

2017 RISK AWARD

EpiNurse – Improving health care in Nepal

Edited by Christian Barthelt
and Thomas Loster



Overview – EpiNurse
Improving health care in Nepal

People of Nepal face many natural hazards: earthquakes, landslides, cold waves, floods and more. Climate change may exacerbate the risks. The health care system in Nepal cannot always keep up. The Nursing Association Nepal (NAN) wants to take action here and uses digital information and communication technologies (ICT) to better protect people. Especially before, during and after disasters – this part of risk management must function efficiently. On the one hand, the nurses operate in a smart world characterized by apps, tablets and more. On the other hand, they treat patients who sometimes do not even have electricity in their homes. This field of tension must be overcome.

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A nurse assesses the health condition of children in a remote Terai region of Nepal.



Editorial – The important role of nurses for disaster risk management

On 25 April 2015 the earth shook in Nepal. With a magnitude of 7.8, it was one of the most severe earthquakes in the country's history. The effects were devastating: more than 8,000 fatalities, around 20,000 partially severely injured and over 800,000 collapsed houses. As a result, tens of thousands of people had to seek refuge in camps and emergency shelters. In view of limited resources, Nepal organised this wave of migration relatively quickly and, among other things, set up tent cities. A few weeks and months later, however, another problem came to light, causing another catastrophe. Health care in the camps was inadequate. The consequences included outbreaks of typhus and cholera. The teams of doctors and nurses worked non-stop – but it was sometimes a battle against windmills.

This is where the Nursing Association of Nepal (NAN) wanted to start and improve the healthcare system for the future. Through a more efficient flow of data, better monitoring and medical supply chains tailored to needs. To achieve this, the NAN cooperated with colleagues from Japan, who experienced a similar emergency after the big tsunami in 2011. In this IntoAction you can read how NAN is trying to modernise the health care system in Nepal and what role modern information and communication technologies play here. The Munich Re Foundation is proud to have financed the project in its pilot phase and to have accompanied the great progress of the project to some extent.

I hope you enjoy reading this report.

Christian Barthelt

Christian Barthelt

After severe disasters, families often have to seek refuge in camps. The risk of illness may increase because healthcare is not sufficient. ICT can improve the situation.





The 4th RISK Award ceremony took place at the Global Platform for Disaster Risk Reduction in Cancún, Mexico.



Apsara Pandey from the Nursing Association of Nepal (NAN) received the RISK Award. It comes with a € 100,000 project grant, provided by Munich Re Foundation.

2017 RISK Award – “... and the winner is: EpiNurse from Nepal!”

Information and communication technologies (ICTs) are key to a more sophisticated disaster risk management (DRM) and for improved disaster risk reduction (DRR). The 2017 RISK Award was praising and funding a project that enhances disaster preparedness through an innovative ICT concept. It supports the prevention and control of communicable diseases following a disaster. The winning contribution was presented by the Nursing Association of Nepal (NAN).

Nepal is one of the most disaster-prone countries in the world. Especially in the aftermath of large scale disasters, such as the earthquake in 2015, the country is highly vulnerable to public health emergencies. One of the main issues leading to this situation is the lack of reliable health data nationwide. Thus the NAN set itself to deal with this problem. The organisation wants to enhance the public health emergency preparedness of the country through an innovative approach to data collection.

For this purpose the organisation equips local nurses with a simple information and communication technology toolkit. These EpiNurses – short for “Epidemiology Nurse” – are trained by the association to assess living conditions of communities and to surveil their health condition in post extreme emergencies and disasters. Their ICT toolkit enables them to provide crucial, yet hard-to-collect evidence of where there is potential risk of communicable diseases

erupting and consequently spreading. The collected data is shared with other health actors as well as with the Ministry of Health through an Application Programming Interface. This facilitates the development of models that support health-risk-management decisions in the aftermath of disasters. The role of EpiNurses could be crucial in preventing the eruption of health threats and ultimately in mitigating disaster risk.

The Munich Re Foundation and its partners UNDRR and GRF Davos were proud to announce the EpiNurse project as the winner of the 2017 RISK Award endowed with € 100,000. The jury honoured the blueprint character of the project. Jury member Dr. Robert Glasser is convinced that the EpiNurses will meaningfully improve disaster prevention in Nepal and, in the future, hopefully in other countries of the world.

The prize was awarded on 24 May 2017 in a ceremony at the 2017 Global Platform for Disaster Risk Reduction in Cancun, Mexico: one of the most important gatherings on reducing disaster risk and building resilience of communities and nations worldwide. During the ceremony, Sandra Wu, CEO of Kokusai Kogyo Co., Ltd. and jury member of the RISK Award, emphasized the importance of new technologies for disaster risk management. At the same time she underlined that new technologies have to go hand in hand with traditional and local knowledge. Combining those two elements can create a safer environment for all. Thomas Loster, Chairman of Munich Re Foundation, thanked the hosts of the Global Platform for the opportunity to present three light-house projects including the winner to the public. Over 5,000 delegates from all over the world attended the platform in Cancun.

Apsara Pandey, representative of the NAN, was delighted: "We are excited and happy to receive the 2017 RISK Award. This is a huge motivation for us to move on and empower the nurses in Nepal!"

Thomas Loster (Munich Re Foundation) and Sandra Wu (RISK Award jury member) handed over the trophy to Apsara Pandey. The session was hosted by UNDRR, represented by David Stevens (right).



Telecommunications in Nepal

Like many other Asian countries Nepal has enjoyed great achievements in digital implementations in the last years. In 2009 mobile penetration was about 21%. Nowadays (2019) almost every citizen got a mobile phone, some even own two. Through the increasing popularity of social media, increased mobile connection and mobile entertainments, the internet penetration is also growing steadily and reaches around 70% of the population. Most of the internet-enabled devices are used with mobile internet (77%).

To expand this numbers and improve the mobile connectivity in Nepal, leading mobile operators and the Government of Nepal are investing in an expanding coverage of mobile internet. The invested money should also improve digital healthcare systems in Nepal. Therefore the Government of Nepal considered in 2017 to invest 10% of its health budget into digital health programmes. The money should be invested for example in a national digital healthcare platform, high-speed internet access or centralised tele-medicine centres.

Sources:
Government of Nepal. Ministry of Communication and Information Technology; Frost & Sullivan (2018): 2018 Digital Nepal Framework. Unlocking Nepal's Growth Potential.

Nepal Communications Authority (2020): MIS Report. Poush, 2076 (16 December, 2019 – 14 January, 2020). Kathmandu.



Nurses in Nepal – Indispensable for disaster risk management, but still not held in the esteem they deserve

Interview with Apsara Pandey and Sakiko Kanbara

Apsara Pandey, Vice President of the Nursing Association of Nepal (NAN), represented her organisation at the Global Platform in Cancun. Munich RE Foundation (MRF) spoke to Apsara Pandey and Sakiko Kanbara, the founder of the EpiNurse system in Japan, about their plans after winning the RISK Award.

Apsara, the Nursing Association of Nepal won the 2017 RISK Award. What does this mean to you and your team?

Apsara: First of all, we are honoured to be the winner of the 2017 RISK Award. We are pleased and relieved that our project was selected and recognised as a blueprint for risk reduction.

This recognition gives us much-needed support. But we also feel responsible for developing our proposed system to make it applicable in other disaster-prone areas.

What will be the first steps?

Apsara: We need to train more local community nurses to carry out our mission. Right now, the nurses do not have a full understanding of disaster risk reduction and risk management. But the Nepali nurses are motivated and passionate about helping people in need. We have to translate this enthusiasm to measurable knowledge and action plans.

Sakiko Kanbara and Apsara Pandey (from left to right) explain the EpiNurse system.



Sakiko Kanbara and Apsara Pandey present the EpiNurse project after the RISK Award ceremony.



EpiNurse has been successfully implemented in Japan, Indonesia and the Philippines. Sakiko, as founder of this idea, what do you regard as special about EpiNurse in Nepal?

Sakiko: The 2015 earthquake in Nepal occurred at a time when the EpiNurse framework was being solidified. Thus, we could directly apply our new methodology in real situations rather than in simulation – and it proved successful! Prior to our engagement, the work and potential of so many nurses weren't recognised and therefore they were insufficiently deployed.

What role do new technologies play?

Sakiko: We connected the local knowledge and the nurses' professional health security knowledge by using information and communication technologies (ICTs) and were able to prevent an outbreak of communicable diseases. Furthermore, we were able to collect public health information from isolated shelters. This data could not have been obtained without the nurses and their valuable surveillance work. Since we could offer professional care and data monitoring via EpiNurse, the other women in the camps were freed from the burden of taking care of their sick relatives themselves. Instead, they were able to proceed with their day-to-day work which prevented income loss.

Apsara and Sakiko, where do you see the EpiNurse project in two years from now?

Apsara and Sakiko: We expect the EpiNurses of our project to be fully versed and equipped in disaster risk reduction literacy and technology, especially ICT. Whenever there is need, EpiNurses will automatically monitor the health situation in the affected areas and provide care services.

The RISK Award aims at highlighting groups who play an important role for Disaster Risk Management (DRM) and whose work is often not really appreciated. How big is the potential in Nepal to serve this goal?

Apsara: The award's potential is immense! It recognises the importance of the nurses' role in disaster mitigation. Many people in Nepal don't value their work sufficiently; their potential is neglected. Due to lack of medical facilities, many licensed nurses are not employed. Only when working in the communities nurses who are mostly women in Nepal are treated with respect.

So empowerment is key?

Apsara: Yes. The EpiNurse project empowers women with practical skills and allows them to take over leadership functions. Knowledge and usage of ICT play a big role. Due to their new self-esteem they are now empowered in their dealings with community leaders – even daring to oppose them when their opinion regarding the necessity of health monitoring differ from that of the community leaders. Every nurse within the programme should be able to work independently since the shelters are often remote and have no access to regional infrastructure during emergencies.

How does the EpiNurse system work?

Apsara: EpiNurse as background organisation has the responsibility to connect all nurses and provide all the necessary resources to establish an overarching surveillance system and network. Thus, we can easily detect where help is needed and where we might need external support.

And your vision for the future is?

Apsara: Nurses will serve as role models, carrying out disaster risk reduction activities to create a better future for all.

In phase 1 target regions were identified, potential project partners were contacted and the first workshops for the future EpiNurses were organised. The fragmented healthcare system as well as the rugged topography in Nepal posed particular challenges.

IntoAction phase 1 – Improving health care in Nepal

The Nursing Association and their partner organisations are developing new, digital information and communication technologies for the health sector to improve medical care for thousands of people in Nepal.

The project “EpiNurse” kicked off with workshops and seminars with the aim of putting together a powerful team and approving a joint project plan. The goals are fairly ambitious: besides improving direct medical help after disasters for people in emergency accommodation, the project also hopes to bring benefits to isolated mountain regions. In addition, the training modules in the EpiNurse programme are to be directly incorporated into the curricula for trainee nurses. A collaboration with schools and academies is also planned as part of this initiative. Other important components are seminars offered for external trainers in rural communities (Training of the Trainers – ToTs) to ensure the project vision can be spread independently.

Nurses are familiarised with the new technology. Mobile phones play an important role.

State-of-the-art computer technology – the basis for the EpiNurse programme

A digital information and communication technology (ICT) system (ShineOS+) forms the technical heart of the project. It comprises a web platform, monitoring tools and an app. A prototype of the ICT based on a Japanese model was initially developed and used on the Philippines. The standards expected for innovative techniques in developing countries are often different from those in industrialised nations. Cultural background also plays a role, so the ShineOS+ system is being specially adapted for Nepal: the modifications will relate to the content, the user interface and the data evaluation option. This “glocalised” approach enables data to be collected more efficiently, thereby improving the monitoring of patients and people at risk.

To begin with, the project addresses nurses in Nepal. They are to be given special training courses to become “EpiNurses”. This means they will be able to perform special tasks in addition to their normal medical duties – both before, during and after disaster events. These tasks consist e.g. of creating digital client profiles, uploading and sharing of information related to outbreaks of diseases and many more. Three organisational project pillars have been developed for this: one group is focusing on “School EpiNurses”, and one on “Community EpiNurses”, who often have to operate independently in remote regions. The third training team is working with “Mother and Child EpiNurses”. The focus in this group is on medical care for mothers and children.

Most areas of the Melamchi valley are only accessible on foot, or in places with off-road vehicles. This makes it more difficult to provide healthcare for the people living there.





Nurse Sharada records young patients' data. The 2017 RISK Award project places a special emphasis on children and mothers.

The first practical steps

The new ICTs came into use in a pilot test in Kathmandu. There are still 60 people from 11 families living in emergency accommodation in Bouddha, a suburb of Kathmandu, because their houses could not be repaired following the severe earthquake in 2015. The families were registered in the system (ShineOS+) and can now be provided with health services more efficiently as and when needed. In an initial field test, the Community EpiNurses have agreed on a cooperation with the non-governmental organisation (NGO) Green Tara Nepal. The latter already provides first aid services in some rural regions, for example after accidents. It is handy that the EpiNurses can make use of this existing network in the communities. The same can be done in the high-altitude Melamchi valley. Only one health centre, managed by the NGO One Heart, is responsible for villages that are situated at considerable distances from each other and can often only be reached on foot. Here again, the EpiNurse programme wants to network and integrate people.

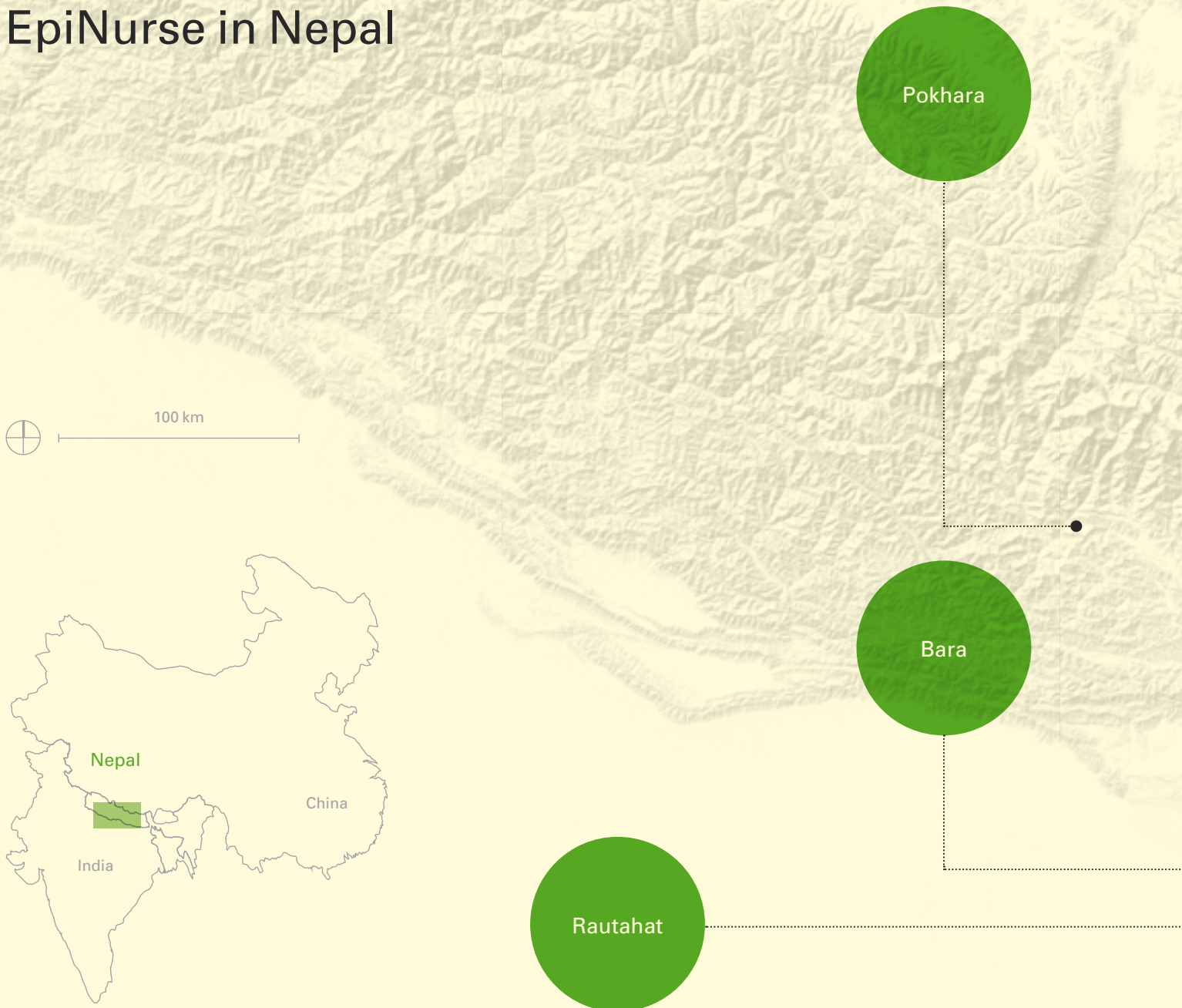
Institutional partnerships

A further focus of the NAN is the cooperation with training institutes for nurses. One such initiative will be seeking a cooperation with the Shivapuri Higher Secondary School in Kathmandu. EpiNurse courses will become a standard part of the school's training programme. To deepen their understanding of disasters and acquire new skills, a number of prospective EpiNurses visited the National Society for Earthquake Technology (NSET). Their objective was to improve mutual understanding, and to enable both sides to respond more quickly after earthquakes.

A current field test

The 2017 monsoon was especially severe in parts of Nepal. There were massive floods towards the end of the year in the districts of Rautahat and Siraha. Many families had to be housed in emergency accommodation. The RISK Award project team used the opportunity to try out its new ICT system. It was able to reach a total of 225 families comprising roughly 1,700 people. Their health monitoring is now conducted digitally. The nurses know exactly what they have to do, since they can access the patient files using an app. And it makes no difference whether the families are still living in emergency accommodation, or have returned to their isolated mountain regions. Innovation is not a privilege of industrial countries. It can be a motor for extremely positive development in poorer regions as well.

EpiNurse in Nepal



Melamchi Valley

In this valley the NAN cooperates with the Primary Health Center which is supported by the NGO One Heart, a public school called Shree Bhairabi Devi Adharbhut School, and a private school called Pragati English Secondary School.



Rautahat

The project team assessed the situation after severe flooding in 2017 in several villages by interviewing 225 families, covering around 1,700 people. A special focus was on the assessment of disease statistics during and after the emergency period.



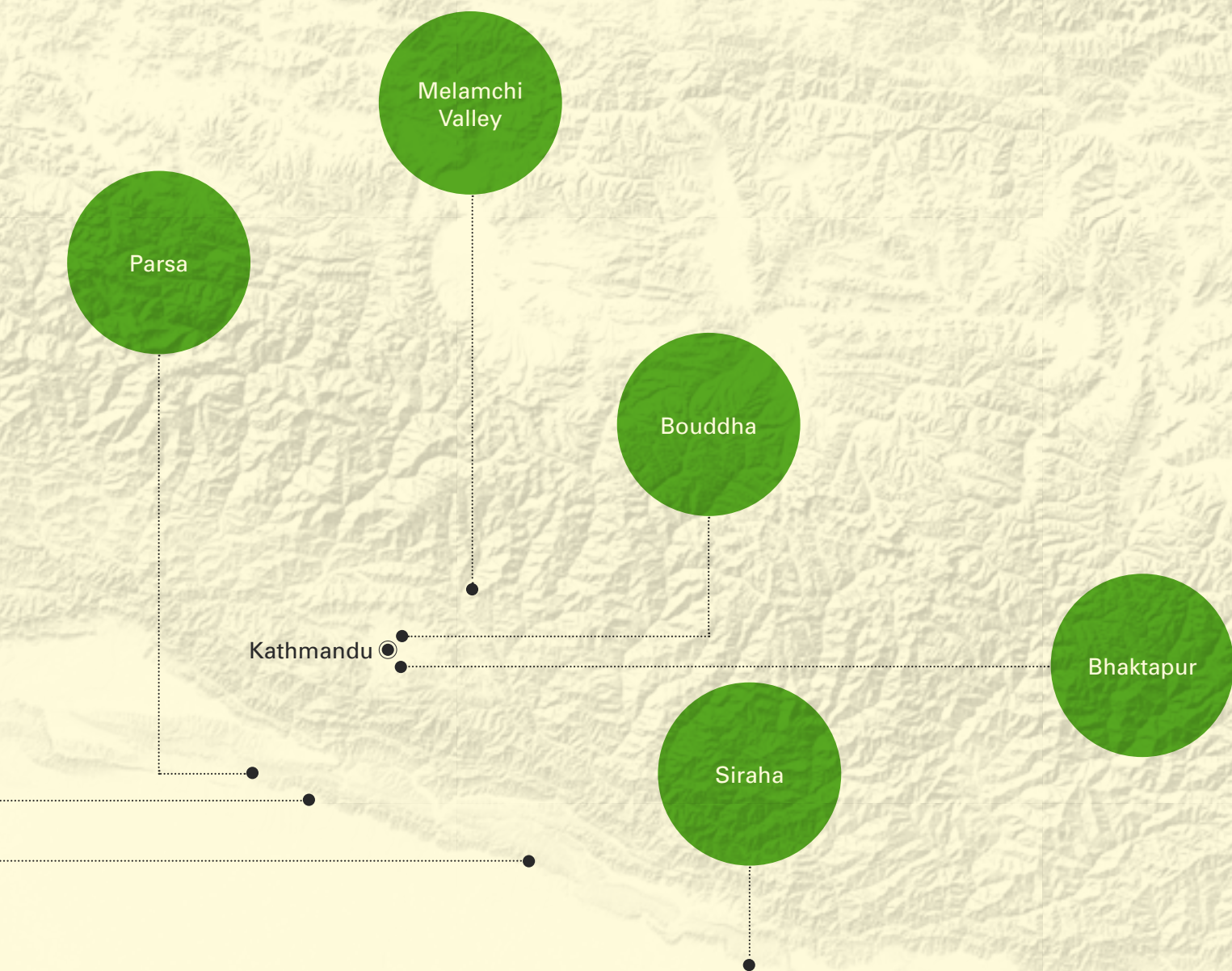
Siraha

The health services in this district as well as in Rautahat are very limited. During disasters, people are even more at risk due to the lack of medical workers and equipment. EpiNurses collaborate with local primary health care center.



Pokhara

The city is the second largest city in Nepal. The NAN aims to build a strong EpiNurse presence here as well. To do so, they offered capacity building trainings in 2018 and 2019 on the Nursing Campus in Pokhara, Kaski.



Bouddha

EpiNurse Thakchi Sherpa provided nursing care to survivors of the Nepal earthquake 2015 and initiated the Phulpinkatti Camp Shelter on her own. The camp near Kathmandu still offers housing for 14 families constituting a total of 60 members today.



Bhaktapur

On 12 July 2018, the village was hit by a massive landslide. On 14 July an EpiNurse team visited the affected area to identify losses and to assess the health and environmental risks. The data collected revealed three fatalities from the landslide and thousands of displaced people.



Bara

Bara and Parsa suffered severe damages during a disastrous tornado on 31 March 2019. Thanks to the ShineOS+ system, teams of the EpiNurse project were quickly mobilized and could take over medical care just two days after the storm hit the place.



Parsa

The new assessment and risk management app is part of capacity building trainings within the EpiNurse program. Nurses in Parsa have successfully completed the workshops.

Mobile phones and tablets are the daily companions of the EpiNurses – nurses with special digital training – in Nepal. The women are sent to refugee camps, crisis areas and remote mountainous regions to provide medical care in emergencies.

IntoAction in Kathmandu – Digitalisation is key

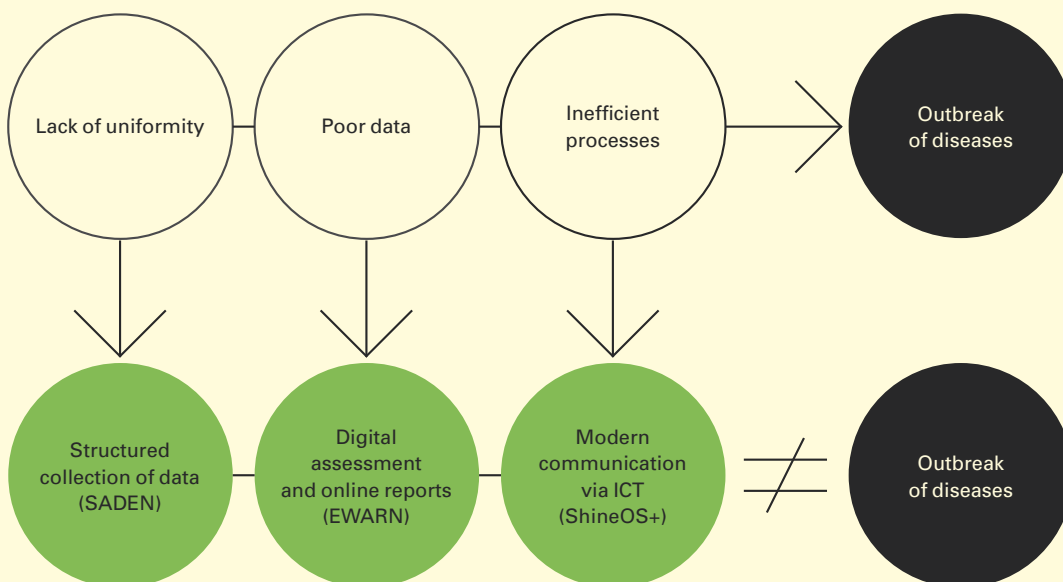
Nepal’s health monitoring and patients care is regularly confronted with challenges. Firstly, it does not have a centralised nationwide healthcare system. Many remote regions are served by separate health centres, which in turn are independently funded by various agencies, such as relief or non-governmental organisations and associations. Secondly, patient data is often only filed in analogue records, some of which are handwritten. If a register is destroyed by a flood, landslide or earthquake, such as in 2015, all the records are lost. Thirdly, it often takes too long to determine which medicines and aid are required in a crisis region, and then to complete the complex ordering and delivery processes.

In a crisis, this interaction between a lack of uniformity, poor data and inefficient processes can lead to the outbreak of serious diseases, such as typhus and cholera, especially in the wake of disasters.

First steps towards digitalisation

The Nursing Association of Nepal (NAN) wants to tackle these problems and trains its EpiNurses (an abbreviation for epidemiology and nurses) with a mobile app that can record patient data in digital form (ShineOS+). The data is collected, analysed and compared nationwide on an online platform. For the future it is planned to organise the further treatment steps via the online platform.

It will be some time before the health system of Nepal is digitalised. The progress made so far is due to the great commitment of the Nursing Association and the people that make it possible. Such as EpiNurse Thakchi Sherpa: since the devastating earthquake in 2015, she has worked intensively to help the survivors. Many people took shelter from the earthquakes in a field in Boudhha on the outskirts of Kathmandu. With the support of Thakchi Sherpa, they procured tents and food and built up a reasonably secure water supply. She also took care of medical emergency and first responder services and set up a mobile emergency clinic in the Phulpingkatti camp.



ICT and disaster risk management

The ShineOS+ app which is used by the EpiNurses combines a bundle of services. The data is collected through a mobile application named SADEN (Shelter Assessment following Disaster by the EpiNurse Nepal). It includes a geotagging function and contains questionnaires regarding demography, social environment and livelihoods. The collected data gets a

clear structure. The assessment and reporting of the data is organized via the post-disaster Early Warning Alert and Response Network (EWARN) app, developed by the World Health Organisation (WHO) and is also used by the Ministry of Health. The overall aim is to avoid the outbreak of diseases after disasters.



Within a short period of time, hundreds of people gathered at the clinic, and more than 90 families found refuge. Although initially conceived as a temporary solution, 14 families are still living in the shelters three years later. Their old homes have not been rebuilt, and they do not have the financial means to leave the camp. Daily health checks and preventative measures are required to prevent the outbreak of infectious diseases, which spread easily in cramped living conditions. Due to the lack of medical facilities on site, Thakchi Sherpa has assumed responsibility for this too.

The remarkable thing about this is that she managed to set up the mobile clinic and auxiliary structures on her own. Only later she asked for help and received support from the NAN.

The EpiNurse project now makes a lot of things much easier, in particular patient monitoring. Apsara Pandey (RISK Award project leader) and Tara Pokrhel (President of the NAN) emphasise: “Women like Thakchi Sherpa are special. If we are able to help her with our EpiNurses organisation, that makes us happy.”

EpiNurse Thakchi Sherpa greatly helps the victims of the earthquake in 2015 to find shelter and healthcare.

ICT plays a crucial role for efficient health services. ShineOS+ is a software which is also being used in Japan and the Philippines. In Nepal, it was adapted to local needs and now serves the EpiNurses.



Mobile phones and tablets are the daily companions of the EpiNurses.



IntoAction phase 2 – The project keeps the momentum going

Heavy incessant rains on 11 and 12 July 2018 caused the Hanumate River in the Bhaktapur district of Nepal to flood, leading to severe damages and landslides. Three people were killed, four injured and thousands displaced. An EpiNurse team visited the affected area to identify losses and to assess the health and environmental risks associated with the flood as well as the shelter quality. The data collected by the team showed that a lack of sanitation and clean drinking water, crowded health facilities, and the odor of dead and decayed animals caused health problems in the area.

The team concluded that outbreaks of water- and vector borne diseases were major potential health hazards. In response, it offered health education regarding sanitation and hygiene to affected people. The installation of temporary drainage systems, the provision of safe drinking water and the conduction of door to door health checkup programs were then provided by local leaders and the army.

Trainings, expansion and improvement

Besides visiting disaster affected areas, the EpiNurse project is focusing on building up its capacities and competencies. The team successfully trained 66 additional local nurses to be certified EpiNurses in two training sessions. In various workshops and

consultation meetings, the team members enhanced their knowledge about how they can contribute to sustainable disaster risk reduction in Nepal. Further, they were informed about the so-called “Minimum Data Set” surveillance tool for disaster situations, developed by the World Health Organisation (WHO).

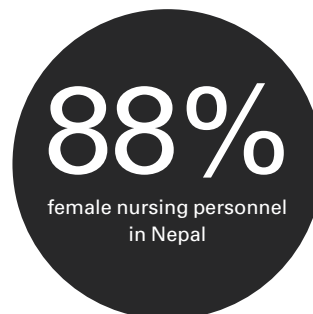
Another milestone was the development of a first draft of a EpiNurse Training Manual as a result of consultation meetings and feedback from the trained nurses. This manual includes improved training methods and will provide clear guidance to trainers. After having collected large amounts of feedback on the app, the EpiNurse team now will work on improving it, making it more intuitive and user-friendly.

Local nurses are being trained as EpiNurses and learn about the App ShineOS+ in order to make health-monitoring of their patients more efficient.





Standing water after heavy rains is a threat in many urban areas in Nepal. Mosquitos find breeding ground and diseases can spread more easily.



In 2018 Dirk Reinhard, Vice Chairman of the Munich Re Foundation (middle), visited the project team in Kathmandu. He was impressed by the quality of the project proceedings. Nurses testing the new app (right).

Source: WHO (n.d.): The Global Health Observatory. Nurses by sex (%)



EpiNurse Outlook – A RISK Award project on the home straight

Interview with Apsara Pandey and Sushila Paudel

For two years we have been supporting the outstanding EpiNurse project in Nepal. The aim is to improve healthcare and the health system in Nepal after and during disasters with the use of modern information and communication technologies (ICT). Specially trained nurses are the cornerstone of the initiative. As the project enters the home straight, we spoke with two key representatives from the Nursing Association Nepal (NAN), which is responsible for the EpiNurse project.

Sushila and Apsara, you have been involved in the project for almost two years now. What has been achieved?

Sushila: The name 'EpiNurse' itself is now well known in Kathmandu and beyond. The project has led to greater public recognition of the nurses' efforts for improving the Nepalese healthcare system using ICT. In two years, we were able to hold more than ten workshops that created visibility even in rural regions.

Around 200 nurses from different regions of Nepal have been trained and certified as EpiNurse by now. That means that they are familiar with the new digital systems and are helping to design a more efficient health management for thousands of people. The ShineOs+ software used by the EpiNurses on a daily basis was updated and adapted to actual local needs in Nepal.

What are the next steps?

Apsara: The RISK Award has helped us to design the pilot phase successfully. What we need to do now is to set up the EpiNurse project in a sustainable way to ensure long-term success. This does not only include the further development of contents, but also the establishment of a solid financial basis for the project. An important step in this context is our cooperation with the Health Ministry. We work very intensively on integrating the EpiNurse system in the governmental mechanisms of disaster risk reduction. One of our objectives is to revise disaster nursing contents in the national nursing curriculum and to integrate the EpiNurse concept. This will be an efficient way to extend the range of the programme.

And aside from the politics, what else is happening in the educational sector?

Sushila: We are already working with schools and universities in the project. A capacity building training manual has been developed in accordance with national standards. Pokhara University has already incorporated nursing and our ideas in its offered Bachelor courses. "One school – one nurse" is a policy newly implemented by the authorities. The Province 3 government of Nepal has launched this scheme in 20 community schools. As part of our 'School EpiNurse' programme, the NAN has trained 20 school nurses for this initiative. They already have initiated the data collection of schools and students using the 'School EpiNurse' application. We are in the trial and error phase.

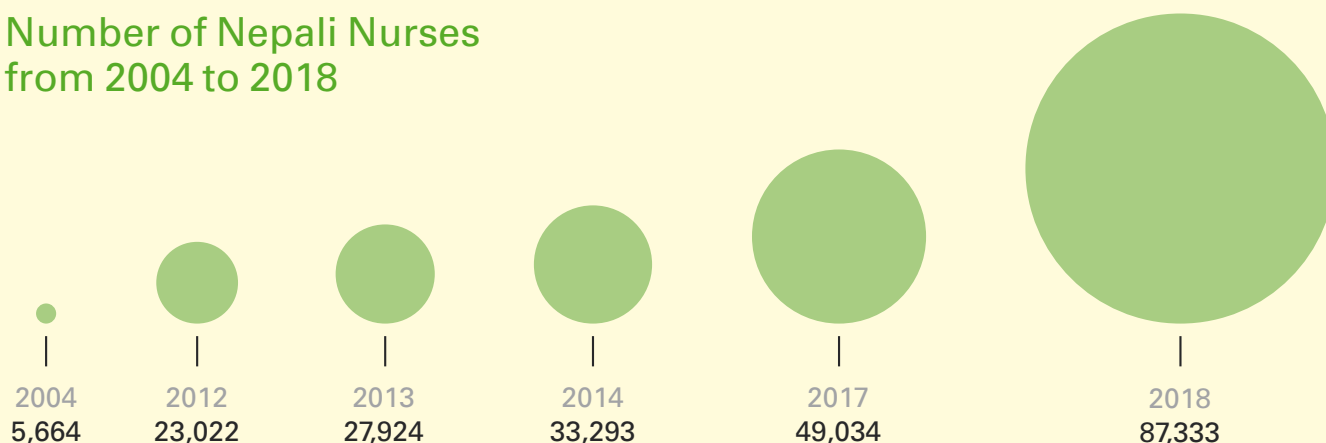
200

nurses have been trained and certified as EpiNurse



Apsara Pandey (left) is project leader and Vice President of the NAN. Sushila Paudel (right) works as an EpiNurse Coordinator and project team member. In the interview with Christian Barthelt (Munich Re Foundation) they talked about obstacles, successes and future plans.

Number of Nepali Nurses from 2004 to 2018



Source: WHO (n.d.):
The Global Health Observatory.
Nursing personnel (number)

What is happening in the field?

Sushila: We will continue to provide training and capacity building to new nurses, to perform data collection, analysis and case studies using the EpiNurse application. A comprehensive disaster information management system (DIMS) in Nepal is still under development. We try to find a possibility to integrate our indicators in the DIMS in order to simplify risk communication, avoid duplications and enable coordination. This requires cooperation with the government as well. For that, consultation meetings and workshops are taking place.

Do you have official public partners by now?

Apsara: Yes, sure. Up to now, we have been working with the Kathmandu City Authorities. And – as said – we are also in discussions with the National Ministry of Health. One challenge we face is that the health system in Nepal has a very regional structure. In many cases, care within a region is provided by health centers that operate relatively independently of one another. We are in discussions with representatives of e.g. the Ministry of Social Development in Province 3, which is responsible for the region surrounding Kathmandu.

A Memorandum of Understanding has been developed with this Ministry for Data Collection by school nurses, but we need to expand the program at the community level as well. We hope to establish a stronger foothold there. Province 3 is extremely hilly and includes the high mountain ranges of Langtang and Ganesh. Not an easy area. For the development of the national curriculum, we have the Nepal Nursing Council as one of our crucial partners.

Do you see other positive aspects of the RISK Award, maybe apart from assisting the project financially?

Apsara: Definitely. The announcement of the award at the Global Platform for DRR in Geneva in 2017 gave us a much higher level of visibility from the very start. Not just here at home, also internationally. The World Health Organisation (WHO) is going to declare 2020 the “Year of the Nurse”. We were also invited to the pre-discussions on this initiative, at the same time as the Global Platform in May 2019 in Geneva. Other countries including Indonesia, the Congo and the Philippines, are showing deep interest in our approach.

What were the most important guarantees of success for the project up to now?

Sushila: The most important thing is that the project was in the hands of the EpiNurses themselves from the get-go. Local nurses are the first health care responders in communities during an emergency. They can understand best the language, culture, local community needs and resources. Thus, they can best predict which treatments, medicines and care will be needed. Ownership is a key factor for success. With advice from Sakiko (MRF note: the founder of EpiNurse in Japan), we were then able to make the leap into the digital world.

Apsara: Another aspect particularly important in Nepal is the empowerment of women. We are often the people with responsibility, in the field of healthcare for example. But in many cases, we are not seen as important decision-makers. In this respect the RISK Award project has had a very positive impact. Nurses are taking on more visible tasks, and that in turn increases their self-confidence. This finally serves the patients and the people at risk.

Thank you very much for the insights! We wish you every success with EpiNurse in the future!

About the RISK Award

The risks posed by population development, environmental and climate change are increasing. Complex technical systems and infrastructure are additional risk factors. The Award partners recognise the need to address this development. The RISK Award has been set up to help improve risk reduction and disaster management by providing financial support to projects dedicated to this topic.

Prize and awarding ceremonies

The RISK Award, endowed with €100,000, is assigned to operational projects in the field of risk reduction and disaster management. The prize is awarded every two years. The International Disaster and Risk Conference (IDRC), organised by GRF Davos, and the Global Platform for Disaster Risk Reduction in Geneva, organised by UNISDR, host the awarding ceremonies. The endowment for the RISK Award is provided by the Munich Re Foundation.



Project partners

Nursing Association of Nepal (NAN)

NAN is the only one professional organisation of the nurses in Nepal. It is a non-political, non-sectoral organisation not influenced by class and religion. It is determined to provide quality-nursing service to the people in order to protect and promote the professional rights and interests of all nurses in the kingdom of Nepal. NAN was established in 1962 with the Regd. No. 8/018 and became a member of International Council of Nurses (ICN) Geneva in 1969. Initially it was registered as Trained Nurses Association of Nepal (TNAN). By the 3rd amendment of its constitution 1991, the name of the association was changed and the organisation shall be called as "Nepal Nursing Sangh" in Nepali and "Nursing Association of Nepal" in English (abbreviated as NAN). The organisation is run by an executive board, which is formed by nationwide election of secret ballot every three years.

Munich Re Foundation (MRF)

MRF is a non-profit foundation established in 2005 by the Münchener Rückversicherungsgesellschaft Aktiengesellschaft in München (Munich Re) on the occasion of its 125th anniversary. People are ultimately at the core of what MRF's work is all about. MRF's task is to minimise the risks to which they are exposed. It clarifies issues and provides support, including in developing countries. MRF's aim is to prepare people to cope with risk and to improve their living conditions in relation to: water as a resource and risk factor, population development, poverty, urbanisation and megacities, disaster prevention, environmental and climate change. The activities of MRF concentrate on four fields: knowledge accumulation and implementation, clarification and sensitisation, networking, direct help and support.

United Nations Office for Disaster Risk Reduction (UNDRR)

As the United Nations Office for Disaster Risk Reduction, UNDRR brings governments, partners and communities together to reduce disaster risk and losses to ensure a safer, more sustainable future. UNDRR (formerly UNISDR) is the United Nations focal point for disaster risk reduction. UNDRR oversees the implementation of the Sendai Framework for Disaster Risk Reduction 2015-2030, supporting countries in its implementation, monitoring and sharing what works in reducing existing risk and preventing the creation of new risk.



Global Risk Forum Davos (GRF)

The foundation GRF Davos aims to bridge the gaps between science, administration, the private sector, the practice and the public regarding risk reduction, disaster management, and climate change mitigation and adaptation. GRF Davos is the organiser of the International Disaster and Risk Conference (IDRC). IDRC is a global gathering of experts for risk reduction, disaster management and climate change adaptation, and held as a biennial conference in Davos, Switzerland.



**Munich Re
Foundation**
From Knowledge
to Action



Nurses are the backbone of the health system in Nepal. It is only with their help that the most vulnerable people, such as children or elderly in very remote areas, receive crucial medical support.

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Four beneficiaries of the RISK Award project stand in front of a house in a remote Himalayan region North of Kathmandu. Thanks to the EpiNurse programme they are now better connected to medical services and better prepared in case of disasters.

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and bottom left), 15 (bottom left)

