



Widespread collapse, glimpses of revival: a scoping review of mental health policy and service development in Central Asia

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Received: 3 August 2020 / Accepted: 10 March 2021 / Published online: 18 March 2021
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Abstract

Purpose We aimed to map evidence on the development of mental health care in Central Asia after 1991.

Method We conducted a scoping review complemented by an expert review. We searched five databases for peer-reviewed journal articles and conducted grey literature searching. The reference lists of included articles were screened for additional relevant publications.

Results We included 53 articles (Kazakhstan: 13, Kyrgyzstan: 14, Tajikistan: 10, Uzbekistan: 9, Turkmenistan: 2, Multi-national: 5). Only 9 were published in internationally recognised journals. In the 1990's mental health services collapsed following a sharp decline in funding, and historically popular folk services re-emerged as an alternative. Currently, modernised mental health policies exist but remain largely unimplemented due to lack of investment and low prioritisation by governments. Psychiatric treatment is still concentrated in hospitals, and community-based and psycho-social services are almost entirely unavailable. Stigma is reportedly high throughout the region, psychiatric myths are widespread, and societal awareness of human rights is low. With the exception of Kyrgyzstan, user involvement is virtually absent. After many years of stagnation, however, political interest in mental health is beginning to show, along with some promising service developments.

Conclusions There is a substantial knowledge gap in the region. Informed decision-making and collaboration with stakeholders is necessary to facilitate future reform implementation.

Keywords Central Asia · Mental health · Deinstitutionalization

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Introduction

Central Asia (CA) covers an area equivalent to the European Union and is inhabited by more than 70 million people [1]. In the twentieth century, CA was profoundly influenced by the ideology prevalent in the USSR, in which psychiatry was biologically oriented and care was mostly pharmacological and concentrated in asylum-like psychiatric hospitals. Scientific methods and evidence were disregarded in favour of ideology, and psychiatry was systematically abused to confine those who opposed the Communist Party [2–4].

After acquiring independence in 1991, subsidies from Moscow halted and the countries of CA faced significant economic constraints [5]. For Tajikistan, the crisis was aggravated further by a devastating 5-year-long civil war. Sudden socio-political changes and economic instability in the post-Soviet region resulted in the decay of social institutions and rapid increases in social and health inequalities, leading to a drop in public health indicators to levels far below the Western European average [6]. Life expectancy decreased dramatically as mortality rates skyrocketed, especially for men. To address these issues and replace the overly centralised Soviet health system, the newly independent states embarked on comprehensive and enthusiastic health reforms [7]. However, implementation of reforms was hindered by low investment; lack of political support; and by receiving limited foreign input to health sector reforms compared to other Central and Eastern European countries [7]. As a result, these countries retained most features of Soviet health care systems such as overreliance on large hospitals, little involvement of primary health care and prevention, inefficient allocation of resources, and poor quality of care, with wide usage of outdated and ineffective treatment methods [5, 6].

Recently, the region of Central and Eastern Europe was depicted as a ‘blind spot on the global mental health map’ [8]. While most of the scant evidence available on mental health in the former Eastern Bloc focusses on the European countries, the “stans” (as CA countries are sometimes referred to) receive even less attention in terms of research and development [9], suggesting that CA might be considered a blind spot within the blind spot. In addition, CA countries have distinct features such as, to various degrees, centralised and top-down health care governance and predominantly Muslim populations [10]. Against this context, we aimed to collect and analyse evidence on post-Soviet development and the current situation of mental health policy and practice in CA to identify needs, gaps and key challenges to inform decision-making about the region’s future mental health care policy and practice. We chose a scoping review methodology because it is used to

answer broad research questions by examining the range and nature of research activity, identifying gaps in existing literature and summarising findings on the topic of interest in contrast with traditional systematic reviews that aim to appraise evidence to answer a narrowly defined research question [11].

Method

Search strategy, definitions, and selection criteria

We built our methodology on the previous scoping review on mental health systems in Central and Eastern Europe [8] and followed established guidelines for conducting scoping reviews [11, 12]. We included all former Soviet CA republics: Kazakhstan, Kyrgyzstan, Tajikistan, Turkmenistan and Uzbekistan and used a broad search strategy to identify relevant literature (both peer-reviewed and grey) and conducted expert consultations.

The key search terms related to mental health services, mental health policy, and mental disorders were run in combination with country names in Medline, PsychINFO, Embase, Web of Science and the Russian Science Citation Index (RSCI) (see appendix for full search strategy).

Studies published since 1991 were eligible for inclusion; however, RSCI allowed online searching of articles published from 2005 only. We applied no language restrictions and placed an emphasis on inclusion of Russian database and language since Russian remains the lingua franca of the region. Two researchers (AA, PW) independently screened references for title and abstract. Additionally, we searched World Health Organisation (WHO) MiNDbank database; we did backward and forward citation screening of included papers; conducted a basic Google search, and asked country collaborators to conduct local grey literature search and report its results in the pre-defined form. Finally, we included WHO—Assessment Instrument for Mental Health Systems (WHO-AIMS) [13–15] and used WHO Mental Health Atlas reports [14–16] of relevant countries to obtain quantitative data on mental health service development.

We built our analytical framework upon constituents of modern mental health care practice and factors that can inform policy decisions (see Fig. 1). We defined mental health care practice as a system of mental health services (formal and informal) influenced by policies, resources and legislation. We also distinguished public service delivery from that provided by non-governmental organisations (NGOs), since this is important for the sustainability of programmes. Policy decisions and service planning can be informed by evidence on the epidemiology of mental disorders and their determinants, health services and implementation research, economic evaluations of innovative

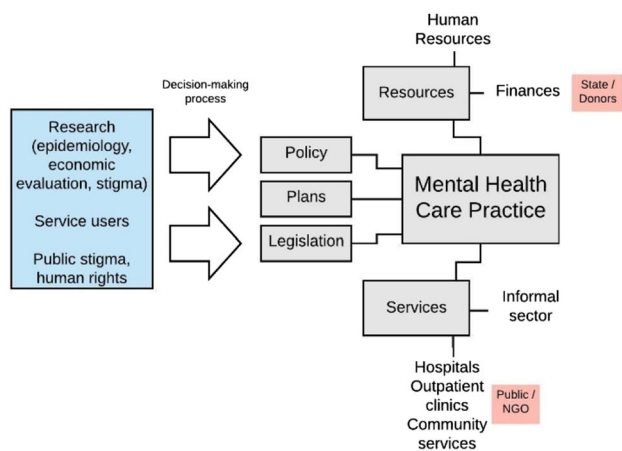


Fig. 1 Mental health care practice analytical framework

interventions. Other factors that can affect decision-making include involvement of service users and their families in service planning [17], societal stigma and discrimination, which can constrain policy and funding of mental health care and reports of human rights violations, which suggest failure of mental health systems and can trigger reforms. Therefore, we aimed to include evidence on mental health services; epidemiology of mental disorders; policy and legislation; service user involvement in service delivery and planning; resources and their allocation; economic evaluations of complex interventions; quality of psychiatric education; mental health related stigma and human rights in mental health.

For this review, we selected severe mental disorders (an ICD-10 diagnosis of an affective disorder or non-affective functional psychotic disorder: F20–F22, F24, F25, F28–F31, F32.3, and F33.3) because of their high socio-economic burden [16] and common mental disorders (an ICD-10 diagnosis of depression and range of neurotic or stress-related disorders: F32.0–F32.2, F32.8, F32.9, F33.0–F33.2, F33.4–F33.9, F40–F43) for their high prevalence in the population [17, 18]. We looked at child and adolescent psychiatry, because about a third of the population in CA consists of children under 14 [1]. We also included articles concerning suicide epidemiology and prevention in CA as it has been suggested that suicide rates might be increasing in the region, especially among children [19]. Unless they addressed human rights violations of people with mental disorders, we excluded articles on geriatric psychiatry, addiction medicine, and forensic psychiatry for feasibility reasons and their interception with other non-psychiatric services.

Articles on alternative mental health medicine, such as folk remedies, traditional healers, faith healers and others were eligible as well due to the rise in popularity of folk medicine after the dissolution of the Soviet Union and its widespread use in CA countries for general health symptoms [20] and because there is an increased likelihood of taking

mental health help from traditional healers in low-income settings [21].

Since the region is severely understudied, we expected to find scarce evidence and therefore set broad inclusion criteria. Primary studies with quantitative and qualitative designs, reports, opinion papers, editorials, book chapters were all eligible. We excluded study protocols, conference abstracts, and individual case studies, unless they reported violations of human rights. We also excluded studies on individual treatment methods, clinical, biological and aetiological research. Detailed inclusion and exclusion criteria are provided in the appendix.

Expert consultation

Experts were identified by AA or country collaborators (SM, LP, SY), who approached experts in their countries. Experts had to be either involved in the organisation or provision of mental health services, or they had to be a member of a mental health professional association or a local service user or family organisation. We attempted to ensure participation of experts from each stakeholder group in each country. When we were unable to include a user representative, we approached other civil society organisations working in mental health. Experts were approached by official letters, email, phone or in person by collaborators. We ensured anonymity of experts if they requested so. Collaborators kept approaching potential experts until at least two experts from each country agreed to participate in the consultation exercise. Despite many attempts, we were unable to find a collaborator or experts willing to participate in Tajikistan and Turkmenistan. However, after making a formal request, we received an official report from the Ministry of Health of Turkmenistan based on our expert form. Experts were asked to write a report based on a pre-developed form (appendix), covering the topics discussed above. In addition, country collaborators were required to carry out a grey literature search in local languages and complete the pre-developed form by summarising the identified literature. Reports were submitted in Russian, and subsequently translated into English.

Data analysis

We developed a data charting form in Airtable (see <https://airtable.com/>), a cloud-based spreadsheet service, according to categories in the analytical framework described above. After translation, AA familiarised himself with the expert reports. A common analytical framework was applied to extract the data from each study and expert reports to the charting form, recording the following information: author, year, type of publication, study location and specific data related to categories in the analytical framework (Fig. 1).

The charting process provided an overview of included studies and expert reports. We then used thematic framework analysis [22] to compose the country profiles by identifying and highlighting certain patterns across papers. Quality assessment was not conducted, in accordance with scoping review guidelines, since the aim is to provide an overview of heterogeneous evidence and identify gaps, rather than appraising the strength of evidence in support of a given hypothesis [11].

We prioritised the inclusion of primary data from reliable sources in the analysis. However, this was often not possible due to extreme scarcity of good-quality data. In such cases, we referred to grey literature and expert reports. When findings were contradictory, both opinions were included. To ensure the accuracy of information, final country profiles were validated by experts.

We describe the characteristics of the published literature included in the review by country, topic, and whether articles were published in internationally recognised journals. Studies focussing on more than one country were included as ‘multinational’. Internationally recognised journals were operationalised as those that received an ISI impact factor. Next, we present a narrative synthesis of our findings. Details on each country are presented in the country profiles available in the appendix. The reporting of this study conforms to PRISMA Extension for Scoping Reviews guidelines [23] (appendix). The protocol of this study was approved by the Ethical Committee of the National Institute of Mental Health, decision #133/19.

Results

The search strategy resulted in 1281 items after excluding duplicates ($n = 318$). We further excluded 1236 after screening titles and abstracts achieving high the inter-rater

agreement of 97.9% and resulting in 45 papers for full-text examination. Further, we added 23 articles from other sources or from grey literature search and three papers identified from the reference lists of included studies leading to 50 articles in the final analysis (see Fig. 2).

Table 1 shows the distribution of all identified published literature across countries and themes. Most studies describe the development and structure of services ($n = 17$), followed by studies on suicide ($n = 7$), the majority of which originate from Kazakhstan, epidemiological studies ($n = 7$) and papers discussing human rights in mental health ($n = 7$). We were unable to find any published evidence on child and adolescent psychiatry, mental health stigma, or financial resources in the region. However, of the included papers, only nine articles were published in internationally recognised journals. The rest were published in journals without an impact factor ($n = 22$), were reports of international organisations and NGOs ($n = 16$) and country reports from book chapters ($n = 3$). Turkmenistan is the least studied country, where we could identify only two reports on the state of public health care (with discussion of mental health). A full table with reference list is available in the appendix.

We collected nine expert reports in total: four from Uzbekistan, three from Kazakhstan, one from Kyrgyzstan and one report filled by three experts identified by the Ministry of Health in Turkmenistan. All experts were represented by professors ($n = 2$), associate professor ($n = 1$) or heads of psychiatric departments ($n = 3$) in local universities, directors of NGOs working in mental health ($n = 2$), representatives of ministries of health ($n = 2$) and head of a mental health centre ($n = 1$).

Service development

Seventeen articles discussed development and structure of mental health care systems [13–15, 24–37]. The early

Fig. 2 Screening and selection of articles

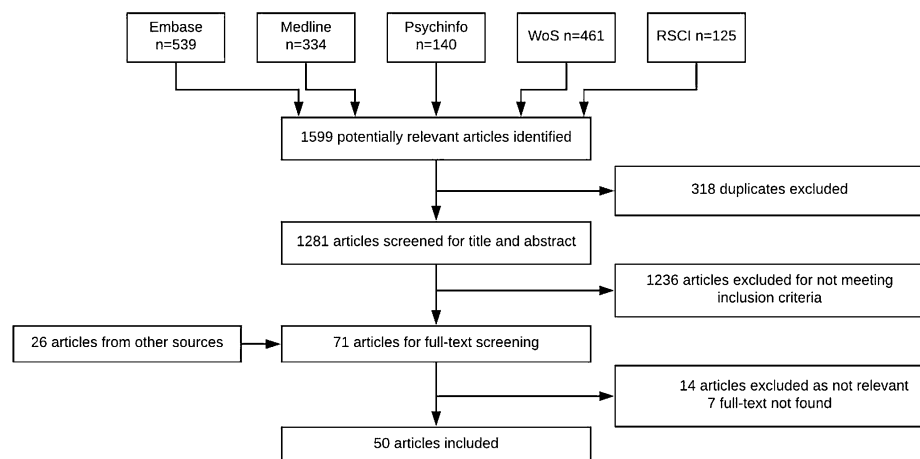


Table 1 Number of papers found stratified by topic and country of interest, divided into those published in journals with an impact factor (IF) and those with no IF (IF/no IF)

Country	Epidemiology	Services: structure, development, reforms	Services: economic evaluation	Financial resources	Policy legislation	Children and adolescents	Suicide	Human resources and education	Stigma	Human rights	User involvement	Alternative medicine	Total
Kazakhstan	2/2	0/1	0/0	0/0	0/1	0/0	0/4	0/0	0/0	0/1	0/0	0/2	2/11
Kyrgyzstan	0/1	0/4	0/1	0/0	0/1	0/0	0/0	0/0	0/0	0/3	0/1	1/2	1/13
Tajikistan	0/0	2/4	0/0	0/0	0/0	0/0	1/0	0/0	0/0	0/1	0/0	1/1	4/6
Turkmenistan	0/0	0/2	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/0	0/2
Uzbekistan	0/0	1/3	0/0	0/0	0/3	0/0	0/1	1/0	0/0	0/0	0/0	0/0	2/7
Multinational	0/1	0/0	0/0	0/0	0/0	0/0	0/1	0/1	0/0	0/2	0/0	0/0	0/5
Total	2/4	3/14	0/1	0/0	0/2	0/0	1/6	1/1	0/0	0/7	0/1	2/5	9/44

post-Soviet period in the region was characterised by a sharp decline in availability of mental health services [24, 26, 28, 32]. In the following years, the number of beds continued to decline, despite population increases, and no new services were established (Table 2). Soviet-era rehabilitation services, consisting of occupational workshops and day-care facilities, likewise deteriorated [15, 24, 28], which could decrease quality and coverage of care and increase burden on hospitals. Today psychiatric care is still primarily hospital-based. These hospitals are usually described as overcrowded, lacking privacy and in need of repair. Uzbekistan has been extensively rebuilding psychiatric hospitals in accordance with modern requirements since 2013 across the country with a programme aimed to renovate all hospitals by 2021.

A paper from Uzbekistan [26] and experts from Kazakhstan and Kyrgyzstan reported that people with severe mental disorders are also held in *internats* (very large scale social care homes), a type of closed institution that were common across the Soviet Union which are outside the influence of health care reforms since they are the responsibility of ministries of social welfare [38], making information on such institutions scarce in the medical literature.

According to experts, service provision for common mental disorders in primary care is being gradually introduced in Kazakhstan under the recent health care development programme, and is being piloted in Kyrgyzstan, but for the rest of the region, this remains an aspiration. Recent increasing interest in the WHO's Mental Health Gap Action Programme (mhGAP) and its implementation demonstrates the region's willingness to reduce the treatment gap using evidence-based interventions, with workshops held across Kazakhstan, Kyrgyzstan, Turkmenistan and Uzbekistan in 2019 and implementation efforts now initiated [39].

A network of outpatient psychiatric clinics (dispensaries or centres of mental health) has been retained from Soviet times [15, 26, 27] and, experts claim, their function has not changed significantly since then, with services limited to pharmacotherapy. Day-care centres on the grounds of these clinics, which are supposed to reduce the burden of psychiatric hospitals, represent a rudimentary system of community care in the region, but their care is also reportedly limited to administration of pharmaceuticals.

Psychosocial services (i.e. non-pharmacological interventions) are extremely rare, and were available, are delivered at small scale by local NGOs supported by foreign organisations (Global Initiative on Psychiatry, Soros, World Bank) [25, 34]. The role of NGOs and private organisations is more prominent in the provision of child and adolescent rehabilitation services, initiated by parents. State-owned facilities mostly provide inpatient care for children with severe mental disorders; treatment is reportedly pharmacological and of low quality [14, 15]. Prevention programmes are limited to the presence of psychologists and teachers trained for

Table 2 Key features of mental health care services development in Central Asia. Based on WHO Mental Health Atlas 2005, 2011, 2017 data and country profiles

	Inpatient care			Outpatient care			Community services	Other services	Mental Health budget % of total health budget (2017)	Total mental health workers per 100,000 (2017)
	Beds in psychiatric hospitals per 100,000		Psychiatric beds in general hospital per 100,000							
	2005	2011	2017	2005	2011	2017				
Kazakhstan	59	61.3	UN	2	1.7	UN	Day hospitals, (throughout the region), mental health primary care services (Kazakhstan, Kyrgyzstan), multi-disciplinary teams piloted only in Kyrgyzstan (<i>n</i> = 11), small scale rehabilitation projects run by NGOs (Kazakhstan, Kyrgyzstan, Tajikistan)	7*	3.1*†	
Kyrgyzstan	56.2	31.7	27.7	6.3	1.8	UN		0.1	11	
Tajikistan	24.7	19.8	10.3	0	1.4	6.6		2	3.24	
Turkmenistan	32	UN	UN	3	UN	UN		UN	UN	
Uzbekistan	30	16.9	24.6	0.1	1	UN		2.7	23.6	

UN information unavailable

*Data for 2005

†Data for psychiatrists only

counselling in schools in Kyrgyzstan [25], Kazakhstan and Uzbekistan (expert reports).

Policy and legislation

Only two articles specifically discussed mental health policy or law—both from Uzbekistan [40, 41]. Most information on other countries was obtained through other articles (e.g. reports on services development) and expert reports. All countries have adopted new mental health legislation and in Kyrgyzstan and Uzbekistan have been criticised for containing flaws and inconsistencies [40, 42]. Mental health policies and programmes have been adopted to encourage research, tackle stigma, and transform outdated psychiatric care by relocating services into the community. However, these reforms remain exclusively on paper—or in Uzbekistan, only led to cosmetic changes to hospitals—largely because of lack of funding and non-prioritisation of mental health by policy-makers [14, 25, 32, 41]. Today all countries except Tajikistan adopted new national mental health care development strategies (three of them are publicly available [43–45]) for the coming years (Kazakhstan 2019–2020, Kyrgyzstan 2018–2030, Turkmenistan 2018–2022, Uzbekistan 2019–2025). All strategies prioritise development of primary and community mental health care, improvement of financing system and address human resources shortages. Experts in Kyrgyzstan and Uzbekistan reported issues such as lack of interagency coordination and clear instructions for implementation of the policies as well as lack of funding.

Resources, evidence and information systems

No papers on mental health economics or human resources were identified. This section is largely informed by Mental Health Atlas data, other articles and expert reports. Due to reduced investment into mental health care after the Soviet Union collapsed, psychiatric hospitals went into decline and could provide only the bare minimum to ensure patients' survival and served more as shelters for chronic patients rather than therapeutic facilities [28, 30]. In 1992, Tajikistan became embroiled in a 5-year civil war, which led funding to completely cease and half of all inpatients died out of hunger and neglect [31]. International organisations such as Médecins Sans Frontières provided emergency support for years after the war to revive the system.

The average regional mental health budget as a fraction of total health spending is 2.9%, which is less than in Eastern Europe (3.3%) and considerably below the Western European average of 7% [46]. There are large differences in the resources available for mental health (Table 2). These limited budgets are spent on maintenance of psychiatric hospitals and basic drugs, and severe mental disorders are prioritised over common conditions [25, 32, 47].

The total number of mental health workers per 100,000 population ranges from 3.2 to 23.6 and is significantly less than average for Eastern and Western European (47.4 and 127.2, respectively) [46]. While there is an urgent shortage of psychiatrists across all countries, social workers and psychologists are almost non-existent in state-run facilities. This situation is likely to worsen as many Soviet-educated psychiatrists are due to retire imminently and psychiatry remains unpopular among medical students because of stigma and low pay. Non-drug treatment was not historically considered part of psychiatric care [48]; hence the limited number of non-medical staff positions.

Evidence on psychiatric education is scarce; we identified one paper that looks at duration and structure of psychiatric education across former Soviet countries [49] and one study on diagnostic practice in Uzbekistan, demonstrating that teaching resembles that of the Soviet period [47]. Experts in Uzbekistan report that the quality of education is low, there is lack of regard for science, and no mechanisms by which evidence informs policy. However, all countries are reportedly integrating the international classification of diseases into clinical practice and in Kyrgyzstan evidence-based clinical guidelines are now being developed. This is an important step forward from the outdated system that has dominated since Soviet times.

Countries have inherited public health care registries from Soviet health systems, which include data on the incidence and prevalence of treated mental disorders, i.e. number of people using psychiatric care. We identified six studies on the prevalence of mental disorders, of which three collected data from such registries [50–52]. Epidemiologic situation presented by these registries when compared to this of the EU shows low incidence and prevalence of mental disorders compared to the EU, especially for common conditions [52]. This is likely to be explained by poor accessibility of services and stigma. Other epidemiological studies collected primary data on common mental disorders in limited areas only, namely regions of ethnic conflict in Kyrgyzstan [53] and two provinces in Kazakhstan [54, 55]. Only one economic evaluation was identified, which evaluated cost-effectiveness of community interdisciplinary teams in Kyrgyzstan [56].

With such limited quality knowledge about mental health care needs and services, it is unclear how decision-making for mental health policy and financing is informed, implying a risk that limited mental health resources are distributed ineffectively.

Stigma and alternative services

We could not identify a single study on mental health stigma in the region. Experts in all countries report that stigma is widespread and cuts across all life domains including

employment opportunities, marriage, family relationships, and help-seeking behaviour. Soviet-era psychiatric myths and stereotypes are prevalent, and there have been few initiatives to tackle this issue. The effects of stigma are aggravated through mandatory inclusion of diagnoses in a registry, leading to restrictions on marriage and employment. To avoid registration, people reportedly often avoid professional care providers and prefer self-treatment, other medical specialists, or traditional healers, making psychiatric care a last resort when the illness is often protracted and complicated.

Overall seven studies are entirely dedicated to the place of alternative healing services in mental health [57–63]. Prior to the Soviet era, beliefs in spiritual and supernatural causes of mental illness were common in CA [30, 35]. Societal changes in the 1990's revived these traditional cultural beliefs, which when combined with lack of trust in psychiatrists, low quality of care in official institutions, and pervasive stigma associated with being labelled as mentally ill, made alternative services widely popular in the whole region [30, 60].

The range of treatments people use to address their mental health issues include, among others, prayers, visiting holy places, performances of traditional folk music, herbalist services, bloodletting, and even whipping to release the body from evil spirits. The growing number of healers made it necessary for governments to try to institutionalise the sector. In Kazakhstan, compulsory training is now required to obtain a licence for alternative care practice [58]; in Tajikistan, along with obtaining licences, healers seek legitimisation by creating official associations [30], while in Turkmenistan, folk medicine is being taught in the country's only medical university. Having such a developed culture of alternative services, however, has not led to formal cooperation between their representatives and traditional psychiatry, and cross-referral is rare [30, 35, 59]. On the contrary, mistrust and mutual criticism between the two sides is reported.

Suicide

Seven studies report on suicide in CA, of which four originate from Kazakhstan [64–70]. Kazakhstan is an outlier in CA with some of the highest suicide rates in the world (potentially due to ethnic and religious differences in the population, which affect attitudes towards suicide [71]). In the rest of the region, suicide typically remains low, despite concerning increases in child and adolescent suicides over the last decade. Pilot prevention programmes to address the alarming rates of suicide among children and young people have been developed in Kazakhstan with the support of UNICEF [66]. However, further scaling-up of these programmes on a national level has yet to be implemented.

Low rates of suicide in the rest of the region may be explained by Islamic tradition, which prevails in the region

and strongly condemns suicide [68, 70]. For the same reason, suicide data must be treated with caution because some cases likely remain unreported and misclassified.

Service user engagement and human rights violations

Information on user involvement in the region was largely provided by experts with only one commentary paper on the foundation of the first user-organisation in Central Asia in 1997 in Kyrgyzstan [72]. Even today, it is only in Kyrgyzstan, where service users and their families have been regarded as stakeholders in decision-making and clinical guideline development in the last two years. In the rest of the region, service user organisations are non-existent or at an embryonic stage of development, and there is no participation of service users in policy development or decision-making.

We identified five reports on human rights in psychiatric institutions in Kazakhstan, Kyrgyzstan and Tajikistan, and two papers discussing cases of political abuse of psychiatry in the region. Legal illiteracy and indifference to the law is commonly reported across the region. As such, a culture of informed consent is absent, with “consent” regarded merely as the process of signing a form by patients and medical staff [30, 40]. Access to information on patients' rights, choice of treatment methods and their effects are limited within psychiatric institutions. Other violations of human rights relate to inaccessibility of services in rural areas, low-quality treatment, and adverse living conditions in psychiatric hospitals. Uzbekistan implements an unusual system of compulsory premarital examination for mental disorders for the general population, and refers to it as a preventative measure for creating a ‘healthy family’ [26]. Widespread systemic abuse of psychiatry for political purposes has not been highlighted since 1989, but cases of the detention of political activists in psychiatric institutions have been reported from Kazakhstan, Turkmenistan and Uzbekistan [73, 74].

Discussion

Principal findings

To our knowledge, this is the first review focussed specifically on mental health care in CA. Previous international reviews only mentioned CA countries within the scope of the former Eastern Bloc [38, 48], thereby limiting understanding of region's distinctive situation.

In 2001, Tomov predicted that mental health service research from Eastern Europe and Central Asia will not emerge ‘for some time’ [48]. This review demonstrated that this is still applicable to CA in 2020, where scientific

research is not prioritised in public health. There are significant knowledge gaps in every aspect of regional mental health care, epidemiological studies are rare and there are no fully fledged evaluations of policies or economic analyses. Existing research is largely descriptive and often lacks methodological rigour to be published in internationally recognised journals.

Strengths and limitations

Due to the scarcity of published literature, we set broad inclusion criteria and included grey literature along with expert opinions to address the goal of this scoping review. As with other scoping reviews, including the recent review of Central and Eastern Europe [8], this review summarises the range and nature of research activity, identifies gaps in the literature and provides an overview of findings on the topic of interest, rather than appraising the quality of evidence for and against a specific hypothesis. It is important to recognise the inclusion of sources that potentially did not undergo a rigorous review process, although we triangulated our findings from the literature with reports from in-country experts, which increases the reliability and comprehensiveness of the review. Given the scarcity of information, the inclusion of a Russian database and articles in Russian were vital and allowed us to retrieve more relevant literature.

Our methods have some important limitations to acknowledge. First, we excluded addictions (ICD-10 F10-F19), organic mental disorders (F00-F09), developmental disorders (F70-F79, F80-89) and forensic psychiatry. Some of the domains in our review, such as stigma, user involvement, or mental health policy, were informed largely by experts, as we were unable to identify published literature on these topics. All experts were experienced specialists in their fields, but they were selected based on their willingness to participate in the study rather than on a stakeholder mapping exercise, which might have led to an information bias. This also applies to the grey literature search, which was done by country collaborators. To maximise transparency, we report a complete information on individual countries in their respective country profiles, including disagreements between experts and literature. We were unable to include a representative sample of experts for some countries, and in Kyrgyzstan, we could only rely on one expert, while for Tajikistan, no expert opinions were obtained. It was not possible to identify user/family participants, therefore perspectives of this important stakeholder group were not included.

Implications

Despite CA countries having embarked on different economic and political courses, as well as approaches to foreign cooperation since 1991, mental health policy and practice

remains quite homogeneous across the five countries after nearly 30 years. Reduction of beds may be associated with transinstitutionalisation of patients into prisons or internats since community services were not developed. Tomov [48] suggested that the reason for delay in mental health reforms in Eastern Europe was the existence of two parallel realities that never overlap: one is the official account on paper, another is the actual situation, which is only ever spoken. In such conditions of fragmented mental health care, where policy is not informed by research and actual practice is independent from official policy, a genuine shift in mental health practice takes a long time to happen. Only when health administrators start using quality evidence, and involve other stakeholders for strategic development, then one should expect genuine progress.

Like in Eastern Europe, rare cases of community care in CA exist due to activity of local leaders and financial support of foreign organisations rather than national governments. However, for CA, which is more financially restrained than European countries, it is even more challenging to sustain and scale-up such programmes on a national level. Less costly interventions such as provision of priority mental health treatments within primary health care [75] are needed for CA countries to be able to reform their mental health care systems [76]. Engaging general practitioners and other primary health care workers, psychologists, social workers, traditional healers, and families could address the problem of understaffed mental health services. Recent strategic development plans with first steps being made in primary mental health care, integration of International Classification of Diseases into clinical practice, and rebuilding old psychiatric hospitals might demonstrate serious attempts of policy-makers in the region to revive the deteriorated system.

Recommendations and future work

With only minor differences between the countries, quality data are generally lacking in all research domains across the region. Epidemiological studies only use registry data or are limited to certain populations, further research on the national level is required to set priorities for interventions and evaluation. No paper looked at child and adolescent mental health and this area should be prioritised further given the large proportion of this age group in the region and the noted increase in suicide. In light of the recent adoption of mental health policies, research focused on assessment of policy implementation accompanied with cost-effectiveness analyses of care in different settings is needed. Only two papers on Turkmenistan were included in the review demonstrating the region's blind spot, so this country should be explored further. No published evidence was identified on stigma in mental health, yet experts universally reported that

stigma is omnipresent in CA, interventions to address stigma and discrimination backed by research are needed.

Conclusion

The review demonstrated substantial knowledge gaps and an extreme lack of good-quality evidence in the mental health care of CA. The findings of the review are consistent with other reviews on the countries of the former Eastern Bloc [8, 38]. Recent attention to mental health in the region provides opportunities for future change, and Central Asian countries have an opportunity to learn from the experiences of their European counterparts that began to implement mental health reforms in similar socio-political contexts. This, however, should be accompanied with parallel investment in capacity building to increase research and informed decision-making and involve all key stakeholders including service users and the informal care sector.

Author contributors

AA and PW initiated, planned and designed the study, identified country collaborators, conducted the literature review and prepared the first draft of the paper. TR and DK participated in designing the study and contributed to writing and proof-reading the draft. Country collaborators (SM, LP, SY) consulted with experts and reported on their countries, conducted grey literature search in local sources, commented on and validated country profiles. GT helped to identify experts and contributed to the final draft of the paper. NS contributed to the final draft of the paper. PW supervised the whole study.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1007/s00127-021-02064-2>.

Acknowledgments The study was supported by the project “Sustainability for the National Institute of Mental Health” (Grant LO1611), with a financial support from the Ministry of Education, Youth and Sports of the Czech Republic. GT is supported by the National Institute for Health Research (NIHR) Applied Research Collaboration South London at King’s College London NHS Foundation Trust, and by the NIHR Asset Global Health Unit award. The views expressed are those of the author(s) and not necessarily those of the NHS, the NIHR or the Department of Health and Social Care. GT also receives support from the National Institute of Mental Health of the National Institutes of Health under award number R01MH100470 (Cobalt study). GT is supported by the UK Medical Research Council in relation the Emilia (MR/S001255/1) and Indigo Partnership (MR/R023697/1) awards. TR is funded by an ESRC fellowship (ES/T007125/1). We would like to acknowledge everyone who contributed to this study by expressing their valuable opinions with regard to the countries where they work: Natalia Raspopova, Bakhyt Tumenova (Kazakhstan); Sandjar Akhmedov, Zarif Ashurov, (Uzbekistan). We are grateful to the Ministry of Foreign Affairs of Turkmenistan for their cooperation. We express our

gratitude to Roza Userbaeva who conducted grey literature review in Uzbekistan. We also thank those who wished to stay anonymous. DK is a staff members of the World Health Organization (WHO). The authors alone are responsible for the views expressed in this paper and they do not necessarily represent the decisions or policies of the WHO.

Declarations

Conflict of interest We declare no conflict of interest.

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