-89.

- Silver, S.M. & Iacono, C.U. (1984) Factor-analytic support for DSM-III's Post-Traumatic Stress Disorder for Vietnam veterans. *Journal of Clinical Psychology*, **40**, 5–14
- Schwarzwald, J., Solomon, Z., Weisenberg, M. & Mikulincer, M. (1987) Validation of the Impact of Event Scale for psychological sequelae of combat. *Journal of Consulting and Clinical Psychology*, **55**, 251–256.
- Summerfield, D. (1996). The impact of war and atrocity on civilian populations: Basic principles for NGO interventions and a critique of psychosocial trauma projects. *Relief and Rehabilitation Network Paper 14.* London: ODI.
- Van der Kolk, B.A., Pelcovitz, D., Roth, S., Mandel, F.S., McFarlane, A.C. & Herman, J.L. (1996). Dissociation, somatization, and affect dysregulation: The complexity of adaptation to trauma. *American Journal of Psychiatry*, 153, Festschrift Supplement.
- WHO (1992). *International Classification of Diseases* (Tenth Revision: ICD-10). Geneva, Switzerland: World Health Organization.
- WHO (1994). *House Hold Survey Manual: diarrhoeal and acute respiratory disease control.* Division of Control Diarrhee Acute Respiartory Disease. Geneva, Switzerland: World Health Organization.
- Zilberg, N.J., Weiss, D.S. & Horowitz, M.J. (1982) Impact of Event Scale: A cross-validation study and some empirical evidence supporting a conceptual model of stress response syndromes. *Journal of Consulting and Clinical Psychology*, **50**, 407-414.