Swiss-Tajik Cooperation:
Nearly 20 years of Primary Healthcare Development

Ministry of Health and Social Protection of Population of the Republic of Tajikistan

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With high levels of poverty and two thirds of its people living in rural areas, Tajikistan's primary health care system and the quality education of its health workers are essential to make health care more accessible. The Enhancing Primary Health Care Services Project (Project Sino) and the Medical Education Reform Project (MEP) have been committed to the pursuit of Universal Health Coverage (UHC) through development of the health system and medical education reform for close to 20 years. The projects are supported by the Swiss Agency for Development and Cooperation (SDC) and implemented by the Swiss Tropical and Public Health Institute (Swiss TPH).

The projects were conceived to support, and work directly with, the Ministry of Health and Social Protection (MoHSP), the Republican Clinical Centre for Family Medicine (RCCFM), the Republican Centre for Healthy Lifestyle (RepHLSC), the Post Graduate Medical Institute (PGMI), the Tajik State Medical University (TSMU) and selected Nursing Colleges, to make significant strides towards family medicine-oriented primary health care (PHC). The projects have also ensured a sustainable partnership between Switzerland and Tajikistan through continued collaboration and improvement, and serve as a model for other health sector reform initiatives.

The aim of Project Sino is to develop affordable and sustainable models for PHC, as well as to build up management competencies in the health sector and strengthen the capacity of national institutions. The aim of the closely linked, and now concluded, MEP project was to modernise the training of family doctors and nurses. This was achieved by putting greater focus on practical, clinical skills, communication techniques and providing early exposure to rural practice realities, with students working directly with patients under the guidance of experienced colleagues – as is routinely done in Switzerland.

To achieve the health-related Sustainable Development Goals, Switzerland promotes UHC through activities that establish social protection mechanisms in health and advocate for access to quality healthcare. SDC in particular supports the drive towards UHC and that attention is paid to the needs of the poor, such as the assistance provided in Tajikistan.

Universal Health Coverage (UHC)

UHC is a rallying call for the strengthening of health systems that deliver basic, quality care to the most vulnerable populations. UHC is an investment that affects individuals, communities and even societies as a whole. A healthy society is a more resilient one - one where individuals are able to get an education, be productive at their workplace and create a more prosperous life for their families.

Project Sino: Primary Health Care Strengthening

What is Project Sino all about?

Project Sino supports the MoHSP to achieve its strategic goals in health, promote family medicine, and increase the health literacy of the population. In addition to the development of appropriate health policies and interventions to strengthen management and improve the quality of care, social participation and community health form an important cornerstone in the establishment of sustainable and equitable models of primary care services.

Project Sino seeks the involvement of community leaders and direct interactions with the population to engage in their own health. The role of district level Healthy Lifestyle Centres has been strengthened to provide information to the surrounding community. This information covers a range of issues, including changes relating to health reform such as family medicine services, entitlements under the basic benefit package and exemptions and payments related to the utilisation of these services. The capacity built in the local health system structures to work in partnership with communities will remain after the projects' end and opens the chance to expand the programme throughout the country.

Moreover, capacity at national level has been created so that streamlined, quality resources exist on a variety of health issues including HIV/AIDS, reproductive health, tuberculosis and worm infections. Comprehensive, precise, and timely information of issues with respect to health, healthcare and prevention through information campaigns and media coverage are developed and carried out. This could all be leveraged to issue timely information about COVID-19, containing the spread of misinformation and reducing the risk of panic.

Why is primary health care strengthening needed?

Tajikistan has made important progress to move away from the heavily centralised and specialist-focused healthcare system that existed in the Soviet era, towards a family-medicine oriented PHC system. There is now a basis upon which to build, and the people of Tajikistan can start to envisage the right to basic health care. Nonetheless, family medicine remains insufficiently acknowledged for the critical role in securing population health, with family doctors too often punished instead of praised, and the PHC system chronically underfunded. Rural communities in particular continue to face healthcare barriers such as stock-outs of medicines and other supplies, poor infrastructure, and deficiencies in the quality of care provided.

What is unique about the ongoing primary health care reform?

The ongoing reform aims to improve the delivery of PHC through stronger and more transparent planning processes. In doing so, it seeks to build management capacity at the district and health facility level, and to raise awareness of resource use. In addition, PHC reform empowers communities to take more responsibility for their health and facilitates greater health literacy by supporting the involvement of PHC staff in health promotion and disease prevention activities, and overseeing the establishment of Community Health Teams.

In the context of the COVID-19 pandemic, the role of PHC has been shown to be more important than ever. PHC can differentiate patients with respiratory symptoms from those with COVID-19, make early diagnosis, help vulnerable people cope with their anxiety about the virus, and reduce the demand for hospital services.

What is the rationale behind PHC strengthening?

The goal of Project Sino is that individuals in rural areas of Tajikistan enjoy better health thanks to improved and transparent family medicine-oriented primary healthcare services and community involvement. By working closely with the MOHSP and its associated institutions, both Project Sino and MEP contribute to PHC strengthening, and in turn the improvement of population health in Tajikistan.

The 2017 Demographic and Health Survey for Tajikistan already showed important improvements in health outcomes for mothers and children – indicators that are highly sensitive to capacities and quality of care at the PHC level. It indicated that under-five mortality rates had declined from 51 deaths per 1000 live births in the 2003–2007 survey to 33 deaths per 1000 live births in the 2013–2017 survey. According to these surveys, some indicators of maternal health have also improved, including the number of antenatal care visits, or births occurring in a health facility, although there is no information regarding perinatal maternal death. This aside, most of the surrogate markers for health reported in the survey had shown an improvement[1].

An endline survey into out of pocket expenditures for health was conducted in 2019 and compared to a previous survey conducted in 2016. It was designed as a cross-sectional community based survey and was conducted in 8 districts. The respondents were adult patients that had visited a health centre in the previous 3 months.

From the total 1,600 interviewed respondents in 2019, the majority were women (88.3%) and of median age 31 years old. The main reason for visiting a family doctor was pregnancy (44.9%); other highly reported reasons included cardiovascular (25.9%), respiratory (15.6%), acute digestive (15.0%) and genitourinary (12.5%) problems and diabetes (14.8%). 82% of respondents reported the prescription of medicines during the last consultation and from those, every fifth patient (20.8%) received five prescriptions or more. Among the prescriptions were a high number of injections and almost half received an antibiotic.

42% reported to have paid money on a formal basis at an average cost of $3.2 USD. The majority of patients reported formal fees for the diagnostic tests, however about 15% reported payment for the consultation itself. Giving money on an informal basis to the family doctor was reported by 23.9% with a mean amount of $1 USD. Even though the rate of informal payments have increased since 2016 (15.6%), the **frequency of informal payments is less than half** of the amount reported in the much earlier iterations of the survey in 2005 and 2011.

In 2019, 80.2% spent at least some money on medicines and medicine prescriptions and the high rate of polypharmacy still requires urgent attention. Community engagement and continuing efforts to make the fee system more transparent remain further important factors for patients to act on their own agency and to demand fair and quality treatment.

[1] Statistical Agency under the President of the Republic of Tajikistan, Ministry of Health - MOH/Tajikistan, and ICF. 2018. Tajikistan Demographic and Health Survey 2017. Dushanbe, Tajikistan: SA/Tajikistan, MOH/Tajikistan, and ICF. Available at http://dhsprogram.com/pubs/pdf/FR341/FR341.pdf.

Building Management Capacity: PHC Management Course

Management weaknesses are compounded by the chronic lack of resources within the healthcare system. PHC managers find it difficult to effectively manage health service delivery due to the lack of problem-based training and support mechanisms, as well as the availability of appropriate tools.

In response, Project Sino has worked with the MoHSP to develop and implement a business planning approach at a district and rural health centre level. In addition, the project initiated the development and implementation of an innovative, modular training in health management. The Post Graduate Medical Institute (PGMI) is the leading partner and host institution, under the oversight of the MoHSP.

The main goal of the course is to strengthen management skills for PHC within the health system. The key features of this highly practical, modular course are:

I. Combination of theoretical inputs in Dushanbe, mentoring at the workplace by the institute's trainers, and self-education, considering the real situation in the district;
II. Use of innovative teaching methods, including distance learning;
III. Application of modern concepts for PHC system management, adapted to local conditions.

The course is designed to train PHC managers and focuses on practical aspects of management, with special emphasis on planning and problem solving. In total there are 10 modules (see Figure 1). Each module lasts 4 weeks: Week 1 is for inputs at PGMI in Dushanbe; Week 2 is for self-learning at the workplace. During Week 3, PGMI trainers travel to the districts to provide on-site training and mentoring. Week 4 is reserved for written assignments. Participants thereby enhance their capacity to use the different tools and instruments existing in the health systems, including the business plan (health planning tool), and guideline for engaging communities in questions related to their health.

Proven Results

Four rounds of the course were successfully completed between 2015 and 2020, with external and internal evaluations taking place. In total 23 PHC managers or deputy mangers and 69 other members of the PHC management team have been trained. A rapid survey was carried out amongst the 23 managers, and the opinions are shown in Figure 2 below.

The consolidated results from these data collections indicate: managers' capacities to manage their rural health centres, especially regarding finance, human resources, quality of care, health planning, monitoring and implementation were improved.

Moreover, the course provided them with the skills to work with communities. At a personal level, managers felt more confident in their management skills and were motivated to improve the quality of medical services in their district.

Figure 1: 10 teaching Modules of the PHC Management Course

1 Health Care System in Tajikistan	2 Quality of Care	3 Management in practice: Business planning and other performance measurement tools	4 Knowledge Management	5 Human Resource Development
6 Infrastructure equipment and supplies management	7 Healthcare Financing	8 Community engagement in health issues	9 Leadership & Communication	10 Basic IT

Figure 2: Key survey findings

Business Planning

Business planning (BP) in PHC facilities in Tajikistan began in 2005 in two districts. Over time, the business planning tools and process have evolved and expanded to 33 of the country's 58 districts, with new funding and implementation partners joining the initiative. Project Sino initially conceived the business plan, and provided the training, materials and monitoring.

Head doctors together with their staff identify health priorities and plan actions for their rural health centre(s) (RHC), which are then recorded in a business plan for the next year. Heads of RHCs report on these chosen targets and indicators to the PHC management team. At the end of the year, each RHCs personnel reviews their progress, take stock of the achievements, and then set new priorities for the coming year. Community representatives actively participate throughout the year in the business planning process. They play an important role in communicating the needs of the community to the RHC staff and distributing health information to the population. At district level, the PHC management team produces a consolidated bi-annual business plan, which combines and compares information provided by the rural health centres. Moreover the PHC management team oversees business planning activities of the RHCs. It is responsible for initiating, monitoring and analysing the business planning process.

Business planning is widely regarded at district, facility and community levels as an effective managerial tool that improved the health of and relationships with the populations served. It has had the visible effect of increasing the use of health services among community members, thereby reducing resistance or hesitancy, as well as encouraging additional community support such as assisting patients with financial contributions from community charities.

Proven results

The MoHSP has adopted business planning as a key element in the national health strategy. In 2014, it established a business development department in the RCCFM to oversee the ongoing implementation and further expansion. As such, this is a successful example of the scale up of a health sector innovation into the wider health system, reinforced by policy documents, training courses and the creation over time of a critical mass of business plan users.

A 2018 assessment commissioned by MoHSP and RCCFM, and conducted by the World Health Organization (WHO) and Swiss TPH identified the following main benefits of business planning to be:

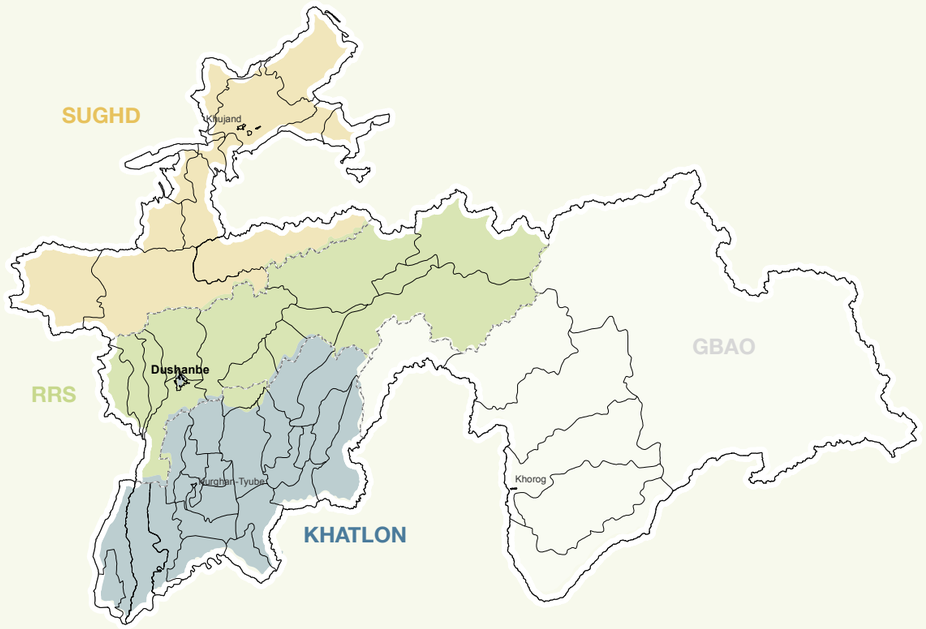
I. Improved health outcomes. The most important result of BP is the reported improved health of the population, particularly that of vulnerable groups. RHC heads also observed success in targeting important health indicators.
II. Increased transparency of the health facilities' activities and resources, fostering greater trust and satisfaction from the community.
III. Stronger management capacity. Both PHC and RHC heads reported an increased ability to monitor progress, manage financial resources, respond to the needs of the population, and manage staffing needs accordingly.
IV. Higher levels of community engagement. Relations between RHC heads and community leaders improved.

Enhancing Primary Health Care Services in Tajikistan through Business Planning

Figure 3: Current list of the 33 of 58 districts implementing Business planning in Tajikistan

Regions	Nb of districts where BP implemented in previous years	Nb of districts where BP implemented in 2019	Total districts, where BP implemented
Sughd	**3** (Konibodom, Istaravshan and Isfara)	**7** (Guliston, Aini, Asht, B. Gafurov, Devashtich, Spitamen, Zafarobod)	**10**
Khatlon region	**5** (Vose, Hamadoni, Khovaling, Muminobod and Sh.Shohin)	**8** (Bokhtar, Nurek, Levakant, Vakhsh, Yovon, Balkhi, Qubodiyon and Jaihun)	**13**
Region of Republican Subordination (RRS)	**10** (Rogun, Tojikobod, Rasht, Nurobod, Sangvor, Lakhsh, Tursunzade, Shahrinav, Rudaki and Faizabad)	**0**	**10**
Total	**18**	**15**	**33/58**

Figure 4: Districts implementing business planning across Tajikistan, 2018



Community Engagement

The community engagement aspect of Project Sino is committed to strengthening the role and ownership of communities in health promotion, ultimately enabling populations to fully exercise their right to health. Project Sino works with the MoHSP, RepHLSC, RCCFM, PGMI, and coordinates closely with other development partners in the country. The aim is to empower community members to bring health institutions closer to the population by building Community Health Teams through a participatory approach to health promotion.

Framework for health promotion

Empowerment of communities to increase control over their health is a central tenant of the human rights-based approach to health and key hallmark of good governance in the health sector. An important element of the Tajik health sector reform process is the re-orientation of the health system towards primary care and public health, including health promotion. Environmental and social factors as well as low health literacy among rural population used to leave communities in remote areas especially vulnerable to a variety of health risks, such as uncontrolled epidemics, malnutrition and risk factors of Non-Communicable Diseases (NCDs).

Swiss approach to community engagement

A challenge faced by Tajikistan over the years was to coordinate the different donor support and approaches. MoHSP had long since indicated that especially in the area of community health they wanted to learn the lessons of various pilots and have a consolidated national approach. Project Sino reviewed its work at community level, as well as the work of Save the Children and the Aga Khan Health Services. Based on all this learning, jointly with the RepHLSC a national guideline “Partnership with communities on health issues” was developed and approved in 2017.

Since then Project Sino has been facilitating that RepHLSC builds capacity in the local health system structures to work in partnership with communities, and to involve family doctors and nurses in all these efforts. This will allow the capacity to remain after the projects’ end and opens the chance to expand the programme throughout the country.

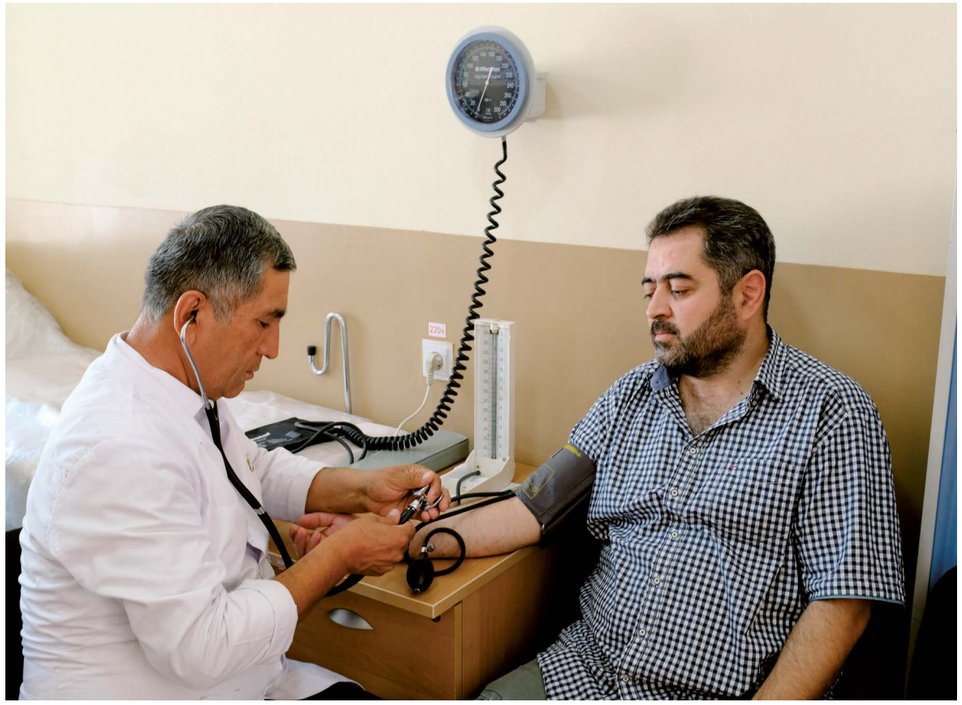
By working together, and taking time to understand their different perspectives, communities and PHC staff start to collaborate as equal partners. If people have a say in deciding the focus of community health work, they are much more likely to respond to the intervention and they are much more likely to engage in Community Health Teams as volunteers, thereby enhancing effectiveness.

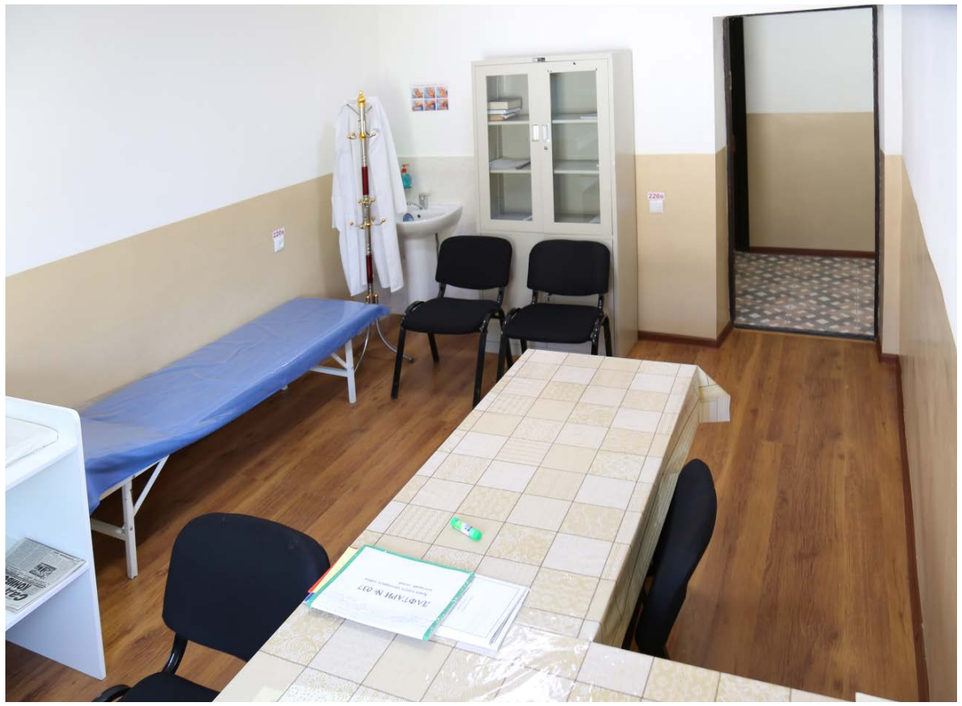
Enhancing Primary Health Care Services in Tajikistan through Community Engagement

Proven results

Findings from health literacy pre- and post-intervention surveys indicate that the adult population increased their knowledge about cardiovascular risk factors as well as about diabetes and obesity. The overall level of knowledge rated as ‘good’ increased from 31% in the pre- to 46% in the post-intervention assessment. The proportion of ‘poor’ overall knowledge decreased from 38% in the pre- to 23% in the post-intervention assessment, and the proportion of a ‘very poor’ overall knowledge from 8% to 4%, respectively. Community members had overall a much higher belief that there is a proven association between lifestyle choices and one’s health and well-being.

Moreover, community members involved in Community Health Teams were highly motivated by the changes they were able to achieve, the increase in their knowledge and skills about health issues, and their involvement in business planning. Community members highly appreciated their work and were grateful to have a local team to help them with guidance and advice, which also relieves the PHC staff.





Rehabilitation of Facilities

Rehabilitation activities have been carried out at over 170 PHC facilities mainly at the Rural Health Centres in the pilot districts, including Varzob, Dangara, Shakhrinav, Tursunzade, Vose, Hamadoni, Faizabad, Rudaki and Kanibadam. In addition to the Rural Health Centre, work was also done at District Health Centres, the departments of Family Medicine of the District Health Centre, the Educational and Clinical Centre of Family Medicine, Healthy Lifestyle Centres the family medicine outpatient clinic at the District Health Centre (Varzob) and the district Tuberculosis Directly Observed Therapy (DOTS) centres (in Varzob and Dangara). The rehabilitated medical facilities have been provided with basic medical equipment and furniture.

Proven results

In combination with the overall health system strengthening approach of Project Sino, the renovation work has been associated with consistent improvements in the quality of care.

Findings from Quality of Care assessments carried out between 2012 and 2020 showed clear improvements on structural attributes. Examination rooms were clean (98% in the post-intervention assessment vs. 82% in the pre-intervention assessment) and ensured privacy (89% vs. 78%), functional and improved water sources (95% vs. 66%), and washing points equipped with water and soap (95% vs. 82%). In addition, essential disinfectants and antiseptics (96% vs. 70%), and sharps (e.g. needles) (95% vs. 78%) and infectious waste (93% vs. 60%) was safely disposed.

Technical aspects of patient consultation processes by family and medical doctors significantly improved, particularly for systematically asking about prescriptions currently being taken (96% vs. 67%) and providing advice to the client's health problem (98% vs. 81%). Patient history on the other hand was not systematically recorded (63% vs. 50%). Additionally, infection prevention and control measures have improved over time, such as washing hands before procedures (72% vs. 22%), and the application of proper decontamination procedures (82% vs. 22%).

Medical Education Reform

Medical education reform aims to strengthen the quality of PHC in Tajikistan through the reform of undergraduate and postgraduate training and the introduction of new forms of continuous professional development to build a robust workforce of well-trained family doctors and nurses.

Medical education operates at the complex intersection between the Ministries of Education, Health and Finance and seeks to make family medicine a valued and widely-recognised career choice, with the potential to directly improve population health.

MEP's three-pronged approach

1. Undergraduate Reform

- **Undergraduate reform for medical students** revised curricula with increased clinical skills training and a clinical 6th year
- **Undergraduate reform for nursing students** revised curricula, with the introduction of clinical skills training

2. Postgraduate Reform

- **Postgraduate specialty training** new 2 year curricula based on clinical placements that produces higher quality family doctors

3. Continuous Professional Development (CPD)

- Updated the Regulation on CPD
- Introduction of self-directed learning options like peer groups
- Launch of a credit based system
- Adoption of National Guideline on Mentoring

What is the Medical Education Reform Project (MEP) all about?

The MEP operates at the complex intersection between the Ministries of Education, Health and Finance and seeks to make family medicine a valued and widely recognised career choice with the potential to directly improve population health. Support has been focused on institutions like the Republican Clinical Centre for Family Medicine, Tajik State Medical University, Post Graduate Institute and Nursing Colleges.

Promoting European standards and building on the available evidence and curricula has facilitated competency-based learning, early patient exposure and clinical training in the education of medical doctors and nurses.

"Swiss support gives important attention to organisational development and change management to strengthen institutions to take up the leadership, and further expansion of system level changes as they relate to the education of health workers."

Mouazamma Djamalova
Senior Health Care Program Officer,
Swiss Representation in Tajikistan

MEP's three-pronged approach

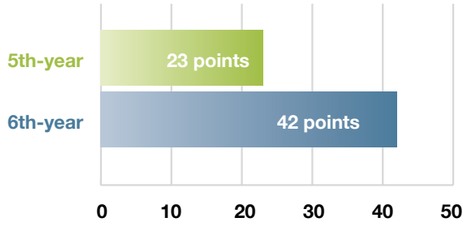
Undergraduate reform: Medical students

The MEP has supported a curricula reform in 2010; capacity building of faculty at the Tajik State Medical University to teach and assess clinical skills; the expansion of a clinical skills based training, and the introduction of a clinical year 6 that is completely self-financed and does not rely on donor support. Tajikistan currently has 132 clinical training areas situated at 58 medical facilities in 17 districts and towns that are accepting medical students for their clinical year 6 placements.

The Tajik State Medical University has introduced the Bologna Process credit system, added the Objective Structured Clinical Examination (OSCE) to its assessment repertoire for all clinical topics, and improved the monitoring and assessment of the delivered training quality.

Proven results

An assessment of 10 key clinical skills of medical students finishing year 5 and 6 show that students who also participated in the clinical year 6 obtained a far higher score.



Through specialised support from the University of Calgary, the TSMU faculty is now skilled in the use of In-Training Evaluation Report (ITER) to assess the skills of medical students as they progress through their rotations, so they can identify where they are strong and where they need practice. OSCE are used to evaluate the overall clinical year 6.

Medical Education Reform Project: Achievements of the Tajik State Medical University

"The Medical Education Reform Project has been a unique initiative in Tajikistan. Over the past decade, MEP has implemented activities founding the basis for sustainability and ownership by the local stakeholders. From the very start, MEP used a comprehensive approach to overcome existing challenges and to meet the needs of the medical education and practical medicine community."

Dilorom Sadykova
Advisor to the Minister of Health and Social Protection of the Population of the Republic of Tajikistan

"Medical material and tools provided by MEP make the learning process much more interesting. Only in the clinical skills center are students able to picture their future roles and get first practical experience in using medical tools and equipment. I am sure that the skills and knowledge I acquire here combined with my motivation will enable me to contribute to the well-being of our people."

Komron Aliev
Student of Tajik State Medical University

Undergraduate reform: Nursing students

Swiss TPH and the Institute of Nursing Science in Basel worked together to build the skills of nurse tutors to teach key competencies, to revise the curricula for nurse students, and to set up clinical skills bases at the nursing colleges.

The latter work focuses on two colleges, in Dushanbe and Kulob. At these colleges, nursing and midwifery programs follow a common curriculum in the first three years, after which the students enrol in their respective specialty training for their fourth and final year.

The work that was done to build nurse tutor capacity was carried out by nurse practitioners to foster greater prestige and recognition of the role of the family nurse.

Proven results

To assess nursing students' perceptions of their learning environment, the Dundee Ready Education Environment Measure (DREEM) instrument was applied as a baseline in two nursing colleges in 2015. The DREEM is a well-established tool for measuring the subjective educational environment in medical education programs. It consists of a 50-statement questionnaire with the possibility to respond along a five-point Likert-scale ranging from 0 to 4 (strongly disagree → 0, disagree → 1, unsure → 2, agree → 3, strongly agree → 4).

Based upon the findings of the baseline study, steps were taken to refresh the curriculum, improve the clinical skills lab, build the didactical skills of tutors, and bring more nurses into teaching to help establish a positive role model for nursing students.

The DREEM was re-applied in late 2018 to assess the change in perceptions over time. The results show that between 2015 and 2018, the perception of the learning environment improved with a significant increase of the mean total DREEM score and a significant improvement for all sub-scores over time.

These scores are indicative of a positive evolution, so it is generally recommended to maintain the current strategic direction. However, there are still areas of concern which include that more efficient use could be made of the Clinical Skills Labs and that the teaching style still remains too teacher-centred. Many students suffer from high levels of stress. Therefore, adequate monitoring systems, support structures and counselling should be developed.

Dushanbe		DREEM Scores	Kulob	
2015 n=297	2018 n=315	60% precentage of max. score 90%	2015 n=332	2018 n=294
31.2	34.7	Student' perception of learning	32.1	35.4
27.5	32.0	Student' perception of teachers	28.0	32.1
22.6	25.0	Student' academic self-perception	23.7	26.8
32.0	35.7	Student' perception of atmosphere	32.8	37.2
18.4	19.5	Student' social self-perception	18.3	19.7
131.8	146.9	Total Score	134.9	151.2

"Being in the clinical environment sets necessary conditions for us to learn what it is like to be a nurse and how nurses can indeed help people even in desperate situations. Being next to real nurses and patients is a completely different experience compared to standard learning practices at the nursing college."

Jahonoro Asrorova
Nursing Student, Dushanbe, Tajikistan

Medical Education Reform: Tutorship in Family Nursing in Tajikistan

Postgraduate reform

MEP has facilitated the establishment of a 2-year postgraduate training for family doctors at the Post Graduate Medical Institute PGMI. The course is comprised of 20% theory and 80% practice and takes place in policlinics and rural health centres. It is delivered by trained and certified family doctors (clinical tutors) under the supervision of the PGMI. The ordinators (residents) are integrated into the team with growing responsibility over the course of the two years.

Postgraduate Education Achievements

The two-year specialty training was completed by 143 ordinators in the timeframe 2013-2019, with 138 of them deployed by the Ministry of Health to work as family doctors in rural districts.

Local health administrators are very pleased to have these well trained young family doctors in their PHC facilities. In some districts, they have been the first to join the PHC workforce in over 10 years.

Family doctors' 2-year postgraduate specialty training in Tajikistan

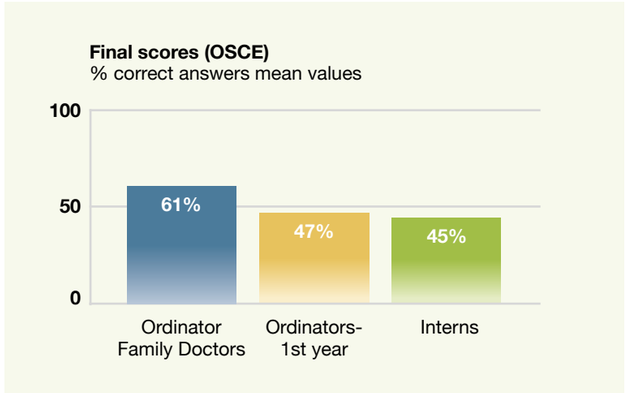
Proven results

An evaluation of the 2-year postgraduate training used Multiple Choice Questions (MCQs), and measured clinical skills, attitudes and behaviour through an OSCE with different stations to assess history taking, examination, interpretation of lab results and communication skills.

Three groups were compared – Ordinators entering the specialty training; Ordinators completing the specialty training (newly graduated family doctors); as well as Interns completing the traditional, unstructured 1 year work experience which is all that is otherwise available in Tajikistan for the training of family doctors.

Group	Description	MCQ Sample	OSCE Sample
Ordinators-1st year (N=20)	Graduated medical students newly entering the 2-yr specialty programme	N=20	N=20
Interns (N=22)	Newly graduated family doctors that underwent the 1-year internship (unstructured work experience)	N=8	N=6
Ordinator Family Doctors (N=26)	Newly graduated family doctors who just completed the 2-yr specialty programme	N=26	N=24

Compared to the other 2 groups, the Ordinator-Family Doctors achieved statistically significantly better scores in the OSCE test (61%, representing 84 out of 139 possible marks), with the Ordinators-1st year gaining the next highest results and the Interns performing worst of all. In fact, no statistical difference could be observed between Interns and Ordinators-1st year for either MCQs or OSCE; this indicates a lack of professional progress of the Interns during their one-year work experience.



Based on this positive evaluation a case for investing in the 2 year training of family doctors was generated. The slightly higher costs of the 2 year course are more than off-set by the resulting benefit of having better educated family doctors providing higher quality care. This indicates the value for money given by these Swiss investments.

Continuous Professional Development

The traditional form of Continuous Professional Development (CPD) is based on one or two months of theoretical courses that are taken every five years. These courses are primarily taught at an institution in the capital Dushanbe, but also in some other cities (Khuchand, Kulob, Khorog). They enable doctors to reach a higher level of income and focus on knowledge rather than competencies.

"Medical Education needs to be innovative to meet the needs of practical medicine. Continuous education needs to be introduced as a new learning tool for acting family doctors in Tajikistan. Initiatives such as peer groups helps family doctors keep up with new developments in medicine and enhance their clinical skills."

Qodirjon Kholbekov
Peer group facilitator, Tursunzoda, Tajikistan

Peer groups

The concept of peer groups has been introduced as a potentially cost-effective CPD option. These are groups of family doctors and/or nurses, usually from the same or neighbouring districts that meet on a regular basis to discuss clinical topics and find solutions to problems faced in everyday practice.

A facilitator is chosen by each peer group on a rolling basis to help coordinate meetings. A 2017 study found that family doctors in districts with peer groups were more involved in CPD activities and perceived the flexible choices of the content and timing of CPD meetings and types of CPD events positively. Conversely, family doctors from districts without peer groups complained about the lack of sufficient exposure to clinical updates and limited topic choices.

Peer Groups as a strategy for continuing medical education in Tajikistan

Credit-based system of CPD

To build a system of CPD that meets the World Federation for Medical Education standards and applies to modern adult learning theory, a transparent, nationwide credit-based CPD system for all specialties will be needed. The on-going MoHSP-led pilot in one district is a positive step in this direction. Additionally, in the long term, the role of professional associations needs to be strengthened and an independent agency of accreditation established to assure the quality of CPD provided by teaching institutions.

With support from MEP, the Tajik Association of Family Medicine has joined the World Organisation of Family Doctors (WONCA).

On the occasion of the last Family Doctor Day the activities organised in Dushanbe by the Ministry of Health and Social Protection with the Tajik State Medical University were included in the WONCA news roundup.

"I have a long-term history with this health center. The reason which makes me come back to same health center is the attitude of health professionals and quality of care one can observe in this facility."

Female patient and her grandson
Dushanbe, Tajikistan

Impact of Medical Education Reform on the people of Tajikistan

As the percentage of people living in rural areas is rising at a faster rate than in urban areas, providing healthcare to the rural population remains an immense challenge. Through the strengthening of primary healthcare and the building of a workforce of well-trained doctors and nurses, the MEP contributes to the improvement of health outcomes in Tajikistan and acts as a model for other countries working towards achieving UHC through medical education.

Conclusion

As the percentage of people living in rural areas is rising at a faster rate than in urban areas, providing healthcare to the rural population remains an immense challenge. Through the strengthening of primary healthcare and the building of a workforce of well-trained doctors and nurses, Swiss support had contributed to the improvement of health outcomes in Tajikistan and acts as a model for other countries working towards achieving UHC through a multifaceted systems strengthening approach.

Policy Level Change

As Switzerland withdraws is support for the health sector, the legacy will remain through the following national guidelines which have emerged from the project:

- Package of Business Planning Documents (Guideline, templates etc)
- Guideline for Community Partnership on Health and various supporting documents
- Guideline for Peer Groups
- Guideline for Mentorship
- Primary Health Care Management Course curricula and training materials
- Updated curricula for specialty training in family medicine;
- Updated medical curricula with clinical skills focus and practical year 6
- Updated curricula for nurses
- Algorithms for physical examinations in family medicine
- Clinical skills for taking exam on OSCE for "Basis for the operation of the family nurse" and "Medical care by the family nurse"

Evidence Generation

Over the years the surveys into out of pocket expenditures, quality of care and health literacy, as well as on the topic of medical education have generated publications that contribute to the evidence situation related to Tajikistan. The findings have always been disseminated locally in Tajik language, and on occasions regionally in Russian as well as in English in the international literature.

Key publications are listed below:

Assessment of business planning in primary care facilities in Tajikistan. WHO Regional Office for Europe, (2020)
https://www.euro.who.int/en/health-topics/Health-systems/primary-health-care/publications/2020/assessment-of-business-planning-in-primary-care-facilities-in-tajikistan,-2019

Developing a national framework for community involvement in health promotion in Tajikistan, European Journal of Public Health, 30, Issue Supplement_5 (2020).
https://doi.org/10.1093/eurpub/ckaa165.447

Out of pocket expenditures of patients with a chronic condition consulting a primary care provider in Tajikistan: a cross-sectional household survey. BMC Health Services Research, 20, 546 (2020).
https://doi.org/10.1186/s12913-020-05392-2

Assessing the effects of the nursing education reform on the educational environment in Tajikistan: a repeated cross-sectional analysis. BMC Nursing, 19, 11 (2020).
https://doi.org/10.1186/s12912-020-0405-4

Informing the medical education reform in Tajikistan: evidence on the learning environment at two nursing colleges. BMC Medical Education, 19, 85 (2019).
https://doi.org/10.1186/s12909-019-1515-0

Bringing greater transparency to health workforce planning in Tajikistan: using the WISN approach, European Journal of Public Health, 29, Issue Supplement_4 (2019).
https://doi.org/10.1093/eurpub/ckz185.616

Improving the quality of Primary Health Care through the reform of Medical Education in Tajikistan. Public health panorama, 04 (04), 599 - 605. World Health Organization. Regional Office for Europe.
https://apps.who.int/iris/handle/10665/324859

Out-of-pocket expenditures in rural Tajikistan and their impact on patients with chronic diseases. European Journal of Public Health, 27, Issue Supplement_3 (2017).
https://doi.org/10.1093/eurpub/ckx186.106

Drug prescribing patterns at primary health care level and related out-of-pocket expenditures in Tajikistan. BMC Health Services Research, 16, 556 (2016).
https://doi.org/10.1186/s12913-016-1799-2

Assessment of work-time allocation of health workers at family medicine level in rural Tajikistan through direct observation. Tropical Medicine & International Health, 20:98-99 (2015).

Out-of-pocket expenditures for primary health care in Tajikistan: a time-trend analysis. BMC Health Services Research, 13, 103 (2013).
https://doi.org/10.1186/1472-6963-13-103

Patient referral patterns by family doctors and to selected specialists in Tajikistan, International Health, 4, 4 (2012).
https://doi.org/10.1016/j.inhe.2012.09.003

Access to medicines and out of pocket payments for primary care: Evidence from family medicine users in rural Tajikistan. BMC Health Services Research, 8, 109 (2008).
https://doi.org/10.1186/1472-6963-8-109

Swiss-Tajik Cooperation:
Nearly 20 years of Primary Healthcare Development

Ministry of Health and Social Protection of Population of the Republic of Tajikistan

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