[00:00:01] [music] It's time for meaningful insights, every researcher's delight! It's data night

[00:00:12] Kasha Ely: Hello, and thank you for joining us on another episode of Data Night. I'm Kasha Ely from the Odum Institute for Research in Social Science and joining me today is Amanda BenDor, the Partnerships and Community Manager at PATH. Hi Amanda.

[00:00:28] Amanda BenDor: Hi Kasha. Thanks for having me.

[00:00:30] Kasha Ely: Thanks for joining us. So to start this off, this is a very timely episode for us. We're gonna chat a lot about the COVID-19 pandemic, but first, would you mind telling me a little bit about yourself?

[00:00:44] Amanda BenDor: Sure, so, my name is Amanda BenDor and I currently work at a non-profit organization called PATH. I have been working in the global health space for over 15 years and I've worked in family planning, maternal and child health. I've done work to strengthen human resources for health. So that's where there are shortages of health workers and doing things like, you know, task-shifting of health workers or training health workers.

But for the past seven or eight years, I've been supporting digital health and that's really been helping governments and stakeholders to harness digital tools including open source software or mobile phones, all of that, to support their health interventions, policy and planning. And these digital tools used in a lot of the low-resource settings that I work in, they look quite different from the tools that we might use here. So some of these open source software solutions would be something like Iris, which is a health workforce information system. And that is so that governments can know how many health workers there are in a country, where they're deployed, maybe when they're gonna retire, so they can use all of that information for planning their health workforce. Another tool is a logistic management information system and that is to help with supply chain.

So organizing, you know, so pharmacies or health facilities can put in orders when they need more supplies. Those orders can go to the right place and can be at the facility or at the pharmacy when a patient needs it. And also it's to help them organize, you know, when something might be expiring on the shelf, so they know. So using digital tools to do that. I keep saying open source, and that's because a lot of countries don't have funding for licensed software and that expensive software that, that we have here. So open source allows them to get the source code for free and many of these open source tools have communities of practiced developers to help countries be able to keep those tools up to date.

But at PATH, we're tool agnostic, and that means that we don't have a specific one of these tools that we developed. We don't push governments to use any one or another. We support them to use whatever tools they want to use, whether they be open source or proprietary. So we let them drive. We just sit in the passenger seat and help them achieve their visions. And that's one of the things I respect the most about working at path.

[00:03:35] Kasha Ely: Excellent. And can you define what digital health is in terms of your work?

[00:03:41] Amanda BenDor: Sure. So, it's a pretty broad thing. There are over 8.8 billion mobile phones subscriptions in the world and that's more than the 7.8 billion people that there are. And this proliferation of mobile phones, particularly in low-resource settings and really out in rural areas, has enabled the way healthcare services are provided and the data that's captured on healthcare to be, to be done quite differently in the past 15 years. So we've just seen such a growth in the use of digital tools and a lot of that has been catapulted by, by cell phones. But digital health is much more than just cell phones. It's a lot about the systems, the health information systems, that capture data from all different parts of the health system. It's about moving from paper to digital. A lot of countries have had, you know, their health records on paper files, so moving them into those digital records has been just illuminating in terms of the types of data captured and the ability to use that data.

And then digital health goes beyond more than just the tools as well, it's a larger environmental, you know, space in terms of policy, governance, infrastructure, capacity-building, data use, all this stuff to really, as I said, be that accelerator for improving health systems. And then there's the fun sexy stuff too, like telemedicine and drones and AI so, I guess in short, the digital health field is pretty broad.

[00:05:33] Kasha Ely: Great, and we will go into more detail about the parts of that world that you are working in. But first, would you mind telling us what is PATH?

[00:05:44] Amanda BenDor: PATH is a global team of innovators that are working to accelerate health equity so all people in communities can thrive. We do things like advise and partner with institutions, investors and businesses of all sizes to solve the world's most pressing health challenges. I love PATH because we believe that health moves humanity forward. Our team at PATH does a lot of different work. We include scientists, health experts, business leaders, engineers, advocates, just experts from all kinds of specialty areas. We work in more than 70 countries and we transform bold ideas into sustainable solutions that improve health and wellbeing for all.

We have lots of different work that we do. We develop and introduce and advance vaccines, drugs, devices, diagnostics, digital tools such as Myspace and other innovative approaches to strengthen health systems. And our team, our team shapes global conversations about health and technology. So we're very engaged with the WHO and many of these other partners. We advise the Ministries of Health, we train providers, we support health workers. We do all of this to break down barriers to good health. A lot of the innovations that we do at PATH are simple. One of my favorite ones is a bio-vaccine monitor and this is an innovation that we came up with where basically it's just a dot on a vaccine and if the cold chain of that vaccine is disrupted, the dot changes color. So the health worker can get that and if they see that the vaccine, the dot has changed color on the vaccine, they know this is not good, we're not going to give this to a child. That's a simple innovation, but it's saved, you know, so many lives and one that we're really proud of at PATH. Also our team right now is doing a ton of work and the COVID-19 response. We're creating PPEs in the Pacific Northwest using 3D technology and dispersing those across the Pacific Northwest and even looking beyond, so some of those Innovations are really cool coming out of PATH.

[00:08:02] Kasha Ely: And can you tell us a little bit more about your role at PATH?

[00:08:07] Amanda BenDor: Sure. I've been there for about three years and I have a lot of different hats that I wear, it feels like. I work with lot of partners in the digital health space. So that's other NGOs, software developers of open source tools, I do a lot of work with the WHO and CDC and USAID and then, of course, do a lot of work with with Ministries of Health and our staff who are in a lot of the countries that we, that we work in. So doing a lot of this coordination and collaboration with partners is part of my role and there's a lot going on in the digital health field, it moves pretty fast. So there's always something to talk about.

[00:08:55] Kasha Ely: As far as moving health systems into the digital space, how then do you use data at PATH? What, in what ways do you use data?

[00:09:06] Amanda BenDor: That's a good question. We're always, we're very grounded in the countries that we're working in, and as I said earlier, you know, 15 years ago, 10 years ago, 5 years ago in some places, the data was all living on paper if they had it. And so now it's digital and there's a world of opportunity and you know, just so much there that can be used to help guide policy that can help guide, you know, help system delivery at health facilities and out in the community.

So we work with, you know, governments and also facilities to understand the data that they have and to improve the quality of that data and to use that data. You know, we talked about this data cycle, data use cycle, where it's very cyclical data production and data utilization drive each other. So we support, you know, a lot of aspects of that and and helping folks use their information that they have for good. We do some awesome data visualization stuff too, we have a strong partnership with Tableau at PATH. And one of the coolest things that we've done is just visualize new malaria work where we've got these maps and they are used for planning, right down like to the specific like community level, like exactly where, you know, incidents for malaria's higher, it's used for projections. It's just amazing how visuals can help you in planning response to health services. And you know, we do a lot of that strategy work as well. In Tanzania, we work with the government through a Bill and Melinda Gates-funded project called the Data Use Partnership. And this is helping the government create a digital health strategy, which includes how they use their data, and cost out recommendations of what they need to do to exercise the power of that data. So we work with the government very closely to execute that strategy.

So, you know, there's just so much going on in this space around data, bringing data science, you know, assets that you know, like Tableau, like I said, that some countries are ready to go deeper using more AI to guide service delivery and understanding how to analyze and use their own data. So it's very different at lots, in different countries and at lots of different levels, but grounding the truth in the data and using that we call it "action-led data", so that it's not just sitting there. It's actually used to inform decisions that will ultimately improve health services and save lives

[00:11:51] Kasha Ely: Interesting. We've talked a little bit about the projects that you've specifically been a part of, can we just highlight those real quick?

[00:11:59] Amanda BenDor: The main project that I work on is called Digital Square and this project, it's very unique. It came out of the West Africa Ebola outbreak where we saw a lack of coordination and collaboration in the digital health space. Over governments were just overwhelmed because all these people were coming in and they were trying to take digital applications and software and, and apply them to combat Ebola. So just, good intent but partners were tripping over each other causing chaos and disruption. So we learned from this as a global digital health community. We learned that to support governments to adopt their existing tools and, and how important it is to use what's already there. And we learned the value of coordination and partnership in the space.

So that's really, you know, a lot of what Digital Square does. It's a project that's led by PATH but it's got so many partners and I like that about it. And it also has a lot of different investors. It's not one single investor in the space. So by convening government officials and technologists and donors and other implementing partners, like other NGOs, we can achieve a common goal of connecting the world for better health.

I also work on a global health security project and this is work I do to provide digital expertise and sort of a strategic secondment to that project. And we work with country teams and global partners to better prepare, detect and respond to outbreaks. So this work includes scaling some of the most applicable and appropriate digital tools for surveillance or for laboratory systems. We also support interoperability or integration of their systems and also look to go beyond the data we support setting up emergency operations centers in countries and the protocols needed for those to be functional. We also have done quite a lot of work through our global health security program on antimicrobial resistance. So really understanding when drugs don't work and you have to collect data on that. So a lot of our global health security activities are aligned with this one health approach and that's realizing that it's more than just human health. It's also zoonotic so animal health and environmental factors that contribute to global health security.

[00:14:28] Kasha Ely: I think that is an excellent segue into our next topic, which is the ongoing COVID-19 pandemic. How has this affected your day-to-day in your job?

[00:14:43] Amanda BenDor: So before I came to PATH, I worked at IntraHealth International, which is based here in Chapel Hill, I worked there for 12 years. And when I was at IntraHealth, I did a lot of work in the West Africa Ebola response. I spent a significant amount of time in Sierra Leone and Guinea and in Liberia, and working with the Ministries of Health there to use digital tools for, you know, everything from you know, surveillance to contact tracing. So because of my experience and also my work on our global health security projects, my team at PATH, which is this, I work on this, in the Center of Digital and Data Excellence, they kind of asked me to step up and help support some of our coordination at PATH through the digital work that we're doing with partners and countries and also ensuring that strong linkage with our global health security programs. I don't know how I got this nickname "COVID Queen" at work. I don't know if that's good or not, but you know, all jokes aside, I'm working quite long days right now and really coordinating with a lot of the partners in our space talking with our country offices like our teams in India to understand, you know, what's going on? What do they need? How are tools being adapted for COVID-19, you know, surveillance tools that have already been used In countries and are used every week and every day, they have to be adapted for COVID. So, you know, supporting the adaption of those tools and the proliferation of those.

[00:16:19] Kasha Ely: How has this in any way impacted how you do your work every day?

[00:16:24] Amanda BenDor: Actually, it's been quite limited for me. I telecommute, my organization is based in Seattle, and I'm here in Chapel Hill, North Carolina. So I've had this telecommuting thing down pat for a couple of years now. I have enjoyed, you know, I guess engaging a little bit more with my colleagues because they're all trying to figure out how to work virtually. But as a telecommuter and a work-from-home expert, it's been pretty limited disruption for me.

[00:16:57] Kasha Ely: Do you have any tips or tricks, advice for people who are doing this for the first time?

[00:17:06] Amanda BenDor: Yeah, absolutely. Well, get up get shower get dressed every day. Don't wear sweatpants every day. Put on clothes — that kind of helps you get in the mindset. Definitely take breaks and get outside during the day go for a walk or at least sit by a window if you can just to connect with nature and, you know, put the computer away listen to the birds. It's spring right now, it's so beautiful. I even move around in my house sometimes to work, I don't always work in my office. I try to go work in different little areas of the house and you know, just try to, try to exercise and, you know, fit in some of that. There are all these things online that you can do now. So I think keeping that balance of, you know, taking breaks and getting some exercise in since we're all pretty sedentary at home, that's always been something that's super helpful for me.

[00:17:57] Kasha Ely: Mm. Great. Well, thank you very much. That's super helpful. I'm personally still adjusting, so I will keep those tricks in mind and we'll circle back to dealing with the new normal. But first obviously, like you said, this is a pandemic so it's fundamentally different than the Ebola outbreak a few years ago. But what are other differences that you've seen?

[00:18:25] Amanda BenDor: Well, I mean it's a zoonotic, so the origin, origin of both of them come from animals and spreading to humans. This is a respiratory disease. Ebola was mostly transmitted through improper burials. So people washing bodies and contracting Ebola that way, so the behavior change communication with Ebola versus COVID is really, really different. It was a lot easier to protect yourself from Ebola than COVID.

But you know, like, from a digital health perspective, kind of what's happening now in the COVID-19 response, particularly in low resource settings versus Ebola, we've come so far. We've learned so much because we did a lot wrong during Ebola, a lot of, with good intentions, a lot of partners were going into West Africa and introducing digital tools and wanting to pilot and test out a tool in the middle of an outbreak. There was a just a huge lack of coordination of people deploying tools, of donors investing in some of the same things and really overwhelming the governments, who welcomed the support ,welcomed the donor money coming into their country, but didn't didn't know how to coordinate it, didn't know what to do with it. So, you know, I remember in Ebola, every I think Wednesday the Ministry of Health would have this briefing in Guinea. So everyone would go and we, they would kind of share the latest numbers, they would share how they were doing a contact tracing. You know, these many suspected cases were confirmed. And it was a room of like a hundred people and it was just utter chaos, you know. And I think what we're doing now is doing better at not doing the chaos. You know, we're working with countries, we being the digital health community, are helping countries adapt existing tools. Most of these tools they have already been using, so it's not like they have to learn something new in the middle of a pandemic. We're coordinating across ourselves better, donors are coordinating better. It just feels like a lot more sharing and a lot less competition. And so just kind of seeing the differences being — I mean, gosh, we're all in this together because it's global, but it does feel very different and it feels progressive in that we've learned so much since the digital health, you know, support during the Ebola outbreak.

[00:21:07] Kasha Ely: Mhm. What are the key takeaways that you'd like people to understand about this situation?

[00:21:15] Amanda BenDor: Well, there's still a lot that we don't know about COVID-19. You know, we're still learning so much about this disease and, you know, the impacts this is going to have on pregnancy. Can you, can it come back? You know, really that research on the antibodies. So it's important to educate yourselves as we're all learning about this disease, and listen to health authorities like the CDC about how to protect yourself right now. You know, I just I guess I would want people to understand that this is all new for everybody. But there is significant commitment from health authorities to applying the best science, top epidemiologists coming in to study and understand this, it's, it's no hoax.

[00:22:12] Kasha Ely: Do you have any recommendations as far as what data sources people should be looking at?

[00:22:15] Amanda BenDor: Oh — Reddit? No, I just, no, I'm just kidding and people should be very careful about what they see on social media in terms of COVID-19. I definitely highly recommend the John Hopkins University data and their site. They have weekly bulletins, you can sign up and get a — I'm sorry, a daily bulletin — where you can sign up and get daily updates. The New York Times also has daily bulletins where they will share updates on, you know, confirmed cases, you know, what's going on in other countries, some of the bigger news, like you know, now the CDC is recommending you wear masks. I really love the podcast for the New York Times, The daily. I've been listening to it for years, but they tell some of the real stories of how this is impacting, you know, people, including health workers, Chinese Americans and some of the xenophobia, you know, around that, this is a human story.

In terms of data though, I really like some of the the modeling that's come out of IHME, which is at the University of Washington and Imperial College in the UK. They have really trusted models in my opinion and a lot of their modeling is has been quite accurate. If you want to geek out on all the data, the Johns Hopkins University, you can access that data and and download it and play around with it. The Tableau community has been downloading the data and making just really cool, amazing data visualizations, which you can access on their website, and especially in the United States, looking at stuff by county, by ZIP code, you know, there's, there's a lot — people have time on their hands to a geek out and so there is a lot. But I would just, you know, to determine whether your data is, what you're looking at is reliable or not, you know, I encourage people, don't just look at the map or the chart — read about it. Read where they're saying their data is coming from and apply some common sense. But if you're seeing it's coming from Johns Hopkins, you can rest assured it's, this is, this is pretty accurate.

[00:24:29] Kasha Ely: Mhm. Great. Thank you and we'll add some links down below on this episode page of what you just mentioned, so people can find those resources easily.

[00:24:41] Amanda BenDor: Cool.

[00:24:41] Kasha Ely: Yeah, and another question — how, obviously we've seen how this is affecting our area and our nation. How is it affecting other countries differently?

[00:24:53] Amanda BenDor: You know, it's very different in, in a lot of places. Some countries have — I'm thinking about sub-Saharan Africa and India in particular — have these national lockdowns where you can be fined for going outside. So they're, you know, they're doing this with good intent to, to really enforce that social distancing and limit contact. But the challenge with taking this approach — and this is the same for our country — this is just not a reality for the majority of the people. You take a family who lives in poverty and they have to decide staying home and hopefully, you know, not get this disease that's like a flu or definitely starve to death or put myself at risk and go out, and try to make you know, two dollars a day so that Ican buy some rice buy some fruit to feed my family. This is a very different reality in in a lot of the especially low, low income areas, and social distancing is just not a thing, you know, people live close quarters. They don't have good ventilation in their homes, you know, it's, it's really scary. And...and that's what keeps me up. Honestly, it's thinking about the impact that this is having and is going to have because I mean, it is going to get worse in a lot of places, and what can we do to give the best advice and to provide the best, you know, everyone the best chance to stay healthy and not go hungry or you know.

[00:26:41] Kasha Ely: Absolutely. I want to amend my first question because while there are a lot of areas in other countries that are experiencing these incredible hardships, there are also places and communities in our own country who are also having to put themselves at risk for similar reasons. So I just wanted to amend that. So I want to take a step back, and now that we have covered a lot of COVID-19, talk about your own experiences in the field of global public health. What drew you to this field originally?

[00:27:12] Amanda BenDor: Well, I always wanted to work in international development, I didn't know kind of what that meant. You know, this is coming out of undergrad at Meredith College at age twenty-one. I actually lived in London for a while and came back to United States and I was a journalist for a while. I had these, you know, romantic notions of writing for magazines and papers and, and becoming a journalist. And I lost my job, I think I was 24, and it was the best thing that could have happened because it was, it really kind of put me in the space of okay. What do you want to do with your life? You wanted to do international development, go do it. And so, that's when I applied for a job at IntraHealth and I was lucky enough to get a position there and I worked there for 12 years and, very inspired and remain inspired by IntraHealth's commitment to mitigating health worker shortages across the world and supporting our global health workforce.

And you know, I worked at IntraHealth, I guess it was five or six years and it's like, you know, I'm going to get my Master's. I'm going to Gillings. It was right down the road, I had been exposed to it and, you know, obviously through the work at IntraHealth and their relationships and partnerships with the Gillings School of Public Health. And so I went to get my Master's in 2009, and remained working the whole time while I was getting my MPH. And while I was at Gillings I focused on maternal and child health and family planning, and obviously, you know with a global health lens. Gillings does great domestic help work as well.

[00:28:52] Kasha Ely: How did your time at Gillings impact your career path?

[00:28:57] Amanda BenDor: It was so inspiring, you know, just to find your people and learn together. I think anyone who goes to Gillings, no matter what department you're in, you forge these relationships with your cohort and you just grow and learn together and you get these foundations in public health, you know in epidemiology and biostatistics, which are really important to have in your back pocket, but for me, it was learning so much from my colleagues, and I still do, you know, I'm still very close with a lot of my cohort from, from Gillings and, you know, so just having those tools and those relationships, learning how to talk about what you're doing. One other thing that happened when I was in grad school as I was lucky enough to secure a FLASS, which is a foreign language area studies scholarship, and I studied Swahili for a year and I loved learning Kiswahili. And you know, I go to Tanzania a lot for work and love bringing out my, now limited, you know, Swahili when I was speaking with colleagues. And that brings a kind of connection to the people that you're working with and spending time with that it is so fun and special, I think when you're when you can speak a little bit of the local language.

[00:30:26] Kasha Ely: That's awesome. Knowing what you know now about your field, what advice would you give to a current MPH students?

[00:30:32] Amanda BenDor: Don't stress about going in like one specific path. In my career, I've worked in family planning, I've worked in health workforce. Now, it's a lot of digital health. I'm learning more about gender, that's a focus for me in 2020 and, and bringing a gender lens to the digital health work that we're doing. So I think keeping yourself open because public health, global health, even digital health are very, very broad fields and everything needs that passion and energy wherever you have it. And, and I think another piece of advice, I wish someone had said this to me, was to focus more on building use of tools like those data analysis tools and Odum is a great place to go and get some support on, on using different tools like Stata or GIS tools, but that's really helpful, you know, especially since there's more and more data available, you know by the day in public health, and we need people who can make really good analysis of that data and really help people understand what's in that data to enact the appropriate decisions and response, whether it be for COVID-19 or something else.

[00:31:58] Kasha Ely: Great, and thanks for the plug there. I'm going to build off a little bit — as Amanda said, we have a huge number of resources to help students all over campus learn these tools. Gillings students are actually our biggest audience right now, our biggest section of clients. So don't let this social science in our name scare you off, because we definitely have stuff for you. All right, and I just want to ask, how are you dealing with what's going on right now?

[00:32:29] Amanda BenDor: Oh, thank you for asking that. I take it a day at a time. Every day I feel a little bit different and that's okay. I'm allowing myself a chance to feel the feels and, and with no judgments, and I think everyone should give themselves that grace right now, because this is probably the most difficult thing that we're all going to live through as communities and it's really hard. You know, at home, I'm staying home. I'm cooking more and spending a lot of time with my husband and my dogs, reading more, puzzles, you know, all of the things that that you do to pass your time. But, but also taking some time for gratitude because, you know, there is a lot that I feel like I have to be grateful for and writing that down each day and reflecting on that throughout the day helps me stay positive because I am an optimist. We are going to get through this, this is not forever. There are a lot of silver linings that are going to come from this and despite, how horrible this is, I really try to focus a little bit on the good.

[00:33:42] Kasha Ely: That's lovely. That's a fantastic reminder, and I, and I think a great way to wrap up this episode. We hope that everyone out there is able to find some bright spots in this whole situation and I want to thank Amanda — thank you very much for joining us today.

[00:34:01] Amanda BenDor: Well, thank you so much for having me, this has been really fun. And you know, I encourage everyone, if you're a budding epidemiologist and you're like this, this stuff is super cool — go learn about, you know, what's behind the data, go learn more about the science and zoonotic diseases, and, and check out PATH.org, we're doing some really cool stuff in our organization, and I'm really proud of it. So, you know read and see what's going on.

[00:34:28] Kasha Ely: Definitely. Well, thank you again Amanda and thanks to all of you listening today — until next time stay safe and well.