



Assessment of project possibilities Nepal 2017-03-12--16

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1 Introduction

The International Medical Programme is responsible for establishing, coordinating, and implementing the International Health Projects between the Region Östergötland and partnering institutions worldwide. The mission of the International Medical Programme (IMP) is to support National Public Health Care Services that, as a consequence of crises, are under development and/or reform through long term cooperation. IMP aims to enhance and sustain national capacities and make available specialized services locally, irrespective of ethnic and political boundaries.

IMP's approach balance two primary objectives, i) addressing the short term needs of vulnerable populations, while ii) stimulating long-term capacity building of public health institutions to provide sustainable assistance and medical care.

IMP's collaboration approach also balances the needs of medical professionals in both Sweden and in the partner country and thus provides an excellent example of how activities can be designed and results achieved that are mutually beneficial for international and national parties.

1.1 Purpose

This report describes the visit to Kathmandu, Nepal, from 13-16 March 2017 with the purpose to assess the possibility of identifying a collaborative project.

1.2 Background

During the last years, natural disasters, population movements and environmental emergencies have negatively impacted the efficiency of the Nepalese health system. International aid organizations have supported the health authorities in strengthening the health system in Nepal and providing preventive and curative health services. Not only financial shortfalls, but also insufficient technical and operational skills hamper the health system's performance as a result of brain drain, limited expertise, medical corruption, poor coordination, inadequate field data, suboptimal infrastructure, tools and operational skills at all levels.

To ensure adequate care to the patients with non-communicable diseases the Ministry of health in Nepal (MoH) is continuously challenged with difficulties. In addition growing demand for care of patients with chronic diseases requires a specific attention and emerges for high specialized and costly services. In general there is a lack of; reliable medical information data, need for improvements in basic health care services, hygiene in the hospitals, awareness on use of medicines and patient safety. Improved research in clinical and preclinical environment is of utmost need in order to address all the needs of health care.

The public health care services in Nepal provide services in primary, secondary and tertiary level. Nepalese health care does not have Patient Information System nor public health care insurance fund. The public health care institutions are funded with limited Governmental

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funds. Some of the medical services in public health care institutions are free of charge and for the private health care services patients have to pay themselves.

Tertiary care in Nepal is provided by several public and private hospitals in Kathmandu. Due to limited scope of tertiary health services and lack of health information system the information about the number and most common diseases referred to tertiary health care is not available.

Secondary care is provided by Hospital in Kathmandu and District Hospitals in different regions in Nepal. District Hospitals are similar to family medicine centers that include paediatric and gynaecology emergency basic services. The DH also provides diagnostic (laboratories, X-ray)

Primary Health Care Centers in rural areas (intend to) provide to the citizens in rural and distance areas basic health care. These services usually provide mother and child care, nutrition consultations, vaccination and laboratory services.

Nepal has a highly educated medical staff, they are educated in Nepal and other countries. Workers within the health sector are ranked depending of their level of education in: medical doctor specialists, medical officers (GP with some kind of additional training) nurses (with gymnasium level of education and health workers (male nurses). Below is a brief description of different medical professions:

MDGP specialist (specialist general practitioner)

Doctor who has completed three years of training in general practice after completion of basic medical course. The degree is called MDGP (doctor of medicine in general practice). The MDGP specialist works as a specialist general practitioner who is entitled to do basic surgery such as appendectomy and cesarean section.

Medical officer

Doctor who has completed basic medical course, which is known as MBBS (Bachelor in medicine and bachelor in surgery). The course duration is of 4 and ½ years followed by 1 year internship. The medical officer works as a general practitioner in district hospitals and primary health care centers.

Nurses

Nurse; Qualification: 3 years training after 10 years of schooling.

Assistant Nurse Midwife; Qualification: 18 months training after 10 years of schooling.

A nurse and assistant nurse midwife in Nepal are always women and are meant to take care of admitted patients and delivery cases.

Health workers

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Health Assistant; Qualification: 2 ½ years training after 10 years of schooling.
Auxiliary Health Worker; Qualification: 18 months course after 10 years of schooling.

Health assistant and auxiliary health workers provide consultation to the patients.

Public health service: District hospitals and primary health care centers. Almost all the services and medicines are free. Patients have to pay a small amount for lab investigations and x-rays. However, these services are not necessarily always available and of acceptable quality.

Government hospitals, for example, Tribhuvan University Teaching Hospital. The patient has to pay for everything. Although the cost is less than the private hospitals, it is still very expensive for the general public. There is always question of difficulty in getting service, availability and the quality. Ten % of the total beds are meant to be free. If the patient is on a free bed all the hospital services are free.

Professor emerita Inger Rosdahl and Professor emeritus Sivert Lindström, who have collaborated with Professor Dwarika Shresta, have recognized that the Nepal health system would benefit from collaborating with Swedish health care.

Over the last six years MD Malin Emgård from Linköping University Hospital ER has biannually visited Kathmandu. During her frequent visits she has come to the same conclusion.

In a preliminary analysis several areas have been identified that would gain from development: dermatology, radiology, and primary health care in rural areas.

2 Scope

This was the initial contact for IMP. We wanted to meet representatives from the public health system in Nepal and visit health facilities to get an understanding of needs and possibilities for collaboration.

3 Actions

Below is a day-to-day report on meetings and facilities visited.

3.1 2017-03-13, Monday

The IMP representatives have on a first day of their stay in Kathmandu visited the district hospital in Methinkot (Kavre) that represented a better quality rural hospital. It was a two-hour car ride from Kathmandu. The travel party included Nepalese doctors:

- Dwarika P Shrestha – Professor, Department of Dermatology and Venereology, Institute of Medicine, Kathmandu
- Suwash Baral – Dermatologist, Anandaban hospital, Lalitpur

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- Rushma Shrestha – Associate professor, Department of Dermatology and Venereology, National academy of medical sciences, Kathmandu
- Shree Krishna Shrestha – Dermatologist, Sheer memorial hospital, Kavre
- Bibush Amatya – 2nd year resident, Department of Dermatology and Venereology, Institute of Medicine, Kathmandu
- Namrata Khadka – Medical officer, Methinkot hospital, Kavre
- Nidrit Bohara - Medical officer, Methinkot hospital, Kavre
- Sugam Gauli - Medical officer, Methinkot hospital, Kavre
- Pratima Gautam - Medical officer, Methinkot hospital, Kavre
- Neha Thakur - Medical officer, Methinkot hospital, Kavre

A tour of the district hospital included the emergency ward, delivery ward, post-delivery ward, laboratory, HIV unit, and counselling, pediatric and vaccination room. Approximately 100 patients came to the district hospital every day.

Professor Shresta and dr Baral gave a presentation on three studies that they had conducted: a) Descriptive study on prevalence of skin diseases, b) a training program on how to use a mobile application called dermatological care in rural Nepal (DCRN) to help medical officers diagnose skin diseases, and c) a final study where the DCRN app was compared to face-to-face specialist consultation. These studies were conducted together with Professor Inger Rosdahl (Shrestha, Gurung, & Rosdahl, 2012; Shrestha, Gurung, Shrestha, & Rosdahl, 2014; Shrestha, Shrestha, Gurung, Lama, & Rosdahl, 2013; Shrestha, Suwash, Gurung, Uprety, Bhattarai, & Rosdahl, 2016). After the presentations, possible collaboration possibilities were discussed regarding the continuation of the presented studies. That is, how to implement the DCRN app so that *medical staff* in rural Nepal can diagnose skin diseases.

The trip provided us with a better understanding of the demands that are put on the health care system in Nepal, including how people in the rural areas near Kathmandu live and travel.

3.2 2017-03-14, Tuesday

On the second day, we visited institute of Medicine, Tribhuvan University Teaching Hospital in Kathmandu. Tribhuvan Hospital is a teaching and referral medical institution, and also the largest hospital in Nepal. Patients all over the country are referred here for treatment and specialized care and at the same time medical professionals from all over the country receive training and education in this institution. We were given a tour of the hospital.

After the tour a meeting with four head of departments was being held where we presented the background about IMP and our purpose with the visit to Nepal. IMP presentation is found in appendix 1.

The present head of departments were:

- Dwarika P Shrestha – Professor and Head of Department, Department of Dermatology and Venereology, Institute of Medicine, Kathmandu
- Ram K Ghimire - Professor and Head of Department, Department of Radiology, Institute of Medicine, Kathmandu

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- Yogendra P Singh - Professor and Head of Department, Department of general surgery, Director – Research department, Institute of Medicine, Kathmandu
- Pradeep Vaidya - Professor, Department of general surgery, Director – Department of Information technology, Institute of Medicine, Kathmandu

During the meeting, several project ideas were suggested and discussed:

- Supporting the next phase of Professor Shresta's skin disease project. The research started 2012 with the support of Professor Inger Rosdahl and Professor Sivert Lindström. The potential interest for colleagues in Region Östergötland could be competence development regarding skin diseases that are rare in Sweden.
- Presenting the Emergo Train Systems as a tool to analyze, plan and monitor the emergency medical capacities and command and control system in Kathmandu, Nepal. Emergo system could be beneficial for the Disaster Management Planning group in Nepal to develop a medical crises response group and for organizational and hospital facility planning. Action point: Daniel Alsander will introduce and discuss the idea with our colleague Johan Hornwall in Linköping.
- Radiology services are sufficiently developed in Tribhuvan Hospital. Utilization of existing Telemedicine Centre in Tribhuvan Hospital with those in Linköping with the aim to discuss and share the radiological findings for teaching purposes might be of interest.
- Provide basic research courses to enhance understanding among personnel. Approximately 120 persons would benefit from such a course.

The next meeting was with Dean Jagadis Agrawal – Dean, Professor, Department of Neurology, Institute of Medicine, Kathmandu. Professor Agrawal kindly welcomed us to collaborate with the Institute of Medicine.

He acknowledged the timing and importance of the visit, which can provide the opportunity to strengthen research and teaching capacities of the Tribhuvan Institute of Medicine. Prof. Agrawal suggested that IMP and Tribhuvan University Hospital agree on the form of the collaboration between two institutions and sign the MoU. Ruhija will suggest the MoU format. Dean Agrawal and Tribhuvan University Teaching Hospital have positive experiences of collaborating with Sweden (Sahlgrenska University Hospital).

3.3 2017-03-15, Wednesday

On Wednesday a meeting was held with Mr. Nirakar Joshi from UNICEF and Mr. Dibyesh Giri from Janata Clinic. They provided their view on IMP's possibilities to conduct a project in Nepal and offered to support IMP if needed.

3.4 2017-03-16, Thursday

To plan for future project teams we visited several possible hotels where team members from Sweden could stay.

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- **Hotel 1, Crown Plaza Kathmandu-Soaltee.** Estimated cost per room: USD 130. Pros: Nice hotel, breakfast included in room price. Has Wifi-internet, and hot water for showers. Cons: Is located approximately 1 hour from Tribhuvan University Teaching Hospital with taxi. Lacks less expensive alternative for eating.
- **Hotel 2, Thorong peak Guest House.** Estimated cost per room: USD 25. Pros: Nice hotel, located approximately a 30 minute walk from Tribhuvan University Training Hospital. Has Wifi-internet, and hot water for showers. Is in the central of Kathmandu with access to restaurants and shopping area. Cons: Breakfast is not included. <http://thorongpeak.com/index.html>
- **Hotel 3, Tibet Guest House** Estimated cost per room: USD 45. Pros: Located approximately a 30 minute walk from Tribhuvan University Training Hospital. Has Wifi-internet, and hot water for showers. Is in the central of Kathmandu with access to restaurants and shopping area. Breakfast is not included. Cons: Several stairs to reach some of the rooms. <http://www.tibetguesthouse.com/room.html>
- **Hotel 4, Potala Guest House.** Estimated cost per room: USD 80. Pros: Located approximately a 30 minute walk from Tribhuvan University Training Hospital. Has Wifi-internet, and hot water for showers. Is in the central of Kathmandu with access to restaurants and shopping area. Breakfast is included. Cons: Expensive compared to alternative 2. <http://potalaguesthouse.com/>

4 Next step

One of the critical findings of the 4 days assessment visit to Kathmandu indicates that Public Health Care appears to encounter serious obstacles in the health care provision. The motivation for the visit was to address gaps in the current health sector system. The visit to the Tribhuvan University Teaching Hospital and to the District Hospital in Kavre was a precondition to plan the future projects.

The assessment visit identified several fields of mutual interest for further planning and cooperation with Tribhuvan University Teaching Hospital in Kathmandu. Precondition to specify and move further in the planning is to meet the eventual partnering departments and clinics in region Östergötland and discuss their interest of participating in the project. This process might take several months.

One of the areas that is of interest is tele-diagnostics, an area that is of interest for both Tribhuvan and RÖ. It provides knowledge development regarding challenges that are present in the day-to-day business of the health care systems. For example, tele-diagnostics would apply to any "visual" part of medicine, where TUTH Radiology Department has shown a specific interest in this collaboration.

Continuation of the ongoing research in the field of Dermatology between Kathmandu and Linköping University could be beneficial for both the research in dermatology for identifying the strengths and weaknesses and it will also help to define the appropriate working modalities. It could identify the possible road map for the coming months.

The last earthquake in Nepal emphasized the need to establish emergency medical services capable to respond to the disaster. To address this matter IMP can support in introducing

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the Emergo Train System the model and tool owned by the RÖ and developed to assess, analyze, plan and follow command and control system. The model is introduced and used in several countries nowadays.

Clinical research and teaching course in basic research methods for the clinical staff in 26 different clinical disciplines at Tribhuvan University Teaching Hospital in Kathmandu could be of mutual interest. IMP in cooperation with Linköping University could support the training in basic research methods, analysis and statistics.

The MoU will be prepared by IMP and handled for review and signature to the regional director of RÖ.

5 Information and recommendations for future Swedish visitors

This part of the report will be in Swedish as it is targeted at future visiting team members.

- Visum kostar USD 25 (visum för 15 dagar) som betalas vid ankomst. Ta med ett passfoto till visumet. Ni får ett formulär att fylla i som de delar ut på själva flygplanet, sedan ska ni dessutom gå till en av maskinerna till vänster i ankomsthallen. De är, om de funkar, självinstruerande. Ta med 2-3 passfoton för säkerhets skull om inte maskinerna funkar, då fyller man i en annan lapp istället. Efter ni är klara vid maskinerna går ni till det som heter Visa Payment Desk, eller något sånt, det ligger alldeles intill. När ni betalat där går ni sedan till de andra diskarna längre bort, håll till vänster så hamnar ni vid de som handlägger korttidsvisum.
- Kontanter kan ta tas ut i bankomater runt om i Katmandu. Det är inte möjligt att köpa Nepalesiska Rupier i Sverige.
- Försök att hålla koll på om det är någon form av religiös helgdag under din vistelse i Nepal då det kan påverka möjligheter att resa och äta.
- Om du ska göra en fieldtrip så ta med gympaskor och långa byxor alt lång kjol. Sandaler bra att ta med, undvik shorts. Kanske ett par finare skor till mötena på Tribhuvan. Snyggare jeans fungerar i offentliga sammanhang.
- Kolla upp väder och temperatur. I mars är det 23-25 grader mitt på dagen men kalla nätter. Det kan därför vara bra att ta med en varmare tröja och vind/regnjacka.
- Visitkort vanligt och viktigt.
- Packa pappersnäsdukar och handsprit. Saknas ofta toalettpapper.

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