FINAL EVALUATION OF THE PROJECT:

"Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale"

Final evaluation report

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SYNERGIA

Summary

The final evaluation: introductive aspects to the report and a guide to reading

Gruppo per le Relazioni Transculturali - GRT, together with GAVO, Terre Solidali, Università degli Studi di Milano, IIDA and Save Somalia have implemented the project "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale".

The project aimed to contributing to the promotion of equitable and accessible public health, improving the quality and sustainability of public health care in the paediatric and mental health sector by:

- Expected Result: 1) MASCTH offers high-quality, sustainable paediatric specialised care that is integrated into the public health system.
- Expected Result: 2) Access to and quality of mental health services improved in implementation of the Somaliland Ministry of Health's Mental Health Policy.
- Expected result: 3) The Ministry of Health of the Federal Republic of Somaliland adopts the first National Mental Health Policy.

Roles and functions of the partners and local agencies are briefly explained below:

- GRT, applicant of the project, thanks to the collaboration with the other partners, has dealt with the task of supporting the staff of the mental health department in their daily work and in the clinical management of patients. GRT was also in charge of coordination and general management of the project.
- Terre Solidali was responsible for the introduction of a customised IT system to facilitate cost control and revenue flow, cost recovery in priority areas (such as pharmacy, laboratory, surgery, OPD3, Day Hospital) and health information management and analysis.
- IIDA provided technical support and supervision combined with overall coordination of stakeholders and Ministries with GRT providing technical input during the various stages of preparation of the Somali Federal Republic Mental Health Policy.
- GAVO took care of fundraising initiatives through the organisation of workshops and seminars and community awareness campaigns.
- Save Somalia CO has been involved in the training of doctors at the paediatrics department of MASCHT.
- DAP – Università di Milano made its staff and technology available to carry out the training and supervision activities of the mental health department (HGH).

The aim of this document is to assess the outcome and process evaluation of the project and to provide recommendations. The key focus of this activity is to evaluate what the project has achieved with regards to the impact on the access to health care in paediatrics and mental health sector, how this has been achieved and lessons learned from this process, and any key recommendations to inform the design of a potential extension of the project. Process evaluation will determine whether project's activities have been implemented as intended and resulted in certain set outputs.

The final evaluation is a comprehensive analysis of the strategy applied by the intervention and of any synergy created by the project with other actions implemented at a local level, CSOs (Civil Society Organizations) working in the area and Local Government/Authorities.

All the information and understanding gained from this final evaluation can be used as a guideline for future projects, being available to all partners.

The outline of the evaluation research: purpose, specific goals and methodologies.

In order to provide a comprehensive analysis of the final results of the project "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale", Synergia, has defined a set of methodologies and objectives of the analysis, together with the Applicant and its Partners. Considering the specific nature of the project and the goals to be reached by the Final Evaluation the Case Study was used as methodological approach to collect evidence on the impacts of the interventions implemented, enhance lessons learnt, best practices and elaborate recommendations for proper project development.

A quali-quantitative mixed approach has been used in order to investigate all CRITERIA of the project and to respond to each of the following questions:

- RELEVANCE
- The consistency of the project overall and specific objectives with the Government policies;
- The appropriateness of the project objectives and of the implementation strategy;
- The ability of the project to respond to the needs of the target groups;
- The involvement of the key stakeholders in the implementation process.
- EFFECTIVENESS
- The achievement of the expected results;
- The production of changes in the social and health behaviours of the target population;
- The impact of the project on the access to health care, especially in the paediatrics and mental health sectors;
- The capacity of the project to adapt to changing external conditions in order to ensure benefits for the target groups
- The eventual occurrence of any unplanned negative effective on target groups occurred and the capacity of the project management to take appropriate measures;
- The practice on good principles and ethically;
- EFFICIENCY
- The capability of the parties to perform the responsibilities entrusted to them;
- The adequacy of human resources employed;
- The efficiency of the time-frame adopted;
- SUSTAINABILITY
- The assimilation of health and positive social behaviour messages and tools by project partners and beneficiaries;

- The commitment of local authorities to foster the project results;
- The production of changes across target groups and/or partners, increasing the sustainability of the intervention;
- The possible future development of project activities when the project phases out;
- Eventual obstacles hindering project sustainability;

• IMPACT

- The evidence of the production of impacts and outcomes;
- The likelihood of that the desired practice change will lead to improvement in the Country;
- The presence of any threat and the capacity to address them;
- The characteristics of population impacted by the project (wider or narrower than expected? similar or different from the expected one in terms of composition?)
- The eventual occurrence of non-expected impacts;
- The correction of inequalities in access to health and social protection services.

Part I: MAS Children Teaching Hospital

The programme "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale", has two main threads of operations, one of which is the improvement of health for children in Hargeisa and, more generally, in Somaliland. In this first part of the report, we will go through the activities realized within the context of the MASCTH hospital, where pediatric services are delivered.

Although this report focuses only on this project, it is useful to give an overall overview of the history of the hospital and its activities, in order to better understand the rationale of many parts of this report of evaluation.

The humanitarian project started almost 10 years ago, in 2012, with the construction of the Mohamed Aden Sheikh, Children Teaching Hospital (MASCTH), specialised in pediatrics and neonatology, in collaboration with several NGOs and foundations, universities in Turin and the Regina Margherita Hospital Foundation in Turin. The first part of the project was, therefore, the construction and the operationalisation of the hospital, in order for it to become functional and sustainable over time. The first phase has been successfully carried out, given that the management of the hospital has been transferred to the Government of Somaliland that now runs it almost entirely autonomously.

The second phase of the humanitarian project, started three years ago and coordinated by the NGOs GRT and Terre Solidali, entailed the involvement, again, of the University of Turin and the Regina Margherita Hospital in Turin. The targets that have been set are developing and training the local staff by the project, enhancing the services provided, and increasing the number of children reached. According to the different stakeholders involved, we will explore and evaluate different dimensions of intervention and impact.

Interviews with trainers

Introduction

As already stated, one of the main drivers for the improvement of the pediatric health services has been the constant training and teaching to local doctors of the Mohamed Aden Sheikh, Children Teaching Hospital (MASCTH), built as part of a humanitarian aid project.

University of Turin and the Regina Margherita Hospital in Turin have had a central role for keeping providing training and follow-ups on more specialised topics to the local doctors, through telemedicine; the efficacy and efficiency of this training will be the main object of this paragraph. In

order to assess the impact of the training, four interviews have been carried out with four doctors, following a pre-set list of questions. Three of the doctors, previously to the training of the second phase, had also been involved in the first phase of the project by going to Hargeisa and by providing initial training and guidance when the hospital was first beginning to be operational. In particular, one of the interviewees is one of the founders of the project.

It is important to signal that although the original purpose of the interviews (and of this paragraph) is, as previously stated, the evaluation of the training and follow-ups of the second phase of the project, often the interviews went off-track and focused more on the interviewees' past experiences in Hargeisa; they answered the questions referring to both more recent activities and older ones, that formally do not fall into the object of this report. However, we believe that the value of these first-hand perspectives and experiences is equally important for the understanding of the impact that this project has had on the Hargeisa and Somaliland.

Therefore, the report will firstly focus on the formal object of the evaluation, namely the assessment of the telematic medical training, and secondly it will bring back some experiences, suggestions and considerations of this successful and impactful example of humanitarian international cooperation.

Training through telemedicine

This part of the report will focus on the training provided in the second phase of the project through telemedicine. The interviewees were involved in the delivery of training sessions divided in two steps: after deciding, in accordance with the local coordinator, on which topic to focus the class on, usually a specialistic branch of pediatric medicine such as pediatric oncology or pneumonias, they provided a recorded lesson and additional material such as slides and medical articles or papers that the trainees could study asynchronously. After this first step, the students were required to come up with real life clinical cases, related to the topic, that were then discussed with the trainer during a synchronous lesson held via Zoom, so that the topic of the training could be thoroughly analysed, and all the questions could be answered.

Initial and final level of preparation

As far as the initial level of preparation of the trainees is concerned, all the interviewees agree that the average level was fairly good or good, in the sense that the real-life clinic cases that were chosen for discussion were appropriate and relevant with respect to the topic of the class, and the discussion that followed revealed a good understanding of the subjects. For some of the most difficult and specialistic topics, such as pediatric oncology, although the students were not able to identify the diagnosis completely, also due to lack of the appropriate technical machinery required, they correctly presented cases that did not fall into normal illnesses category, but that needed further investigation. One of the interviewees reported that: *"although the students were limited by the lack of technological*

facilities, the clinical cases presented by them were correctly classified, and my intervention mainly involved refining and smoothing edges".

After the discussions with the trainers, the students reached a higher level of comprehension of the topics according to the interviewees. However, it is to be pointed out that it was not expected of them to be able to learn step by step the treatment procedure or the surgery operation, because these topics are very narrow and require years of specialistic training; they were, instead, expected to improve their general knowledge of the possible cases they could face, in order to correctly identify them and send them to other hospitals in order to be properly treated. In this sense, therefore, the training was successful and the students, already starting from a good point, improved their diagnostic capabilities; this is also corroborated by the good results of the evaluative questionnaire that was handed out after some classes.

Of course, being only one class per topic, there is not a particular improvement for the trainees in terms of being able to plan a treatment and perform surgery for very specific and complicated conditions. However, they reached a higher level of awareness of the possible diagnoses and more ability of identification and skills that could be useful in the day-to-day treatment of the cases. Regarding the possibility of training other fellow doctors or residents, the trainers agree that the material provided is useful and transmittable to other actors.

Collaboration with the local coordination and the NGOs involved

Regarding the collaboration with the NGOs GRT and Terre Solidali, which are now managing this second phase of the project, all interviewees gave positive feedback and agreed that communication was effective and functional. The interviewee who is more involved in the management of the hospital and has therefore collaborated with these organizations the longest, reported that *"we have always worked very well with them, without problems or discussions. They are more involved in project management, whereas we are more involved in operational support".* Some of the interviewees explicitly praised the helpfulness of the people they were in contact with.

Very positive feedback was also provided regarding the collaboration with the local coordinator: one of the interviewees specifically mentioned the useful exchange of inputs and information in order to properly choose the specific topics in order for them to be as appropriate as possible for the target students and that could be adequate and relevant with respect to the day-to-day life of Hargeisa. The local coordinator was also useful in reminding deadlines and in intermediating between the trainees and the trainers also regarding their request of further medical material such as articles or papers.

Usefulness and appropriateness of telemedicine

As far as the technological platforms are involved, all the interviewees reported some difficulties mainly related to bad audio quality and some lagging in video, due to problems with the technological equipment and connection both in Hargeisa and in Italy. The trainers specified that these problems did not prevent the smooth delivery of the classes and were only minor inconveniences, however all of them reported some technological problems. Therefore, even though face to face classes would probably be more effective, remote classes are a good alternative, especially given the Covid-19 pandemic and the difficulties in long-distance travelling. One of the interviewees also reports a fairly

good level of internet connection in Somaliland, and therefore suggests that telemedicine classes could be increased.

Summing up, the general impression regarding the delivery of distance classes on specific topics via online platforms is generally good: all the interviewees agree that, notwithstanding the limited action potential of this format of training, that entailed a single lesson on a very broad and complicated topic, the classes have been useful and well received by the trainees, and provided them with some useful tips for dealing with day-to-day cases and with deeper knowledge on how to recognise possible rarer and more serious condition, and to correctly direct them to other facilities properly equipped for their treatment.

Considerations on the project overall

As anticipated in the introduction of the report, three out of four trainers were involved in the first phase of the humanitarian project as well: in particular, one of them is one of the key individuals of the project, who promoted and allowed the construction of the MAS CTH and has therefore a good understanding of the entire operational life of the hospital and has now a role of advisory to the management of the hospital; one spent in Hargeisa two months in 2012, when the hospital just started to be functional; the last one spent in Somaliland three months in 2016, when the hospital had already been operational for some years. These interviewees have, therefore, a perspective on the project that goes beyond the formal object of evaluation of this report, since it regards activities and events that happened before GRT and Terre Solidali stepped in for the management of the hospital, but nonetheless provide unique insights, reflections and suggestions about what, we can say, is a successful example of a project that started as humanitarian aid but evolved into being a self-administrated, functional and effective facility.

Therefore, in this section of the report, we will highlight some considerations and suggestions that stem from their experience and could be useful for the further improvement of the hospital and the replicability of the project to other areas. It has to be signalled that some of these considerations refer to people or situations that the interviewees witnessed when they were in Hargeisa, and therefore could be different or no longer exist nowadays.

The three interviewees report a good level of preparation of the local doctors and nurses, that were mainly chosen among residents and graduates of the local Hargeisa University. Some of the doctors had received part of their training abroad, and, in particular, two doctors were described as particularly brilliant and prepared; however, one of them left in order to further specialise abroad, while the other still works at MAS CTH and is a coordinator.

An aspect that needs improving according to the interviewees, is the surgical department, both in terms of lack of skilled surgeons and lack of technical equipment. They all agree that it is difficult to improve this situation: one of them suggests sending Italian surgeons that could train their peers, but recognizes that, especially due to the Covid-19 pandemic is now difficult to find surgeons willing to

go to Somaliland to train their peers, also because the country is not well known and not many realise that it is not as dangerous as other African countries but, on the contrary, is calm and liveable; another hopes that the skilled doctor who went abroad specialising comes back and can take over the department.

Among other critical aspects signalled, one of the interviewees reported that the laboratory was not very efficient, both on the management and the operational points of view, and could therefore be improved; however, the interviewee did not have the opportunity, during their recent telematic training, to check whether the conditions have improved or not. The same interviewee also signalled some tension among the staff of the hospital, that in some case prevented the harmonic functioning of the activities; again, they are not aware whether these people still work at the hospital or not, but in their recent training they believed that the situations has improved and that now the staff is working well together.

Notwithstanding these downsides, the project is an example of successful humanitarian cooperation having reached the important objective of becoming sustainable over time: indeed, unlike many other similar projects, after the initial phase of construction and management by the Italian NGOs and actors, the financial and general management has been taken over by the local government, supported by GRT and Terre Solidali. The hospital has brought a true improvement in the health system of Hargeisa, and over the years has provided free treatment to over 100,000 children. This has been possible also thanks to the collaboration with local authorities and institutions, such as the local universities and the nearby local hospital, but especially thanks to the mediation of Mohamed Aden Sheikh, after whom the hospital is named, who played an important part during the initial moments of the project.

The project has also been proven successful by the fact that the three interviewees believe that some of the current doctors and nurses have reached a good level of professionality and competences and are now ready to transmit their knowledge and expertise to new students and young stuff. This positive cooperation among institutions and organizations is a virtuous example that is hoped to be replicated in other areas of Somaliland.

Conclusions

The construction and operationalisation of the MASCTH has reached the important objective of sustainability over time both considering technical sustainability, meaning that the trained staff is able to transmit their knowledge and skills to new trainees, and the administrative sustainability, meaning that the local government can manage the hospital with only a marginal advisory support by the NGOs. These elements are important for potentially expanding the project and partially or completely replicate it to other cities or hospitals.

There is, of course, room for improvement, especially regarding the surgical department, both in terms of equipment and in terms of medical and surgical expertise. According to the interviewees'

opinions, the telemedicine programme has partially helped improving this aspect, since it provided the trainees with more knowledge on more specialised and rarer cases and has, in this sense, reached its purpose. However, the skills of the trainees only allow them to perform minor and basic surgery, and to be able to correctly identify a clinical case and not to perform proper surgery.

In order to improve the surgical department, however, none of the interviewees mentioned telemedicine as a possible path of training. Some suggestions that have been brought up are to either send some Italian surgeons to train the staff for a limited period or to invite some of the local staff to Italy in order to be trained at the Regina Margherita Hospital. There is also the hope that the skilled doctor who went abroad to specialise will return and take over the surgical department.

Notwithstanding the surgical department, the hospital all in all is a source of pride for the actors involved, as reported by an interviewee *"We are proud of this initiative and we hope to extend it to other hospitals, in order to involve them and, possibly, to unify the Somali healthcare system. In less than 10 years we have helped more than 100,000 children and we can say we have improved healthcare in Hargeisa".*

Web-survey with trainees

Introduction

In order to completely understand the important dimension of knowledge developing and training, through telemedicine tools, the final evaluation design has included a web-survey for local operators trained, made of closed-ended and open-ended questions. Only 7 interviewees have completed the web survey. The professional role of all participants is "Doctor". Concerning the variable "gender", 5 of them are males and 2 females. Looking at the variable "age", the mean value is 32,6 (years).

Closed-ended questions

Different aspects of the training have been considered according to corroborated surveys' design. The respondents had to express their agreement to a list of statements, using a Likert scale from 1 (completely disagree) to 5 (completely agree). For each question, the interviewees were given the possibility not to answer, in case of discomfort or unawareness.

From the figure below, we can deduce as result an overall satisfaction concerning the training activities followed. Especially the usefulness and the concrete impact of the telemedicine has been appreciated; indeed, the mean level of agreement on the statements "The telemedicine has been an useful and effective method to learn and improve my skills" and "The training I received has improved the quality of the services I provide" is 4.

The lowest level of agreement (3.14, which is not a negative result anyway) is about the improvement of the abilities in using the equipment provided. This evidence could suggest the fact that, using e-learning methods and lacking direct visual and tactile contents, telemedicine is not that effective on the quality of manual operations, as using medical tools.

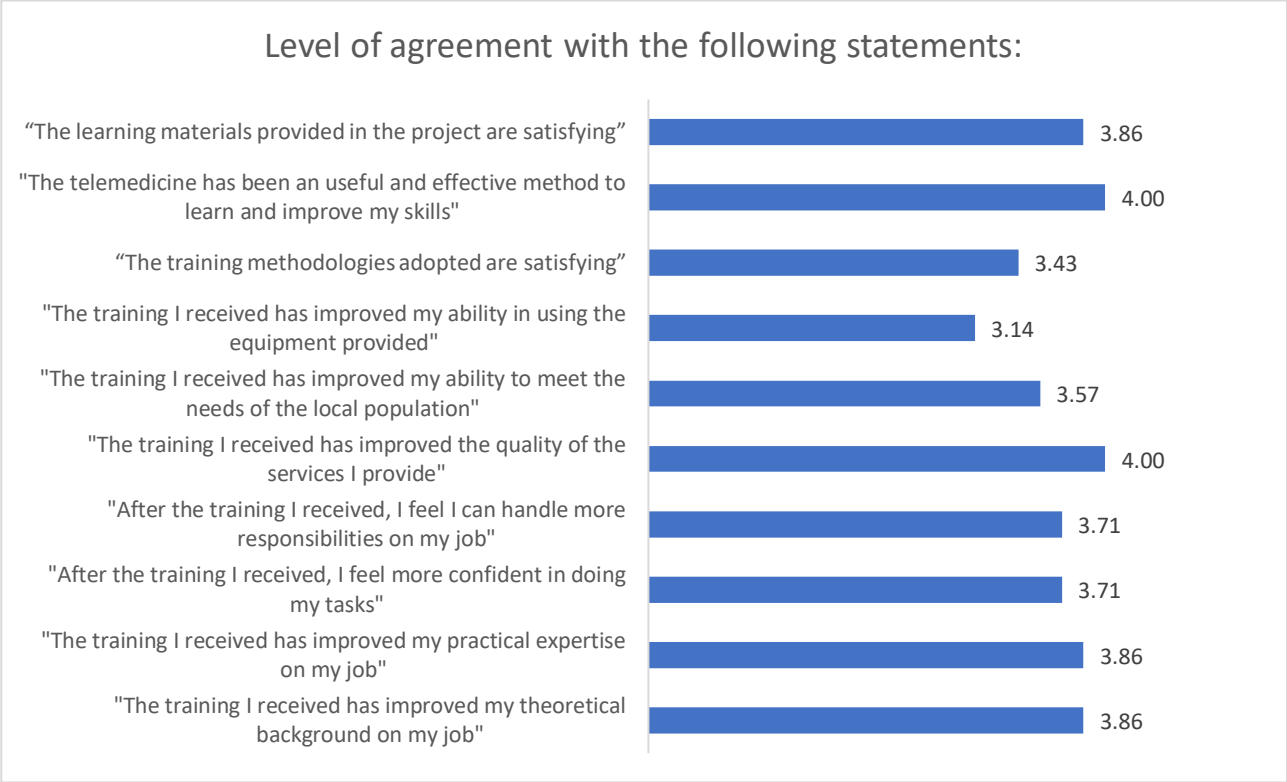

Figure 1 - Level of agreement

Open-ended questions

Three more open-ended questions were addresses to the trained doctors. The first one was “In your opinion, what were the main obstacles in the project implementation?”. Among the seven answered we find some similarities, the main concepts pointed out can be explained as follows:

- *Time constraints*: the duration of the project and/or the training paths were limited; extra time, in general, would allow a more effective achievement of results in terms of strength of competences and confidence on the job.
- *Technological issues*: the reliance on internet is a risk and sometimes it had created problem, due to poor connection. Also “technology use” has been pointed out as an obstacle – it is not clear if that meant the use by the trainers or the trainees.
- *Language problems*: for one respondent, the language difference was a source of difficulty.

- *The absence of presence*: it could seem self-evidence, but an issue to consider in telemedicine is the lack of in presence activities. The consequences have to do with uncertainties in practice, and a couple of respondents would prefer in presence missions.

The following question was: "In your opinion, what were the main strengths of the project?". Some of the answers received concerns the core of the activities, that is, the usefulness and effectiveness of the sessions: the training helped to improve their approach to patients. to go deeper in many aspects of case analysis and intervention, and to discuss and clarify their doubts. Other aspects generating satisfaction were the punctuality and the commitment demonstrated by the trainers, as well as the presentations and articles shared by them.

When asked to provide an any further feedback, the respondent suggested to continue the project; to promote mobility and abroad exchanges; and to deepen specific subjects of study (as Echo and Ultrasound)

Conclusions

With the analysis of the survey's results, we completed a deep reflection on the training activities realized. We notice a general convergence and consistency among trainers and trainees, evaluating the activities they were involved in. Moreover, the relationships generated among them seem to be collaborative and horizontal. However, the positive results should not suggest that telemedicine is the only and the one way to share knowledge and skills. We should, indeed, contextualize this information within the specific project's phase: the doctors had already a well-developed background, so that the training needs were specific and advanced. Therefore, also looking at the future, telemedicine is evaluated as a great tool in contexts like the MASCTH, where the losses due to the online mode are more easily managed by trainees.

Interviews with gatekeepers of camps for displaced persons

Introduction

The project "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale" entails, as one of its core aims, the improvement of access to health facilities and services for children. In order to achieve this goal, doctors and health operators from the MASCTH do outreach activities in Digaale IDP camp and Guinea Conakry IDP camp and provide every child with two free medical visits per month. In order to get a comprehensive evaluation on the impact of the project, four interviews have been conducted, involving four gatekeepers of the camps, who have a deep understanding on the dynamics of the camps and on the feelings of the beneficiaries and their families. The interviewees are both male and female and they have different educational backgrounds and roles within the camps.

The interviews have been conducted by a local collaborator, who was trained by Synergia's staff before the activity; the same collaborator has then translated and transcribed the interviews to English. The interviews have been then analysed and compared, finding very similar answers to all the question asked, corroborating the idea that the programme is having a positive impact on the improvement of the provision of health services to children. The main results are reported in the following sections.

Results

Regarding the general impressions about the programme, all the interviewees agree that it is highly supportive for children: the health services provided are free and of good quality and they include the dispensing of free drugs; the health professionals are experienced and deliver the services efficiently. The programme seems to have a beneficial impact also on the families of the children.

All the gatekeepers stress that the increase in access to health services has been sharp thanks to the programme: indeed, before its implementation, the only health care facilities available for the inhabitants of the camps were in Hargeisa, far away from the camps, and many families could not afford neither the travel expenses required, nor the health services themselves. Therefore, the free programme is highly beneficial to children in general, but also to their families, living in the camps and their surroundings.

Not only did the programme increase the access to health services, but it has also brough a general improvement of children's health conditions, given by the good quality of the services provided and by the positive response and participation of the families to the programme. As one of the interviewees reports, additionally to visit children twice a month, the team *"[…] also refers critically ill patients to the MAS hospital in order to provide further investigations and health care services that this patient needs.*", and this has proven to be extremely beneficial as well.

The team's intervention is considered appropriate and legitimate, because the services provided are of good quality and the team staff operates in an efficient and professional way, and their behaviour has been defined as *"outstanding"* by one of the gatekeepers.

Suggestions and conclusion

All the interviewees are satisfied with how the programme is currently carried out and do not highlight any negative aspect of it. Several suggestions were made on how the programme could be improved in the future: firstly, it was suggested to expand the programme in order to involve also adults, especially mothers; secondly, one of the interviewees suggested to include a supplementary food programme; another gatekeeper suggested to increase the number of days MAS team visits the camps up to 4 days per month; finally, there was a suggestion to implement a system for referring critically ill patients to MAS hospital even when the medical team is not in the camp.

In conclusion, the programme has been highly beneficial for the inhabitants of the Digaale IDP camp and Guinea Conakry IDP camp, it was well received, and has entailed an important improvement of access to health services and general health conditions of children in the camps, creating also spillovers to their families. The level of satisfaction of the beneficiaries, as reported by the gatekeepers, is high, and there is the hope for the programme to continue and to be expanded in the future.

Operating room inspection

In this section we present the video visit inspection made on June 6th 2022 to the MASCHT Operating Room (OR).

The OR consists of two large rooms: the first is used for the preparation and sterilisation of the personnel who will be operating, while the second is the actual room where the surgical activity takes place. A new air conditioning system has been installed on the ceiling thanks to the support of Terre Solidali, the air conditioning, the air extractor and all necessary ducts are already in place and full operating. At the moment, the last crucial step that is missing before the operating room can be put into operation is the laying of the new flooring, scheduled for August 2022.

In order to better understand the path and timing that led to the commissioning of the Operating Room, Dr. Davide Greco, representative of Terre Solidali, one of the partner organisations of the "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale project", was interviewed.

Dr. Greco pointed out that the construction and experimental start-up of the Operating Room took place in 2017, within another project. Initially it seemed to work, but after a short time the materials began to fail as not all of them were supplied from scratch. Precisely for this reason, Terre Solidali, within the "Somalia in cammino" project and with the collaboration of MASCHT, decided to proceed with an additional set-up of the operating theatre, divided into three phases. The first phase, under the supervision of Terre Solidali, consists of the installation of the most masonry-architectural part of the room, i.e. the laying of the new flooring and the installation of the air conditioning system, made up of a supply and return system, built with ducts. The second and third phases, on the other hand, will be borne by MASCHT and involve equipping the room.

The air conditioning system, especially in an initial phase, was very complex to design and realize, because Terre Solidali had to design it on paper from Italy. They had previously made inspections and received documentation from local staff, but precise measurements were not available. They therefore had to buy one part of the supply normally and another 'by body', because the whole channelling part was designed remotely from Italy.

An engineer was brought in to design the supply and return air system. From this design, the ducting technician had to create the entire system three-dimensionally and also think about the various tools that would be needed on site (the chains, screws, installation tools, etc.).

Within the engineer's paper project, each part was assigned a code, which corresponded to the part code sent in the containers by Terre Solidali. On site, it was then necessary to assemble the various parts on the ground according to the plan, a task precisely facilitated thanks to the entry of the codes. Once finished, the system was lifted with chains and mounted on the ceiling. In order to be able to set this up in the most optimal way, 5 video tutorials were requested from the ducting technician for the assembly of the system in its various stages. They were made in Italian with English subtitles. Dr. Greco emphasises that the most complex phase was the realisation of the plant project, finding and sending the material from Italy, then once on site it took very little time to build the air-condition system.

The phase that slowed the work down the most, however, and because of which the completed OR is not available to date, is the flooring part.

Terre Solidali relied on the multinational company Gerflor to procure the flooring material. To date, there is a tiling that does not meet the international standards that an operating room should comply with; it was therefore decided to add a linoleum that would be placed on the base of the floor and take up 10-15 cm of the first part of the wall. The linoleum in question is antistatic and fungicidal. Terre Solidali therefore sent the linoleum plus the glues necessary for its installation in a container.

The Gerflor company, however, did not specify that prior to laying the linoleum it would be necessary to make a screed, which is a self-levelling floor with mortar to remove the chequered effect of the tiles, as linoleum is a very sensitive material that picks up the features of the layer underneath. The mortar needed to do the job was more than a tonne. Purchasing and transporting this large quantity of material from Italy is complex and expensive; in order not to use any more money for a container for the mortar, it was decided to wait for the next container from Terre Solidali to be sent. A further problem that arose on site was the laying of the floor, as this needs to be done by someone competent and no experienced professional could be found in Somaliland. Thanks to Gerflor, a South African company was contacted and commissioned to carry out the work, all paid for by Terre Solidali, as the project has been completed. According to the MASCHT management it will be possible to do the work by the end of August. After that, it will be time to proceed with equipping the room and putting it into operation.

Part II: HGH

Moving on to the second main thread of intervention, the mental health area, the setting, as well as people involved, and services provided are different. As premise, what should be stressed is the extension that this field has known along the project's implementation. Indeed, an ambitious home visiting program has been added to the objectives related to inpatients and outpatients of the HGH – the Hospital in Hargeisa that deals with mental health patients. Since the mid-term evaluation focused on many aspects of the service delivery within the hospital, in accordance with GRT, the final evaluation has invested on research activities on the impact of home visits. All the stakeholders (patients, caregivers and operators) have participated, and the flourishing results confirm the importance of the program – and its evaluative efforts. The last paragraph concerns the evaluative monitoring made on the informatic system adopted. This technological progress for the structure was indeed outlined as essential during the mid-term evaluation.

Participatory analysis with patients and caregivers

Introduction

The home visiting program is part of a wider project implemented in Somaliland by GRT group and partners aimed at supporting and improving the quality of mental health and pediatrics services in the area. In particular, domiciliary activities are intended to improve the access to mental health services

and the monitoring of the therapy by directly intervening in the private homes of the recipients. In order to evaluate the impact of the home visits on the patients' and caregivers' condition, GRT group has commissioned a project appraisal to Synergia. The evaluation activity started in the fourth quarter of 2019 on a sample of 60 patients affected by different types of mental illness and it involved a pool of local interviewers and students from Hargeisa University, both previously trained by Synergia staff. The evaluation has been carried out through in-depth interviews conducted directly in the domicile of the assisted asking about perceived changes concerning their situation. Each interview was structured in two sections: one directed to the caregiver and the other one, when appropriate depending on the mental conditions, to the patient. Moreover, both the caregiver and the patient (when appropriate) were asked to include benefits and limitations of the home visits and suggestions in order to improve the service. Finally, the evaluation also included the creation of a Timeline for each of the patient and caregiver. In particular, both were asked, visit by visit, to indicate chronologically on a line starting from the first visit to the present one, any significant life event occurred in that period of time. The following results only refer to the interviews, which were analyzed to assess the impact of the home visits on previously identified as relevant *dimensions* and then to detect eventual variability by controlling for different characteristics and by comparing various *clusters* of analysis.

Dimensions

The two interview sections mentioned before focused on various dimensions considered relevant in order to assess the general quality of life of both the caregiver and the patient. For what it concerns the caregiver part, the focus was on the burden represented by the patient's conditions. This was captured by asking the caregiver about three dimensions: mental and physical well-being, daily activities management and interpersonal relationships. The patient part, instead, focused on assessing his general health and life condition, captured by other three dimensions: mental and physical well-being, autonomy and habits, and interpersonal relationships.

Clusters

The sample has been clustered considering three main variables: the type of mental illness (schizophrenia, depression or psychosis), the gender of the patient and the identity of the caregiver (whether it is represented by the mother or not).

		Caregiver - **Mother**	Caregiver – **Non-Mother**	**Total**
Schizophrenia	Male	6	7	**13**
	Female	2	5	**7**
Psychosis	Male	3	6	**9**

	Female	6	6	**12**
Depression	Male	5	4	**9**
	Female	4	6	**10**
	Total	**26**	**34**	60

Table 1 - Sample strategy

For example, by controlling for "mental illness" and "gender" variables it has been interesting, and we will show it later on, to assess and compare the impact of the program when the caregiver was the mother and when it was not.

In order to deepen the qualitative analysis of the interviews, and so to create more variability by identifying more clusters, other characteristics have been considered too: the age of the patient (divided into those aged from 15 to 35 years and those aged from 36 to 70 years), the age of the caregiver (divided into those aged under 45 and those aged over 45) and the past chain status (whether the patient has been chained in the past or not).

The impact of the home visiting program on both the patients' and caregivers' condition has been then evaluated, firstly, by assessing whether there has been an overall positive change in one-by-one dimension and, secondly, within each of the latter, by also controlling for specific characteristics so to identify any relevant variability between clusters.

The impact of home visiting on each dimension

The caregiver

Mental and physical well-being

The overall impact of the home visits is clearly positive. Caregivers are the only ones who take care of the patients and therefore their time, energies and feelings cannot be considered untied from the health conditions of the latter. The more severe the patient's case, the higher the burden on the caregiver and the stronger the negative effect on the overall well-being. Consequently, a service aimed at contributing to the patient care and to his condition management cannot but relieve the pressure on the caregivers, hence, improving their well-being condition.

Indeed, we can see this relief emerging from what is reported in the interviews. Almost all of the caregivers state that before the start of the home visits they used to feel overloaded, frustrated and worried because of the patient's conditions. Some of them were even afraid he might harm himself or someone else, and some declared to feel depressed. Therefore, the general situation before the

domiciliary assistance was clearly stressful for everyone. Successfully, most of the caregivers claim that this tough situation improved after the home visits. Indeed, many report that, once the patient's conditions started improving, they in turn began feeling less exhausted and more relaxed. For example, a mother stated "*Previously I felt very stressed and overloaded because the patient was aggressive and fighting. But this time his condition is good and I feel less stressed and overloaded.*" Moreover, they now report to eat and sleep more appropriately than before and to feel more optimistic about the future. However, the more severe cases are harder to alleviate and, indeed, some caregivers report the persistence of a heavy burden, meaning that they are living an ongoing stressful situation. Another mother stated: "*I feel very stressed and overloaded towards patient's case because it is very severe and unconscious. Also, patient experienced traumatic event*". To sum it up, for what it concerns an overall view, we can claim that home visiting generally improves caregivers' well-being by alleviating the burden on them. There are, however, still some cases (although limited) for whom domiciliary visits seem not to have had any impact on the situation, and this occurs when the patient's condition is very severe.

In order to deepen the understanding of the impact on this dimension, interesting evidence comes by controlling for specific variables:

"Mental illness" and "Gender of the patient"

This analysis consisted in comparing the home visiting effect on the caregiver's well-being when she was the mother and when she was not for each illness and gender case. For example, it consisted in wondering: for Schizophrenia affected males, is the home visits effect on the caregiver's well-being different depending on whether she is the mother or not?

By asking this question for each cluster, a clear variability between caregivers emerges when looking at Schizophrenia affected males, Depression affected males and Depression affected females. In particular, within these clusters, the home visiting positive impact tends to be stronger on mother-caregivers' well-being with respect to non-mothers' one.

"Caregiver's identity" and "Mental illness"

This analysis consisted in comparing the home visiting effect on caregivers' well-being when the patient was a male and when a female for each illness and caregiver's identity. It's interesting to see that in the particular case of Psychosis illness, which did not show any variability in the previous analysis, the home visits effect on the caregiver's well-being is stronger when the patient is a male rather than a female, regardless of whether she is the mother or not.

As anticipated, other interesting results emerge when considering other variables.

Age of the patient: "Aged from 15 to 35 years" and "Aged from 36 to 70 years"

By comparing these two age ranges, what emerges is that the caregiver's well-being is more strongly improved by the program when the patient is between 15 and 35 years old.

Age of the caregiver: "Aged under 45" and "Aged over 45"

Finally, by comparing these two age levels, what emerges is that over-45-caregivers report a stronger improvement of their feelings and well-being.

Daily activities management

For the same reason why once the burden on the caregivers is relieved their well-being condition improves, so does their ability to deal with everyday activities. Indeed, most of the caregivers say that when they had to take care of the patient by themselves, they were not able to manage their daily activities appropriately, while now, with the support of the home visits, the same state that the situation has clearly improved. In particular, these caregivers report that they are now able to manage activities related to the housekeeping such as washing clothes, cooking and children caring, but also to deal with work or school commitments. For example, a caregiver reported: "*The way I deal with everyday activities is changed, previously I wasn't able to control them, but this time I can managed my activities such as cooking food, caring children, praying and washing clothes*". On the other hand, as seen for the previous dimension, in more severe cases home visiting program seems not to have an alleviating effect on the caregivers and, consequently, it has a weaker or absent impact on their daily activities management. One of the caregivers, for example, stated: "*There is no change because the patient's conditions need control and it affects my activities. Indeed, the patient is aggressive towards people and other members of the family*". However, the effect of home visiting on daily activities dimension seems to interact less with the severity of the case compared to its effect on caregiver's well-being: when the patient's case is particularly severe, the latter is always almost absent, but not necessary it is the same for the former. Indeed, in some interviews, although home visiting is reported not to improve the caregivers' well-being, it might still have a positive impact on their ability to deal with everyday activities, showing that even in the worst case the program plays a supporting role.

Interpersonal relationships

Most of the caregivers claim to have experienced a strengthening of their relationships with relatives, neighbors or friends. Indeed, they relate to each other not only by communicating and visiting, but they, in particular relatives, may also economically contribute to the patient's situation. In other few interviews, caregivers report not to have any relationship, and the main reasons are linked to the patient's status or to discrimination. This last issue will be deeper discussed in the patient focused part. Nevertheless, in some of the latter cases, relatives still economically support the patient's situation.

Patient

Mental and physical well-being

Home visiting has a general positive effect on the patient's condition and, as already mentioned, this then reflects on the caregiver's one. Previously, patients experienced mental disorders such as hallucination, confusion or aggressiveness and physical problems due to lack of sleep and bad nutrition. Thanks to home assistance, most of them started to feed and sleep better and to take drugs appropriately and this contributed to their recovery. Indeed, they report to feel better and, in some cases, happy and motivated too. For example, a man reported: "*Previously mentally I felt hallucination and I experienced lack of sleep and lack of appetite but this time I get good sleep and take resting. Physically I make good recovery*". Another patient, a woman, said: "*Physical and mental health is changed. Mentally I feel happy, less stressed and motivated. Similarly, physically I feel relaxed and well-being*". In more extreme cases, patients' condition remained severe. For example, talking about his son, a mother reported: "*The patient's condition has not changed and he doesn't feel good because he experiences mental illness, sadness, low moral and he thinks to make suicide. Physically he experiences lack of sleep, lack of appetite and restlessness. Moreover, the patient sometimes experiences hallucination and speech disorder*".

By controlling for the same variables as done for the caregiver's well-being dimension, we find confirmation of its connection with the patient's condition:

"Mental illness" and "Gender of the patient"

Specularly, this analysis consisted in wondering: for Schizophrenia affected males, is the home visits effect on the patient's condition different depending on whether the caregiver is the mother or not?

The same variability found when looking at Schizophrenia affected males, Depression affected males and Depression affected females when the focus was on the caregiver's well-being comes up here too. Indeed, within these latter clusters, the home visits' positive impact on patients' well-being tends to be stronger when they are cared for by the mothers. Although it would seem intuitive to think that, within the same clusters, mother-caregivers feel better than non-mother ones because patients cared for by the former get faster stable, this causality effect cannot be stated with certainty.

"Caregiver's identity" and "Mental illness"

In this case, when looking at the same clusters considered before (Psychosis affected males and Psychosis affected females) we find an exception: the heavier burden perceived by those caregivers who take care of female patients seems not to be connected with the latter's condition, since almost all of the female patients, as like the male ones, feel generally stable.

Although this last exception, when deepening the analysis by focusing on the age variable the connection re-emerges:

Age of the patient: "Aged from 15 to 35 years" and "Aged from 36 to 70 years"

The home visits improve patient's condition more when the patient is younger. Again, one could argue that this is the reason why, in turn, caregivers taking care of younger patients tend to feel better than those caring for older ones, however we cannot verify such a causality.

Age of the caregiver: "Aged under 45" and "Aged over 45"

With the home visits, patients cared for by caregivers older than 45 years old tend to rehabilitate more with respect to those living with a younger caregiver. However, as one might imagine, over-45 caregivers are mostly mothers, and, as previously seen, the fact that the patient is cared for by his mother seems to strengthen the effect of home visiting on his condition. This may be the reason why over-45 caregivers' situation is easier to relieve than under-45s' one but, again, we cannot verify whether one is the consequence of the other and we can again only declare the presence of a correlation.

When looking at the patient's dimensions, it has been interesting to also consider another variable:

Past chain status: "Present" and "Absent"

Home visiting has a slightly stronger impact on the mental and physical conditions of those patients who have never been chained before. However, since the gap is not as huge as in other cases, it may not be significant for this particular dimension.

Autonomy and habits

The focus is on the patient's ability to live with a certain degree of autonomy under different points of view. The dimension refers, from one hand, to self-care autonomy: activities concerning the hygiene and the appearance such as taking a shower, cutting nails and shaving. But it also refers to activities more related to a so called "superstructure", as for instance praying, having a job, studying and supporting family members. The interviews report a general improvement of this dimension, in particular almost all of the patients are able to take care of themselves and to support family members in the housekeeping. Some of the patients usually pray, exercise and take care of children, and other ones have also a job, a hobby or are attending school. For example, when talking about their daughters, two caregivers said: "*Previously, the patient wasn't able to make selfcare such as cleaning dirty clothes, brushing teeth and washing her body etc. but this time she manages basic activities. Also, she takes care of her children and manages her family*"; "*Her self-care is good and she manages her life such as: attending school, supporting family in home activities such as cooking food and teaching younger brothers*". Some patients also stated they got clean from toxic addictions such as the use of "khat" or other substances. The 23-year-old sister of a male patient said: "*The patient noticed a huge change in his behavior, habits and capabilities: previously he used drugs such as khat, cigarettes and other substances but after receiving advice and counseling about his case and taking medications, he changed that behavior"*. However, a minority of them still have no commitment or still depend on the caregiver's support for basic self-care activities such as brushing teeth or taking drugs. For example, the wife of this man reported: "*The patient is not able to manage his self-care such as cleaning his body, brushing and dressing. Also, he doesn't make any support of family. Moreover, there is no change in his behavior as he does not move outside home.*"

An interesting fact emerges when controlling for a particular variable:

Past chain status: "Absent" and "Present"

Both the cases show a positive autonomy of the patients. However, if those having been chained in the past positively changed their habits only in terms of self-care autonomy and housework activities, those who have never been chained also found a job or a hobby and, therefore, seem to more easily re-/integrate in the society.

Interpersonal relationships

The interviews show a general presence of positive relationships with other people. Patients mostly relate with family members but sometimes interact with friends too. As for the caregivers, there are few interviews reporting an absence of any kind of relation and this is due, internally, to the patient's unwillingness or impossibility to communicate and move, or, externally, to the fear and discrimination by people. For example, the sister of this man said: "*There is no change in the relationship with relatives and other family members. They don't communicate not relate because they discriminate the patient and are afraid to visit me*". Indeed, the stigma issue is deeply rooted and pervasive in Somaliland. Their perception of mental health is binary: one is either "mad" (waali) or not, so there is not the concept of a spectrum of mental health. Therefore, once an individual is considered "waali", this label and the associated stigma, is permanent and irreversible. In this way, patients and caregivers are socially isolated and this contributes to make them even more vulnerable. For this reason, home visiting positive impact on this dimension is particularly relevant. Indeed, in a context such as the one described above, the fact that most of the patients and caregivers claim to have stable social relationships and interactions is a very important achievement. Just to stress the point, this is what a caregiver said about her family's relationships: "*Before home visiting, other relatives, friends and neighbors were afraid to visit me. But that behavior has now changed and we now have good relationships with other people who also visit us every time*". Finally, when looking specifically at the patients' relations, it's worth noting also that some of them are planning to marry in the near future.

Benefits, limits and suggestions

Caregiver

The successful experience of the home visits is also demonstrated by the fact that caregivers always refer to the benefits of the program but never to its limits. In particular, the majority of them specifies the usefulness of the home visits in terms of drugs supply and management. Indeed, the interviews show that, generally, when the patient appropriately takes his medicines, his condition gets stable and this contributes to his rehabilitation and, as already seen, this is connected with the improving of the caregiver's condition too. Another benefit often mentioned by most of the caregivers is the pool of advices given by doctors about how to deal with the patient's condition and how to manage stressful

situations. This, indeed, strongly contributes to ease the pressure perceived by the caregiver. For example, a woman said: "*Previously I used to feel stressed and overloaded, but during this program I got counseling and advice about how to manage the situation mentally and physically*". Moreover, concerning health workers, some of the caregivers not only mention their counseling as an advantage, but also the improved and enhanced communication with them. Finally, as already discussed, a particularly relevant benefit that is mentioned to be brought by the program is the reduced discrimination and isolation of the family. Indeed, some interviews report statements like the following: "*Home visitors visited me when other people, instead, isolated me*"; "*Home visiting is important for me because other people used to reject me*"; "*This program supports family members by reducing the stereotyping toward patient's conditions*". Another reason why to consider this an extremely positive experience, is the fact that almost all the caregivers suggested to continue home visiting or even to increase its frequency. It's worth noting that some of them asked for economic and financial support and some also suggested to support the reintegration of patients in the labor market.

Patient

Consistently with the caregivers' opinion, even the patients only talked about the benefits of the program, without mentioning any limit. In particular, they referred to some of the same aspects considered by caregivers, such as the beneficial effect of doctors' advices and information provision about the patient's illness or the extremely helpful support not only in obtaining medicines, but also in taking them appropriately following a scheduled timeline.

For example, a woman stated: "*This program helps me in getting information related to my illness. Also, this program supports me in taking drugs in appropriate way*". Moreover, some of the patients mentioned the motivational effect that home visiting has had on them. Others also underlined how the fact of being treated with respect by the health workers made them happier and hopeful. Finally, according to all patients' point of views the home visiting program should be carried on and the frequency of visits should be increased. Moreover, some of them suggested also to financially support their family and to invest in their business creation: *"I suggest to continue this program and increase home visit days. Also, I suggest to invest in my small business and to support us financially*".

Conclusions and recommendations

The evaluation of the home visiting program effect on the conditions the recipients live in has brought to positive results. In summary, we can see an overall improvement of both the caregivers' and patients' well-being, which are strictly connected. Indeed, where one gets better, we can find the same picture for the other. In particular, there is evidence to state that the impact of home visits on both of them is stronger when the caregiver is the mother and when the patient is younger than 35 years old. We have also seen that the same effect is stronger when the caregiver is over 45 years old, but it seems not to be informative since that cluster includes almost entirely mothers. Instead, it would be

worth deepening the contradictory phenomenon emerging when looking at Psychosis illness: as an effect of home visiting, caregivers taking care of male patients tend to improve their well-being more than those caring for female ones, however, both male and female patients seem to be generally stable and healthy.

In general, we see that the severity of the patient's case inhibits the beneficial impact of the program on his, but also on the caregiver's, well-being. However, we can also see that even in these cases, home visits can still enable caregivers to better manage their life in terms of daily activities. Finally, it is important to stress the role played by the stigma issue. For example, when comparing the habits improvement of those patients never been chained and those who instead have experienced this trauma, we have said that only the former are reported to find a job. This could be explained by the fact that society might not have really labelled these patients as "waali", indeed their chaining has not been considered necessary, and, therefore, they now might more easily re-integrate into society because the latter allow it.

Indeed, the stigma implies that once considered affected by mental illness, an individual cannot reverse this label. This may be the reason why those who have been chained in the past, so who have surely been labelled as "waali", although now considered rehabilitated, are still not able to integrate into society by, for example, finding a job. Here, however, endogeneity might play the big role: patients that experienced chains represent more severe cases and, for this reason, even if stable, they may not be or feel ready for such responsibilities. By the way, concerning this stigma issue, we can say that the program is very significant to the assisted because of its effect on social relationships. Indeed, in a context permeated by discrimination against people suffering from mental disorders, the fact that almost the totality of the recipients report to have interactions external to the core family is an extremely important result. Finally, it is worth remembering that beyond asking for a continuation and an increasing of home visiting, some caregivers and patients suggested also to extend the program by including the economic support of the family and by investing in the patient's entrepreneurship.

Interview with home visits operators

Introduction

In order to get a more comprehensive understanding on the benefits, limitations and possible paths of improvement of the home visiting program in the context of the *Somalia on the move* project, interviews have been conducted involving three GRT social workers who participate directly in the program. In particular, we have interviewed the field coordinator of the program and two operators, asking them about their general impressions and their suggestions, as well as the change that they think home visiting has brought for the patients, caregivers and communities. As previously described, the social workers are involved in the follow up of some of the patients affected by mental health problems discharged from the hospital, by going directly into their houses together with doctors and nurses, in order to check on their progress, to provide them with the medication and to support them and their caregivers with counseling. Their first-hand point of view is therefore extremely valuable, and it has allowed us to complement the previously collected information coming from the interviews to the patients and caregivers, and to get a more exhaustive view on the impact of the program, useful for the analysis and the final evaluation.

We have conducted the interviews by videocall, and we have asked the same questions to all of the social workers. It is important to say that, unfortunately, due to technical problems, the interview to one of the operators was of difficult comprehension and lost part of its value.

The results of the qualitative interviews are presented in the following sections: after an overview of the interviewees' impressions about the program and the description of the activities they carry out, the impact on patients, caregivers and community will be analyzed, followed by a final section on the suggestions provided.

Results

Overall impressions

First, it is important to stress that all three of the interviewees have a positive general impression regarding the home visiting program, and they think that it is bringing some positive change: this will be analyzed more thoroughly in the following sections. They all recognize the importance and the impact of the program, and although they are sometimes negatively emotionally impacted by the home visits due to the seriousness of the patients' and families' living conditions, they feel motivated and optimistic about the program, because they feel like they are making a positive contribution to the patients, the families and the community.

Activities and main issues

As previously described, the home visits program consists in the social workers doing the follow up of some of the patients with mental health conditions who have been discharged from the hospital by visiting them directly into their houses, together with trained doctors and nurses. In addition to provide the patients with the medications and to report to the mental health department of the hospital information and data regarding them, they play an important role in assuring that the medications are working properly and that patients do not interrupt the therapy; they also provide counseling and education to both the patients and the caregivers, who have their phone number in case of emergency. Two of the interviewees have stressed the importance of communication through the telephone for creating a connection with the beneficiaries.

Among the issues that the social workers point out, poverty stands out: on the one hand, it may be the cause why patients stop taking the medication, because pills make them hungry, they do not have enough food and, instead, might be addicted to chewing *khat*; on the other, it creates a generally bad environment within the households, because the lack of food, hygiene and basic goods increases the already stressful situation and the burden for the families and can lead to dangerous situations such as, for example, some cases in which the caregivers are worried to leave children alone with the

patients, because they do not know what could happen, but they cannot do otherwise because they have to provide for the family.

Another problem reported by all of the interviewees is that often, when they visit the patients in their houses, they find other family members in chains. This, on the one hand may be helpful for diagnosing other people affected by mental health problems, on the other, it has a negative impact on the environment and conditions within the household and on the state of minds of the rest of the family.

Impact on patients

All the interviewees stress the positive impact that the home visits program has had on the condition of the patients, especially in terms of constancy of the therapy. For example, one operator stated that: *"We have a lot of patients that used to not take the drugs, but when we visited them continuously and the family called us whenever they stopped the medication and we went back and back, then they finally stood up and continued taking the medication".* They also think that patients are mostly feeling positive emotions when being visited, because they know that the social workers know their story and are there to help.

When asked about differences among the different kind of mental health illnesses (psychosis, schizophrenia and depression), all of the interviewees agree that most of the patients they treat are psychotic or schizophrenic, and only a small part is depressed. The program seems to be effective in particular for psychotic patients, but no particular difference has emerged.

In addition to improving the health of the patients, the home visits program has also improved the quality of life of the patients; in particular, one of the operators reports that some of the patients have stopped chewing *khat*, that some of them are working or even own a shop now.

Another aspect impacting the quality of life is the fact that many of the patients, thanks to the program, do not need to be treated at the hospital anymore, and can stay at home with their families. However, the social workers have mixed opinion regarding whether it is better to treat patients at the hospital or at home: all of them believe in the efficacy of the home visits program if, as reported by the coordinator, *"[…] the patient is collaborative, and the family is collaborative".* There might be some situations, however, in which the patient is too violent and is having some episodes, or the caregivers do not understand what the patients need, and they chain them in the house, and therefore it is better and easier to treat these patients at the hospital. It seems, hence, that the home visits program has a meaningful impact if there is collaboration and trust between the patients and caregivers on one side, and the social workers on the other; if this does not happen, the hospital is more indicated for the treatment of the patients.

Impact on caregivers

All of the interviewees believe that the home visits program has had a positive impact also for the caregivers of the patients they follow. In particular, all of them thoroughly stress the virtuous circle of trust and communication that has been created with most of the families of the patients: when they are visited in their houses, and they are provided with counseling and education on mental health, the caregivers feel that the social workers really know the history of the patients and care for their situation. Being able to contact the social workers through mobile phone is also a very important aspect that is making a big impact in terms of monitoring the conditions of the patients and increase in trust in the program. For example, the coordinator stated that *"The first thing that they feel when you visit, since they have never been visited before, is that you are caring and that you are interested in their problems, so they would share with you some of their burdens, being it about their livelihoods or about the patients. When you maintain and you continue with the communication, […] there is a big change within the family and I think they rely on this kind of service very much, they like it, and it is making a very positive impact on them".*

There is one relevant exception regarding the families' attitude towards the social workers reported in all of the interviews: once the patient starts getting better, the families seem to hope or expect that the social workers will also help them economically and financially, by providing them with funds or by helping the patients find a job. This goes beyond the scope and the services provided by the program, and sometimes social workers feel that the families are disappointed in them because of this.

When asked whether they think there are situations in which it is better to interrupt the program, all of the interviewees agree that the program is to be stopped only if they believe that the patient is feeling better and that does not need therapy anymore. The only exception, reported by the coordinator, is when there is strong resistance from the families regarding the program, mainly due to lack of education and awareness about mental health. This stresses the importance of spreading information on mental health within the communities; this aspect will be furtherly analyzed in the following sections.

Impact on the community

The problem of stigmatization of mentally ill people is still very rooted into the culture of Somaliland, and the discrimination involves not only the patients themselves, but also their families. Even though, as stated by the field coordinator, the situation has significantly improved compared to ten years ago, there is still a lot of discrimination towards the people affected by mental health problems: indeed, in order to not being labeled as mentally ill by going to be treated at the hospital, many try to rely first on religious healers, called *sheikh.* This aspect is reported by all of the interviewees, who also reiterate the importance of education at the patients, families and community level in order to reduce the stigma and help the patients with proper treatments.

Although the problem is still relevant, the social workers believe that the program has helped improving the situation within the community. People understand that the program is having a positive impact on patients, and therefore are more prone to go to the hospital and to be treated. One operator stated that: *"people do not want to go to religious healers, they want to come to the hospital, they want to take medications, they will call you and say that the medication is doing good, so it is very motivating and optimistic for us, so I would say that it had a very good impact on the community here in Somaliland especially in Hargeisa".* The coordinator reports a very important aspect that the program has given a significant contribution to: now, also the government recognizes the importance of the project and is providing funds to the mental health department. This is particularly significant because if mental health issues are recognized at the institutional level, this could furtherly reduce the level of stigmatization of people affected by them, as well as contribute to the spread of information and awareness and the increase in access to mental health treatment.

Indeed, all of the interviewees report an increase in access to the hospital among the population thanks to the program and, in particular, all of them have signaled as a contribution the help they have received from the patients themselves in diagnosing other members of their families affected by mental health problems. In addition to this aspect, the program has also helped spreading awareness and information within the community, so that now more people reach out for mental health help, as reported by the coordinator: *"you can see that we are reaching more people than those who are visiting the health department, so it increases the access to mental health services […] but particularly of a lot of women who did not have the luck to have access to the mental health institutions, so this has increased".*

There is a clarification to point out when talking about the increase in access to the hospital which does not emerge in a straightforward way from the interviews: social workers consider a success when the patients who have already been discharged from the hospital and are followed up at home continue with the therapy and they improve so much that they do not need to be hospitalized anymore, therefore reducing the number of admissions in the hospital. When we talk about increase in access to the hospital, therefore, we refer to those patients that had never been diagnosed with mental health issues before and now, thanks to the spreading of information from patients and families who benefit from the home visits, are reaching out for help and are going to the hospital, therefore increasing the admissions.

Suggestions

A very valuable aspect of the interviews has been the suggestions' part, in which we have asked the social workers to indicate their positive or negative comments about the home visits program and to give advice on possible improvements.

First of all, it is important to point out that none of the social workers has mentioned negative aspects of the program or any activity that they would want to be carried out in a different way. Secondly, all

of them have indicated two things that are to be improved in the future in their opinion: on the one hand they would like to increase awareness about mental health issues and about the program in order to deal with the problem within the community and to try to furtherly reduce stigmatization; on the other they would also increase the number of beneficiaries of the program and therefore to follow more patients in the home visits activities. These two elements are interrelated and could possibly create a virtuous cycle: more increase in awareness could lead to more patients reaching out for help and helping more patients could spread more information and awareness in the community.

On top of this, two of the interviewees add a further step to these considerations by suggesting expanding the program to mental health departments of hospitals in other regions and cities, and not only in Hargeisa, since they feel that the program is having a positive impact on their patients.

Other suggestions brought up by the social workers include: providing help and counseling also to people who have not been diagnosed with a mental health condition such as schizophrenia, psychosis or depression but maybe have experienced some trauma or suffer from anxiety and could therefore benefit from advice from experts; increasing the medications distribution, which could furtherly increase the number of patients; improving forensic psychiatrics in order to help the police when dealing with people who committed some crimes.

Conclusions

What emerges from the analysis of the interviews is that all of the social workers feel positively about the program and recognize the impact that it is having on the patients, the caregivers and the community overall. This is in line with the results obtained by interviewing patients and caregivers, since also in those interviews any particular limitation or negative feedback have not emerged. This furtherly corroborate the idea that the program is having a positive impact.

It is also relevant to highlight that all of the answers regarding the different topics have been consistent among the interviewees, and no significant difference or disagreement was found, meaning that the program had some clear initial goals that are being reached.

Finally, it is worth noting that the suggestions provided by the social workers are very similar, and they mainly regard the importance of spreading awareness and information about mental health in the community and the hope that the program will continue and will be expanded, therefore including more beneficiaries.

Information Management System visit

Introduction

In the context of the evaluation of the project: “Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale” some IT tools have been developed in order to further improve the efficiency of the project. The first tool implemented is the Clinic Information Management System (CIMS), a software that allows to create clinical records and to keep track of patients, their diagnosis, their treatment, etc. This software was already foreseen in the original project and refers to the mental health strand of the project. The second tool implemented, in collaboration with Terre Solidali, is an e-learning platform, that allows the training of doctors and nurses and facilitates the distance classes with the Italian trainers; this platform was not included in the original project and is beneficial to both the mental health strand and the pediatrics strand of the project.

It is important to assess the efficacy, efficiency and usability of these tools in order to get a more comprehensive and exhaustive analysis of the impact of the project as a whole. In order to do so, an interview has been conducted with a representative of GRT, as well as a local social worker who is the main person involved in the update of the clinical records in the CIMS. The results of this interview are presented in the next sections, one dedicated to the CIMS and the other to the e-learning platform.

The Clinic Information Management System (CIMS)

As mentioned in the previous paragraph, the Clinic Information Management System is a software introduced in the mental health department of the hospital that allows to create and update the clinical records of the patients. It has both a web version and a mobile version. The image below shows some of the features that the CIMS allows to monitor, such as patients, treatments, symptoms, etc.

According to the interviewees, the software was firstly developed and tested by GRT and then introduced in the mental health department in 2019, and now counts more than 1000 patients registered. Prior to that date, the clinical records were filled manually and there was often the risk of losing some or all of the information. The recording method they are using right now consists in firstly manually fill the clinical record when the patients first visit the hospital. This step is carried out by the doctors or nurses that visit the patients. When the paper version of the record is ready, a social worker is in charge of transferring the information into the software.

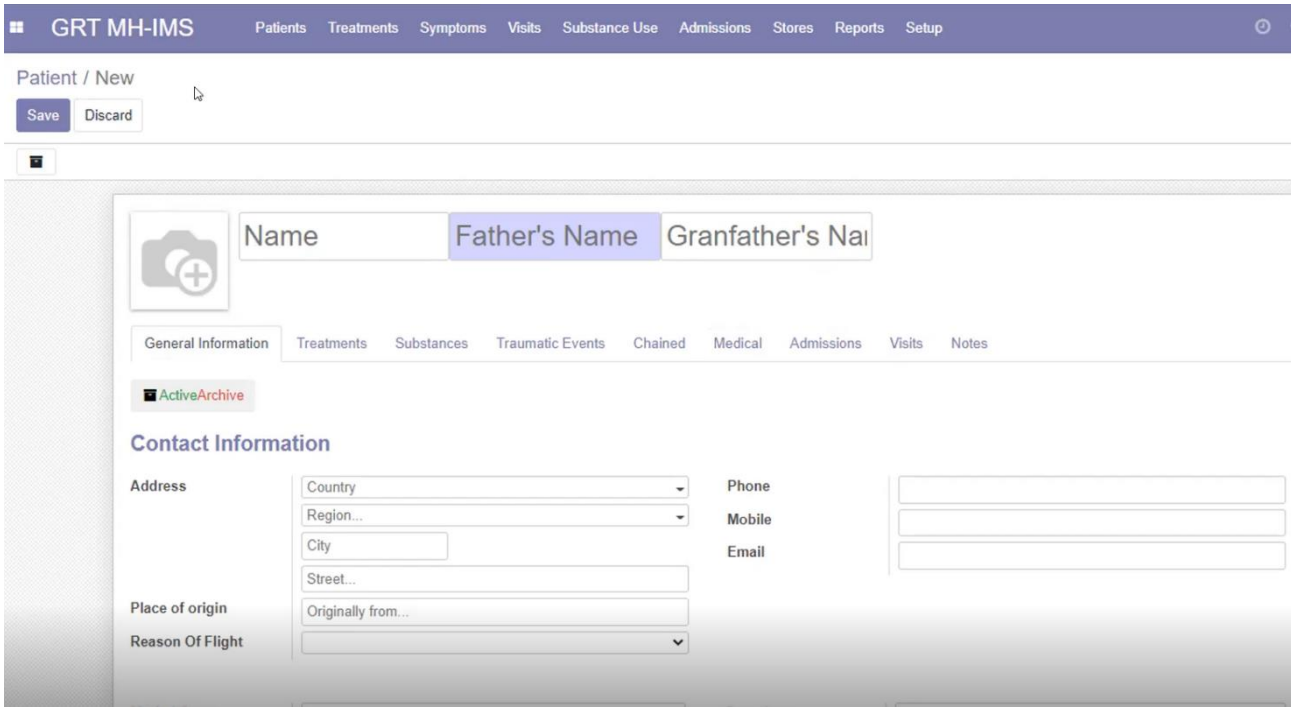

Figure 2 - Tab 1

The above image shows how the creation of a new clinical record looks like. The variables considered (general information, treatments, substances, etc.) reflect the standard medical record used at the hospital. The software has recently been upgraded by an IT professional by introducing some minor changes that reflect what has been changed in the database.

The social worker stresses how useful the software is for keeping track of clinical records of patients, both when they first visit the hospital and when they come back for the follow up. There are several options of filtering and grouping of the patients (such as gender, origin, etc.) that the social worker indicates as particularly helpful, and, in general, the usability is described as simple even for people with no computer skills. The CIMS also allows to keep track of the home visits and to create reports according to a time range. There are some minor improvements foreseen for the immediate future that concern usability and not any structural change for the functions or activities. Another aspect pointed put by one of the interviewees is that the mental health department had always been somehow stigmatized within the hospital, and that the fact that it was the first department in the HGH hospital introducing this kind of tool was very helpful in improving this situation and the morale of the staff.

The interviewees point out a couple of downsides: first of all, the CIMS is a web-based information system, therefore it is not based within the servers of the hospitals and runs only with an internet connection. This is not a major problem, given that the internet connection is running smoothly enough, but it is a limit of the system.

The second downside mentioned is that doctors and nurses are not yet completely autonomous in the creation and the updating of the clinical records: they have received some training, however they still need the support of a social worker. The current arrangement is that the doctor who visits the patient writes the clinical record on paper and later the social worker transfers all of the information into the software using one of the two computers available. Given the many chaotic situations that come up at the hospital, this entails some degree of risk of losing the clinical record, that is extremely reduced compared to when the software had not been implemented yet, but that still exists. In order to reduce it even more, they have equipped the visit room with an additional computer, so that as soon as the doctors visit the patients the social workers immediately update the data, without going into another room. The ultimate goal would be to make the doctors independent from the social workers in entering the data into the software, and there has been some improvement in this sense. However, some further training for the doctors would be required in order for them to be able to use the CIMS completely autonomously.

Regarding the stakeholders external to the hospital involved in the implementation of the software, the interviewees report in particular the Ministry of Health: there has been some discussion regarding the possible introduction of this software into other hospitals in Somaliland, however another facility would like to introduce their own software for money, so there has been some discussion on this topic. Apart from this aspect, the Ministry of Health is supportive of the project in general and has collected some extra fund that will be devolved to the mental health department also for covering some costs such as the internet connection.

All in all, the introduction of the software has improved the management of clinical records in the mental health department, especially in terms of reduction of the risk of losing data. The social workers and the director of the department are well trained for keep updating the software even after the end of the project and are also able to transfer some of their knowledge to the doctors, with the hope that they will also become independent from the social workers.

E-learning platform

As mentioned in the introduction, the original project did not include the implementation of an e-learning platform. However, the partner Terre Solidali had already developed the platform for another project and therefore decided to introduce it also in the context of “Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale”. The trainings mainly concern pediatric topics, but they have also provided two mental health courses show in the image below. The GRT responsible illustrated the main functions of the platform and the learning process for students.

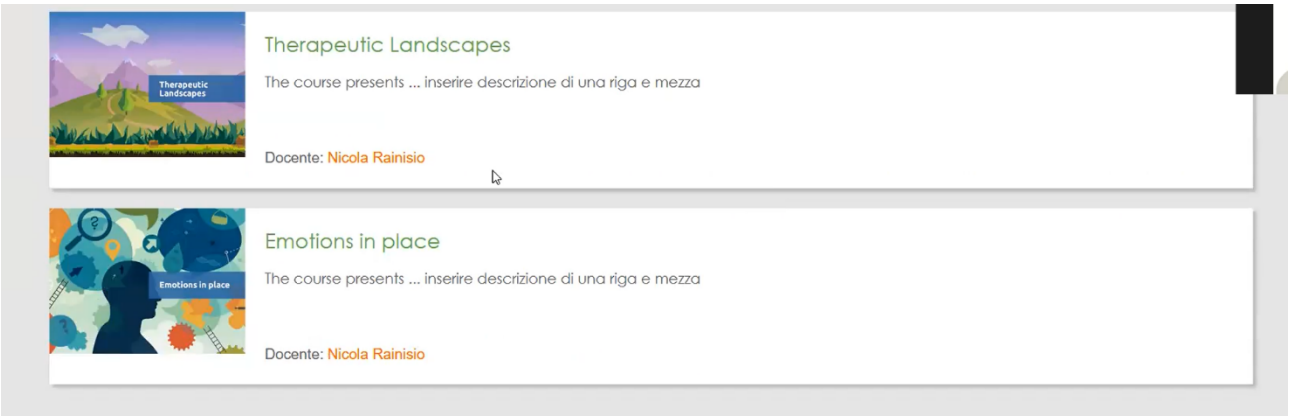

Figure 3 - Elearning platform 1

After an introduction explaining how the platform works, the functions of the training and the details of the teacher, students can access the material of the class shared by the teacher such as articles or scientific papers, the video presentation with subtitles of the class and the slides provided by the teacher. The platform makes sure that students watch the whole video by not allowing them to skip parts of the presentation. After the video lesson, students can discuss the topics of the class during the live discussion with the trainer, that is a useful moment of exchange of opinions, doubts and questions. If someone cannot attend the live discussion, there is a recording of it available in the platform. After having completed all of these previous steps, students can access the evaluation test: they have to answer ten answers in ten minutes, and they are allowed with two attempts. If they successfully complete the test (collecting 6 out of 10 correct answers), they obtain a downloadable certificate stating that they have passed the class. For some of the trainings, an additional live session dedicated to the discussion of real-life medical cases is also foreseen.

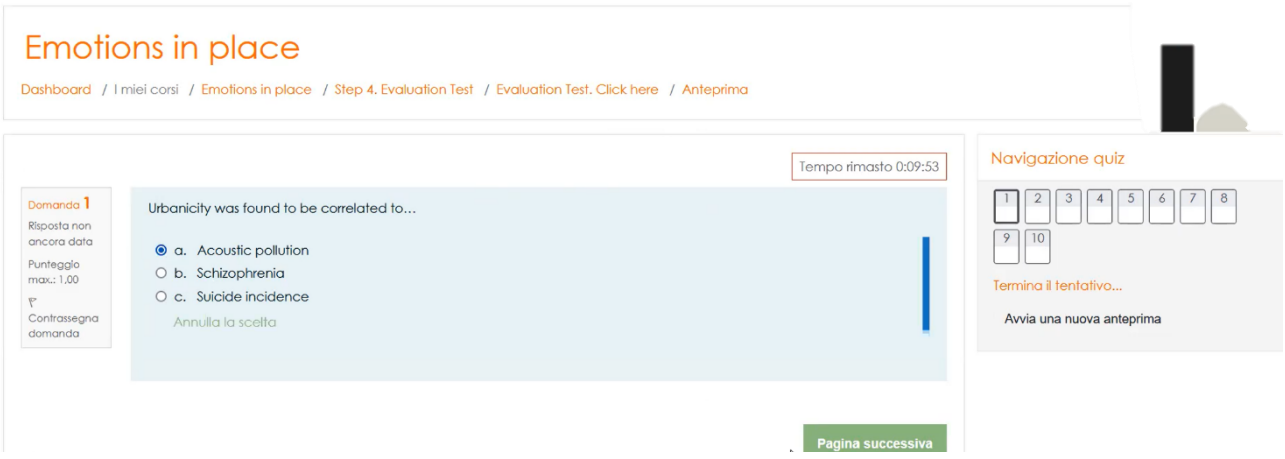

Figure 4 - Elearning platform 2

The topics are selected by the former pediatric director of Terre Solidali in accordance with the local coordinator. The trainers are all doctors of the Regina Margherita Pediatric Hospital, which formally is not a partner of the project but only of the HGH. During the past year 10 trainings have been delivered, in addition to 5 live discussions on real-life cases and approximately other 10 trainings are foreseen in the near future.

According to the social worker interviewed, that is also one of the beneficiaries of the trainings as a student, the platform is very helpful and easy to use. They stressed that live discussions with the trainers are very helpful. Another positive aspect signalled, is the fact that at the end of the training students are able to get a certificate, and everyone seems content with this feature.

Regarding the exit strategy, the platform will not be handed over to the hospital, since it was not originally foreseen in the initial project. It is a complex tool, and therefore there is the need for someone trained to be able to run it. Now, there is no one at the hospital level able to manage the platform, and the interviewee doesn't think that Terre Solidali is intentioned to hand over the platform to the hospital, since it is a private tool so far.

Conclusions

The interviewees briefly mentioned a third tele-activity that is performed in the context of the project, namely the supervision of the mental health staff, performed by a psychologist based in Milan to the local staff in Somaliland. However, there is not a dedicated software or platform for carrying out this activity, and the sessions are performed via Zoom.

In conclusion, the IT tools introduced in the project "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale" are helpful for the success of the project. The CIMS software improved the day to day management of the mental health department by digitalising the clinical records, while the e-learning platform improved the quality of teaching and allowed the exchange of knowledge and information with some specialists in the paediatric and the mental health fields.

Interview with local project manager

In order to gain a more comprehensive view of the impact that the various project actions had on patients, community and on Somaliland policy system in general, Synergia researchers interviewed the local project manager, Dr. Abdirisak Mohamed Warsame. He was the field coordinator of the project and his role consisted in general project management responsibility and in supporting the creation and establishment of connection and relationship with the Government, authorities, the local staff of Hargheisa Mental Health Department and the staff provided by GRT working in the Mental Health Department. His role allowed him to monitor the overall project implementation over these three years and to assess whether the expected results were actually achieved by the project activities. He gives an overall positive evaluation of the whole project that has been implemented.

Concerning the MASCTH pediatric center, the local project manager declared that in his opinion the project has contributed to increase access to health facilities and services and to improve the quality of the cure for pediatric population, especially thanks to the outreach activities and the training sessions of the medical staff. Going deeper with the outreach activities, the interviewee states that the fact that the medical staff carried out these outreach activities in the territory outside the city of Hargheisa on a continuous schedule allowed to increase the number of patients, the regularity of visits and access to adequate care of a huge part of the population, even the poorest. Furthermore, in the respondent's opinion, the training of the health personnel conducted by Italian qualified nurses and the introduction of telemedicine in the MASCHT helped to transfer knowledge and skills and to build the capacity of local nurses.

With respect to the Hargheisa Group Hospital (HGH), the interviewee believes that the impact of the project was good and that a before and after difference is very clear. First of all, thanks to the on-the-job and theoretical professional training sessions the project helped the local staff to develop new skills and knowledge, that according to the respondent will be able to independently replicate in order to train the new operators. In addition, Dr. Abdirisak said that one issue that needs to be mentioned is the fact that the project attracted new professional personnel to work for the Department of Mental Health: new doctors, psychologists, social workers, psychiatrists. The introduction of new qualified staff has improved the quality of care and medical techniques. In parallel, efforts are currently being made to produce a document of standard operating procedures, which everyone can follow in their daily work.

According to the interviewee, access to health care has also improved thanks to the outreach activities, which have made it possible to increase the number of patients, reduce the number of hospitalizations and ensure continuity in visiting and treating a large part of the population. On the other hand, also home visits achieved to reach the expected results according to the respondent. They helped to break stigmas and to improve the quality of communication between medical and social staff and the patients and their families, giving them the opportunity to ask for help and support when they need it, for example to clarify how to do a medication. It can be said that now patients are more controlled, and their relapses have decreased.

Focusing on the fundraising network and the awareness-raising campaigns for the respect of the human rights of people with mental health problems other important evaluative considerations have been proposed by the local project manager. According to Dr. Abdirisak opinion the fundraising network was under the responsibility of the local partner GAVO, who organized workshops, seminars, and local campaigns. They have involved some businessmen and other wealthy people in these initiatives to try to raise funds to finance structural interventions in the hospital and hiring people.

Considering the awareness-raising campaigns, the interviewee believes they have been crucial in spreading appropriate knowledge about mental health within the Hargheisa territory. Together with the Minister of Health, the project partners decided to establish an awareness week in October, on

Mental Health Day, the 10th of October. In particular, in 2018 and 2019, Mental Health week was held in Hargheisa, while in 2020 and 2021, due to the covid 19 pandemic, only Mental Health Day was organised on October the 10th. In 2021 it was celebrated both in Hargheisa and Mogadishu, with the involvement of the Ministry of Health.

Both the fundraising activities and the awareness-raising campaigns helped to improve the administrative capacity of the local staff and the partners, contributing to the development of the new Department of Health at the institutional level.

Talking about stigmatization, in Dr.Abdirisak's opinion the most important activities that contribute to reduce it are the awareness-raising campaigns and the home visits. Awareness-raising campaigns have helped the community to better understand mental illnesses and have given a different perception to the hospital and the mental health department. Home visits, on the other hand, have helped patients' families to accept their loved one's illness and understand the right treatment for him or her, greatly reducing the number of people kept in chain.

Concerning the collaboration with the other partners of the project Dr. Abdirisak seems to be satisfied. In his opinion, one of the things that helped to build a good relationship and collaboration was the quarterly stakeholder meetings in which the different parts discussed everything about the project and the mental health issues, guaranteeing the success of the project.
Furthermore, a good level of communication was established with all local institutions, the authorities and with the other local organizations operating there, including the only Mental Health dedicated international organization. Another positive aspect according to the project manager is the fact that the Ministry of Justice has also been willing to cooperate with them on human rights issues.

As regards his role as coordinator, the interviewee states that he "*would take this job again"*, showing a strong positive opinion of the project and its impacts. When asked about the main difficulties he encountered during the three years, the interviewee stated that during the early days there were some issues with the local authorities due to a turnover of the staff in the ministries, which led to major

changes in less than one year, that involved starting and developing the relationships from scratch again. Additionally, another issue that put some pressure in the interviewee's work in the first months was that it was difficult for the MASCTH staff to get adapted to the new working method, since they used to be very disorganized in the past.

Overall, according to the local project manager the project was considered to have helped the government to better understand the issue of mental health and the local community in understanding and accessing services and treatment. Furthermore, it has helped to reduce stigmatization in the local community, and it has contributed to the government establishing a better mental health policy.

Speaking of future and sustainability, the interviewee expresses the will to continue the project activities and to spread them to other territories and areas outside Hargheisa that require more attention, especially in the eastern part of Somaliland. He would focus particularly on home visits and awareness-raising campaigns since they have been very effective in reaching the goals and the expected results of the project. Additionally, in his opinion, more actions are needed in the field of human rights, also in collaboration with the Ministry of Justice.

Part III: general evaluation

Interview with the General Director of the Ministery of Health

"This three-years project serves a lot; I do encourage the repetition of this project". The General Director Dr. Mohamed Abdi Hergeye, interviewed by Synergia researcher, has monitored the project's implementation during the past years and he is therefore able to enrich our analysis from a policy perspective, contributing also on dimensions such as sustainability and institutional capacities. The General Director is clearly aware of the complex activities realized and gives an overall positive evaluation of the whole project that has been done.

He affirms that it was an important three-years period for health services in Somaliland: concerning the mental health services, the project, through GRT support, has enhanced the staff and the patients for the growth of the HGH. At MASCTH, through the cooperation with Terre Solidali, GRT's contribution has been fundamental for the general improvement of the Hospital, starting from the development of its staff, and the impact of its services on the community.

Going deeper with the evaluation of the first area of intervention, the DG thinks there have been improvement after the project's implementation regarding the access to health facilities and services for the mental health patients. Three years before, indeed, most of the patients cannot get medical treatments, the staff was not recruited, and they were not getting proper incentives, the number of places for patients at the department was limited. After the engagement of GRT, there was a quite improvement in the quantity of patients visiting the department and a growth in the patients' satisfaction. According to his view, it is notable also an improvement in the infrastructures. Exploring the changes occurred within the dimension of sensitization on mental health, the DG suggests positive steps forward: sensitization is a result coming from coordination among the partners, the engagement of the community, and awareness. Those dimensions, together with human resources and the quality of the services provision, have been positively impacted by the project implementation. The services provided are not excellent yet, and the level of satisfaction he perceives is not the highest, but thanks to the project many progresses have been done.

Focusing on the specific activities realized at the MASCTH, other important evaluative considerations have been proposed by the General Director. He says that a lot of improvements have been done for the pediatric population, firstly in terms of numbers: the outreach activities and professional skills have improved significantly the program's impact, regularly reaching, visiting and treating a huge part of the population. Furthermore, in terms of patients' satisfaction, the impression is that the contribution of the project has been highly effective. Additionally, even poor patients have been reached by these interventions, so limiting inequalities in the access to services. Therefore, the

feedback is that the project led to an improvement of the pediatric patients' situation. The DG expresses a positive evaluation on the role of telemedicine in the MASCTH functioning: it has deeply contributed to the human resources' capacity building, as well as to the quality of the operations followed and services delivered.

Concerning the partnership built with GRT and with the other project partners, the General Director shows a great level of satisfaction. He affirms that good collaboration and coordination between the Ministry of Health and the Agencies involved in the program, have characterized the implementation of activities.

During the interview, the financial sustainability in the long term of the new facilities and structures was evaluated together with the DG. It represents a crucial and complex dimension, on which actions and decisions are in development. According to the General Director's evidence, the sustainability of the MASCTH hospital finds financial support by the Minister for Health, especially for the professionals' employment. Talking about the constructions, he says there are not secured resources yet and that in this area they may need support from the international community. For what it concerns the mental health sector, there is an internal support which consists of around a million, provided by private donors and implemented by the Minister of Health. Although he considers the project sustainable in the long run, looking at his considerations based on local efforts and resources, in the Dg's opinion there are still areas in which they need support from Eu agencies. For instance, in finding resources for the construction of infrastructures.

For the future, the General Director suggests that the project's activities should go ahead. An improvement it should be designed is the integration and the engagement of both pediatric and mental health with the sector of primary health care. Another strategic objective pointed out for the future is to increase of the capacity building of the human resources among Health personnel, through training activities and staff work. The Dg also recommends for future projects to improve the coordination at the institutional level, that is, according to his view, the way how partners inform the Minister of Health during the whole project implementation. He expects an improvement of the ownership and the leadership of the Ministry of health in the project.

In light of the above, the General Director Dr. Mohamed Abdi Hergeye, recommends similar future projects. According to him, these can improve the quality of the patient care provided by hospitals in Somaliland. The areas that have been improved are awareness, human resources and the quality of the services provision. The first seems to be related to both, patients and local medical staff. Patients' awareness of medical services, results from partners' collaboration and social mobilization. While improvements for human resources are considered in terms of an increment in the number of medical personnel, in their organization and lastly in terms of their training. Moreover, the Dg has stressed the importance of an enhancement of Somaliland Government awareness and ownership of the project process. There has been also a direct request for an increment in the number and the types of health services provided by GRT. Additionally, from the interview, it resulted that it is of critical importance that both, mental and pediatric services, are integrated into primary health care.

Interview with GRT project coordinator

The Italian project coordinator and GRT contact person - Dr. Massimiliano Reggi, has been in charge of writing the project, keeping relationships with donors, partners, local authorities and monitoring and technical advisory to the local project manager, considering he's a psychologist. Due to his role and experience, his interview is very important for the overall evaluation of the results achieved by the project actions. Moreover, having written the project, the interviewee is able to state with certainty whether the results he expected to achieve were actually achieved or not.

First of all, the interviewee was asked, in relation to pediatric care inside the MASCTH structure, whether the service has improved and if the mechanisms that have been adopted - such as the diversification of areas of intervention, the training of local staff, and the facilitation of access to care for displaced persons - have been useful.

Regarding the facilitation of access to care Dr. Reggi points out the success of the home screening and outreach activities, which involved hospital staff going to IDP camps to provide medical checks, solving medical issues that could be solved within a short time and sending patients to the hospital in case of need. The interviewee highlights the large increase in the number of these visits directly in camps and in the number of people going to the hospital after these first screenings.

With respect to the training of the health personnel, the interviewee declares that, in his opinion, the project has been producing positive results and it has improved in its very last phases. The training activities are described as concrete and they have been made easier by telemedicine, which had already been planned before Covid and was one of the most appreciated components of the project. Lessons were typically composed of a theoretical part and a practical one which included a discussion of cases with Italian experts. This practical activity is believed to be useful to improve the trainees' knowledge. Also, the introduction of a specific platform, on which materials were uploaded and a live discussion was available, has been very useful.

During the interview, also the mental health strand of the project was evaluated together with the Italian coordinator. According to Dr. Reggi's opinion, the project has contributed to improve the Somaliland Mental Health Policy and the access to care services. He underlines the importance of constituting a real Health Department in charge of improving the mental health policy in a participative way connecting all the relevant actors and structures of the territory. This department was created after building coordination groups in the first phase of the project that were able to connect different public entities. In addition, another important point was the improvement of work organization, introducing new professional figures and new routines to implement services at the hospital. Another success achieved at a more institutional level was the updating and refinement of the mental health policy.

Focusing on the specific activities realized to enhance fundraising, several workshops, seminars, awareness-raising activities were conducted, especially by GAVO. These activities aimed to increase awareness on the importance of mental health and to raise money to implement structural works to the Hargheisa Group Hospital building. The project partners, the Ministry, the department, even the first lady intervened in this process. Furthermore, at government level, a new tax on Qat, which is a

crucial plant for the Somaliland economy, was introduced. This tax was fundamental to support the project activities, open the Mental Health Department, reconstructing physical spaces and hiring people.

Another topic discussed during the interview were awareness-raising campaigns for the respect of the human rights of people with mental illnesses. These campaigns are considered by the interviewee to have had an effect in the framework of a better organization of the other activities, like improving services or the administrative capacity in managing the services. The impact has been lower on the families themselves, which have benefitted more from the work that has been done directly with them during home visits and outreach activities.

A further point concerned the stigmatization in respect of people with mental illnesses. Dr. Reggi explains that, in his opinion, the activity with the families and the improvement of the building structure have given a different perception to the hospital and especially of the Mental Health Department, which before the start of the project was not well regarded and was not suitable and equipped to be a treatment area. Indeed, while in the past mentally ill people were kept in chains, now the mental health department has gained more dignity and it is not perceived anymore under a negative light. Moreover, according to the interviewee's opinion the structural conditions appear to have improved also from a clinical point of view. In fact, the higher number of patients and accesses to mental health services, which Dr. Reggi thinks that its rise is also linked to a reduction in stigmatization by the community, has required the hospital to rationalize the system, for example some visits have been conducted externally.

Other important activities on the mental health strand of the project are home visits and the on-the-job and theoretical trainings.

With respect to home visits the Italian coordinator of the project says that this type of intervention has been successful, and the proof is that the number of relapses has decreased enormously, showing that patients who are also followed at home, thanks to the continuity of therapy, are less likely to be re-hospitalized.

Focusing on the on-the-job and theoretical trainings the interviewee states that, in his opinion, this mixed modality alternating theoretical and more practical moments was very useful in order to better assimilate the training sessions, especially for older operators who, unlike younger operators who have just graduated, are not used to studying on books but to learning by doing. On the other hand, he believes that only a part of those people that were trained, the younger operators, will be able to teach in future to other colleagues what they have learned during these three years.

Concerning the partnership built with the other project partners, the interviewee, who represents GRT in the project, pointed out that the relationship with Terre Solidali, Save Somalia and GAVO was good and eased by the fact that they had already been partners with them in the past. With the Ministry and the Director of the MASCHT centre, on the other hand, there have been some issues at the beginning, but the situation improved when the Ministry became a partner of the project, while before it was a counterpart. Also, with the local institutions there were some minor problems at the beginning, but they have been progressively solved.

Asked about his role as a coordinator, the interviewee says that it was a challenging and interesting experience and that overall, he is very satisfied with his work and the project. When asked about the main difficulties he encountered during the three years, the interviewee highlights some issues with the first AICS referent, as it was difficult to get in touch with her. After a few months, a new referent

was then introduced to the project and the relationship with this new person has been better, although there have been some issues with the monitoring process, since the two referents used different measures and had a different approach. In general, there has been a discontinuity between the two AICS referents. Furthermore, at some point AICS was not providing the funds and this caused a slowdown in the activities of the project.

Another big problem that the project faced was Covid. Indeed, after the troubles with the MASCHT Director and after having had to wait four months before a response from AICS that would have allowed to continue the project activities, this response arrived in February 2020, the same period that Covid was spreading. In spring 2020 training activities in person had to be suspended, and the remote ones were limited because Italian doctors, that were supposed to do the training sessions, were busy dealing with overcrowded hospitals and Covid cases.

For what regards things that we would have changed about the project, the interviewee would probably have wished to achieve a better connection between the two strands of the project - pediatric centre and mental health. He wished to have introduced psychological assistance also for the mother-child relationship and to have invested more in telemedicine also in the paediatric centre, in particular after knowing that the operating room initially provided in the plan would not be realised.

Fortunately, despite the complex starting situation, the project got off the ground and was a great success in all its components. The interest and involvement of the local community, including institutions, the improvement of the IT system for mental health department and the progress in telemedicine, with an increasing interest and commitment by local nurses and doctors made it possible to achieve the expected results and sometimes even exceed them, as in the case of home visits. In fact, thanks to these activities, not only the access to care has increased and its quality improved, but they have also been crucial for the medical staff since they have understood the importance of home visits and they have made this activity as a part of their routine.

Finally, speaking of sustainability of the project in the future the interviewee says that it will not be very complex to continue the project activities since these were carried out in structures where there is no longer a need for structural and, therefore, economic intervention. One problem that could arise is the supply of medicines, which could be easily solved by allocating the money collected from the Qat tax to the purchase of medicines. About training sessions through telemedicine and training activities on field, they are something that could be done without a strong effort and large financial resources.

Set of indicators

Outreach

The outcomes of the indicators were calculated starting from the data collected during the outreach activities that took place in the second year of the project. The data refer to 29 outreach activities which occurred between 2019/07/29 and 2020/08/31, in the Guinea Conakry camp, Ayah camp and Digaale camp.

The outcomes of the set of indicators used are described below:

1. **Average number of patients per single outreach = 45,21**
   This indicator describes the average number of patients encountered during each single outreach to the camps. On average, 45.21 patients were reached during a single outreach.
2. **Undiagnosed patient / Patients within the single outreach = 0%**
   This indicator describes the number of patients for whom it was not possible to make a diagnosis, in relation to the number of patients encountered during each single outreach. There are no patients for whom it was not possible to make a diagnosis, therefore the ratio between patients without diagnosis and those encountered during each single outreach amounts to 0.
3. **Patients without a caregiver/Patients within the single outreach = 6,49‰**
   This indicator measures the number of patients without a caregiver in relation to the number of patients encountered during each single outreach. The number of patients without a caregiver is very low compared to the number of patients reached during each single outreach, therefore the ratio presents a value close to zero, that amounts to 6.49‰ (0.00649).
4. **Patients who received a follow-up/Patients treated within the single outreach = 3,49‰**
   This indicator measures the number of patients who received a follow up, compared to the number of patients who received a pharmacological treatment during each single outreach. Only in a few cases the patients have received a follow-up, therefore the ratio between the patients who received a follow up and the patients treated per outreach is close to zero and amounts to 3.49‰ (0.00349).
5. **Average number of drugs administered per patient (within a single outreach) = 1,92**
   This indicator measures the average number of drugs administered to each patient during each single outreach. To calculate the indicator, the number of drugs administered per outreach was calculated in relation to the number of patients encountered during each single outreach. The result amounts to 1.92 drugs administered per person during each single outreach.
6. **Average number of diagnoses per patient (within a single outreach) = 1,14**
   This indicator represents the average number of diagnoses made to each patient during each single outreach. To calculate the indicator, the number of diagnoses made during each single outreach was calculated in relation to the number of patients encountered during each single outreach. The result amounts to 1.14 diagnoses made per person during each single outreach.
7. **Average age of patients within a single outreach = 51,75 months**
   This indicator measures the average age (expressed in months) of the patients encountered during each single outreach. The average age of the patients amounts to 51.75 months, also expressible as about 4 years and 3 months.
8. **Untreated patients/Patients within a single outreach = 10,73‰**

This indicator measures the number of patients who have not received a pharmacological treatment during the outreach, in relation to the number of patients encountered during each outreach. The result is close to zero, because most patients received a treatment during the outreach, and it amounts to 10.73‰ (0.01073).

9. **Number of untreated patients / Number of diagnosed patients (within the single outreach) = 10,73‰**
   This indicator measures the number of patients who have not received a pharmacological treatment during the outreach, in relation to the number of patients who received a diagnosis during each outreach. The result is close to zero, because most of the patients have received a treatment during the outreach while all the patients have received at least one diagnosis. The result amounts to 10.73‰ (0.01073).
10. **Number of undiagnosed patients / Number of treated patients (within the single outreach) = 0%**
    This indicator measures the number of patients who did not receive a diagnosis during the outreach, in relation to the number of patients who received at least one pharmacological treatment per outreach. The outcome is zero, because there are no patients who have not received at least one diagnosis during the outreach.

Telemedicine

The outcomes of the indicators were calculated starting from the data about the telemedicine sessions and from the documents provided regarding the courses and the evaluation tests. The telemedicine sessions were taken on the following days: 2020/09/15, 2020/11/17, 2020/11/24, 2020/12/01 and 2020/12/08.

The outcomes of the set of indicators used are described below:

1. **Average questionnaire mark received = 7,5/10**
   This indicator measures the average of the marks received of the questionnaires for the training evaluation. The calculation of this average was based on the marks of the tests available, taken by 8 doctors, carried out on 2020/12/17. The average of the marks amounts to 7.5, on a maximum achievable of 10.
2. **Average number of participants to sessions = 5,83**
   This indicator measures the average number of participants per session. The calculation of this indicator was based on the 6 sessions for which the data were available. The average number of participants in the telemedicine sessions was 5.83.
3. **Average number of sessions attended by each participant = 4,38**
   This indicator measures the average of the number of sessions attended by each participant. The calculation of this indicator was based on the data available regarding the participants of the telemedicine sessions. The average number of sessions attended per participant was 4.38.
4. **Average number of hours of consultation per session = 1**
   This indicator measures the average of hours of consultation per session. The calculation of this indicator was based on the available data referring to two sessions: the first concerning one suspected case of tuberculosis and the second concerning Covid-19 in children. Both sessions had a duration of consultation of 1 hour, so the average result is 1 hour of consultation per session.

General conclusions

From a general point of view, the evidence gathered from all qualitative-quantitative sources during the final project evaluation converges on one clear result: despite the significant challenges faced, starting with the effects of the Covid 19 pandemic, the "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale" project was an unquestionable success in terms of achieving the expected results and outcomes.

The instruments put in place for the enhancement of quality and access to care have fostered an improvement in the health and well-being of the paediatric patients of the MASCHT on the one hand and the mental health patients of the HGH on the other. The expected results were achieved both quantitatively, as the monitoring indicators clearly show, and qualitatively, as confirmed in the interviews by the project stakeholders and beneficiaries.

Referring specifically to MASCHT, it can be stated with conviction that the project has led to an improvement in the health of children in Hargheisa and more generally in Somaliland, thanks to the development and training of local staff through telemedicine, the strengthening of services offered, and the developing of outreach activities. From the data collected, in fact, it is possible to note that the trained personnel are considered capable of passing on their knowledge and skills to new trainees, especially for the detection of diagnosis. Moreover, the outreach activities in the camps in Digaale and Guinea Conakry have been a beneficial and well-received programme by the population, leading to an important improvement in access to health services and the general health conditions of the children in the camps, creating positive repercussions on their families as well.

Regarding the second strand of intervention, the Mental Health one, the project activities improved and enhanced access and quality of care services in the area of mental health. In particular, a very effective aspect was the development of home visits, which, in addition to generating an overall improvement in the well-being of patients and their caregivers, led to a drastic reduction in the number of relapses thanks to therapy monitoring. Furthermore, they have facilitated the dissemination of more knowledge and information with respect to mental health, reducing the stigmatisation of patients and their families within the community and increasing the number of hospital admissions of people who had never been diagnosed. In addition, thanks to the on-the-job training and education activities, the improvement of the medical records management software and the e-learning platform, the mental health department staff is much more competent, organised and prepared in the all-round care of the patient.

A very important long-term achievement of the project was the improvement and the refinement of the Somaliland Mental Health Policy and the constitution of a real Health Department in charge of improving the mental health policy in a participative way connecting all the relevant actors and structures of the territory. This great achievement provides the basis for the dissemination of the Mental Health Policy and project actions in other territories.

Finally, the excellent project management and coordination was a crucial aspect for the success of the project. Although the partners worked mainly on their specific target groups and objectives, the tasks and division of competences were well specified from the very beginning of the project and the

project leader was able to effectively coordinate the work of the partners by demonstrating excellent problem solving skills, which were recognised by all partners.

Besides the many positive aspects of the project, we would like to highlight possible room for improvement and recommendations in view of a future continuation of the project itself:

- From many interviewees point of view, particularly the medical staff who trained the MASCHT operators, it emerged that there is a need to go more in-depth on the subject of paediatric surgery, through specialised advanced training sessions on site or in Italy of doctors and nurses;
- It might be useful to envisage the operation of the medical records management software (CIMS) even without an internet connection but relying on the HGH's servers; in this regard, many operators suggested the possibility of more training regarding the functioning of the platform and the compilation of medical records for doctors and nurses, who currently have to ask the social workers for help to record patient data. This small measure could further reduce the dispersion of data.
- Even though this was not part of the "Somalia in cammino: sostegno alle eccellenze socio-sanitarie in pediatria e salute mentale" project, some testimonials and stakeholders have suggested the creation of social and work integration pathways for patients discharged from HGH and that thanks to the therapy their health condition has greatly improved.

Before

After

Before

After