

## Millennia2015 International seminar 2011 Séminaire international 2011 de Millennia2015

Foresight analysis of the 37 variables of Millennia2015 + Session Women and eHealth Analyse prospective des 37 variables de Millennia2015 + Session Femmes et eSanté

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## WeHealth session – Mateja de Leonni Stanonik, surgeon general of the Republic of Slovenia (Draft)

Thank Marie-Anne and Véronique for inviting me. It is a very great pleasure to be here. This, I think in eHealth telemedicine circles, is the first time I have been surrounded by some many women.

By going to this specific project, I want to respond to the comments I heard earlier about education, down to earth, culture, inappropriate implementation of telemedicine and health. I was recently recruited by my country to come and implement the national eHealth and telemedicine project in Slovenia. And guess what? We have all the technologies, all the network of professionals that we need, we have all the help from the outside but our biggest challenges to this implementation is human factors. Telemedicine is about 90 to 95% of sociology and psychology combined to 5 to 10% of technologies and medical issues. In my group, we recently hired sociologists to help us understand the culture of context where we try to implement the project and how overcome this challenges. I learnt this in my previous experiences in implementing projects in the Balkans and in the Amazons and I understood that education and really understanding the cultural context where you try to implement your project and working with the local population is essential.

I could go on and tell my exercise about implementing telemedicine in Slovenia but I want to tell you about this small project that I did 4 years ago in the Amazons because it really made me believe that advances technologies that we use in health and sciences are a path to faster gender equality. We really need to develop a speedy way to decrease this deep gap in sciences and telemedicine. I am a medical doctor and biologist, I am a beneficiary of ICT and eHealth, my patients use telemedicine applications to communicate with me, I am an ICT professional and recently a designer for eHealth and telemedicine infrastructures for our country, in Slovenia so those of you who want to point it how to continue and what we should expect in 2025 please talk to me afterwards.

I have to place the context. So Martin Strel is a professional swimmer. He swam the Mississippi, the Danube and other rivers all over the world. In 2007, he decided that the Amazon is his final river. Before the Amazon, he swam all these rivers without any medical support but he felt that Amazon was different. I was very young and literally speaking inexperienced.





I thought that because of my inexperience I could probably kill the guy but I was very lucky to have my sciences laboratory located at the University of Tennessee right next to the telemedicine laboratory. I started thinking of how I could help this person with telemedicine when he was swimming the river and after a while of researching, the American association of telemedicine helped me finding Rifat Latifi who is a Professor of Clinical Surgery at the University of Arizona, but originally from Kosovo. He basically rebuilt the healthcare system in Kosovo with the help of telemedicine and advance technologies so he knew something about how telemedicine can be implemented in rough and different type of conditions, remote conditions and he accepted to help me.

So we decided to find all the money, gather all the technologies that we need to go to support Martin Strel in the Amazon and I actually asked Slovenia to help us by supporting, sponsoring and financing this mission into the Amazon. So we were responsible of taking care of Martin Strel, the crew members of the boat but also hundreds and hundreds of locals in the Amazonian village during this two and half months of swim because the Slovenian government gave us the medical supplies. On the boat we had an emergency room and an operating room fully equipped with telemedicine equipment with a military satellite connection.

I want to talk a little bit about the fact that I was a young physician but also a young woman, the only woman members of that expedition and that over a team of 25 people. I had protection from the Brazilian Navy Seals but I also had to know how to use a weapon to protect myself. That is the kind of conditions we were going through.

So concerning the Amazon, We were in places where no western person had ever stepped or swam before. There are incredibly beautiful and diverse places. Martin Strel is the first person who actually swims the entire length of the Amazon. Dr Latifi who is Professor of Clinical Surgery at the University of Arizona, recruited people to help us and gathered all the technologies. With the help of the team we designed and settled connection between Tucson, where he was and the team we had in the Amazon. I was the physician and coordinator. But it was not just the two of us. After a medical expertise, we designed a team of 37 universities and hospital across the world to help us so I could call a medical specialist to help me when I was encountering problems. So we consider this unique opportunity for human and technology to work together in some of the most remote area. We learnt a lot from this experience in all aspects.

We had different specialists on board that were helping us. Latifi was the medical director and I was the team physician. I treated the swimmer, team member and locals. Something we took not for granted is that we were really culturally sensitive and we did try to look for charmers, for local healers to at least communicate with, to make some connection because I thought that origin of information is very hard to get everywhere. And this was actually mended for our swimmer that we incorporate those elements of the cultural context.

Our main goal was not just to treat the swimmer, the team and the locals but to introduce and promote telemedicine to people and authorities along the river so we could develop projects in telemedicine because as you guys probably know is that there is no medical service or whatsoever along the river.

We had this system that looks for the satellite signals all the time so even if you are moving along, you have internet connections all the time. It was something amazing to







have. Unfortunately, most of our medical technologies used or telemedicine applications technologies used failed and we had to use Skype to communicate. We were frequently going through the jungle to see the locals; we had a connection there thanks to the satellite. I had two engineers with me on board but I had to work on myself with connectivity issues.

Martin was a pretty healthy guy but I had to monitor its heart condition. Dr Latifi did virtual medical round with me so we could discuss what was going on if I needed any help. Martin ended up being in good conditions but Dr Latifi wanted to do a medical conference in Brazil so we connected from there in the boat and he examined Martin. There were some specialists there that confirmed diagnosis.

Equipment was always a challenge; satellite rescued us when everything failed. I am not a surgeon, I am an interventionalist but I ended up doing surgery on board and in the jungle. Dr Latifi guided me from Tucson. Martin swam from 10 to 16 hours every day. We examined every time before swimming and when getting out the water. At the end he was in very bad conditions hallucinating but he did it.

I visited every clinic, every hospital, everything that has to do with health along the entire river to talk about telemedicine, to promote it. I met everybody I thought I could influence talking about what telemedicine could do in the area.

We wrote several scientific papers and publish them on the technology and the medical aspects, we demonstrated that the humanization of technology and a strong international collaboration is possible and we showed that through this project.

Transcription: Coumba Sylla

