The evaluation of mental health services in war: a case register in Bosnia-Herzegovina

Mental health programmes in war-stricken areas aim to offer immediate help to those who most need it. Usually, there is no urge to start a systematic registration on demographic data of clients and on characteristics of interventions. Nevertheless, there is a growing necessity to do so. Structured gathering of information can help professionals to obtain insight in the age, sex and number of clients they see, in the usefulness of the interventions they offer on the basis of which they can demonstrate the importance of their work. This paper describes the pros and cons of the development and implementation of such a monitoring system in Bosnia and Herzegovina. It is argued that although methodological disadvantages can be formulated against this type of evaluating services, the pros outweigh the cons, even in ongoing crises.

Keywords: mental health services, evaluation, war

Introduction
The last century saw an incredibly violent end to the former Federal Socialist Republic of Yugoslavia. Even during the war many programmes aimed to meet the psychosocial needs of the victims of armed conflicts (Ajdukovic & Ljubotina, 1995). Never before were there so many mental health programmes in a war-stricken area. Emergency mental health care programmes have been critically reviewed (Bracken, Giller & Summerfield, 1997), while at the same time the need for evaluation is being increasingly emphasised (De Girolamo, 1993; WHO, 1998; Silove, 2000). The WHO (1998) has stressed the importance of registering mental health care as well as mental disorders world wide, particularly in relation to emergency health care. In order to gain insight into the effectiveness of particular programmes for specific (sub)groups of the population, to learn about the short- and long-term consequences of major life events such as war and migration, or to examine the prevalence of disorders, systematic accumulation of data is required.

Directly following the Second World War, only a few studies were conducted on the consequences of war experiences (Eitinger, 1964; Freud & Burlingham, 1943). Nevertheless, even after almost half a century, the social and medical sciences clearly demonstrate the existence of long-term scars caused by this war (Kleber & Brom, 1992). Against this background, it is crucial to evaluate mental health programmes and psychosocial projects aimed at dealing with the adverse psychological consequences of armed conflict. Systematic evaluation of mental health projects and psychosocial
programmes, however, rarely takes place. For one reason, in crisis situations such as war, priority is not given to research when there are more pressing needs to fulfil. For another, daily dangers and harsh circumstances (e.g., no electricity) make it difficult to meet the demands of scientifically strict methodology.

In this article we will describe the monitoring system that was introduced by Médecins sans Frontières (MSF) in order to gain insight into the efficacy of their counselling programme in war-stricken Bosnia-Herzegovina. This monitoring system was set up as a case register; it fulfils the criteria for a systematic psychiatric case register in public health (Horn, Giel, Gulbinat, & Henderson, 1986). The objectives, procedures and instruments of the mental health case register in Bosnia-Herzegovina are being presented. Gains as well as shortcomings and limitations will be discussed. First, the context in which the register has been implemented will be briefly illuminated.

The MSF mental health programme
In April 1994, Médecins sans Frontières (MSF) Holland started a mental health project in the besieged city of Sarajevo, Bosnia-Herzegovina. This project was taken over by HealthNet International (HNI) in 1998. The general purpose of the programme was to prevent and reduce mental health problems due to war conditions. The methods used in the project were aimed at strengthening clients’ capacities for coping with their war experiences and to maximise and restore their resources for support.

Psychiatrists, psychologists, medical doctors, social workers, nurses and teachers were employed in multi-disciplinary teams working in ten counselling centres attached to health centres in various parts of Sarajevo (from 1994) and Central Bosnia (from 1996). A variety of interventions was offered. One was psycho-education, which during the war was given to the general public by means of a weekly broadcast on the local radio. It informed the public about traumatic stress reactions, means of support, and possibilities for referral (Brom & Kleber, 1989; Herman, 1992; Mitchell & Dyregrov, 1993). Special attention was paid to vulnerable groups such as orphans and refugees, or professionals in health care facilities (e.g., nurses) or service providers (e.g., fire fighters).

Besides psycho-education, interventions on both individual and group level were offered. On an individual basis, acute crisis intervention consisted of a very basic intake combined with emotional support, psycho-education and psychological structuring of emotionally drastic experiences. When more support was wished for, individual or group counselling was suggested. Group treatment was preferred for its secondary benefits such as sharing and providing mutual support (Grinker & Spiegel, 1945; Walker, 1981). Home visits were provided when clients were unable to visit the centres for counselling. Clients were referred when long-term treatment or pharmaceutical care was indicated (Marmar, Foy, Kagan & Pynoos, 1993).

The Bosnian case register
Instituting the register. A (psychiatric) case register has been defined as ‘A patient-centred longitudinal record of contacts with a defined set of psychiatric services, originating from a defined population that has been used on more than one occasion’ (Tén Horn et al., 1986, pp. 388). The Bosnian case register met all criteria mentioned in this definition, except the description of the target population: due to war
and migration, the target population was changing constantly, rendering it difficult to obtain insight into the demographical characteristics of the community. Though in Zagreb (Kulcar, Folnegovic-Smalic & Rogina, 1986) and Belgrade (WHO, 1987) expertise with case registers existed, no examples of mental health care registrations used under war circumstances were known to us. A new system had to be developed and people had to be trained. Instruments were introduced step by step and were adapted following suggestions by counsellors. Although Bosnia-Herzegovina is part of Europe, a cross-cultural check of the instruments had to be included. Guidelines were written and a programme for computer storage was developed. After being in use for approximately one year, the monitoring system was revised. Once the war was officially ended in December 1995, new changes were indicated since some of the questions were exclusively related to the war, while many clients presented problems that were related to the post-war situation, in particular economic circumstances (lack of job, poverty, migration).

**Instruments.** Since 1995, the case register consisted of ten forms. Demographic data and information on the personal background of clients was gathered, such as (post-)war-experiences, family situation, physical as well as psychological complaints. Four forms were designed to register data on the different kinds of treatment (crisis or short intervention), individual intervention, group or family, intervention and psycho-education. On all forms, codes were assigned to chosen methods and the main topics for discussion were noted. Subsequently, central characteristics of mental health and coping with traumatic stress were assessed by the use of four psychometric instruments, most of them internationally known and tested: 1. The General Health Questionnaire (GHQ-28 (Goldberg & Hillier, 1979). This questionnaire had been used earlier in an Eastern-European population (Havenaar, 1996). It distinguishes four clusters of complaints: somatic, social and depressive symptoms, anxiety and insomnia). 2. The Impact of Event Scale (IES; Horowitz, Wilner & Alvarez, 1979). This scale was chosen to measure the intrusive and avoidance responses to traumatic stress. Like the GHQ, it has been used world wide and consistent structures have been found across samples and situations (Dyregrov, Kuterovac & Barath, 1979; Joseph, Williams, Yule & Walker, 1992; Robbins & Hunt, 1996; Schwarzwald, Solomon, Weisenberg & Mikulincer, 1987; Zilberg, Weiss & Horowitz, 1982). 3. For use with children, the Birleson Self Esteem Scale (Birleson, 1981; Yule & Udwin, 1991) was introduced. It produces an indication of the occurrence of feelings of sadness and depression. 4. Where clients were too young to fill in forms themselves, a checklist for problematic behaviour in children was presented to their carer(s). 5. As a final self-report scale, an instrument for the evaluation of the intervention was selected. This shortlist of items reflecting possible attitudes towards the intervention, was developed earlier in a controlled outcome study on PTSD-treatment (Brom, Kleber & Defares, 1986). Both clients and counsellors complete this questionnaire.

All items of these instruments were translated and back-translated until complete consensus was obtained. The instructions for answering the GHQ-items were adapted. Because it was difficult to judge ‘as usual’ in an ongoing war situation, the categories stating a position different from ‘as usual’ were changed into degrees of occurrence.
**Procedures.** Clients were asked to complete instruments twice: both at the start and at the end of counselling. Anonymity was emphasised. In practice, hardly anyone objected to personal registration. Once counselling had ended, the data were taken to headquarters and entered in the computer. The co-ordinator of the register visited the centres weekly and collected the forms. A programme developed for epidemiological surveys (Dean et al., 1990) and compatible with the software for statistical analyses (SPSS Inc., 1997) was used. The data files were checked for inconsistencies or missing answers and discussed with the counsellor the next time the co-ordinator visited the centre. For reasons of confidentiality, computer registration was anonymous and clients were assigned a unique identification code. This code was re-used when a client visited a centre a second time.

**Results.** The register informed the project management by providing the numbers of interventions and numbers of clients seen in the centres. The counsellors used instruments that facilitated diagnostic assessment. In addition, the systematic registering of clients and services provided information on the need for professional support in this war-stricken society. The impact of war could therefore be estimated. Lastly, the effects of mental health services in times of war could be analysed. Based on the data in the register, more than 21,000 clients have been seen by counsellors from the start of the programme in Autumn 1994 until March 1999 (Table 2). Though extra centres were opened in 1996, the numbers of clients seen in the project did not rise until 1997. One of the most important explanations that has been given was the presence of a general atmosphere of hope and shared trust in a better future after the Dayton Accord was signed in December 1995. In the course of 1996, this glorious feeling faded away. In 1998, there was a growing tendency to focus more on individual counselling, involving more severe problems and being more time-consuming. Generally, over subsequent years, most of the clients have participated in group interventions. A substantial number

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<th>Number of clients in subsequent years (Autumn 1994-Winter 1999)</th>
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<td>Family counselling (as off 1997) (a)</td>
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<td>Short- or crisis intervention only (b)</td>
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<td>Psycho-education (c)</td>
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<td>Total number of clients</td>
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(a) Counselling with families was registered as group counselling before 1997; (b) this is the number of ‘real’ short or crisis interventions, thus without continued individual or group counselling; (c) there is no registration of dates of psycho-education sessions; no distinction among different years could be made – in total 238 groups received psycho-education in this period.
of citizens have received information by means of psycho-education, while several thousand have been seen individually, either for a few sessions, or on more occasions.

Discussion: the pros and cons of evaluation in wartime

Competing priorities. Though monitoring is extremely relevant in these extreme conditions, the priority has been to provide support for those in psycho-social need because of their war experiences. This obvious choice had consequences for the implementation of the case register. It has only been implemented when time and human capacity permitted monitoring issues to be addressed. Both the mental health programme and monitoring system have been implemented under very difficult circumstances. Practical consequences of siege, such as lack of paper, food, electricity, gas and printing facilities, are only a few examples of the problems encountered, besides the obvious dangers of war, such as the risk of being shot by snipers. These constraints caused delay in implementation. Furthermore, the demands of implementing a case register in terms of time investment is considerable.

On the other hand, however, the large-scale availability of computers and software has made it possible to gather and store large numbers of data systematically, even in wartime.

Shared responsibility. The establishment of this data base has been dependent upon the efforts of professionals working with clients in counselling centres, as well as of the staff responsible for data-entry. Looking at data registration procedures, it can be concluded that forms were used with great precision. Inconsistencies encountered while entering data in the computer were discussed in the centres and corrected. When, for instance, an identification code was used twice, a new one was assigned in the centre. Much effort has been put into understanding what is meant by the different forms and questions. Regular meetings were organized with the teams during which the relevance, background and meaning of the questions and instruments was discussed.

Counsellors found it difficult to work with some of the questions. Some elements in the system, such as the amount of experienced traumatic events, seem to have been strongly underreported. Some questions, such as the question for coping resources in the client file, are so general that the answers do not seem to be very valid.

Altogether, counsellors had to do a lot of paperwork. They were directly involved in creating and revising the register. As a safeguard for their motivation, it was important to guarantee feedback. From the beginning, the necessity of frequent feedback was stressed. This was successfully realised to some extent. On a few occasions presentations were given of the findings based on the register.

In this project, the analysis of the data was dependent on input from abroad. Although it was stated at the start of the project that data would be analysed by local staff, the great mobility of staff members among NGO’s caused a vacancy. To guarantee close cooperation between clinicians, data-analyst(s) and also programme managers, however, it would be best to have local professionals for all jobs.

Confidentiality. It is crucial to use unique identification codes for every client. Registration is client-based, not event-based. This has had implications for storing data in the computer and client files. For a while counsellors carried little booklets around containing confidential notes. The filing of confidential information has been an issue that has been extensively discussed.
and finally solved by providing the opportunity to put personal notes in the forms and providing each centre with a locked cabinet and a computer.

Choice of instruments. Most of the suggested instruments were previously unknown to the professionals involved. Use and interpretation had to be explained repeatedly. Unfortunately, in daily practice not all questionnaires were used with all clients. Obviously, the choice of instrument is determined by the age of a client. Next, diagnostic needs guide the decision what list to use. Furthermore, some questionnaires seem to be more popular than others. In Sarajevo for instance, a certain reluctance has been observed to use the Impact of Event Scale – especially since the war ended. This has been explained by the implicit view that this scale is only useful when a client has experienced a drastic event recently. Other counsellors objected to the General Health Questionnaire, because of its strong focus on severe depressive feelings. Introducing new instruments has required repeated explanation of purpose, procedure and interpretation.

No proof beyond doubt. Presenting clients with similar questionnaires at the beginning as well as at the end of intervention provided insight into the effects of counselling (described elsewhere, see Mooren et al., 2003). Effects of treatment programmes are very difficult to assess however, as is shown by psychotherapy outcome research (Brom, Kleber & Defares, 1989). Ideally, one needs some kind of control group to assess the effects of the help provided. Data of clients on a waiting list or placebo treatment should be collected and compared with assessments of clients who receive help. Scientifically sophisticated studies are, however, hard to conduct in war-stricken countries, due to ethical as well as logistical reasons.

Lessons learned. To summarise our experiences with the implementation and use of the monitoring system, we can derive several recommendations: The implementation of a registration system in a crisis situation is perfectly feasible at a time when computer facilities are mobile and widespread. The energy and input in terms of professional staff and time is worthwhile since information on number and characteristics of clients becomes available. At the same time, the protection of personal information needs special attention. Although unlikely to be completely culturally specific and valid, general screening questions and instruments can help to focus on the needs met. However, careful consideration of the instruments (for instance for evaluation purposes) is necessary, since norms and psychometric properties for the target population are not likely to be available. For more than one reason it is best to employ a local researcher for the analysis and reporting of data. Regular feedback is important for the continuity of registration. Finally, a monitoring system can help programme managers and professionals to demonstrate the efficacy of their work. Since most projects are dependent upon time-restricted subsidies, a registration system can provide useful support.

Future developments
The implementation of mental health programmes in war-stricken areas and (chronic) conflict zones enjoys a rapidly growing interest. This is a positive development given the long-term neglect of behavioural, mental and social issues in emergency interventions. The contrast between this popularity and the lack of theory-based descriptions of mental health interventions and evaluations is nevertheless striking (Bracken, Giller & Summerfield, 1997; WHO, 1998; Silove, 2000).

An explorative evaluation method was
described in this article. Measurements and procedures were developed or selected by improvisation, by trial and error, and by suggestions of experienced researchers in the field of mental health and traumatic stress studies. Since implementation, the mental health project has gone through several transitions. The aim has been to proceed with the registration of clients and services. In the meanwhile, based on the experiences gained and the objectives for future mental health work, a new monitoring system has been developed. The number of forms has been reduced in the new case register. A local researcher has been appointed the task – among others – of providing feedback to the professionals. Client files have been stored at the centres, and precautions with regard to confidentiality of information have been taken.

Although pragmatically started during the war in Sarajevo, improved after first use in 1995 and ongoing throughout 1999, the monitoring system provided a rich source of structured information on the people who experienced war in Bosnia and the help they were offered. A data-set encompassing structured information of more than twenty thousand war-stricken Bosnian persons provides answers to questions with regard to mental health care (e.g., which health concerns are presented) and the identification of risk groups (who find their way to the centres, who don’t?). The use of standardised questionnaires both at the start as well as at the end of intervention, together with the subjective evaluative judgements of both clients and counsellors, gave insight into the acknowledgement of these needs and the efforts to meet them (results have been described elsewhere, see Mooren et al., 2003).

This case register, developed and implemented in a war situation, has been described as an illustration of a method for evaluation of mental health interventions. The lessons learned could easily be applied to programmes designed to offer relief following other crises, such as natural or technological disasters. Systematic registration and filing in order to evaluate the help offered to the unfortunates stricken by disaster will provide opportunities for follow-up and longitudinal study. Though wars differ from natural disasters such as hurricanes or floods in important ways (duration, perpetrator), experiences of trauma, loss, societal destruction, migration and acculturation may be identifiable as well.

For clinicians and clients themselves, the introduction of standardised instruments and the provision of forms that provide an overview of demographic and background data, offered a structured way of perceiving complaints and symptoms. Even though adequate norms have been lacking, instruments have been both criticized as well as warmly welcomed.

Finally, special motivation for putting effort into the implementation of a valid register lay behind the initiative to report the violence and harm that was inflicted upon the Bosnian people. For all those involved it has been of eminent importance to register what happened during that fearful episode of history. Through registering clients and their complaints, insights could be gained into the public health consequences of war and siege. The monitoring data thus also served as an historical document demanding recognition for those who suffered.
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