

June_18_407_002

I've been told this is the only one focusing on the intersection between disaster risk management and the role of health systems. And so in this session we will put it to you that that particular relationship, disaster risk management and the role of health systems in responding to and recovering from disasters is probably an overlooked one.

Okay, I hope you can hear me. My name is Jun Renschler. I'm a senior economist with the World Bank, one of the team leads of a small team working on disaster risk management and health systems. In this session we will have a simultaneous translation.

You're probably aware of this from the other sessions. If you would like to use that, please scan the code and there is English to Japanese and French. So in this session we will put it to you that health care systems are absolutely key to effective disaster risk management.

Health systems themselves are exposed to natural hazards. Think of hospitals that are affected by earthquakes, for instance. But health systems are also really integral to the response to emergencies.

So they need to be well coordinated, for instance, with search and rescue operations as well as humanitarian relief operations. And then, of course, health systems themselves are also highly dependent on disaster resilient infrastructure systems.

So for instance, reliable power supply and water in the aftermath of a disaster is extremely crucial for health systems to operate effectively. And Japan is really one of the pioneers in this field, as it's no coincidence that we are meeting in Japan.

And that's not just in the general field of disaster risk management, but also specifically when it comes to integrating disaster preparedness with health systems. So the government of Japan has been a true champion of this important agenda, not just at home here in Japan, but also internationally with generous financial support, but also deep technical expertise that has been helping countries around the world.

So to get this session started, we are very lucky to have for some opening remarks the director of the Multilateral Development Banks Division of the Japanese Ministry of Finance, Mr. Takihiko Tsuba.

Please join me in welcoming him.

Good morning, everybody. Thank you for coming. As the official of the Japanese government, obviously, the First World Electric sent my warm welcome to all of you, all the participants in particular from different countries.

Hyogo Prefecture, the venue of this place, is well -known for cultural heritage, such as the Lanma Castle that was built in 17th century. I think some of you have already visited that place. And it's heavy Western cultural impact after the modernization of the country in 19th century.

So making this city or this Prefecture a unique place where tradition and innovation meet as one of the themes of this conference. When we discuss the health disaster risk management nexus, we often start our story with the COVID -19 pandemic.

It was a global wake -up call to re -evaluate what the legitimate sustainable health systems are and how to strengthen the emergency preparedness of health services. However, even before the COVID -19 pandemic, healthcare systems in many countries have been struggling to meet routine demand, such as providing primary healthcare, building a hospital network, securing sufficient doctors and nurses later on being able to effectively manage emergencies.

This challenge is most acute in developing countries where their health systems cannot provide what we call universal health coverage. In other words, they cannot offer quality care to all people with affordable price.

Mind you, they are also especially vulnerable to disaster situations. We have witnessed enormous challenges in this regard. Earthquakes in Indonesia destroyed hospital buildings, cyclones in Mozambique disrupted transport and power systems that are essential for hospitals to operate.

And floods in Pakistan forced the disaster response and the search and rescue agencies to coordinate closely with health services. Going forward, the risks of pandemics, the risk of disasters and the risk of economic crises will be placing more pressures on health systems due to the longer structural trend, such as urbanization and demographic shift and climate change.

So what I'm saying is basically we have imminent challenges and unfortunately today will intensify down the road. Thus, our health system needs to be prepared for preventing and managing such crises, especially when it comes to strengthening capacity, coordination among different government agencies and coordination between the government and the private sector and effective system planning based on solid plans.

In Japan, we have a long history of integrating disaster risk management strategies with health system planning. In this regard in the session, I think we are lucky to have Dr. Yoshiki Toyokuni, who represents Japan's disaster management assistance team, DMAT, which I believe is a great example of how our health system is treated as a critical component of disaster risk management as a whole.

Thank you. Let me also elaborate how the government of Japan has made the link between strengthening health system and disaster risk management capacities and important priority in the development context.

As you know, we have been already sharing our experience and expertise on this agenda with countries around the world, through our bilateral agency like JICA, and multilateral organizations including, of course, the World Bank.

Why the World Bank? The World Bank is uniquely positioned to draw on its DRM and health expertise to offer integrated solutions for the resident health system in developing countries. I'm also glad that the World Bank is fostering global partnership in this regard, including with the WHO, as well as many health and DRM experts around the world, and also those from Japanese ministries, local governments,

medical association, hospitals, and academia. The GFDRR is an important partner in this journey and appreciated the hard work and dedication of the team. So, in the opening ceremony that I attended yesterday, there are two ignites.

I just talked with Jun, and I was a bit disappointed that the health was not presented. So, I humbly ask the team to be the igniter after, you know, two years after the next UR conference. You should be presented proudly about the importance of the health system and the DRM.

So you have a full lineup of the distinguished panelists. I wish you a productive and a stimulated discussion. Thank you very much.

Thank you very much, Ms. Tatsuda. So that was a good challenge to the team in two years. Next up, we will hear from a series of experts about their work specifically at that nexus between disaster risk management and health systems.

Three out of five of our next speakers are medical doctors, so we're in good hands. And we will start first with a series of three presentations, very short presentations. And first up, we have my colleague, Merceda Tarevedi, a senior data scientist, co-lead of the Resilient Health Systems Program at GFDR.

And she will talk about some of the work that we've been doing at the World Bank. Over to you.

Thank you so much, Jun, and thank you so much for opening remarks. I will not repeat the importance of the nexus between disastrous management and health. In GFDRR, with the current support of Japan program, in 2022, we initiated this program to support health sector in employing the lessons learned from other sectors, such as transport, energy, emergency preparedness and response, gender and equity in disasters,

and to bring all of that into health. Did it mean that we have to start from scratch? No, a lot of information already existed in different sectors laying in silos, and we had a technical challenge on bringing this information together.

Countries, while dealing with pandemic, they had to respond to cyclones, to earthquakes, to floods. While there were COVID patients in clinics and hospitals, they had to evacuate hospitals, and they were not ready for it.

It was a wake -up call, as we heard, for the health sector to focus on risk mitigation and preparedness for health system resiliency. I'm a data scientist, so my expertise in the team has been bringing together these different insights and factors effectively into decision -making.

Our mission has been in informing investments in health, but also transport, water and energy to have resilient co -benefits for health systems. How do we do it, and what do I mean by different sectors?

First, we try to identify vulnerable people. That is different from country to country. We focus on poverty because we know that poor are unproportionally affected by disasters, and they don't have the means to reach health services equally.

So we have to identify them. Who are they in each country? Where do they live? How they reach health services? What health services they need the most? Gender, like specific services for mother and children.

Disabilities, elderly population. These things for disaster risk management communities has been known long, but how to bring it into health system planning was the challenge that we embarked on. Each of these information comes from different sectors.

Poverty, we can get it from micro -targeting efforts of our social protection colleagues and ministries that provide micro -targeting for population, and so on. So we have the sectors that support well -being of population, and on the other hand of the equation, we have vulnerability of systems.

And that is what my colleague mentioned. That's the resiliency of roads to ensure access to essential services during and after disasters. Transport, that's a transport. Energy to ensure the continuation of services in facilities, as well as water, and more importantly, communication.

We put all of these together, and we add the mechanisms that exist in the country for effective disaster risk management. And we come up with prioritization schemes for investments. As I mentioned, we put population on the sector because we believe that resilient investments should first and foremost impact population health, population well - being in general.

One of the examples that we use is Colombia. In Colombia, we identify facilities at the national level that are key points for most vulnerable communities and the least resilient communities, including indigenous population, that have the worst access to services to begin with and most affected by disasters.

We do that both on a national level for national decision making and policies and a sub - national level working with local agencies with their capacities, with their priorities to identify the specific sub -national level hazards as well as population vulnerabilities and health system vulnerabilities, which we believe is important because not always national level policies reflect the specific needs that the communities need.

As everyone in the disastrous community knows, hazards are geolocated and in countries, some areas they deal with seismic, some areas deal with floods and some

areas they deal with drought. So we cannot just look at a national level and be done with it and we bring that into analytics by bringing data and insights.

Lastly, this is what we provide to transport sector. The vulnerability of roads, that's the reality on the ground, that when we have floods, people cannot get to facilities, doctors and nurses will not be there.

So no matter if we preposition our medical equipment, our medications, we train our doctors and nurses, which should be done in the health system. Those are the foundation of health system resiliency.

But if people cannot get, like supply chain gets disrupted, none of that would be realized after disasters. So we provide the most critical roadways that are necessary to ensure access to health services.

We expand this to educational jobs for DRM and shelters. We identify that and we identify the communities that would lose access the most. Thank you so much. I will leave it as is and I will hand over to Riyoma from our partner, World Health Organization.

Thank you so much for joining us.

Thank you, Mayor Sele, for introducing me, and also inviting me to this wonderful event. And good morning, ladies and gentlemen. It is my pleasure to be here. I'm Ryoma Kayano, Technical Officer of WHO Center for Health Development, which is located in Kobe, Japan.

So it is called the WHO Kobe Center, in charge of doing some research on the health emergency disaster risk management. Today, thank you very much for inviting us to be here to present WHO's initiative on disaster reduction.

First of all, let me deliver the message from a colleague in the headquarter of WHO. The first name is Dr. Christian Fuda, who is the unit head of the DLR unit, who unfortunately cannot come here today.

So I'm going to present her, a friend's message on behalf of her. Distinguished guests, ladies and gentlemen, good morning. I would like to express my deep appreciation to the people of Japan for hosting this historic meeting and to the organizers for putting together this great event.

It is my understanding that UR24 is being held this week in Himeji, with consideration of the upcoming 30th anniversary of Great Hanshin Awaj earthquake. As we reflect on this past event and lessons learned, it is worth noting that the combined effects of the natural hazards, climate change impacts, conflicts and disease outbreaks are increasingly creating complex multi-hazard scenarios for countries and communities around the world.

The lessons from the COVID -19 pandemic are already shaping our understanding of managing these complex and interconnected risks in the health sector, with increasing complexities of risks and in -depth understanding of triggers, consequences, seasonality, geographical areas and populations susceptible.

Along with the cascading impacts of hazards, it's essential to build resilience for emergency disasters. Indeed, enhancing risk knowledge is fundamental for driving country development agenda. Through the Health Emergency Disaster Management Framework, WHO is working with partners, countries, communities and other stakeholders to integrate health into broader DRL strategies and policies for whole society approach to implement the center framework for disaster reduction.

WHO will continue to work with stakeholders to develop innovative tools and inclusive approaches for risk assessment so that authorities and decision makers in countries can have a true picture of the risk they face to inform actions such as developing multi-hazard early warning systems and investments in building resilient health infrastructures.

As we gather around this critical issue, we need to identify and discuss the gaps in data availability and reliability. We should aim to strengthen our partnerships to reflect on what we know and what we don't know and consolidate the worlds of information and data at our disposal to better support countries in their efforts to build resilience and reduce risk more effectively.

That is a message from Dr. Kusefuda. Thank you very much for inviting the venture to be here. And following that, I'd like to share with you some WHO's initiative on disaster risk reduction. So this is the slides which shows overview of the WHO's activities, especially in terms of the center framework and the international health education and WHO health emergency disaster risk management framework.

As part of the international disaster database from the Center for Health Research on Epidemiology and Disasters, in the year 2022, there were 378 disasters recorded globally, resulting in significant human and economic impact.

The following year, 2023, saw an increase to 399 disasters, marking it as a significant year for disaster impacts. Data for 2024 is still emerging, but the trend indicates ongoing high -frequency disasters.

The data underscores the urgent need for a risk -based approach to health emergency disaster management through a strong governance and robust investment following the whole society and whole government's approach.

Multiple threats to health are proliferating, compounded by systemic vulnerabilities they interact with and reinforce in one another. If the threats to health are interlinked and self -reinforcing, so must be the solutions.

This is where the value of health emergency and disaster risk management comes in. Health EDLM framework provides a common language and comprehensive approach that can be adapted and applied by all actors in health and other sectors who are working to reduce health risks and consequences of emergency disasters.

The framework focuses on improving health outcomes and well-being for communities at risk in different contexts, including fragile, low, and high resource settings. Based upon the risk-informed and light-based approach, the Health EDLM framework builds upon the SENDI framework for disaster reduction, the Paris Agreement for Climate Change, and the International Health Regulations, and upholds attainment of sustainable development goals.

Through its various components, and we have 10 components, as you show in the slides, the Health EDLM framework supports to assess, communicate, and reduce risk across the continuum of prevention, preparedness, readiness, response, and recovery, thereby supporting to build the resilience of communities and health systems.

So we have a lot of tools linking with this framework. The COVID-19 pandemic has starkly illustrated interconnection between health and resilience of communities and countries. It has acted as a catalyst for action and efforts to strengthen national and global efforts towards disaster management.

Must be about more than just preparing for and preventing the next pandemic, but follow a risk-informed approach of the health emergency and disaster management. Health EDLM emphasizes that all actions and strategies for DLM in the health sector should be risk-informed and driven by the latest evidence.

Over the years, WHO has produced various tools to support operationalizing of the Health EDLM framework. This includes the left one. The WHO's strategic tool for assessing this. It is called STAR. You can find it on the, where is that?

Yeah, this is one. STAR is the tool. It's a comprehensive, easy-to-use toolkit and approach to enable national and subnational governments to rapidly conduct a strategic and evidence-based assessment of public health risk for planning and prioritization of health emergency preparedness and disaster management activities.

The seasonal risk calendar generated from all hazard strategic risk assessment, which helps countries to anticipate and prepare for concurrent health risk during the pandemic.

The whole society approach, which emphasizes that management of emergencies and disasters, is everyone's business.

You can find it also in the middle of the slides. An inclusion of the impacts of COVID -19 pandemic in the center framework monitor, which are supposed to quantify the impacts of countries and communities.

Lapid hospital readiness checklist and safe hospital webinars to reinforce the critical role of prepared hospital during the COVID -19 pandemic and concurrent emergencies. As Marisa mentioned, the access to hospital and resident hospital is very important.

In addition, for the research methods for the health EDLM, WHO published in 2001, the handbook on the research methods for health EDLM to guide research in the context of COVID -19, so that quality evidence could be generated to inform actions.

I would like to conclude that effective disaster risk reduction and health emergency management hinge on strong national governance mechanism and sound financial investment. It is not merely about responding to disasters, but proactively reducing risk and building capacity.

Every dollar spent on disaster preparedness and resilient infrastructure yields significant savings in disaster response and recovery. Therefore, it is imperative that donors, governments and private sector partners increase investment for these initiatives.

Governments must lead with clear policies, robust legal frameworks, and coordinate our actions across sectors. Public -private partnerships and community engagement are also vital, ensuring that all stakeholders are invested in emergency and disaster resilience building efforts.

Thank you very much.

So.

Thank you very much.

Thank you. That was great. WHO is an important partner in this work, of course, for us. I'm especially excited about our next speaker. A great example, I think, of how Japan leads as a pioneer in this area, particularly on health systems and their role in disaster response.

We have the Chief of the Disaster Medical Coordination Unit for the Japan Disaster Medical Assistance Team, DMAT, Dr. Yoshiki Toyokuni. He's been at the frontline as a logistician, as a medical expert in responding to various disasters here in Japan, but also internationally abroad, many of the major recent disasters that we've experienced.

Please welcome Dr. Yoshikuni. The floor is yours. Thank you.

Thank you very much. Hi, my name is Yoshi Toyokuni. I am from Japan D. Matt's secretariat, which is the headquarter of the domestic disaster medical response. And I'd like to just briefly explain about the disaster medical response in Japan.

Right, so, Japanese medical, disaster medical response is started from international response, first in the 70s. And as you know, the 1988, the Armenian earthquake that's changed the whole world system for the rescuing for the affected.

And in 2010, high earthquake that's changed a lot of disaster medical response in the world. So the EMT initiatives for the WHO is established after this high earthquake. For the domestic -wise, the 1995, we had a Hanshin Awachiki earthquake.

So that was awakening for the Japan medical disaster response. So internationally, we've been deploying our team to all over the country since 1987. So that's under the JICA, Ministry of Foreign Affairs.

And after the 1995, finally, the domestic team is developed and then we've been working synergistically together. Okay, so the 1995 is the Great Hanshin Awachiki earthquake. That time, we have over 60 ,000 death toll and the number of preventable disaster deaths, which is the casualties which could have been saved if standard emergency care was provided.

That is being estimated as more than 500. So that was a lesson learned. And for the Japanese government, so from that experience, we, the Japanese government, developed the four key components of the disaster medical response.

So one is to establishing and then designating the disaster -based hospitals into the four D7 prefectures and developing us to the disaster medical assistance team, DMART. And while the air medical revocation plans were also developed, and we also established emergency medical information system, we called EMAS.

So the disaster medical assistance team is established in 2005. So that's, our team consists of two doctors, two nurses, and one or two physicians. And we have standardized small medical kits. And that, you can tell that the very small team, but that makes us to respond very quickly.

And if you need more person, we can get together and we can make a big team to respond. So DMART is a medical team that is mobile and trying to operate in acute physical disaster. That is defined by the Ministry of Health.

And our team is first to respond to the disaster -based hospital. So we are not bringing any field hospital into the disaster site. Since fortunately, Japan has so many hospitals around the country. So we go first to the disaster -based hospital and if we gain the function of going in the disaster -based hospital, then we move to the smaller hospitals or social welfare facilities or even the shelters or first aid station on site.

So this just looks like it. So the DMART coming into the disaster affected earlier by the airplane or by the DMART curse. And first we go to the disaster -based hospital and the disaster -based hospital have a responsibility to cover each region.

So each region is covered by the disaster -based hospital. So the DMART will check later to the smaller clinics. So this is our numbers. So we have now over 1 ,800 teams that counts more than 17 ,000 registered DMART members in Japan.

And so after 2005, we've been responding to so many disasters, not only the natural disasters, but we've been responding to the train accident or airplane accident, all that. And 2011, we had a great East Japan earthquake in the Tohoku area.

That time, our 400 teams responded. And 2016, another criminal earthquake, which is Kyushu Island, which happened in Kyushu Island. And then over 500 teams responded to this disaster. And after that, you can tell we are very prone to the disasters.

And we have been in so many disasters, and then we've been responding to those disasters. And 2020 to 2022, COVID -19 pandemic, that time, we also responded to each hospital or clinics, which had the outbreak inside of those facilities.

And we helped them to keep their functioning. So we stayed there until their functioning is getting back to the normal. And 2024, as you know, the Noto Peninsula earthquake occurred in January 1st. That was magnitude 7 .6.

So the epicenter was the northern part of the peninsula. And we had so many building crops, and even we had a tsunami. And from this earthquake, unfortunately, we lost over 200 people. And same time, we had an indispensable person, over 13 ,000.

In this disaster, we had a maximum response in our history, once our over 1 ,000 team is responded. And other disaster -maker response listed here is also responded to this disaster. So what we have done for this disaster, we provided continuous medical care to supporting a damaged hospital or even the long -term care facilities or nursing homes.

And we also supported the water, food, or heatings to the hospitals or care facilities. That means we coordinated the logistical support also. And we stayed longer than we have expected to connect the restoration of the local healthcare and the welfare systems.

So that, usually, the DMAT is supposed to be stayed for the acute phases, which means disaster happened. We may stay three, four days, and we go back. But this time, we stayed longer to get the local health care functioning coming back.

So we stayed maximum of three months this time. So this is the sum of the picture from our response. Okay, so as I said, so our system, this is a medical response system started internationally. And that experience has helped us to develop our domestic response.

And we've been, as I showed you, we've been through so many disasters. And we have lessons learned from those experiences. And that's developed more in, especially in information management on the disaster medical response.

And that is now helping WHO EMT initiatives, especially we call the minimum data set, which is operated by WHO. And that is coming from our experiences. So we're physically developing together. So finally, the Japan developed disaster management and disaster medical system from recent land from the past disaster response over 40 years almost.

And Japan International and domestic disaster medical response developed synergistically. So if you give me three or four more days, I can explain more detail of the disaster medical system. But it's a limited time, so I will finish my presentation.

Thank you.

Thank you so much. That's really fascinating. And I encourage all of you to catch the panelists on their way out because they have a lot more to tell you, and we only have very little time here, unfortunately.

But with that, I'm happy to move on to the next segment. We have two very distinguished experts on this topic. We're lucky to have them here. So I'll invite them on to the stage

one by one. First up, we have Virginia Murray, who is head of the Global Disaster Risk Reduction at the UK Health Security Agency.

So warm welcome, please. And next, we have Ms. JJ Cabrera, who is deputy minister of the National Household Targeting System at the government of the Philippines. So, we have a lot of experience here on the stage, and I'm not counting myself.

And we would really like to hear from both of you about your experience. So you've heard the presentations on how health systems are crucial for disaster response and preparedness. And we would like to hear from your experience.

Maybe first, Virginia, you've worked not just in the UK, but you've also been very active with work globally with the WHO and the UN system. So perhaps you could tell us a little bit about your experience, how can disaster risk management strategies be integrated into health sectors, and what are perhaps the challenges and the priorities in doing so.

Over to you.

Thank you so much for inviting me to contribute. It's a great honor. Thank you, Mercedes. Thank you, June. Thank you all. And wonderful to hear the presentations, what tremendous presentations and how important it is to hear, not only the World Bank's commitment to trying to see how we can do it better, but to hear how WHO is taking this forward, but also the incredible experience of Japan with DMAT.

To me, though, the best thing about Japan is your incredible Sendai framework. That framework is the first time we've really got the whole of society, the whole of government, to understand that disasters happen, that we need to understand the risk, we need the governance, the investment, and we need to build back better, as we heard this morning.

It is absolutely critical, so huge thanks to you for this, for the leadership of the government of Japan. But equally, what is so exciting about it, it has more science and

more health in it than any other UN landmark agreement, I am told, by our European Union colleagues.

They were really excited to see it. So it's really important that we have that, because that is the baseline for allowing us to take health into the whole systems approach that Mercedes, you were talking about.

But I really wanted to add that it's not just terrifying earthquakes, it's not just frightening floods. Think of the world's heat waves at the moment. They are truly shocking. What's happening in India, across the states, and many other parts of the world, which are heating up.

So we are really interested that we look at an all -hazards approach, which the Sendai framework calls for, because unless we prepare for all hazards, we will not be ready in the health systems, in our view.

COVID -19 was a shocking wake -up call to the world, showing what the impact of a pandemic could be. We've lived through pandemics before. Think about the 1920s pandemic. Even the 1963, the Hong Kong flu, all these other things that have happened, we just didn't seem to be able to share that health is vulnerable, and that we have to work as a whole system.

So I'm really anxious we look at this and learn from it. And Rheoma, you talked about how we could actually build our knowledge. And I think that's one of the first things we need to do. So I think we need to recognise that we've just had a meeting in Europe, where Mercedes, you were at.

Thank you so much, and Rheoma, the joint workshop for the whole of the WHO, European region, to try and pull together how we build capacity for disaster risk. And we were very lucky to host that in the UK Health Security Agency.

So we were very proud to be part of that. But also to celebrate the fact that we need research. Sorry, it's just a little textbook. But most importantly, for all of you in the room, we need you to join us, our research network.

Please know we need you to help us to deliver this. So that's one of the handouts that we have, and I know Rheoma will share it with you all. Why am I doing this more globally than locally? Because I don't think that unless we reach out to everyone, we won't share the problems that we've had.

Let me take you to a doctor in Australia. He had two mothers in his clinic. Two mothers said, oh, I had German measles, rubella. And the other one said, I did too. And only by putting the story together and learning the epidemiology did we understand that congenital rubella is a shocking disease for the fetus, not so much for the mother.

And that's why vaccinations for rubella has been so important. And we need to make sure we vaccinate to prevent the harms of these diseases. And I know in the Philippines, you do much of this already.

And your leadership here is so wonderful. Can I hand over?

Thank you, Virginia. Maybe, JJ, you're a real pioneer and leader in the Philippines working on this topic. In particular, you've risen through the ranks from being a social worker all the way to being the manager of the largest social protection system in the Philippines.

And you have seen live at the front line and at the government level how health systems are essential for delivering care. So can you maybe tell us a little bit more about your experience in the Philippines?

Thank you very much, June. Thank you very much. I'm not a social worker, but I know and have very personal experiences why health should be looked into the patterns of nature it is, such as disasters and or finding new things.

Let me share my, sorry, again, I'm not a social worker, but my personal experience is managing large -scale disasters had lead me to realize and agree on the points that had been raised by WHO and our colleague here in terms of the importance of health system in the DRRM.

My experience managing Haiyan in the past indicated that social workers and health workers are inseparable during the time of major disasters. For example, in Haiyan, during Haiyan, 11 regional areas of the Philippines had been adversely affected.

More than 10 million individuals had been affected also by the typhoon. Several deaths, several casualties that really would require intervention of health practitioners. What we did during the time is that we operationalized, we maintained an interoperable setup at the national level by having the cluster systems of the United Nations adapted, but modified in the actual context of the Philippines.

So we had there. In addition to health and nutrition, we include the concern on the mental health, psychosocial and mental health, not only for the people, but also for the workers. The workers, meaning disaster response workers, had been exposed to the areas for several days, and they don't see their families, they don't see their friends and coworkers, and they have sleepless nights.

So it's important that we process them for the psychological, psychosocial needs of these workers. Now, it is also very important to highlight the centrality of people during disasters. Majority of the areas that have been affected are in lockdown.

They cannot move around because of damage bridges, damage roads, so it's important that we localize the preparedness of our local government units on the subnational level because the requirements during major hazards would really go beyond the capacity of a local government unit or any government.

We also had experience during the lockdown. People in the area that had been locked down are forced to prepare, provide, and protect each other. So the relevance of health system cannot be discounted because of the importance that they should altogether,

social workers and the doctors, the nurses, should plan out and operationalize the classes systems that had been put in operations in the Philippines.

The context of the country and we're so lucky that the Philippine Congress had passed the National Disaster Risk Reduction and Management Act which highlighted the importance of the different sectors in managing and responding to crisis and emergencies.

I would like also to highlight here the importance of being prepared all the time. We have a study in the country that indicated that any time a major earthquake, intensity eight or nine would affect, the entire metro manila would be washed away so that we have designed and designated several quadrants, four quadrants for metro manila that in the event one quadrant is affected, the other quadrants will come in to help or if the entire four quadrants in metropolitan areas would be adversely affected,

then health systems would also be affected so we defined responsibility as to who will or what regional groupings will come in to help that particular quadrant so that any time there would be need for health emergencies for food, for emergency rescue, then the team would be ready any time.

I wish also to highlight that during Hayan, the local capacity for health workers or the health system had been really put to challenge because the hospitals cannot accommodate anymore so we have to rely on partners coming from development partnership such as Australian government and the Japanese government had set up field hospitals in the area.

While they concentrate on medical operations, our social workers had reached out to areas that are needing psychosocial, psychological support and counseling so this is how we operate during that time and we look forward to having more partnership particularly in terms of strengthening the capacity of people to respond and not wait for augmentation.

Immediate augmentation cannot be expected or cannot be relied on because areas that would be passed through would really be problematic. The bridges, the roads cannot be

constructed immediately so the best way is to prepare the people in the event of major disasters.

Thank you very much.

Thank you. Please get your questions ready and raise your hands and the team will get your microphone and meanwhile I'll ask maybe a quick follow -up question if I may and specifically so even in normal times when there's no disaster happening there's a lot of inequality in the access to health systems.

So what's your experience like during disasters especially difficult to get certain vulnerable excluded population groups access to these care services so what can we do about that?

Yeah, that's true. Even during normal times, health systems are really being challenged already. So what we did for, you know, to prepare for any disaster, I would like to stress on the importance of the data.

You know, the National Household Targeting System of the government had really helped a lot identify where the poor households are located, what are their vulnerabilities using the Household Assessment form.

So what we did to say if there would be doctors, if there would be nurses, areas of deployment are already identified in accordance with the database that are made available through the National Household Targeting System and currently through the community -based monitoring system of the Philippine government.

I think we had some questions there.

Thank you, I have two quick questions. First, right now after the COVID -19, international community discuss pandemic preparedness response and recovery a lot. How we can

integrate the discussion about disaster risk management agenda as well as the pandemic issues at a local level, for example.

And the second question is regarding the climate change. When we talk about the regional health system, in the climate change arena, discuss a lot about that issues. Again, how we can integrate that today's discussion with COP 28 or 9 or whatever the climate change discussion.

Thank you.

Thank you for your questions. Perhaps I could take you to one of the resources that Riamar showed, which is the Health Emergency and Disaster Risk Management Framework. The front of it looks like a scaffold, those white lines.

So you can hook on all the other pieces of work, including the pandemic preparedness for this overarching framework that brings the whole of society, the whole of government together, which is one of the gifts as a result of linking the international health regulations with the Sendai framework.

This is a really useful outcome. And that, I think, is something that would be very helpful to use as much as you can. You talk about climate and climate change. In our work with the UN, Office for Disaster Risk Reduction, the International Science Council, and in partnership with many, the World Meteorological Organization, the Intergovernmental Panel on Climate Change, and another major organization,

said that climate change is not a hazard, it is a driver of hazards. So this is why counting the number of events that happen helps us to understand what the impact of these climate issues are in trying to make sure that we pull these together.

One of the big things about it, though, with early warning systems, with early warning for all, which Antonio Guterres, as the UN Secretary General, has asked for, to be complete by 2027, really quite soon, then there's this huge driver that we'd understand more about early warning for all.

And I know at this conference there's a huge engagement to deliver early warning for all. But at the moment, what worries me is organizations like the World Health Organization are not at the heart of that program.

They are more related to the International Economic Communications Union, for communications, but also the response is very much directed at communities through the International Federation of the Red Cross Red Crescent.

We have a long way to go, but you asking these questions and your engagement are so important. Thank you very much.

Can I add, yeah, at the operational level, you know, we're looking into the supply side thing. If there would be areas affected because of the climate change challenges, we look into where the supply side or the supply can be located.

Where health centers or temporary health centers may be situated or may be established. And where the medicines and other health requirement items will be stored. Because we have experienced that in the past.

Storage that are placed in areas that had not been, you know, affected before because of the climate change. There had been lots of warehouses adversely flooded and later on the goods, the humanitarian goods, as well as the medical equipment are damaged.