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ZOOM TRANSCRIPTION

Interviewer: Dr. Adela Grando

Interviewees: Drs. Josephine Nabukenya and Raniah Aldekhyyel

19:03:17 Welcome to another edition of for your informatics, a podcast where we explore the limitless world of medical informatics created and lead by the women in AMIA.

19:03:27 We offer insights into career paths leadership and education.

19:03:32 Thanks for joining us, as we highlight lives to inspire greatness inclusion and diversity in the field of informatics.

19:03:42 Welcome to for your informatics podcast. My name is Dr Adela Grando, and I'll be your host today. This podcast is sponsored by the 2020 women in AMIA leadership seed grants.

19:03:56 Thank you so much to our sponsor. And thank you for joining us. Today, I have the pleasure of introducing and interviewing very special guests: two women informaticists from Uganda and Saudi Arabia.

Let us start with Dr. Josephine Nabukenya. Dr. Nabukenya is an Associate Professor of Informatics and the former Dean of the School of Computing and Informatics Technology at Makerere University in Uganda. She founded and chairs the Health Informatics Research Group at the Makerere University to solve fundamental health challenges in Uganda, the African Region and other low- and middle- income countries. Dr. Nabukenya was core to the development of the Uganda National eHealth Policy and Strategy and the Model IT Platform Document to Facilitate Individual Interactions with the Health System in the Africa Region. Dr. Nabukenya spearheaded the development of Health Informatics and Digital Health Graduate programs within Uganda, East Africa and the African Region under AFRO-WHO.

We also have here with us today, Dr. Raniah Aldekhyyel. Dr. Aldekhyyel is an Assistant Professor in health informatics at the College of Medicine, King Saud University in Saudi Arabia. She published this year a JAMIA paper on "What it means to be a woman in the field of biomedical informatics in the Kingdom of Saudi Arabia". She is a member of several committees to review health informatics standards and develop national level training programs in Saudi Arabia. Dr. Raniah Aldekhyyel completed her PhD training in the University of Minnesota. In 2018, she served as the AMIA student Member-at-Large and as a Student Editor for JAMIA. She has received several awards, including the AMIA Martin Epstein Award in 2016 and the HIMSS Minnesota 2018 Scholarship Award.

Dr. Nabukenya and Dr. Aldekhyyel welcome to the FYI podcast!. Today we will be discussing your career paths and your views on global informatics.

19:06:17 Could you give us a synopsis of how you got to where you are now, Dr. Nabukenya?

19:06:24 Okay, thank you, Maria, thank you for the opportunity for listening to me on AMIA podcasts. My journey starts very humble, where my first degree was a Bachelor's in Information Science.

19:06:45 In 1999, when I graduated, and then later on in 1999, I had my master in Information Science. All this was done at Makere university located in Kampala, Uganda, and it's the highest institution.

19:07:05 Thereafter, I was very successful with my master of information science that I got myself a job at the same institution Makerere University.

19:07:16 I studied by being an assistant lecturer. That was in 2000-2001 academic year. After that I was lucky to be part of those who won a scholarship to go and study in Europe, specifically the Netherlands.

19:07:40 It was a bilateral collaboration between the two governments, the Dutch government but also the Republic of Uganda.

19:07:48 And we were 10 people who got scholarships, of which there were four women and six gentlemen. So, I was among the four people at that time in 2004 is when the scholarship opportunity came in, specifically in my college, which that time we

19:08:11 were still a School of Computing and Informatics technology. We have not yet become a college, a fully-fledged college. So in 2004, at that time I went to the Netherlands.

19:08:25 The school had only one professor in the informatics school and his background was actually mathematics. So him, together with a group of two of us. He was the school dean and I was the research coordinator at that time in the school.

19:08:39 I supported him and we wrote, or responded to a call, to NOFIG. NOFIG is the funding program in the Dutch government.

19:08:52 And we I was lucky that I won myself a scholarship to go and study so I enrolled on my PhD in the Netherlands in 2009, in the School of Computing and Information Sciences at the Radboud University, Nijmegen in the Netherlands.

19:09:10 So my journey as a doctorate started in 2004 to be precise first of November.

19:09:17 And I finished on 30th of October 2008. Four years later, because the program was restricted to four years. But while pursuing the doctorate, I actually developed a family, because I also got married in the year that followed in 2005, and later on I also

19:09:39 had two babies. So the Dutch felt, my supervisor and the entire administration felt I couldn't pursue my PhD, with family, and these we are really young kids. But I told them no.

19:09:57 I think I can do this and I must do it, because I have a goal, and a goal to achieve within a certain period of time, I must go back home. Like I told you we had only one professor.

19:10:09 So I had to breastfeed or raise my family at the same time I was pursuing my career. The Dutch were so impressed they gave me an award, they gave my daughters an award at the time I was defending my PhD.

19:10:24 There were so impressed by the persistence, the resilience to be able to pass your doctorate at the same time raising the family. So when I came back, I immediately got the headship.

19:10:39 I became the head of department for Informatics technology department, and one year later, that was in 2009. In 2013, I became the acting Dean, I replaced the dean.

19:10:51 And I served in this position for six years until 2015 February, and between 2015 to 2017, I worked so hard, and in 2017 I became associate professor.

19:11:06 And currently, this year I'm waiting for the external reviewers' report to become a full professor in informatics, that's my journey to date.

And what about you Dr. Aldekhyyel?

19:11:20 how you got to where you are now? Sure. So that's a very interesting story to be very frank, I graduated from the applied Medical Sciences program.

19:11:29 And during my first job and the quality department of a large hospital in Saudi Arabia, specifically to capital.

19:11:37 We had like a training program for students within the health informatics they were the first students from the masters of health informatics, and the university King Saudi University for Health Sciences.

19:11:50 And so they visited for training and I was talking with them. And the moment that they saw my work because I was working on automation and clinical processes and all that stuff.

19:12:00 And they were like, Wait, you're doing a lot of the informatics work that we're learning, are you aware of a program that's called health informatics, a master of health informatics and I was like no I don't know about that program All I know is

19:12:16 they were programs offered outside of Saudi Arabia. And so I think being introduced to that program through the eyes of students that we're currently at the time of the program gave me the opportunity to be the second group to graduate

19:12:26 from the program.

19:12:28 And I think that's where I just felt like the right thing to do, which is whatever I worked on and the hospital and being educated and trained to do it properly.

19:12:39 It just fits very well. And then of course after getting my master's degree I moved on recruited at the university that I'm currently at. And then move to the US to complete my PhD studies in informatics at the University of Minnesota.

19:12:57 And then, about two years ago, I would say end of 2019 and I mean with the COVID happening we just don't keep track of the years but end of 2019 I moved back to Saudi Arabia and currently I'm an assistant professor in the College

19:13:18 of Medicine at King Saudi diversity.

19:13:14 So yeah, it's been an amazing career for me.

19:13:19 That's a very nice summary of your careers, and what you just said, leads me to a new question.

19:13:25 What did informatics, and STEM education looked like in your countries when you started. And how has it evolved over time, Dr.

Nabukenya, would you like to start with this question?

19:13:36 We were very few on ground in informatics and STEM subjects, especially the females. Males were quite a number. If I may use statistics, males were 18 to 20%, at the time I started my career path, but by now, we have moved to at least with

19:13:58 Makerere University to use it as a case study in this conversation. We have moved to 42 and 58%, 58 being the male and 42 being the females and females, especially we have been encouraged by the government policy of gender violence, because STEM was formed

19:14:25 to be quite a no go area, especially for the females, but the government has done a big deal, including the agenda policy at Makerere University, so I can say confidently that informatics and stem

19:14:39 are well embraced as compared to

19:14:42 Several years ago.

19:14:44 What about you, Dr. Aldekhyyel? Well, for me, when I first entered the undergraduate programs STEM for women, was already available, except for the engineering part and so we were very strong in and medicine and technology, and mathematics, it was

19:15:02 lagging with engineering. Informatics at the time when I'm looking back, as an undergraduate student we didn't have informatics program whether it would be undergraduate programs, or even graduate programs.

19:15:14 And so gradually this changed. When we're looking back 10 years ago when I started my master's degree in 2008 and graduated from that program. It just, it just, it just went so fast that a lot of programs, then we're building up in several universities

19:15:32 across the country so they weren't only centralized in the capital, which usually that was the case, the strongest programs were in the capital of the country but now they're, they're more in other cities across the country and we're looking at more than

19:15:46 about 10 programs which are undergraduate programs in informatics, we have a couple of master's degree programs around the country, have a lot of progress now being developed.

19:15:55 And that is supported mainly by the country's 2030 vision that has really shifted how programs are being developed that has shifted how strategies are being planned and how we're moving towards informatics and stem in general.

19:16:13 So there has been a significant growth in the opportunities available to learn train and get jobs in informatics that is very encouraging. And what about women engagement and leadership in informatics, do you see a similar evolution in your countries?

19:16:29 Dr. Nabukenya?

19:16:31 Yes.

19:16:33 The good thing like I said the Government of the Republic of Uganda is doing extremely well to encourage women to take up leadership positions to the extent that once a particular institution surpasses the level that is required by government, they

19:16:54 give a certificate of gender balance in terms of women taking leadership positions. Personally, I am the Deputy Vice Chancellor in charge of Finance and Administration at Makerere University which is the highest institution of learning and the National Public

19:17:08 University of Uganda, the prestigious university on the region but also the world at large. And apart from me. We have several women either as dean, especially in STEM.

19:17:24 Currently, the school/College of Engineering and Technology is deputized by a woman. The school/College of Computing and Informatics is deputized by a woman.

19:17:38 The College of Health Sciences is led by a woman. And then gender

19:17:45 The gender section is led by a woman, although you may say that could be obvious but anyway. She out competed a set of 10 applicants she was the only female and she got it.

19:17:59 And then most of our ministries for Minister of Education Minister of Energy, Minister of Transport all are led by women.

19:18:09 So women are actually in big positions there in leadership, and this is spearheaded by our current president too I really acknowledge and applaud for that kind of attitude towards making sure that women are part of a big portion percentage in taking

19:18:30 up leadership positions, both in government, but also tertiary institutions and everywhere else private, and non government organizations.

19:18:41 What are your thoughts about this Dr. Aldekhyyel?

19:18:46 Well, again, yes, I have to agree with that, again, I need to refer to the country's 2030 vision that has not only helped develop a programs in general educational programs and informatics, but also has really laid the ground for women and specifically

19:19:02 when we're talking about the realization programs and health care, where a lot of institutions and organizations have been built specifically towards the realization programs that were developed by this division.

19:19:16 We're looking at more funding opportunities because a lot of research and data are being developed in that area, not only training, education and a lot of money is put on research efforts to try to work with the health data that are being

19:19:31 developed the automation that's going on building systems to support, connecting different cities and countries what we call the e-health or mobile health technologies and so I think that the government, really creates opportunities not only for male people

19:19:47 in the area, but also female. And I think a lot of programs that are also built for training, and leadership programs and making it available for women as well.

19:20:01 So again, very positive, you're noticing higher engagement and more leadership opportunities for women in informatics That's excellent. So what comes next, what is the future vision of informatics in your country, Dr. Nabukenya?

19:20:18 We must make sure that we create a platform as a model to nurture, to maintain to father grow and reinforce the informatics we've already started on. Like I said, the women in informatics the number is growing quite huge, at least in my school.

19:20:43 School of Computing and Informatics technology, we have a 51 to 49 percentage of women informatics students. PhD, researchers in terms of people my colleagues who are finished PhDs, the percentage is 50/50.

19:21:03 So, using ourselves as an example, we have provided a platform where we nurture

19:21:12 our colleagues who are just enrolled into their doctorates, but also the students at graduate level, those are students who come from outside of Makerere but come to do informatics as masters, and also those who enroll at bachelor level, we see

19:21:28 that we provide a conducive working environment. And we are also continuing to support informatics just beyond our country, because our country has developed so fast, we informatics, and get the region is still behind.

19:21:44 So we are currently supporting the East African region, Rwanda, Kenya and Tanzania, to be precise, but also the entire continent, they are always, we are always called upon one organization, or is comes closer support to support a development of

19:22:02 informatics health informatics programs. Do you want to add anything Dr. Aldekhyyel?

19:22:08 Oh wow the future I think the sky is our limit.

19:22:12 When we were looking at what is currently available and how we're going to see things evolve in the future I think the best way to know how things are going is when you're looking at the past three four, even five years and I think if we're working on the

19:22:26 same case, it's just the future I mean, supported by divisions supported by strategies supported by program supported by training,

education, I think there's a lot of a lot of things to be working towards and we need to support the, the people that want

19:22:46 this area in this field to be mentors for them as well i think that's that's the future.

19:22:54 Dr. Nabukenya and Dr. Aldekhyyel, thank you so much for your time and for sharing your stories with us. It's been wonderful to hear about your global perspectives on informatics, and also to learn about your career path, you are incredible role models for so

19:23:07 many at AMIA and around the world, especially for me.

19:23:13 And before we let you go, do you have any last words or advice for those who are considering pursuing a career in informatics?

We must use informatics, in order to proceed with all our practices, whether we are banking, whether we are doing

19:23:44 modern agriculture, whether we are doing electronic health, whatever we are doing transaction business, name it, everything is e-savvies, and e-savvies can only be delivered through informatics. So, my call to everybody is, please just join the

19:23:48 world of informatics, in order to be able to achieve any goals that anyone.

19:24:05 I would just say you have to love it. I mean, informatics changes a lot has so many different aspects to it when you're dealing with people you're dealing with technology or dealing with different systems.

19:24:09 There's the evolution, and now we are looking at COVID everything is automated right now and we have to shift from person in person to online, and then how that even changed within healthcare and so I think you have to love what we're doing.

19:24:24 I can't stress that enough and every day is a different day for, for us as informaticians in the field.

Thank you so much Dr. Nabukenya and Dr. Aldekhyyel, we appreciate all you shared with us! This is Dr. Adela Grando, concluding the For Your Informatics podcast highlighting views of informatics across the globe. Don't miss our next podcast. Bye, bye!

19:24:50 Thank you for joining us for this edition of for your informatics, a podcast where we explore the limitless world of informatics.

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19:25:04 and never miss an asset.