Iran’s Comprehensive Mental and Social Health Services (SERAJ Program): A Pilot Protocol

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Abstract

Objective: The Iranian Mental Health Survey (IranMHS) indicated that almost 1 in 4 people had one or more psychiatric disorders (23.6%); however, two-thirds of patients did not benefit from health interventions, many provided services were inadequate and imposed a high burden on Iranian families. Therefore, the development of a national program on providing comprehensive social and mental health services, entitled "SERAJ", became necessary. The present study aims to develop and outline the protocol for the pilot implementation of SERAJ.

Method: This study is an action research with the collaborative mode. To compile the protocol, a broad review of the literature, interviews with experts and stakeholders, and focused group discussions were conducted.

Results: The pilot implementation should be divided into 4 phases: (1) preparing documentation and work team, (2) preparing the prerequisites for providing pilot services, (3) providing pilot services, and (4) implementation and evaluation.

Conclusion: SERAJ considered both preventive and treatment measures for mental and social health disorders and their risk factors. Moreover, the entire population can have access to primary and secondary services. Therefore, SERAJ is more comprehensive than the current situation in the country's mental health services. We suggest piloting and evaluating SERAJ in three districts of Iran.

Key words: Community Action; Mental Health; Protocol; Pilot Implementation

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World Health Organization (WHO) reported that more than 1 in 5 people of the Eastern Mediterranean Region suffer from mental disorders (1) and that these disorders contribute to 32.4% of years lived with disability (YLDs) and 13.0% of disability-adjusted life-years (DALYs) of global burden (2). According to the Iranian Mental Health Survey (IranMHS) in 2011, almost 1 in 4 individuals are affected by psychiatric disorders (3). It is also reported that these illnesses are the leading cause of disability among 10-40-year olds in Iran (4). Moreover, the Iranian Mental Health Survey (IranMHS) (5) indicated that almost 1 in 4 people had one or more psychiatric disorders (23.6%) and the prevalence of psychotic disorders was nearly 1%. This is when two-thirds of patients have not benefited from mental health interventions, and the mental and social health services have been inadequately distributed and provided in Iran. Furthermore, from the economic point of view, psychiatric disorders impose a considerable burden on the family; according to the IranMHS, more than 30% of family income is spent for a psychiatric patient per year (5).

In our previous study (6) conducted in 2012 to prepare national policy and interventions for promoting mental health, we used secondary data by reviewing country’s mental health programs, WHO recommendations, the descriptive situation of mental health, and its trend during the last decade.

Then, we formed a group of experts and stakeholders following a stakeholder's analysis. After three focus group discussions (FGDs), the main points of the meetings, influencing factors of the present situation, and oncoming strategies were agreed upon.

By reviewing the literature on countries with successful experience on providing mental and social health services, evaluating the Iranians’ mental status based on published studies and Iranian national reports, in another study (7) published in 2017, we proposed a model for reaching the universal coverage for mental health services. The distinct feature of this model was proposing a referral system for mental disorders and adapting and merging it within the current available primary health care (PHC) system in Iran (7).

Meanwhile, a national program on providing comprehensive social and mental health services, entitled “SERAJ”, was developed and has been piloted in three districts of Iran. Three main programs provided in SERAJ are primary care services, secondary care services, and community action. Primary care services mainly include public education on social and mental health skills as well as the screening of the population for mental and substance use conditions by a health worker and referring the identified individuals to a general practitioner and if necessary, to the secondary care (7). The second program includes community mental health centers (CMHCs) and psychiatric wards in general hospitals. In CMHCs, a collaborative care model working with primary care general practitioners (GPs) has been developed to improve detection and treatment of common mental disorders; the services for patients with severe mental disorders include assertive follow-up through home visits and telephone calls, family and patients’ psychoeducation, and other rehabilitation services. The third program, community action, has three main components: strengthening intersectoral collaboration through the memorandum of understandings (MoU), increasing people’s participation by establishing People’s Participation House with the presence of the representative of current people’s network, and social protection of people suffering from mental disorders by establishing self-reliance unit. All three components work and are controlled by the governor and with supervision and technical consult of the health network of the district and stakeholder participation. The model is summarized in Figure1

Any reform needs resources; apart from the physical and fiscal resources needed for the proposed model, preparing human resources is of most important prerequisite for implementation. In this regard, social workers (8) should be employed in the PHC system in Iran, and the PHC structure itself should be reformed which needs macro support and intersectoral collaboration. This model uses the inner capacities of the district rather than creating new structures that impose a smaller financial burden. All these changes need to be piloted before they could be nationally implemented. The present study aims to develop and outline the protocol for the pilot implementation of SERAJ.

Materials and Methods
The present protocol is action research with the collaborative mode. We selected this mode of action research for our pilot implementation because it assists health service providers and policymakers when they are looking for a root cause behind a problem and helps them to better understand the problem by raising their collective consciousness (9). To compile this protocol, three types of data collection have been used:

1) Review of the literature,
2) An in-depth interview with experts and stakeholders, and
3) Focused group discussions. The purpose of collecting information was to formulate goals and pilot steps.

Phase 1: Review of the Literature
A review of the literature using keywords “Mental Health Service, Mental Healthcare, Mental Health Hygiene, Social care, Healthcare, Primary healthcare, Primary Care, Social Care Services, Social Care System, Social Service, Community Service, Implementation Protocol, Pilot Implementation” was performed to collect data on experiences in implementing mental and social health care services in districts of Iran. The motor engines we searched were Google Scholar, PubMed, and Embase for English publications and rc.majlis.ir (Iranian Parliament Research Center), irandoc.com,
Phase 2: In-depth Interview with Experts and Stakeholders

Stakeholders were selected according to their power and influence using stakeholder analysis. The intentional sampling method was used to recruit experienced experts from different disciplines, including public health, health care management, and social work. Semi-structured interviews were conducted using a set of open-ended questions. The interview questions were sent to the interviewees by email and then a face-to-face interview was arranged. All interviews were recorded on a digital audio recorder with the permission of the interviewees. The interviewer was a trained researcher and familiar with the in-depth interview method. The five major questions were as follows:

1) In your opinion, what is the goal of mental health services?
2) What will be the basis of such services?
3) How will the process of providing these services be?
4) How and from where will the resources (human resources, including information and education; physical resources, including necessary equipment and financial resources) of the aforementioned services be provided?
5) How should this project be managed? The thematic analysis method was used for analyzing the data collected through the interview.

Phase 3: Focus Group Discussions

A draft report on how to determine a protocol for the pilot experience of providing comprehensive mental and social health services was developed by the research team based on the information gathered by the previous phases. Then, the report was reviewed and criticized by experts in six focus group discussions (FGD). A facilitator raised the questions in each session, and we collected ideas and opinions by assigning a member as the session manager. The discussions were recorded with the group's consent and were analyzed by the thematic analysis method. Finally, a table consisting of a brief overview of four phases (Figure 2) of the protocol implementation for providing a comprehensive model for mental and social care services was indicated and then the requirements of implementation were defined. The collected data were reviewed by the steering committee and a consensus was reached on how to do the implementation.

Results

The overarching goal of this model is to 1) increase the equity index of mental health and social care services, 2) increase mental health literacy, adopt preventive psychosocial behaviors, and improve financial protection of patients, and 3) reduce the prevalence of mental disorders and social harm. To do the pilot implementation and evaluate the results, we divided the pilot experience into four main phases. Phase 0 is preparing documentation and work teams which began in 2014 and took one year to fulfill. The protocol was compiled at this stage. In phase 1 the prerequisites for the next step is prepared, that is providing pilot services from 2015 to 2016; preliminary works for implementing the pilot phase as well as pre-evaluation were done at this stage. In phase 2, pilot services were provided from 2016 to 2018. In phase 3, evaluation and utilization of results, as well as post-evaluation, are performed in 2018-2019. The process of the pilot protocol is demonstrated in Figure 2.

Phase 0: Preparation of Documentation and Work Teams

Stakeholder Analysis and Their Participation at National, Provincial, and District Levels

According to the stakeholder analysis matrix, the deployment participants were defined as the project team, steering implementation, the social care intrasectoral committee, and field implementers.

A) Project Team: Includes two psychiatrists, two community medicine specialists, and two psychologists. The selection criteria for the project team were being familiar with public health issues and prevention of mental disorders, experience in designing and deploying similar patterns and having worked in the ministry.

B) Steering Implementation: The health and food security provincial council and the deputy health minister were independently appointed as steering members to receive their support and announcements as appropriate. The Office of Mental Health and Substance Abuse was responsible for the coordination of staff with the Center for Network Development and Hospital Administration.

C) Social Care Intrasectoral Committee: To seek advocacy for national organizations in providing social care in the district's model, 13 institution and organizations were appointed as members of this committee: Environmental Protection Agency, Police, Interior Ministry, High Council of Provinces, the State Welfare Organization (Center for Social Welfare, Office of Advice and Psychology), Iran Confederation of Employers’ Associations (ICEA), the Islamic Revolution Housing Foundation, Iran's Technical and Vocational
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Training Organization (Iran TVTO), the Literacy Movement Organization, the Imam Khomeini Relief Foundation, the Ministry of Cooperatives Labor and Social Welfare (Office of Labor Guidance, Social and cultural affairs and insurance), Ministry of Education, and Judiciary.

D) Field Implementers: The team consists of eight members, chaired by the deputy minister in the province, including a health deputy from the universities of medical sciences and health services, the governor and deputy governor of the district, the director of the department of psychiatry in the university, the director of mental health department of the university, the head of health network of the district, and the head of the secretariat of the health and food security working group of the province. One person is responsible for establishing the pattern in the district and receives it from the head of the university. The head of the line implementation team is responsible for coordinating with and informing the representative of the district in the Islamic Consultative Assembly and the head of the provincial management and planning organization for further advocacy.

### Determining the Selection Criteria for Districts

In the beginning, three provinces desired by the deputy minister of health should be selected. Considering its importance in the pilot phase and to minimize the confounding effect of the field implementers' activities, the following criteria were proposed to the project team for selection:

1. The maximum population of the district should be 80,000 to 100,000;
2. There should be a city populated with 20,000 to 50,000 people;
3. There should be at least one hospital in the district;
4. There should be at least 1 psychiatrist in the district;
5. It must be close to the capital of the province;
6. There should be a capable, interested, and sustainable network director;
7. There should be a governor interested in this topic.

After selecting the three districts, the following information for each should be collected and extracted as data: the urban and rural population, the number of rural and urban health care centers, the number of health houses, the number of manpower employed in the hospitals, the number of the health center of the district (line and staff), the number of hospitals, the number of counseling centers, and psychocognitive services.

### Determining Preevaluation and Postevaluation Indicators and Their Measurement Method

Indicators of evaluation before and after intervention based on mental and social health services' constitution include reducing the prevalence of mental disorders, improving the vitality index, adopting preventive psychosocial behaviors and mental health literacy, the health system responsiveness in the psychosocial sector, financial protection of psychosocial patients, and finally social health indices, especially increase in social support.

After selecting the three case districts, three control districts should also be selected. The questionnaire for identifying major depressive disorder, general anxiety, and obsessive-compulsive disorder (CIDI), the social support questionnaire, and mental health literacy questionnaire should be considered. After selecting interviewers and holding a three-day training course for them, an in-depth interview should be conducted one month before the intervention. Then, 20% of filled questionnaires will be reviewed and qualitatively controlled, and feedback for all questionnaires in all three provinces will be sent. Other indicators of monitoring will be calculated according to expectations from all the three levels of basic, specialized, and action community.

### Determining the Current Status of the Main Process of Service and Service Packages Required (Clinical and Public Health)

Regarding the conceptual model and the constitution that are discussed in our previous studies (6-8), we developed three service packages for the provision of mental and social health services: the primary care (first program), specialized mental health services in the form of developing a community mental health center and psychiatric wards in general hospitals (second program), and community action (third program).

### Determining the Patients' Registry Software and Its Relation to the Available Software

To manage this information, a system with the following features should be designed:

1. The system should be designed to record the follow-up data through both visits and phone calls.
2. Users should have access to specific features due to their role in the system.
3. Each level shall be able to create its own or lower level in the system and introduce its users to the system.
4. It should be equipped with exporting data in Excel format.
5. All mandatory fields should be specified in the system.
6. Before storing data, all mandatory fields should be controlled.
7. To facilitate data entry, all mandatory fields should be equipped with several options.
8. According to the patient's records and previous visits, identifiable information to the system should be filled automatically.
9. Given the data entered in a field, the status of the next fields, as active and inactive, should be processed by the system.
10. The sequence of visits and follow-up activities should be defined for the system so that after entering any data, the next activity will be automatically determined by the system.

The system should be equipped with entering data, other than the system's predefined options.
11) The system should provide a daily list of activities done by the therapists’ assistants.
12) The system must connect all three service packages (basic, specialized, and community action) and should be trackable after referring from one level to the next.

**Pilot Financial Management System and Determining the Actual Budget Needed in the District**

Given that the three service programs were considered separately, financing of each one was as follows:

1) Primary care services (provided in health centers) were funded by health reform plans.
2) Secondary care services (provided in a community mental health center) were calculated for each district, based on analyses conducted in previous pilots.
3) Community action package was firstly funded by the staffing budget and training workshops, but later to implement the memoranda of the three districts, correspondence was made with the Standards Bureau and the Ministry of the Interior.

**Phase 1: Preparing Prerequisites for Providing Services**

**Submitting Timetable and Expectations from the Provinces and Tracking Them in Several Steps**

A rigorous and consensual meeting should be initiated with the team and the manual of pioneer implementation of mental and social health services shall be explained in that session. Then, the expectations from the three provinces and timing schedules and deadlines should be sent.

**Engaging Local Authorities and Health Departments**

Local authorities, including the budget director of the provincial budget office, the heads of the insurance companies, the Imams of the Friday prayer, the governors, and the tenants and mayors of each district, should be justified, and the expectations from each of them should be stated. Also, health deputies must be justified and the joint decree of the head of the network and the personnel should be received and their duties should be described.

**Holding the National Interagency Coordination Committee on Social Care**

To seek advocacy from the national organizations in providing social care in the district's model, 13 institutions and organizations were appointed as members of this committee (including 1. Literacy Movement Organization, 2. Imam Khomeini Relief Committee, 3. The Iran Confederation of Employers’ Associations, 4. Deputy of Commissions and affairs of government; 5. Organization of technical and vocational training; 6. Ministry of Education: Health Office; 7. Governor; 8. Islamic Revolutionary Housing Foundation; 9. Ministry of Cooperatives, Labor, and Social Welfare; 10. State Welfare Organization: Office of Counseling and Psychology, Social Emergency). Then, the framework for the comprehensive mental health system of the district and the service package for social support were presented in a meeting through 10 priority issues for implementing in three districts. Moreover, participants raised questions and ambiguities, mentioned the limitations, and conveyed their suggestions for seeking advocacy. They filled in a form, answered questions, and wrote their information for contacting.

**Training the Mental Health Team of the District**

The health care professional should be trained and all educational documents should be handed over. Training for each province will be held in four days. The training of the community mental health center team should be held centrally in Tehran for a week. The governor, deputy governor, and the head of the health network of the district should also be trained about principles and techniques of community action in Tehran. The training program will be published separately.

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![Image of Iran's Comprehensive Mental and Social Health Services](https://example.com/image.png)

**Figure 1. Iran’s Comprehensive Mental and Social Health Services (the SERAJ Program) and Its Three Service Packages: Primary Care Package, Secondary Care Package, and Community Action Package**
Discussion
To compile this protocol, documents and the teams were prepared in the first phase. Stakeholders’ participation was analyzed at both national and provincial levels. Criteria for districts’ selection were determined. Indicators of evaluation and the method of data collection for pre-pilot and post-pilot service implementation were specified. According to previous studies, the status of the main process of service and the required service packages (clinical and community health) were derived. Also, the features of the software for patients' information registry and referral system were determined. The pilot financial management system was monitored and the method for collecting actual budget was discussed. In the next step, the prerequisites for providing the services in each district should be prepared. The timing expectations from the provinces should be sent and their follow-up should take place in several steps. The National Intercultural Coordination Committee for Social Care should be held. Thereafter, extensive training should be provided to the family health care professional, the mental health specialist, the psychiatrist, and the executive director, the post-discharge care unit personnel, the cooperative care unit personnel, the day staff, the governor, the head of the community monitoring committee secretariat, and
the manager of the district program. Subsequently, mental and social health services will be provided; follow-up sessions with the mental health team will be organized; then, the results will be evaluated and applied at a later stage. Other countries also reported problems in the field of mental health services and took action to resolve them.

A study (10) conducted on the US population reported that nearly 19% of people have reduced or lack of access to mental health services. Their results showed the most factor which had a role in this issue was related to insurance conditions in the US. Insurance providers in the US do not cover mental health services as much as they cover physical health services. To improve the access to mental health services for the American people, the US has recently passed the comprehensive state mental health parity legislation (C-SMHPL), although its implementation has been limited.

A survey (11) conducted in Canada in 2014 showed although a relatively high prevalence of mental health problems in Canada is well-documented, less is known about the adequacy of mental health services available to Canadians. They found that many institutions did not have initiatives or services aimed at identifying patients with mental health problems or policies for monitoring their mental health services. Moreover, gatekeepers and campus medical services, compared with larger institutions, are less likely to offer certain services in Canada. Moreover, a systematic review or an evaluation of services was infrequently conducted. They highlighted the need to develop and institute a comprehensive strategy to evaluate and optimize the delivery of mental health initiatives and services.

Another study (12) also showed that mental health literacy, to recognize mental health problems, is an important target for increasing service uptake. They concluded that there is considerable potential to increase the impact of such education in the community and have a greater community-based response to encourage people to access appropriate mental health care.

One Canadian study (13) in 2017 reported that their national surveys showed they also needed to increase the provision of mental health services in their country. In this regard, they have increased the access to mental health services by intervening in PHC infrastructures to update the role of the goalkeepers of their health system and oblige them to detect mental health disorders in the population through screenings, management, follow-up sessions, and having a role in reducing the stigma of mental disorders. They performed a needs assessment, organized training programs, and set action plans for implementation; we also reached similar results in our protocol.

According to an Australian study (14), the great majority of mental health resources are targeted towards headspace and early psychosis youth centers, which are oriented towards treatment rather than prevention. The lack of attention to population-level mental health promotion and mental illness prevention was considered crucial in this study. To reduce the prevalence of mental illness, they reported that considerably greater federal and state government-funded population health action is needed, which is congruent to our study. They also indicated this action to consider the developmental origins and risk factors over the life course, beginning with support for families during pregnancy and early childhood, and continuing with programs such as online and school-based cognitive behavior therapy and whole-school based bullying prevention interventions (15). We also included such services in our primary level services in SERAJ with mental and social health screening as well as screening for substance abuse and alcohol consumption. Investing in population mental health strategies is inexpensive compared to the costs of specialist mental health services, but if successful it will reduce future demand for these services.

Moreover, an Australian study (15) suggested that mental health promotion in workplaces, the community, and the aged care sector is likely to play a key role in preventing mental disorders in adults; this could mostly be fulfilled by the third package, community action in SERAJ.

Another Australian study (16) reported that after 12 years of national mental health reform, major service gaps, and poor experiences of mental and social care were common in their country. They reported that the mental health community in Australia was faced with little progress in implementing its key priorities, such as expanded early intervention programs, comanagement of people with mental health problems and related alcohol or substance misuse, and widening of the spectrum of acute care settings. They later proposed new national targets for reducing the social and economic costs of poor mental health; these include increased access to effective care, reduced suicide rates, and improved rates of return to full social and economic participation. We have included the aforementioned indicators for the evaluation of SERAJ by conducting a before-after study and an outline in the protocol. Moreover, in our study, we detailed specific services designed to maximize the chance of achieving these targets and integrate primary care programs.

A Chinese study (17) on the mental health system in China, evaluated their recent service reforms, and reported on their future challenges. They suggested that with continued political commitment, timely assessment of needs and matching resources, development of appropriate public health policies, delivery of effective interventions, strengthening of human capacity, efficient mobilization of financial resources, and rigorous monitoring and evaluation, China will be in a favorable position to build and strengthen a national sustainable community mental health system and service for the benefit of the mental health of its population. We also considered the above-mentioned points in SERAJ.
Limitation
There are several limitations to this study. The results of this pilot implementation are not expandable to other countries, as it is action research, which is not a serious problem, because it aims to solve a local problem. Moreover, results and strategies we implemented have not been analyzed according to different cultural backgrounds and there are likely to be important cultural differences in help-seeking for mental disorders that have not been revealed.

Following the provision of this protocol, the following issues should be considered:
1) Funding the community action package and finding advocacy from the MOHME;
2) Integrating our suggested software into the National Integrated Health System (SIB) software;
3) Conducting a unit-cost study for services provided in health centers, community mental health centers, and community actions;
4) Designing a sustainable financial system for all three programs so that insurance organizations participate in financing specialized and community action services.

Conclusion
Our proposed protocol has three distinct features:
1) Prevention and treatment of mental and social health disorders are fulfilled.
2) The whole population can enjoy basic services, as access has been provided by the sustainable referral process from primary to secondary levels in the treatment section.
3) An intervention model has been considered to reduce risk factors. Therefore, SERAJ is more comprehensive than the current situation in the country’s mental health services. We suggest piloting and evaluating SERAJ in three districts of Iran.

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Conflict of Interest
None.

References