

Community Mental Health Centres Initiated by the South-Eastern Europe Stability Pact: Evaluation in Seven Countries

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Received: 15 December 2009 / Accepted: 15 November 2010
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Abstract Eight community mental health care centres (initiated by the South-Eastern Europe Stability Pact) in Albania, Bosnia-Herzegovina, Croatia, Macedonia, Moldova, Montenegro and Romania were evaluated. Characteristics of patients, patient reported outcomes and patient views of care were assessed in 305 psychiatric patients. Patient characteristics varied across centres, with most patients having long term psychotic disorders. Treatment

satisfaction and therapeutic relationships were rated favourably. Subjective quality of life mean scores were rather low, with higher satisfaction with health and dissatisfaction with the financial and employment situation. Being unemployed was the only factor associated with poor quality of life and lower treatment satisfaction. Most developing centres target patients with persistent psychotic disorders. Care appears highly valued by the patients. The

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findings encourage establishing more centres in the region and call for employment schemes for people with mental illnesses.

Keywords Mental health care evaluation · South-Eastern Europe · Quality of life · Treatment satisfaction · Therapeutic relationship

Introduction

In 1999, the European Union founded the Stability Pact for South Eastern Europe (SEE) as a framework for the regional stability with an emphasis on the promotion of democracy, human rights, economic prosperity and security issues. It followed a period of fundamental political change in the region. The addition of health to the agenda of the Stability Pact Social Cohesion Initiative led to the establishment of the SEE Health Network in 2001 as a platform for regional cooperation in public health. The SEE Mental Health Project (“Enhancing Social Cohesion through strengthening Community Mental Health Services in South Eastern Europe”) was the first project formed by the network (WHO 2009). The project was carried out between 2002 and 2008, involving 9 countries: Albania, Bosnia and Herzegovina, Bulgaria, Croatia, FYR Macedonia, Moldova, Montenegro, Serbia, and Romania. It was based on the wide spread view that the old fashioned and asylum based system of mental health care that was still prevailing throughout region should be reformed (Kucukalic et al. 2005). Supported by the WHO Regional Office for Europe and the Council of Europe it was intended to be a first substantial step in the transition to modern community based models of mental health care in the participating countries. The three main objectives were: to adjust and amend mental health policies and mental health legislation so that they are in line with international standards, in particular those of the European Community; to implement a harmonised model of community mental health services across the region; and to establish region-wide training curricula for mental health professionals.

The project initiated the establishment of multidisciplinary pilot community mental health centres (CMHCs) as a first step towards a comprehensive service reform. Overall, ten centres were established, i.e. two centres in Bosnia and Herzegovina and one in each of the other countries. The WHO provided guidance about principles of good practice in community mental health care and arranged workshops for staff training. However, it was left to national and local agencies to decide on how exactly these centres should operate and what precise treatment programmes they should provide. This study aimed to evaluate the pilot CMHCs in different SEE countries by providing data on the

characteristics of patients, patient reported outcomes and patients’ experiences of treatment. This was also an opportunity for the CMHCs involved to gain experiences in the documentation and systematic collection of data which may be seen as important for the accountability and quality management of mental health services.

The study addressed four questions:

1. What are the socio-demographic and clinical characteristics as well as the patterns of health and social service use of patients in the CMHCs?
2. What are their subjective quality of life (SQOL), treatment satisfaction (TS), and rating of the therapeutic relationship (TR)?
3. What patient characteristics are associated with more or less favourable SQOL, TS and TR ratings?
4. What are the views of the patients about the treatment received?

Methods

This exploratory cross-sectional study was coordinated by the Unit for Social and Community Psychiatry, Queen Mary University of London. The partners in the study were the SEE Mental Health Project regional offices in Albania, Bosnia and Herzegovina, Croatia, FYR Macedonia, Moldova, Montenegro, Romania and the WHO Regional Office for Europe. We had planned to conduct the study also in centres in Bulgaria and Serbia, but for organisational reasons data could not be collected. The evaluation undertaken in this study was seen as an integral part of the initiative and not a separate research project. Data was collected in 2007 and 2008.

Settings

The study was conducted in eight pilot CMHCs in seven countries: Albania (Vlora), Bosnia and Herzegovina (Mostar and Prnjavor in the two political parts of the country), Croatia (Zagreb), FYR Macedonia (Strumica), Moldova (Chisinau), Montenegro (Kotor), Romania (Bucharest). All centres had multi-disciplinary teams and were established within the Mental Health Project for SEE to implement mental health programs for patients in community. In Zagreb two centres were planned aiming at different target groups, i.e. one for patients with severe and persistent mental disorders, as in other participating countries and another one mainly for patients with mood and anxiety disorders. Due to organisational problems only the latter centre was implemented and included in this evaluation. In other countries (and in each of the two

Table 1 Characteristics of pilot community mental health centres

| Country: | Albania | Bosnia and Herzegovina | | Croatia | FYR Macedonia | Moldova | Montenegro | Romania |
|---|---------|------------------------|----------------|----------------|------------------|----------------|------------|-----------|
| Location: | Vlora | Mostar | Prnjavor | Zagreb | Strumica | Chisinau | Kotor | Bucharest |
| Number of residents in catchment area | 130,000 | 65,000 | 50,000 | 84,000 | 120,000 | 110,000 | 60,000 | 120,000 |
| Professionals employed | | | | | | | | |
| Psychiatrists | 2 | 1 | 1 ^a | 8 ^a | 1 | 4 ^a | 1 | 1 |
| Nurses | 7 | 3 | 2 | 2 | 6 | 2 | 2 | 2 |
| Psychologists/psychotherapists | 1 | 1 | 2 | 4 ^a | 1 | 2 | 1 | 2 |
| Occupational therapists | — | 1 | 1 | 1 | 1 | 1 | — | 1 |
| Social workers | 1 | 1 ^b | 1 ^a | — | 1 | 1 | 1 | 1 |
| Types of interventions | | | | | | | | |
| Crises intervention | — | + | + | + | — | — | — | — |
| Individual psychotherapy | + | + | + | + | + | + | + | + |
| Group psychotherapy | — | — | — | + | — | — | + | + |
| Family therapy/therapeutic sessions with families | + | + | + | + | + | + | + | + |
| Psychoeducation | + | + | + | + | — | — | — | + |
| Occupational therapy | — | + | + | + | + | + | — | — |
| Art and music therapy | — | — | — | + | — | — | — | + |
| Rehabilitation activities, living skills training | + | — | — | + | + | — | — | + |
| Home visits; mobile teams | — | + | + | + | + | — | + | — |
| Support for self-help groups | + | — | — | + | — | — | — | — |

^a Members of staff employed part-time

^b Volunteers

political parts of Bosnia and Herzegovina) there had been only one service from the very beginning. Table 1 shows the size of the catchment areas, staffing and type of interventions of each CMHC.

All aspects show substantial variation across CMHCs. The size of catchment areas ranged from 50,000 to 130,000 inhabitants, and staffing from 6 to 17 members. Interventions usually included psychological interventions and occupational activities.

Participants and Procedure

All patients with severe mental illness who were cared for by CMHCs between mid 2007 and mid 2008 were considered for eligibility for the study. The same inclusion criteria were used in all the centres:

- Being cared for by the CMHC as a psychiatric patient in the community.
- Aged between 18 and 65 years.
- Not suffering from learning difficulty or organic brain disease.
- Capacity to provide informed consent.

We aimed at interviewing 40 patients in each CMHC. Eligible patients were informed about the study by their clinician and asked to be approached by an interviewer. In the two centers in Bosnia and Herzegovina, the patients who were approached to participate in the study by the clinicians were a random sample of all those patients on the total caseloads that fulfilled the inclusion criteria (120 and 122, respectively). Other centers approached consecutive patients attending the centre. The nature and aims of the study were explained to all potential participants. Once they agreed to take part and informed consent was obtained, the interview was arranged and conducted. All interviewers were qualified psychiatrists or psychologists and native speakers of the language of the focal country. The patients were interviewed at the premises of the CMHCs.

Measurements

In the absence of consistent documentation of patient characteristics in medical records across the centres, all data used in the study was specifically recorded. Socio-demographic characteristics were assessed using the Manchester Short Assessment of Quality of Life (MANSA)

(Priebe et al. 1999). The characteristics recorded include sex, age, age of leaving education, employment status, income, living arrangements and type of residence. These data were used to form an objective index of social outcomes which combines aspects of the employment situation, housing situation, and living situation into one single index ranging from 0 (worst social situation) to 6 (best social situation) (SIX) (Priebe et al. 2008).

The MANSA also contains 12 items for assessing satisfaction with life as a whole and different life domains, rated on a Likert-type scale ranging from 1 (worst satisfaction) to 7 (best satisfaction). The mean score of these 12 items was taken as a measure of subjective quality of life. The MANSA has previously been used in both community and clinical samples in former Yugoslavia (Jankovic Gavrilovic et al. 2005; Priebe et al. 2010a, 2010c).

With respect to clinical characteristics of the patients, the clinical diagnosis according to ICD 10 (obtained from a clinician), age at the first onset of illness (alternatively at first hospital admission), number of hospital admissions, total duration of all hospital treatments, involuntary hospital admissions in the past, and sources of referral to the current service were recorded.

Living with a carer was defined as living with a partner, parent(s) or a child over 18 years of age only, as opposed to living alone or with a child under 18 years of age only. Duration of illness was computed by deducting the age of onset of illness from the age of participant at the time of interview.

Satisfaction with treatment was assessed using the 8 item Client Satisfaction Questionnaire (CSQ-8) (Attkisson and Zwick 1982; Larsen et al. 1979). The instrument contains 8 items rated on a Likert-type scale ranging from 1 (low satisfaction) to 4 (high satisfaction). Participants' mean scores were used to create an index of satisfaction with treatment.

The quality of the therapeutic relationship with a key clinician was assessed on the patient version of the Scale to Assess Therapeutic Relationships in Community Mental Health Care (STAR-P) (McGuire–Snieckus et al. 2007). The instrument has been developed specifically for assessing the therapeutic relationship in community psychiatry. It contains 12 items on a Likert-type scale ranging from 0 (never) to 4 (always). Participants' mean scores were used to create an index of the quality of therapeutic relationship. For organisational reasons, the data for STAR-P scale was not collected in the centre in Vlora, Albania.

Type of care and interventions received were recorded retrospectively for the 3 months prior to the interview on the Client Service Receipt Inventory (CSRI) (Beecham and Knapp 2006). Services include primary and secondary health care, social care, medication, and informal care from family/friends.

Patients' experiences with CMHCs were recorded using four open response formats (1 = general experiences, 2 = strengths of the service, 3 = weaknesses of the service, 4 = wishes for care and changes in future). Answers were recorded by the interviewer.

Data Analysis

The characteristics of the sample and patient reported outcomes were analysed using descriptive statistics. Tests of statistical significance were applied only to the total group (and not separate centres because of small sample sizes) to identify which socio-demographic and clinical characteristics are associated with more or less favourable SQOL and ratings of TS and TR.

Analyses using fixed effects linear regression model (with centers as fixed effects) were applied to explore the factors potentially associated with SQOL, TS and TR ratings, i.e. age, gender, education, employment status, living with a carer, clinical diagnosis according to ICD-10 (psychotic, mood or anxiety disorders), duration of illness and the experience of involuntary admission in the past. The three-level categorical variable "diagnosis according to ICD -10" (patients with psychotic, mood or anxiety disorders) was transformed into two dummy variables with psychotic disorders as a reference group.

Missing values for the items of outcome variables were substituted by the average mean values for the relevant country. Items on the MANSA were missing for 4 patients and on the CSQ-8 for one patient. The missing values for STAR-P in Vlora were not replaced for this centre. The data were managed and analyzed using STATA, version 10.1 (StataCorp., Texas, USA).

Patients' responses to open questions on their views of treatment were subjected to content analysis.

All the authors certify responsibility for the manuscript. There are no known conflicts of interest.

Results

In the eight centres, 368 patients were identified and approached who were potentially eligible for participation during the study period. Out of these, 27 were not interviewed because they did not consent to participate (4), could not be contacted (4), had moved away (7) or did not attend the interview (12). A total of 341 patients were interviewed in all the centres (Vlora: 40; Zagreb: 40; Strumica: 40; Chisinau: 51; Kotor: 50; Bucharest 40; Mostar: 40; Prnjavor: 40). Out of these, 6 were excluded from the analysis as they were over the age limit, and a further 30 were excluded because of the existence of an

organic disorder or learning difficulties. Therefore, data on 305 participants were analyzed (Vlora: 40; Zagreb: 37; Strumica: 40; Chisinau: 22; Kotor: 48; Bucharest: 40; Mostar: 39; Prnjavor: 39).

Characteristics and Service Use of Patients

Patients' socio-demographic and clinical characteristics are summarized in Table 2.

Overall, patients had a mean age of 41.1 (SD 10.3) years, were mostly male and unemployed, lived in their own house or flat, and lived with a carer. Only in Zagreb were the majority of patients female and employed. Apart from the CMHC in Zagreb, where most patients had mood disorders and the average duration of illness was 5.8 years, patients had mostly psychotic disorders and a mean duration of illness of 10 years or more with several hospital admissions in the past. The summarizing index of objective social outcomes shows that the patients in Zagreb were in a much more favorable social situation than those in other centers.

Table 3 shows which services patients used in the 3 months prior to the interview. Contacts with psychiatrists, psychologists and social workers were provided in the CMHCs, whilst primary care input was outside of them.

Most patients had been in contact with primary care and psychiatrist as well as psychologists in the CMHC.

Patient Reported Outcomes

The mean scores of CSQ-8, STAR-P, MANSA are shown in Table 4.

Mean scores of CSQ-8 are all 24.9 or higher. CSQ-8 scores and even more so STAR-P scores show considerable variation across centres, i.e. several mean scores differ by more than one standard deviation.

The MANSA mean score for the total sample was 4.1, i.e. just above the neutral middle point of 4.0 on the rating scales. There was substantial variation across centres, but even clearer differences between the satisfaction ratings with different life domains. Throughout most centres patients were relatively satisfied with the relationships with their family, their personal safety, accommodation, and also their physical and mental health. However, they were dissatisfied with their sex life, and their financial and employment situation.

The results of fixed effects linear regression analyses are shown in Table 5.

When we tested diagnosis, age, gender, level of education, employment status, living status (with a carer or not), duration of illness and experience of involuntary admission

in the past for their correlation with SQOL mean scores, only employment status was significantly associated with SQOL. Employment status remained significant in a multivariable analysis, when all other variables including the CMHC and the type of mental health diagnosis were adjusted for. Unemployed patients reported significantly poorer SQOL ($B = -0.44$, 95% CI -0.66 to -0.22 , $P < .001$), as compared to those who were employed or in education.

Unemployment was also the only factor significantly associated with lower treatment satisfaction ($B = -1.08$, 95% CI -2.08 to -0.08 , $P < 0.034$) in a multivariable analysis.

When the same independent variables were tested for their correlation with STAR-P mean scores, only older age was associated with better ratings of TR in univariable regressions. This association remained significant in the multivariable analysis ($B = 0.15$, 95% CI 0.04 – 0.26 , $P = 0.006$). Living with a carer ($B = 2.20$, 95% CI 0.44 – 3.96 , $P = 0.015$) reached significance in multivariable analyses after adjusting for other factors, indicating a positive association with better TR ratings.

Patients' Experiences of Treatment

The qualitative data on patients' views of the care received was collected for 164 participants in 4 centres: Mostar (Bosnia and Herzegovina), Zagreb (Croatia), Kotor (Montenegro) and Bucharest (Romania). Regarding the general view of the care provided in the CMHC, 141 (86%) of patients described the overall experience as positive and pleasant: "*Pleasant surprise, friendly environment in which I feel comfortable*" (ID No 119, Zagreb, female, 51) as well as helpful: "*This program is helping me to have a better relationship with myself*" (ID No 306, Bucharest, male, 23).

Attentiveness and commitment of staff were seen as the particular strengths by 85 patients across the assessed centres (52%): "*This is a completely different approach compared to other psychiatric services, kind and professional personnel*" (ID No 139, Zagreb, Male, 28). They praised staff for their patience and readiness to help: "*Everybody is so full of understanding and prepared to listen about our needs*" (ID No 300, Mostar, female, 36). The easy availability and accessibility of CMHCs was reported by 25 patients (15%) who were specifically satisfied with the option to self-refer, the short waiting list and the adequate times for appointments. The opportunity to socialise with other patients (14 patients, 9%) was also valued: "... *I have met many new people to whom I can talk about my difficulties*" (ID No 301, Mostar, Male, 37). Finally, vocational and leisure activities in the CMHC were

Table 2 Socio-demographic and clinical characteristics of patients including objective social outcomes index (SIX)

| | Albania | | Bosnia and Herzegovina | | Croatia | | FYR Macedonia | | Moldova | | Montenegro | | Romania | | Total sample N = 305 |
|---|-----------------|------------------|------------------------|--------------------|------------------|--------------------|--------------------|-----------------|---------------------|--|------------|--|---------|--|-------------------------|
| | Vlora N = 40 | Mostar N = 39 | Mostar N = 39 | Prijavor N = 39 | Zagreb N = 37 | Strumica N = 40 | Chisinau N = 22 | Kotor N = 48 | Bucharest N = 40 | | | | | | |
| <i>Socio-demographic characteristics</i> | | | | | | | | | | | | | | | |
| Age (years), mean (SD) | 39.2 (8.6) | 40.7 (10.9) | 47.2 (10.2) | 36.1 (10.5) | 40.3 (10.1) | 46.5 (9.5) | 37.4 (6.5) | 41.1 (10.3) | | | | | | | |
| Sex, n (%) | | | | | | | | | | | | | | | |
| Female | 14 (35) | 14 (35.9) | 19 (48.7) | 25 (67.6) | 7 (17.5) | 20 (41.7) | 16 (40.0) | 123 (40.3) | | | | | | | |
| Male | 26 (65) | 25 (64.1) | 20 (51.3) | 12 (32.4) | 33 (82.5) | 28 (58.3) | 24 (60.0) | 182 (59.7) | | | | | | | |
| Age (years) at leaving full time education, mean (SD) | 15.3 (2.5) | 19.0 (3.1) | 16.6 (4.3) | 20.9 (4.0) | — | 18.3 (3.5) | 19.6 (2.6) | 18.1 (3.8) | | | | | | | |
| <i>Employment, n (%)</i> | | | | | | | | | | | | | | | |
| Employed | 2 (5) | 5 (12.8) | 5 (12.8) | 20 (54.1) | 2 (5.0) | 3 (6.3) | 7 (17.5) | 52 (17.0) | | | | | | | |
| In sheltered employment | — | — | 1 (2.6) | — | — | — | 3 (7.5) | — | | | | | | | |
| In training/education | — | — | 1 (2.6) | 5 (13.5) | 1 (2.5) | — | — | 8 (2.6) | | | | | | | |
| Unemployed | 37 (92.5) | 21 (53.8) | 17 (43.6) | 8 (21.6) | 30 (75.0) | 18 (37.5) | 24 (60.0) | 169 (55.4) | | | | | | | |
| Retired | 1 (2.5) | 13 (33.3) | 15 (38.5) | 4 (10.8) | 7 (17.5) | 27 (56.3) | 2 (5.0) | 69 (22.6) | | | | | | | |
| Other | — | — | — | — | — | — | 4 (10.0) | 7 (2.3) | | | | | | | |
| <i>Type of residence, n (%)</i> | | | | | | | | | | | | | | | |
| Own house/flat | 35 (87.5) | 39 (100) | 35 (89.7) | 33 (89.2) | 36 (90) | 41 (85.4) | 40 (100) | 279 (92.5) | | | | | | | |
| Other residence | 5 (12.5) | — | 4 (10.3) | 4 (10.8) | 4 (10) | 7 (14.6) | — | 26 (8.5) | | | | | | | |
| <i>Living with a carer, n (%)</i> | | | | | | | | | | | | | | | |
| Yes | 18 (45) | 34 (87.2) | 24 (61.5) | 27 (73) | 29 (72.5) | 26 (54.2) | 24 (60.0) | 195 (63.9) | | | | | | | |
| No | 22 (55) | 5 (12.8) | 15 (38.5) | 10 (27) | 11 (27.5) | 22 (45.8) | 16 (40.0) | 110 (36.1) | | | | | | | |
| SIX, mean (SD) | 3.0 (0.8) | 4.2 (0.8) | 3.6 (1) | 4.9 (1.1) | 3.6 (1.1) | 3.4 (0.8) | 3.7 (1.2) | 3.7 (1.1) | | | | | | | |
| <i>Clinical characteristics</i> | | | | | | | | | | | | | | | |
| <i>ICD—10 diagnosis n (%)</i> | | | | | | | | | | | | | | | |
| Psychotic disorders | 32 (80) | 32 (82.1) | 26 (66.7) | 10 (27) | 40 (100) | 45 (93.8) | 33 (82.5) | 232 (76.1) | | | | | | | |
| Mood disorders | 8 (20) | 1 (2.6) | 12 (30.8) | 26 (70) | — | 3 (6.3) | 7 (17.5) | 60 (19.7) | | | | | | | |
| Anxiety disorders | — | 6 (15.4) | 1 (2.6) | 1 (2.7) | — | — | — | 13 (4.3) | | | | | | | |
| Duration of illness (years), mean (SD) | 11.9 (8.1) | 14.7 (8.8) | 10.0 (9.8) | 5.8 (5.6) | 16.5 (8.7) | 17.4 (9.8) | 16.5 (5.9) | 14.1 (9.5) | | | | | | | |
| Number of hospital admissions, mean (SD) | 3.7 (2.7) | 2.3 (1.5) | 4.9 (5.6) | 1.5 (2.8) | 5.5 (2.9) | 1.9 (1.8) | 4.8 (2.2) | 3.6 (3.8) | | | | | | | |
| Length of all hospital treatment (months), mean (SD) | 4.5 (3.7) | 1.5 (1.7) | 3.6 (5.2) | 2.7 (5.7) | 12.4 (33.5) | 6.4 (7.3) | 5.4 (2.1) | 5.7 (13.8) | | | | | | | |
| <i>Involuntary hospital admissions n (%)</i> | | | | | | | | | | | | | | | |
| Yes | 6 (15) | 4 (10.3) | 12 (30.8) | 7 (18.9) | 13 (32.5) | 6 (12.5) | 20 (50.0) | 72 (23.6) | | | | | | | |
| No | 34 (85) | 35 (89.7) | 27 (69.2) | 30 (81.1) | 27 (67.5) | 42 (87.5) | 20 (50.0) | 233 (76.4) | | | | | | | |

Table 3 Use of services in the last 3 months prior to the interview

| Centre: | Albania | | | Bosnia and Herzegovina | | | Croatia | | | FYR Macedonia | | | Moldova | | | Montenegro | | | Romania | | | | |
|--|--------------|-----------|-----------|------------------------|-----------|-----------|-----------------|-----------|-----------|---------------|-----------|------------|-----------------|-----------|-----------|-----------------|-----------|----------|--------------|-----------|----------|------------------|--|
| | Vlora N = 40 | | | Mostar N = 39 | | | Prnjavor N = 39 | | | Zagreb N = 37 | | | Strumica N = 40 | | | Chisinau N = 22 | | | Kotor N = 48 | | | Bucharest N = 40 | |
| Type of service | N (%) | Mean (SD) | contacts | N (%) | Mean (SD) | contacts | N (%) | Mean (SD) | contacts | N (%) | Mean (SD) | contacts | N (%) | Mean (SD) | contacts | N (%) | Mean (SD) | contacts | N (%) | Mean (SD) | contacts | | |
| General practitioner | 39 (97.5) | 1.9 (1.0) | 31 (79.5) | 2.8 (3.2) | 38 (97.4) | 4.2 (3.0) | 37 (100) | 3.0 (1.4) | 37 (92.5) | 4.5 (1.7) | 12 (54.5) | 1.7 (2.2) | 29 (60.4) | 1.5 (1.7) | 32 (80.0) | 2.6 (2.3) | | | | | | | |
| Primary care nurse | 29 (72.5) | 1.5 (1.2) | 22 (56.4) | 2.0 (2.8) | 38 (97.4) | 5.6 (5.5) | 37 (100) | 3.0 (1.4) | 37 (92.5) | 4.5 (1.7) | 9 (40.9) | 3.1 (5.6) | 7 (14.6) | 0.3 (0.7) | 30 (75.0) | 2.6 (2.2) | | | | | | | |
| Social worker | 16 (40.0) | 0.5 (0.7) | 11 (28.2) | 0.6 (1.7) | 6 (15.4) | 0.4 (1.4) | 2 (5.4) | 0.2 (1.0) | 38 (95.0) | 3.2 (2.6) | 5 (22.7) | 4.9 (12.0) | 9 (18.8) | 0.2 (0.5) | 22 (55.0) | 3.1 (1.9) | | | | | | | |
| Psychiatry outpatient | 39 (97.5) | 2.2 (0.6) | 29 (74.4) | 2.2 (2.6) | 28 (71.8) | 1.6 (1.6) | 30 (81.1) | 3.4 (3.2) | 40 (100) | 3.0 (0.4) | 12 (54.5) | 2.1 (3.0) | 48 (100) | 2.7 (0.9) | 30 (75) | 1.6 (1.2) | | | | | | | |
| Psychology/Psycho therapy outpatient contact | 26 (65.0) | 0.9 (0.8) | 15 (38.5) | 3.8 (7.0) ^a | 31 (79.5) | 4.8 (7.8) | 4 (10.8) | 0.4 (1.7) | 39 (97.5) | 3.4 (2.2) | 9 (40.9) | 0.9 (1.4)b | 6 (12.5) | 0.2 (0.7) | 23 (57.5) | 4.2 (4.6) | | | | | | | |
| Other health care specialists outpatient | 11 (27.5) | 0.6 (1.2) | 2 (5.1) | 0.1 (0.4) | 6 (15.4) | 0.3 (0.8) | 5 (13.5) | 0.3 (0.8) | 2 (5.0) | 0.2 (1.0) | 9 (40.9) | 1.1 (1.3) | 4 (8.3) | 0.2 (0.8) | 8 (20.0) | 0.3 (1.0) | | | | | | | |

^a 1 case (2.6%) missing in Mostar for psychology/psychotherapy contacts yes or no

^b 2 cases (9.1%) missing in Chisinau for psychology/psychotherapy contacts yes or no

reported as important in making patients feel better (10 patients, 6%): “The activities make me feel so relaxed” (ID No 219; Bucharest, Male, 42).

Most patients (122, 74%) did not perceive any particular weaknesses, however, those that have expressed dissatisfaction reported the need for more staff/appointments (4 patients, 2.4%), lack of availability in crises situation (2 patients, 1.2%) and problems with transport/facilities (2 patients, 1.2%).

When asked about the wishes and hopes for the future 31 (18.9%) patients mentioned possible changes to the care programmes in the CMHC. They mostly (14 patients, 8.5%) suggested the addition of new forms of psychological treatments (group, occupational, art/music therapy) or increasing the number of sessions of such therapies. Seven patients (4.3%) expressed a wish for more physical activities such as fitness and dance classes, and walks in the park.

Discussion

Main Findings

CMHCs were established in countries where they had never existed before. They were embedded in different national systems, shaped by different socio-economic contexts and driven by different local champions. It may therefore not be surprising that the developed models including staffing and provided programmes vary. Subsequently, the data obtained in this study, i.e. patient characteristics, service use and patient reported outcomes, also show, in part substantial, differences across CMHCs.

Despite the variation, however, there are three general findings. (A) CMHCs mainly care for the conventional clientele of community mental health services, i.e. patients with long-term psychotic disorders. With the exception of one centre the objective social situation of the patients was similar or worse than the situation reported for samples in long term community care in Western Europe (Priebe et al. 2008). (B) The care provided by the centres and the relationship with the staff appear valued by the patients. (C) A central problem is unemployment which has a significant negative impact on patients’ quality of life and ratings of treatment satisfaction.

Strengths and Limitations

The study has four major limitations. Firstly, it did not employ an experimental design that would have allowed establishing the effectiveness of care in the CMHCs developed within the SEE Mental Health Project. We rather used an observational and less demanding method to have an inclusive approach reflecting as much as possible

Table 4 Patient reported outcomes: scores for each center of CSQ-8, STAR-P and MANSA (for CSQ-8 and STAR-P means of sum scores, for MANSA means of mean scores)

| Outcomes | Albania | | Bosnia and Herzegovina | | Croatia | FYR Macedonia | Moldova | Montenegro | Romania | Total sample |
|--|-----------------|------------------|------------------------|------------------|------------|---------------|------------|------------|------------|--------------|
| | Vlora N = 40 | Mostar N = 39 | Prijedor N = 39 | Zagreb N = 37 | | | | | | |
| CSQ-8, mean (SD) | 27.2 (3.8) | 28.3 (3.2) | 29.4 (2.3) | 29.1 (2.6) | 24.9 (2.9) | 25.6 (4.3) | 27.9 (3.9) | 26.1 (3.7) | 27.4 (3.7) | |
| STAR-P, mean (SD) | — | 37.8 (7.2) | 43.5 (2.3) | 42.6 (4.4) | 31.5 (3.8) | 28.7 (8.8) | 42.6 (5.8) | 34.0 (6.0) | 37.9 (7.6) | |
| MANSA, mean (SD) | 4.2 (0.9) | 4.3 (0.8) | 4.4 (0.8) | 4.3 (0.7) | 4.0 (0.5) | 3.6 (0.6) | 4.3 (0.9) | 3.7 (0.5) | 4.1 (0.8) | |
| MANSA mean scores for individual life domains, mean (SD) | | | | | | | | | | |
| Life in general | 3.8 (1.8) | 4.4 (1.5) | 3.7 (1.4) | 4.2 (1.2) | 4.1 (1.0) | 3.3 (1.1) | 4.7 (1.4) | 3.7 (0.7) | 4.1 (1.4) | |
| Employment situation | 2.9 (1.6) | 3.4 (1.4) | 3.5 (1.8) | 4.1 (1.5) | 3.5 (0.9) | 3.3 (1.2) | 4.0 (1.7) | 3.0 (1.1) | 3.5 (1.5) | |
| Financial situation | 2.8 (1.4) | 3.5 (1.5) | 3.0 (1.5) | 3.6 (1.3) | 3.9 (1.1) | 2.8 (1.2) | 3.5 (1.9) | 3.0 (0.7) | 3.3 (1.4) | |
| Friendships | 4.1 (1.9) | 4.6 (1.4) | 4.8 (1.8) | 4.8 (1.5) | 3.9 (0.6) | 4.0 (1.4) | 4.0 (1.8) | 3.7 (1.3) | 4.3 (1.6) | |
| Leisure activities | 4.3 (1.6) | 4.2 (1.5) | 4.6 (1.7) | 4.4 (1.5) | 4.3 (0.7) | 4.0 (1.3) | 4.2 (1.6) | 4.2 (0.9) | 4.3 (1.4) | |
| Accommodation | 4.4 (2.0) | 5.1 (1.5) | 5.3 (1.4) | 5.1 (1.2) | 4.7 (0.9) | 3.8 (1.2) | 5.5 (1.3) | 4.2 (0.9) | 4.8 (1.4) | |
| Personal safety | 5.4 (1.5) | 5.1 (1.3) | 5.6 (1.0) | 4.8 (1.6) | 4.7 (0.7) | 4.0 (1.1) | 5.1 (1.5) | 4.3 (0.9) | 4.9 (1.3) | |
| People you live with/living alone | 5.2 (1.8) | 5.3 (1.4) | 5.1 (1.8) | 4.8 (1.2) | 4.5 (1.0) | 4.3 (1.4) | 5.1 (1.6) | 4.1 (1.4) | 4.8 (1.5) | |
| Sex life | 3.0 (1.5) | 4.1 (2.0) | 4.0 (1.6) | 3.8 (1.5) | 3.4 (1.2) | 3.1 (1.5) | 3.3 (2.1) | 3.1 (1.0) | 3.5 (1.6) | |
| Family relationships | 5.5 (1.7) | 5.4 (1.4) | 5.7 (1.4) | 4.6 (1.2) | 4.5 (1.0) | 4.1 (1.4) | 5.3 (1.4) | 4.3 (1.0) | 5.0 (1.5) | |
| Physical health | 4.8 (1.5) | 4.6 (1.5) | 4.4 (1.5) | 4.7 (1.2) | 4.6 (1.0) | 4.0 (1.5) | 4.7 (1.6) | 4.1 (0.8) | 4.5 (1.4) | |
| Mental health | 4.9 (1.7) | 4.5 (1.6) | 4.8 (1.4) | 4.6 (1.2) | 4.3 (0.7) | 3.6 (1.4) | 4.7 (1.6) | 3.9 (0.8) | 4.4 (1.4) | |

CSQ-8 Client satisfaction questionnaire (8 items); values range between 1 and 4, higher score indicates higher satisfaction with treatment

STAR-P Scale to assess therapeutic relationships in community mental health care; values range between 0 and 4, higher score indicates better therapeutic relationship with a key clinician

MANSA: Manchester short assessment of quality of life; values range between 1 and 7, higher score indicates better subjective quality of life

Table 5 Results from fixed effects linear regression model analyses of MANSA (N = 305), STAR-P (N = 265) and CSQ-8 (N = 305)

| | MANSA | | | | | STAR-P | | | | | CSQ-8 | | | | | | | |
|--|-----------------------------------|-----------------|--------|--------------|----------------|-----------------------------------|-------|---------------|-------|----------------|-----------------------------------|-------|-------|----------------|-------|----------------|----------------|-------|
| | Univariable analysis (ICC = 0.15) | | | | | Univariable analysis (ICC = 0.49) | | | | | Univariable analysis (ICC = 0.49) | | | | | | | |
| | B | CI 95% | P | B | CI 95% | P | B | CI 95% | P | B | CI 95% | P | B | CI 95% | P | | | |
| <i>ICD-10 diagnosis</i> | | | | | | | | | | | | | | | | | | |
| Mood disorders | | | | | | | | | | | | | | | | | | |
| Yes | -0.15 | -0.40 to 0.09 | 0.219 | -0.26 | -0.56 to 0.04 | 0.086 | 0.63 | -1.44 to 2.70 | 0.548 | -0.36 | -2.96 to 2.23 | 0.78 | 0.63 | -0.50 to 1.76 | 0.270 | -0.15 | -1.52 to 1.23 | 0.835 |
| No | 0 | | | | | 0 | | | | | | | 0 | | | | | |
| Anxiety disorders | | | | | | | | | | | | | | | | | | |
| Yes | 0.16 | -0.28 to 0.60 | 0.474 | 0.004 | -0.47 to 0.48 | 0.986 | -0.85 | -2.48 to 4.19 | 0.614 | 1.63 | -2.06 to 5.31 | 0.385 | -0.32 | -2.34 to 1.70 | 0.756 | -0.49 | -2.69 to 1.71 | 0.660 |
| No | 0 | | | | | 0 | | | | | | | 0 | | | | | |
| Age, mean | -0.001 | -0.010 to 0.007 | 0.757 | -0.01 | -0.02 to 0.01 | 0.440 | 0.12 | 0.05 to 0.19 | 0.001 | 0.15 | 0.04 to 0.26 | 0.006 | 0.05 | 0.01 to 0.09 | 0.023 | 0.03 | -0.03 to 0.09 | 0.391 |
| Education, age at leaving school, mean | 0.028 | -0.002 to 0.057 | 0.063 | 0.02 | -0.01 to 0.05 | 0.227 | 0.05 | -0.19 to 0.28 | 0.681 | -0.01 | -0.24 to 0.22 | 0.935 | 0.03 | -0.10 to 0.16 | 0.627 | 0.003 | -0.13 to 0.14 | 0.959 |
| Gender | | | | | | | | | | | | | | | | | | |
| Male | 0.06 | -0.11 to 0.24 | 0.466 | 0.08 | -0.11 to 0.28 | 0.398 | 0.50 | -0.93 to 1.94 | 0.488 | 0.35 | -1.28 to 1.98 | 0.671 | 0.90 | 0.10 to 1.70 | 0.027 | 0.809 | -0.09 to 1.70 | 0.076 |
| Female | 0 | | | | | 0 | | | | | | | 0 | | | | | |
| Being unemployed | | | | | | | | | | | | | | | | | | |
| Yes | -0.36 | -0.54 to -0.19 | <0.001 | -0.44 | -0.66 to -0.22 | <0.001 | -1.22 | -2.64 to 0.20 | 0.093 | -0.83 | -2.58 to 0.92 | 0.35 | -1.00 | -1.85 to -0.17 | 0.019 | -1.08 | -2.08 to -0.08 | 0.034 |
| No | 0 | | | | | 0 | | | | | | | 0 | | | | | |
| Living with a carer | | | | | | | | | | | | | | | | | | |
| Yes | 0.04 | -0.14 to 0.22 | 0.668 | 0.10 | -0.10 to 0.31 | 0.325 | 1.07 | -0.40 to 2.54 | 0.153 | 2.20 | 0.44 to 3.96 | 0.015 | -0.55 | -1.37 to 0.27 | 0.191 | 0.08 | -0.88 to 1.03 | 0.876 |
| No | 0 | | | | | 0 | | | | | | | 0 | | | | | |
| Duration of illness, mean | | | | | | | | | | | | | | | | | | |
| Involuntary admission past | -0.001 | -0.011 to 0.009 | 0.816 | -0.004 | -0.02 to 0.01 | 0.580 | 0.07 | -0.01 to 0.15 | 0.078 | -0.01 | -0.13 to 0.12 | 0.906 | 0.03 | -0.02 to 0.07 | 0.275 | -0.02 | -0.09 to 0.05 | 0.555 |
| Involuntary admission past | | | | | | | | | | | | | | | | | | |
| Yes | -0.13 | -0.33 to 0.08 | 0.224 | -0.15 | -0.40 to 0.10 | 0.249 | -0.63 | -2.27 to 1.01 | 0.451 | -0.77 | -2.86 to 1.32 | 0.468 | -0.45 | -1.39 to 0.49 | 0.350 | -0.16 | -1.31 to 1.00 | 0.787 |
| No | 0 | | | | | 0 | | | | | | | 0 | | | | | |
| Constant term | | | 4.22 | 3.45 to 5.01 | <.001 | | | | 31.47 | 25.00 to 37.94 | <.001 | | | | 26.29 | 22.69 to 29.88 | <.001 | |

MANSA Manchester short assessment of quality of life; values range between 1 and 7, higher score indicates better subjective quality of life
 STAR-P Scale to assess therapeutic relationships in community mental health care; values range between 0 and 4, higher score indicates better therapeutic relationship with a key clinician
 CSQ-8 Client satisfaction questionnaire (8 items); values range between 1 and 4, higher score indicates higher satisfaction with treatment

the real clientele and service provision as well as their variability in these centres. The study included sites in countries with a limited tradition of research in community mental health care, and more preparation and staff training may be required before very rigorous research design can be implemented. Yet, this study may be seen as an important step towards such rigorous research. Secondly, only in two centers were the interviewed patients a random sample. In other centers, the interviewed patients might not be representative of all patients meeting the inclusion criteria in the CMHCs. Given the heterogeneity of the context, possible variation in the selection procedure and small sample sizes, analyses were descriptive and exploratory in nature. One service (in Croatia) was different because it had a different aim than those in other countries. Thirdly, we did not administer a measure of symptom levels or severity of illness. Finally, we did not establish the costs of care.

The study also has a number of strengths. Most CMHCs that had been initiated in the SEE Stability Pact were included. A similar approach with identical assessment instruments was applied across eight sites in seven countries, although one may have to take into account that the instruments were used in different languages. We used standardised instruments and combined quantitative and qualitative methods (albeit the latter in only four sites); the findings of the two types of methods are consistent and may be seen as validating each other in providing mostly positive patient views. The instruments included several established scales for assessing patient reported outcomes, so that the different aspects of the experience of the patients were assessed and considered in this evaluation.

Patient Reported Outcomes

Research since the 1970s has shown that patients in all psychiatric services tend to rate their care positively and express satisfaction with most aspects of their life and psychiatric care. The interpretation of patient reported outcomes requires therefore a comparison with data from other groups. There has been little systematic research on similar patient groups in SEE. The scores obtained on each of the instruments can be compared only with those of patients in Western European countries or samples in SEE with other characteristics. On average, treatment satisfaction was higher (27.4; SD 3.7) than in patients in community care in six Western European countries (25.7; SD 4.2) (Priebe et al. 2007), in patients of crisis teams in London (21.2; SD 7.3) (Johnson et al. 2005), and in patients of primary health care centres in Leeds, United Kingdom (25.3; SD 5.7) (Gibert et al. 2003). The mean patient ratings of the quality of therapeutic relationship with the key clinician (37.9; SD 7.6) were similar to those

found in community care in London (38.4; SD 12.0) (McGuire–Snieckus et al. 2007). SQOL was lower (4.1; SD 0.8) than usually found in patients with ongoing psychotic disorders in community care (Priebe et al. 2007: 4.7; SD 8.8; McGuire–Snieckus et al. 2007: 5.1, SD 1.4; Priebe et al. 2002: 4.6; SD 0.8). It was comparable to SQOL in non-clinical samples in SEE (Priebe et al. 2009: 4.1, SD 0.9 in Croatia, and 3.9, SD 0.7 in Serbia; Jankovic Gavrilovic et al. 2005: 4.1; SD 1.1 in Serbia).

The lower ratings of SQOL show that patients did not have a generalised tendency for positive ratings on all patient reported outcomes (Hansson et al. 2007). This underlines the significance of the high treatment satisfaction scores and the positive ratings of therapeutic relationship. These ratings and the findings of the qualitative part may be seen as positive evidence that patients value the care received in the CMHCs and the relationship with staff in them.

From the patients' perspective unemployment and financial hardship are the main problems. Patients are more satisfied with their mental health than with their financial situation, and the experience of unemployment has a dominating influence on their SQOL and treatment satisfaction. An association between employment and SQOL has been well documented in other studies for patients with schizophrenia, mood disorders and neurotic disorders (Priebe et al. 2010b). At the same time patients value the therapeutic relationships with staff in the centres. They provide favourable ratings of the TR with their key clinician in a questionnaire and mention helpful relationships with staff as a main factor for their positive views of the evaluated services. When asked for wishes for the future, patients suggest, if anything, strengthening the already existing psychological components of care. This is also in line with the views of community care patients in other parts of Europe who expressed a preference for more talking therapies (Healthcare Commission 2008).

Implications

The findings suggest that on the whole CMHCs meet the expectations and wishes of their patients. They do not indicate whether services are clinically or cost effective. This should be studied in future research. For such research as well as for further evaluation of routine services, the scores identified in this study may be taken as benchmarks against which findings of other patient samples in SEE can be interpreted.

The variation of the activities and clientele across the CMHCs shows that different service models are feasible. The heterogeneity can help further evaluation across SEE. Future research may build on this and conduct more detailed comparisons of pathways, inputs and outcomes.

Finding employment for all patients may be an unrealistic task, particularly in areas with high unemployment rates in the general population and within a climate of uncertainty in changing economies in Eastern Europe. Nevertheless, the results of this study call for initiatives to provide more employment to patients, preferably in regular jobs so that patients have an income and can ease their financial problems. To achieve this, the ‘place and train’ models that have been shown to be effective in the United States and various European countries may be worth considering as an additional component of the CMHCs (Burns et al. 2007).

Conclusions

The blueprint for the mental health reforms in SEE was based on mental health service models as well as the research carried out in Western Europe. It is uncertain whether conclusions drawn from sophisticated service models in richer parts of the world can be applied to scenarios in middle and low-income countries (Muijen 2008). Specific evaluations in SEE are therefore needed to inform further service developments and funding decisions.

A cross-sectional observational study like ours cannot provide a conclusive evaluation of the CMHCs. The findings however may be seen as supporting both the wider implementation of CMHCs in each country and further attempts to evaluate what they do.

Acknowledgments The authors thank the managers and staff of the participating community mental health centres for their contribution to the study. We would also like to acknowledge the support of Ms Vesna Puratic and Ms Taida Kapetanovic from the SEE Mental Health Project Regional Office in Sarajevo, Bosnia and Herzegovina.

Conflict of interest None.

References

- Attkisson, C. C., & Zwick, R. (1982). The client satisfaction questionnaire: psychometric properties and correlations with services utilisation and psychotherapy outcome. *Evaluation and Program Planning*, 5, 233–237.
- Beecham, J., & Knapp, M. (2006). Costing psychiatric interventions. In G. Thornicroft (Ed.), *Measuring mental health needs*, 2nd ed. (pp). London: Gaskell.
- Burns, T., Catty, J., Becker, T., Drake, R. E., Fioritti, A., Knapp, M., et al. (2007). The 4. effectiveness of supported employment for people with severe mental illness: A randomised controlled trial. *Lancet*, 370, 1146–1152.
- Gibert, N., Richards, A., Barkham, M. & Coles-Gale, R. (2003). Primary care mental health worker service: Evaluation report. Retrieved September 7, 2009, from <http://www.psyc.leeds.ac.uk/ptrc/research/pcmhw.htm>.
- Hansson, L., Bjorkmann, T., & Priebe, S. (2007). Are important patient-rated outcomes in community mental health care explained by only one factor? *Acta Psychiatrica Scandinavica*, 116, 113–118.
- Healthcare Commission. (2008). Survey of users of community mental health services. Retrieved from http://www.cqc.org.uk/_db/_documents/Full_2008_results_with_historical_comparisons.pdf.
- Jankovic Gavrilovic, J., Lecic Tosevski, D., Colovic, O., Dimic, S., Susic, V., Pejovic Milovancevic, M., et al. (2005). Association of posttraumatic stress and quality of life in civilians after air attacks. *Psijihijatrija Danas*, 37(2), 297–305.
- Johnson, S., Nolan, F., Pilling, S., Sandor, A., Hoult, J., McKenzie, N., et al. (2005). Randomised controlled trial of acute mental health care by a crises resolution team: The north Islington crisis study. *British Medical Journal*, 331, 559–603.
- Kucukalic, A., Dzibur Kulenovic, A., Ceric, I., Jacobsson, L., Bravo-Mehmedbasic, A., & Priebe, S. (2005). Regional collaboration in reconstruction of mental health services in Bosnia and Herzegovina. *Psychiatric Services*, 56, 1455–1457.
- Larsen, D. L., Attkinsson, C. C., Hargreaves, W. A., & Ngyen, T. D. (1979). Assessment of client/patient satisfaction: Development of a general scale. *Evaluation and Program Planning*, 2, 197–207.
- McGuire–Snieckus, R., McCabe, R., Catty, R., Hansson, L., & Priebe, S. (2007). A new scale to assess the therapeutic relationship in community mental health care: STAR. *Psychological Medicine*, 37, 85–95.
- Muijen, M. (2008). Focus on mental health care reforms in europe: mental health services in Europe: An overview. *Psychiatric Services*, 59, 479–482.
- Priebe, S., Bogic, M., Ajdukovic, D., Franciskovic, T., Galeazzi, G. M., Kucukalic, A., et al. (2010a). Mental disorders following war in the Balkans: A study in 5 Countries. *Archives of General Psychiatry*, 67(5), 518–528.
- Priebe, S., Hoffman, K., Isermann, M., & Kaiser, Wolfgang. (2002). Do long-term hospitalised patients benefit from discharge into the community? *Social Psychiatry and Epidemiology*, 37, 387–392.
- Priebe, S., Huxley, P., Knight, S., & Evans, S. (1999). Application and results of the Manchester short assessment of quality of life (MANSA). *International Journal of Social Psychiatry*, 45, 7–12.
- Priebe, S., Jankovic Gavrilovic, J., Matanov, A., Franciskovic, T., Knezevic, G., Ljubotina, D., et al. (2010b). Treatment outcomes and costs at specialized centers for the treatment of PTSD after the war in former Yugoslavia. *Psychiatric Services*, 61, 598–604.
- Priebe, S., Matanov, A., Jankovic Gavrilovic, J., McCrone, P., Ljubotina, D., Knezevic, G., et al. (2009). Consequences of untreated posttraumatic stress disorder following war in former Yugoslavia: Morbidity, subjective quality of life, and care costs. *Croatian Medical Journal*, 50, 465–475.
- Priebe, S., McCabe, R., Bullenkamp, J., Hansson, L., Lauber, C., Martinez-Leal, R., et al. (2007). Structured patient-clinician communication and 1-year outcome in community mental health care: Cluster randomised controlled trial. *British Journal of Psychiatry*, 191, 420–426.
- Priebe, S., Reininghaus, U., McCabe, R., Burns, T., Eklund, M., Hansson, L., et al. (2010c). Factors influencing subjective quality of life in patients with schizophrenia and other disorders: A pooled analysis. *Schizophrenia Research*, 3, 55–62. doi: 10.1016/j.schres.2009.12.020.
- Priebe, S., Watzke, S., Hansson, L., & Burns, T. (2008). Objective social outcome index (SIX): a method to summarise objective indicators of social outcomes in mental health care. *Acta Psychiatrica Scandinavica*, 118, 57–63.
- World Health Organisation (2008). Approaching Mental Health Care Reform Regionally: The mental health project for South-eastern Europe. Retrieved from <http://www.euro.who.int/Document/E92163.pdf>.