

Folder eCC_00020769 is in stage Annual_Report_Due

Name of the University, Hospital, Research Institute, Academy or Ministry

Iran University of Medical Sciences

Name of the Division, Department, Unit, Section or Area

School of Behavioural Sciences and Mental Health, Teheran Institute of Psychiatry

City Teheran **Reference Number** IRA-22

Title WHO Collaborating Centre for Mental Health

Report Year 06-2023 to 06-2024

1. Annual report on the agreed workplan

Describe progress made on the agreed workplan. For each activity, detail (1) the actions taken, (2) the outputs delivered, as well as (3) any difficulties that may have been encountered. Three responses are expected. [maximum 200 words per activity]. Indicate, if an activity has been completed previously, has not yet started or has been placed on hold.

Activity 1

Title: Provide technical guidance on suicide prevention program development, implementation and evaluation in Countries of the Eastern Mediterranean region

Description: Integration of mental health component within PHC is one of the core strategies of WHO to enhance access to mental health care and reduce the treatment gap while Reduction in Suicide rates is one of the core indicators related to mental health both in GPW 13 and Global action plan for mental health in addition to being an indicator related to 3.4.1 SDG target .This will thus help WHO in reporting on the SDGs as well on the GPW 13 targets

Status: not yet started

Title of Activity:

Provide technical guidance on suicide prevention program development, implementation and evaluation in Countries of the Eastern Mediterranean region (Activity 1).

Introduction:

Integration of mental health component within PHC is one of the core strategies of WHO to enhance access to mental health care and reduce the treatment gap while reduction in suicide rates is one of the core indicators related to mental health both in GPW 13 and Global action plan for mental health in addition to being an indicator related to 3.4.1 SDG target. This will thus help WHO in reporting on the SDGs as well on the GPW 13 targets

Status:

not yet started

Challenges:

There was not any request for assistance to develop or implementation of national suicide prevention program across countries of EMR.

Activity 2

Title: Conduct research to reduce stigma associated with mental health and minimize discrimination faced by persons with mental health problems

Description: Stigma is an overarching problem with its attendant discrimination contributes to perpetuation of outdated models of care, minimal allocation of resources for mental health and human right abuses. The result is a massive treatment gap for mental health problems despite availability of cost effective and affordable interventions. The research will be considered by WHO in WHO's development of a regional action plan and initiatives to address the issue of stigma and discrimination in countries of the region. By identifying and removing the barriers of establishing and expanding the cost-effective mental health services, this activity is related to mental health both in GPW 13 and Global action plan for mental health in addition to being an indicator related to 3.4.1 SDG target.

Status: ongoing

1. Report of Activity

A) Title of activity:

Conduct research to reduce stigma associated with mental health and minimize discrimination faced by persons with mental health problems (activity 2)

B) Status:

Ongoing

C) Progress made during 2023-2024:

Several projects have been undergoing since last year.

A systematic review on mental health related stigma has been conducted and the manuscript has been accepted for publication in Stigma and Health journal and will be published soon.

In order to achieve our goals to review the cost-effective anti-stigma interventions and designing an interventional package, based on our scoping review and designed package which have been published in an article in Frontiers in Psychiatry before

(<https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsy.2022.860117/full>), a pilot study project to reduce stigmatized attitude toward patients with severe mental disorders is performed by a validated educational package. Its revised manuscript is under review Academic Psychiatry journal. Its first draft is now available in Research Square: <https://www.researchsquare.com/article/rs-3322326/v1>

In order to achieve our proposed aim for review of stigma related to mental disorder, in addition to mentioned systematic review, and enrichment of literature, we have launched several studies:

A national survey to evaluate attitude of general population toward patients with mental disorder is ongoing. It's in data gathering phase.

Another survey on Iranian cinema artists to evaluate their attitude toward patients with mental disorders is finalized and published in BMC Psychology: <https://link.springer.com/article/10.1186/s40359-024-01550-x>

Another study on attitude of pharmacists toward patients with mental disorder is finalized and published in BMC Psychology: <https://link.springer.com/article/10.1186/s40359-024-01604-0>

We are in contact with Prof. Norman Sartorius to design another project on self-perceived stigma of the Iranian Psychiatrists.

Another study on correlation between self-perceived stigma of Iranian neurotic patients with their insight is finalized and it will be submitted shortly. Its first draft is now available in Research Square:

<https://www.researchsquare.com/article/rs-4191459/v1>

Another study on attitude of college students toward patients with mental disorders in Iran is finalized and published in Journal of Iranian Medical Council: https://www.jimc.ir/article_172800.html

Several following papers have been lead and are published by the research team in collaboration with early career psychiatrists from different countries in order to raise awareness on stigma related to mental disorders:

1. Kamalzadeh, L., de Filippis, R., El Hayek, S., Heidari Mokarar, M., Jatchavala, C., Koh, E. B. Y., ... & Shalbfafan, M. (2023). Impact of stigma on the placement of mental health facilities: insights from early career psychiatrists worldwide. *Frontiers in Psychiatry*, 14, 1307277.?

(<https://www.frontiersin.org/articles/10.3389/fpsy.2023.1307277/full>)

2. Pokharel, A., Philip, S., Khound, M., El Hayek, S., de Filippis, R., Ransing, R., ... & Shalbfafan, M. (2023). Mental illness stigma among perinatal women in low-and middle-income countries: early career psychiatrists' perspective. *Frontiers in Psychiatry*, 14, 1283715.?

(<https://www.frontiersin.org/articles/10.3389/fpsy.2023.1283715/full>)

3. de Filippis, R., Kamalzadeh, L., Adiukwu, F. N., Aroui, C., Ramalho, R., El Halabi, S., ... & Shalbfafan, M. (2023). Mental health-related stigma in movies: a call for action to the cinema industry. *International Journal of Social Psychiatry*, 00207640231152210.?

(<https://journals.sagepub.com/doi/abs/10.1177/00207640231152210?journalCode=ispa>)

4. Shalbfan, M., El Hayek, S., & de Filippis, R. (2023). Mental-health-related stigma and discrimination: Prevention, role, and management strategies. *Frontiers in Psychiatry*, 14, 1136995.?

(<https://www.frontiersin.org/articles/10.3389/fpsy.2023.1136995/full>)

5. El Halabi, S., Fish, E., Boroon, M., de Filippis, R., El Hayek, S., Larnaout, A., ... & Shalbfan, M. (2024). The role of arts in moderating mental health-related stigma: views of early career psychiatrists and trainees from different parts of the world. *Frontiers in Psychiatry*, 15, 1293142.?

(<https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsy.2024.1293142/full>)

6. El Hayek, S., Foad, W., de Filippis, R., Ghosh, A., Koukach, N., Mahgoub Mohammed Khier, A., ... & Shalbfan, M. (2024). Stigma toward substance use disorders: a multinational perspective and call for action. *Frontiers in Psychiatry*, 15, 1295818.?

(<https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsy.2024.1295818/full>)

Any of projects which are mentioned above will be continued to next stage based on their main findings and future directions.

D) Any output delivered during 2020-2024:

At least 15 published papers in international scientific journals and 5 presentations in national and international congress.

E) Result achieved during 2020-2024:

Better understanding about stigma among Iranian special populations and interventions for destigmatization for them.

We have achieved our aims to review stigma of mental disorders, cost-effective interventions for reducing stigma almost completed. Although our designed package is particularly targeting medical students for now. Broader target population would be of interest in the next step. In addition, multi-national studies in EMRO region will be conducted in the next phase(s).

F) Any difficulties encountered during 2020-2024 (if applicable):

Budget limitation and lack of APC support for publishing our findings in Open Access journals. For future research activities, more specifically multi-national trials, suitable budget is crucial.

2. Resources

A) Costs:

- *Percentage of costs associated with other resources: 30%
- *Percentage of costs associated with staff time: 70%

B) Number of staff involved (either partially or fully):

- Senior staff:3
- Mid-career staff:7
- Junior staff, PhD students: 20

C) Number of full-day equivalents, total for all staff involved:

- Senior staff: 20
- Mid-career staff: 170
- Junior staff, PhD students: 400

3. Networking

None

Activity 3

Title: Using e-health technology for suicide prevention

Description: Reduction in Suicide rates is one of the core indicators related to mental health both in GPW 13 and Global action plan for mental health in addition to being an indicator related to 3.4.1 SDG target.WHO will be able to benefit from this development to scale up Suicide prevention activities and overcome the socio cultural barriers

Status: completed

1. Report of Activity

A) Title of activity:

Using e-health technology for suicide prevention (Development the suicide prevention application) (activity 3)

B) Status:

Completed

C) Progress made during 2023-2024:

First of all, we conducted a systematic review of the effectiveness of self-help mobile telephone applications in reducing suicide ideation and suicidal behavior. The result of the study, confirms the effect of self-help mobile applications on suicidal thoughts and behavior. So, we decided that develop the Persian version of the suicide mobile application for the Iranian population. For this purpose, we reviewed and summarized the contents of other suicide prevention applications. In addition, during the meetings with psychiatry and clinical psychology experts, the main items of the application were discussed and together with the information obtained from the analysis of previous applications, we developed the basic framework of each item, then during the meetings with engineers the process of building the application was completed.

D) Any output delivered during 2020-2024:

Our systematic review article about the effectiveness of suicide prevention applications:

Malakouti, S. K., Rasouli, N., Rezaeian, M., Nojomi, M., Ghanbari, B., & Mohammadi, A. S. (2020).

Effectiveness of self-help mobile telephone applications (apps) for suicide prevention: A systematic review.

Medical journal of the Islamic Republic of Iran, 34, 85.

Finally, the application was published in September of 2022, then a couple of months later we held a webinar with the Iranian Scientific Society for Suicide Prevention (IRSSP) and the Iran University of Medical Sciences Counseling Center to introduce the application to mental health experts and the general public. Below is the link to the application on Bazar and the webinar link:

The link to the application on Bazar: <https://cafebazaar.ir/app/ir.ac.safetyplan>

The webinar link: <https://mohit.online/event/e2mehf>

Fig 1. The application on Bazar

E) Result achieved during 2020-2024:

The application was completed and the main items and more information about each one are described below:

1. Crisis lines: Put this item on top of all pages helps patients to immediate access to several hotlines including 123 and 1480. In addition, the add contact option provides a possibility to add phone numbers of the supportive persons in their lives to immediate access to them in crisis situations.
2. Relaxation Techniques: This item which including Deep Breathing Technique, Progressive Muscle Relaxation, and Object Focused Meditation, was designed to train the person on step by step by providing the podcasts about how to do them, and can be repeated frequently at times of stress.
3. Cognitive techniques: In this section, evidence-based techniques will be used which are effective in reducing suicide ideation and attempts. These techniques (coping card and behavioral activation) will be included in the application in a digital and customized form. It will create the possibility to customize the application based on the needs and preferences of the patient as well as the possibility of adding personal information and active interaction with the application.
4. Distraction techniques: This item includes games such as Sudoku, which not only are attractive and will distract the mind from negative and harmful thoughts, but also will try to strengthen cognitive and problem solving skills.
5. Safety plan: This section included 5 parts which is completed by the person her/his self: 1. List warning signs 2. List the coping strategies 3. List the places and people that can be used as a distraction from thoughts of suicide 4. List all the people that can be contacted in a crisis, along with their contact information

5. List important reasons to live

F) Any difficulties encountered during 2020-2024 (if applicable):

None

2. Resources

A) Costs:

- *Percentage of costs associated with other resources: \$1500 for development of application by engenders (100%)

- *Percentage of costs associated with staff time: 0 dollars (0%)

B) Number of staff involved (either partially or fully):

- Senior staff: 1

- Prof Seyed Kazem Malakouti

- Mid-career staff: 5

Dr Nafee Rasouli (Ph.D Candidate),

Dr Shahrbanoo Ghahari (Ph.D),

Dr Behrooz Ghanbari (Ph.D)

Dr Marzieh Nojomi (MD)

Dr Sara Nooraeen (MD)

C) Number of full-day equivalents, total for all staff involved:

- Senior staff: 75 days

- Prof Seyed Kazem Malakouti (600 hours)

- Mid-career staff: 78 days

- Dr Nafee Rasouli (Ph.D Candidate): (500 hours)

Dr Shahrbanoo Ghahari (Ph.D): (20 hours)

Dr Behrooz Ghanbari (30 hours)

Dr Marzieh Nojoomi (20 hours)

Dr Sara Nooraeen (50 hours)

3. Networking

We sent the suicide prevention application to WHO EMRO and some psychiatrists in Tajikistan and Afghanistan to use our Persian version of the application in their countries.

Activity 4

Title: scaling up the capacity of general health care personnel to deliver basic mental health services and intervention in line with the mhGAP initiative of WHO

Description: Early diagnosis and management of priority mental health problems through PHC and FPs is one of the key interventions identified by WHO in bridging the treatment gap and enhancing access to mental health care.

For this purpose WHO has launched the mhGAP initiative in 2008 and is developed the mhGAP-IG with its suite of implementation support tools and instruments. It is a flagship program of WHO and is part of the DGs special initiative on mental health. It is in line both GPW 13 and Global action plan for mental health

Status: ongoing

Title of activity:

Scaling up the capacity of general health care personnel to deliver basic mental health services and intervention in line with the mhGAP initiative of WHO

Introduction:

The Mental Health Program was piloted in several cities in Iran within the Primary Health Care (PHC) system in 1988 and later expanded to the entire country. To build the capacity of healthcare personnel, considering that the mhGAP-IG has been translated into Persian since 2016 and made available to general practitioners in the system,

Purposes of the activity:

we decided to design a multi-part project, initially, we would focus on examining the implementation, barriers, and facilitators of the current programs related to mhGAP in the country. Then, based on the conducted evaluation, we would propose solutions to enhance the capacity of healthcare personnel. Finally, in collaboration with the Ministry of Health and Medical Education, we will pilot some of these solutions in a few provinces and evaluate the results.

The Proposal of the activity:

The project is a qualitative study. In this project, we aim to examine the barriers and facilitators of implementing the mhGAP program in the country through conducting focus group sessions with various groups, including mental health personnel and staff. The study participants will be identified using the purposive sampling method sequentially. Then, semi-structured interviews and focused group discussions will be conducted with the individuals. The sessions will begin with broad and general questions about the Mental Health Program, followed by inquiries about the barriers and facilitators of implementing the mhGAP program. The content of the sessions will be recorded and coded. In the next phase, the researcher will use key phrases to categorize the meanings, leading to the identification of sub-themes. Data collection will continue until the essential elements of the study reach saturation. Ultimately, the Graneheim approach will be used to analyze the data. After analyzing the data, the core concepts, barriers, and facilitators of implementing the mhGAP program in Iran will be identified.

Any output delivered during 2020-2024:

Based on the information provided above, the performed activities relate to our purposes was:

- 1) from March,24,2020 to Feb,23,2021, we focused on reviewing relevant texts and designing the first project.
- 2) Additionally, to achieve a realistic and comprehensive perspective for project design, we conducted several focus groups with supervisors, mental health experts, and general practitioners working in the PHC system on the 8th and 10th of March 2021.
- 3) After reviewing extensive texts in the field of mhGAP and scaling up, we decided to intervene in the "output" domain (performing better) related to scaling up.
- 4) On June,21,2021, a proposal titled "Identifying barriers and facilitators of mhGAP implementation in Iran: A qualitative study" was prepared and registered. After several revisions, it received approval from the Research Committee and obtained an ethics code on Jan,4,2022 and on Feb,7,2022, an action plan was written.
- 5) During sessions on April 25, 2022, May,21, and May 27, 2022, the focus group questions were finalized.
- 6) The focus group sessions were held virtually on June 8, 2022, with three groups consisting of physicians, mental health experts, and caregivers from the provinces of Gorgan, Zahedan, Shiraz, and Tabriz.

Additionally,

- 7) Two face-to-face sessions were conducted with service recipients at one of the affiliated centers of the University of Tehran in March 2023.

Work to be performed:

Currently, the implementation and coding of the sessions are underway. After completing this phase, the questions related to the session with managers and policymakers will be designed, and the session for this group will be held. Following the presentation of the final results of this section, we will proceed to the next phase.

Challenges:

The responsible of the project migrated to other country and we do not access to her about the activities. The substitutional responsible of the project was in a trip abroad, consequently, we did not have access to their recent performed activities.

Activity 5

Title: Promoting mental health literacy at national and regional levels

Description: Increasing mental health literacy is very important in reducing discrimination and providing adequate care. This needs a whole of society approach to have extensive impact on the society. This is in line of GPW 13 and Global action plan for mental health

Status: ongoing

1) Report of Activity

A) Title of activity:

Promoting mental health literacy at national and regional levels (activity 5)

B) Status:

Ongoing

C) Progress made during 2023-2024:

1. Literature review

To update the literature review, particularly with a focus on effective interventions to promote mental health literacy in developing countries

2. Locally adapted interventions deliverable to different sub-populations

2.1 situation analysis - to identify opportunities and challenges for the implementation of interventions including gathering data from experts, key informants and stakeholders and the available documents

2.2 Determining the structure and content of interventions based on the above two steps, including:

1) Determining the target psychological disorders and problems: Depression, Anxiety & psychosis

2) Determining the desired components of mental health literacy including:

- Diagnosis of specific mental disorders and psychological distress
- Knowledge and beliefs about risk factors and causes of mental disorders
- Knowledge and beliefs about available professional help
- Attitudes facilitating appropriate help-seeking

3) Determining target groups, including general population & Special groups include people with psychiatric disorders and their families

4) Determining the providers to transfer the content of the program. Use of all human resources and capacities and facilities available in the community, including the staff of primary care centers, popular and trusted people of the community for example teachers, the members of local councils, the staff of cultural and sports centers, people working in the field of traditional medicine, the pharmacy staff and students. Particularly, Health ambassadors working with primary care centers were considered the main agents of program implementation

5) Determination of interventions

Two main interventions are 1) Educational meetings and workshops 2) Awareness campaigns. In awareness campaigns, all available media are used, including written materials, sending messages to mobile phones, using virtual space, speeches, short educational clips, holding sports and cultural events, etc.

2.3 Developing the interventions contents and guidelines

1) The content of the program was developed according to the disorders determined in the previous step

(depression, anxiety & psychosis), components of mental health literacy, target groups, and the media used. In developing the content, in addition to mental health expert, some people from the health & treatment networks also participated in order to tailoring of the content for the target groups

2) In the guideline of the program was provided the necessary information for the accurate implementation of the program including: 1) an overview of the content of the program and available documentation 2) target groups 3) appropriate training methods and media for different target groups 4) various requirements to start the program including personal preparation, coordination with people and different organizations, providing the necessary facilities and equipment, informing about the program, engaging the participation and cooperation of the target groups, 5) Identifying the various obstacles to the implementation of the program at different individual, organizational and environmental levels and removing these obstacles

3) Program monitoring and evaluation. In this section, the monitoring and evaluation methods of the program are described. The duration of the interventions was considered for 6 months. In this period, the quantity and quality of interventions is monitored using checklists and its effectiveness, is evaluated at the end of the implementation of the program and during a 3-month follow-up period, based on the primary and secondary outcome variables. The primary outcome variable includes the mental health literacy and secondary variables include the statistics of referrals to primary care centers and 16-hour centers, treatment compliance, acceptance of referrals to higher levels of services, and the stigma of mental illness at the community level. Measurements include the mental health literacy questionnaire, the awareness and attitude towards mental illness questionnaire, the screening questionnaire for benefiting from mental health services, the checklists for extracting information from records and documents

2.4 selecting catchment area

1) Coordination with West Tehran health and treatment network and selecting the city of Robat Karim as catchment area

2) Holding meetings with the Robat Karim health and treatment network officials to implement the interventions

D) Any output delivered during 2020-2024:
The program is still in progress

E) Result achieved during 2020-2024:
The program is still in progress

F) Any difficulties encountered during 2020-2024 (if applicable):

- 1) Long and bureaucratic process of coordination with Health and treatment networks
- 2) workload of primary care centers due to multiple responsibilities

2)Resources

Primary care health centers & local resources

A) Costs:

WHOCC payment.

- *Percentage of costs associated with other resources: 70%
- *Percentage of costs associated with staff time: 30%

B) Number of staff involved (either partially or fully):

- Senior staff: 3
- Mid-career staff: 3
- Junior staff, PhD students: 2

C) Number of full-day equivalents, total for all staff involved:

- Senior staff: 90 days
- Mid-career staff: 20 days
- Junior staff, PhD students: 30 days

3)Networking
-----**Activity 6**

Title: Support the third party evaluation of the national mental health programmes

Description: WHO is seeking to conduct an independent evaluation of the national mental health programmes in countries of EMR .The evaluation will be helpful to develop a standardized methodology as well as instruments.This is further useful to showcase the national mental health programmes and WHO to use as a case study for the other countries and regions to implement similar activities

Status: not yet started

Title of Activity:

Support the third-party evaluation of the national mental health programs (Activity 6)

Introduction:

WHO is seeking to conduct an independent evaluation of the national mental health programs in countries of EMR. The evaluation will be helpful to develop a standardized methodology as well as instruments. This is further useful to showcase the national mental health programs and WHO to use as a case study for the other countries and regions to implement similar activities.

Status:

not yet started

Challenges:

Has not been proposed any proposal on behalf of ministry of health /mental health bureau or WHO/ EMR for far.

2. Annual report on other activities requested

Should WHO have requested activities in addition to the agreed workplan, please describe related actions taken by your institution [maximum 200 words]. Please do not include in this report any activity done by your institution that was not requested by and agreed with WHO.

Activity1- Development of Farsi Version of e-CST

Purpose of the project:

This project is aimed to facilitate access to Farsi Version of e-CST, which is prepared by CST Team in Iran and it would be available in the mid of February 2023.

Planned timeline:

The duration of this contract will be according to below:

Planned start date: 1st of March 2023

Planned end date: 30th April 2023

Introduction:

Facilitate access to Farsi Version of e-CST (electronic version of Caregivers Skills Training Program) When the COVID-19 pandemic started and lockdown had occurred across the world, it was impossible to implement the in-person format of CST. This is why WHO decided to design electronic version of CST. It is called e-CST. CST Team in Iran had been invited to the procedure of development of e-CST during 2020 (for more information see acknowledgement part of e-CST available in <https://openwho.org/courses/caregiverskills-training>). Then it was disseminated in 30th of March 2022. The e-CST program has 15 Modules as well as an introductory module. In the Introductory module, the caregivers would be familiar with the main components of the program as well as all different sections, including Journals, feedback forms and how they can use the different sections of the course. In the introductory module, it was highlighted that all caregivers who have a child aged from 2 to 9 years with Developmental Disorders and Delays, specifically those who have problem in communication and social interactions, can use this course. It was also remarked that it is not necessary for children to have or receive diagnosis to attend in this course (slide 2 in introductory module). If caregivers feel their child has Developmental Disorders and Delays, they can be eligible to attend in this online program. This may be because of WHO respectfulness to neurodiversity and WHO commitments to help more caregivers to

reap the benefits from the components of this course regardless of any specific diagnosis. It was mentioned in the beginning the course (slide 4 in introductory module) that each module would probably take 4 to 5 days to be completed; therefore, the whole course can be accomplished in two and half months. This can be amazing opportunity for caregivers; specifically, those who are recently notified that their children may have any kind of Developmental Disorders and Delays. This course can be accounted for being an early intervention for children of this group of caregivers.

Why e-CST can be beneficial?

This program can be available to all caregivers who have access to internet. As it was aforementioned, it takes 2.5 months which is less than the in-person format of CST. This program increase equity for all caregivers to have access to all materials free of charge; regardless of their locations. In the in-person format of CST, for training 10 caregivers, 1 trainer and 2 facilitators should be available for more than 3 months whereas in e-CST, unlimited number of caregivers can use e-CST without any trainer and facilitators. This program does not have probable challenges that the in-person format of CST had, because there is not necessary to prepare logistic facilities and amenities for implementation of e-CST, there is not essential to have some trained trainers for this program, this program does not impede any financial pressure on both governmental and non-governmental organizations for administration, and also this program does not need equipment which are essential for running group sessions used in the in-person CST format. In addition, this program does not need home visits which can be challenging for both caregivers and trainers in the in-person format of CST (e.g. cost of travelling, cultural and religious attitudes about having trainers in a house, limited time schedules and so on).

However, this program has some amazing and well-developed animations which can help caregivers to learn how they can practice the key messages and tips of this program in their home-based settings. In fact, all animations developed by the main developers of CST and e-CST; consequently, those animations would reduce misunderstanding and misinterpretations which may occur in the in-person CST format in which trainers (not developers) explain how caregivers can practice in home settings. In the electronic version of CST; so-called e-CST, caregivers have to fill feedback forms and they are highly encouraged to fill a specific journey during the course. Without them, they could not complete the course. This would be counted to be another benefit for e-CST, because in the in-person format of CST, it may be possible for both trainers and caregivers to skip from the home practices, feedback and fidelity forms. For instance, in quite a few countries in the Middle-East, some non-governmental organizations started to deliver the in-person format of CST while no one has been trained to learn how they can fill the fidelity form nor does anyone learn about video feedback procedures.

Development of Farsi Version of e-CST:

The main developers were suggested by CST Team in Iran to get permission for producing the Farsi version of e-CST. Fortunately, they accepted and gave permission to do so (the WHO copyrighted code was 389881).

The process of translation started in late July 2022 when WHO office in Iran decided to support this project. The e-CST materials, including the guidelines, videos, audios, animations, video scripts, power points, feedback forms, quizzes, e-CST documents and so on, had been available in the Google drive in format of 9GB compressed files for translators. All materials had been divided into two main parts. Two translators, who were completely familiar with the materials and both of them were engaged in the procedure of development of English Version of e- CST, were nominated to be main translators. Not only did these translators translate their own materials, but they also checked the translation of each other to make sure they are adherent to main components of e-CST and the guidelines.

When all materials had been translated, the final version of materials sent to World Health Organization-Collaborative Centre (WHOCC) for Mental Health, located in the Tehran Psychiatry Institute in the school of Behavioral Sciences and Mental Health in Iran University of Medical Sciences, for checking the validity of translations. Finally, they confirmed the validity of materials and the process of video recording was started in early October. Based on the guideline, a female voice should be recorded for all videos and animations; therefore, a professional Doubler had been selected for this project. The recording had occurred in a studio in which the level of noise was minimized and a professional microphone and software had been use to record the audios. Then all audios had been checked with the videos scripts and power points to make sure there was not any error in the final version of audios. The audios were returned to the studio for corrections 3 times. Then the process of matching power points to recorded audios had been started. The narration videos had been corrected 5 times to make sure the final version are corrected and matched with the guidelines. Then the animations should be doubled and synched the Farsi version of animations dialogues with their motions. This

had been taken long time; the animations were corrected 3 times. Then all videos should be synched to produce the final version of videos as well as power points in which the Farsi Version of animations should be inserted. These processes were finished in 1st of December and after final check, all materials were sent to the Google drive in which both WHO office in Iran and WHO Pub-rights for Open- Access Sources had access to the materials. The load of Farsi version of materials was more than 52GB and they were compressed to be accessible on Google Drive. The WHO Pub-rights sent a confirmatory email in which they mentioned that the Farsi version would be available in February 2023.

Challenges:

It may be necessary to mentioned here that the special condition of internet connections since late September to late November made the process of corrections quite slow, because the exchanges of materials had been accomplished by using USB.

Work to be performed:

As it was aforementioned, the benefits of this new program (i.e. e-CST) can be undeniable. Therefore, it may be essential to facilitate the access to this website for all caregivers who have 2- to 9-year-old children with any kind of Developmental Disorders and Delays. To approach this goal, the Farsi version should be available in <https://openwho.org/courses/caregiver skills- training>.

Activity2 -Autism project:

In this project, outpatients referred to the pediatric psychiatry clinic of Tehran Institute of Psychiatry, Hazrat Ali Asghar (AS) Children's Hospital, Roozbeh Hospital and Asma Rehabilitation Center (affiliated with the University of Welfare and Rehabilitation Sciences) whose diagnosis of ASD has been confirmed by a pediatric psychiatrist, have been selected by the available sample method. After selecting the patients, they and their parents are given a sufficient explanation about the method and necessity of implementing the plan, its possible benefits and harms, and the confidentiality of information (according to the written consent form) and informed and written consent is obtained from them. If these people wish to participate in the project, in the interview, personal and demographic characteristics, including first and last name, age, gender, ethnicity and race, parents' kinship, place of birth and residence, birth rank, education, history of developmental delay, type of referral (hospitalization or outpatient), and clinical information, including the name of the disorder, the presence of seizures, the presence of mental retardation and other psychiatric diagnoses, personal and family history of the disorder, and personal and family medical records are also recorded.

The first phase:

This phase included the design of the system, which was implemented by Iran University of Medical Sciences (strategic committee and scientific committee).

The second phase:

This phase includes the start of the system, which is being implemented with the referral of the patient by the Universities of Medical Sciences of Iran, Tehran and Welfare Sciences. In 1400, the software system was transferred from "SharePoint" to "tetis" so that more features of this system can be used.

Findings:

80% of the patients were boys and 20% were girls. The greatest concern of parents is in the third year of life. The highest number of referrals were to psychiatrists and then to neurologists. After autism, hyperactivity was the most common diagnosis. 22% of children also had seizures, 14.8% had low birth weight and 23% were overweight. 42% had prolonged jaundice after birth. In 14% of the children, the parents had a close family relationship with each other. Only 24.4% of children were born through natural delivery. 14% had a history of maternal diabetes, 18% had a history of preeclampsia, and 27% had a history of miscarriage. After receiving the diagnosis of autism spectrum disorder, 66.9% of the children participated in rehabilitation sessions less than 10 sessions per month and only 10.2% attended more than 20 sessions per month.

3. Resources

Indicate staff time spent on the implementation of activities agreed with WHO (i.e. those mentioned in questions no. 1 and no. 2 above). Do not include any data related to other activities done by your institution without the agreement of WHO. Please indicate staff time using the number of "full-day equivalents" – a day of work comprising 8 hours (e.g. 4 hours work per day for 7 days should be recorded as 3.5 full-day equivalents).

Number of staff involved (either partially or fully)

Senior staff	Mid-career staff	Junior staff, PhD students
7	15	22

Number of full-day equivalents, total for all staff involved

Senior staff	Mid-career staff	Junior staff, PhD students
185	268	430

Implementation of the agreed workplan activities (i.e. those mentioned in questions no. 1 and no. 2 above) normally require resources beyond staff-time, such as the use of laboratory facilities, purchasing of materials, travel, etc. Please estimate the costs of these other resources as a percentage of the total costs incurred (e.g. if you incurred costs of USD 100 and the value of your staff time was USD 50 which makes the total of USD 150, please report 33.3% and 66.7%).

Percentage of costs associated with staff time	Percentage of costs associated with other resources	Total
0.00	0.00	0.00

4. Networking

Describe any interactions or collaboration with other WHO Collaborating Centres in the context of the implementation of the agreed activities. If you are part of a network of WHO Collaborating Centres, please also mention the name of the network and describe your involvement in that network [maximum 200 words].

We sent the suicide prevention application to WHO EMRO and some psychiatrists in Tajikistan and Afghanistan to use our Persian version of the application in their countries.