

WEBVTT

NOTE duration:"00:27:54.5620000" language:en-us

NOTE Confidence: 0.965231716632843

00:00:00.030 --> 00:00:01.470 Good afternoon everyone.

NOTE Confidence: 0.880080878734589

00:00:02.130 --> 00:00:10.980 And thank you. Melissa for such a wonderful introduction, so I'm just gonna start my.

NOTE Confidence: 0.849898755550385

00:00:11.730 --> 00:00:13.140 Presentation.

NOTE Confidence: 0.935303628444672

00:00:13.730 --> 00:00:34.280 Bought cervical cancer in low resource settings, so cervical cancer is one of the most common cancers among women in the world. In 2002 of about 500,000 women wear Haden. You cervical cancer cases and 265 thousand deaths due to cervical cancer in the world.

NOTE Confidence: 0.914044141769409

00:00:35.730 --> 00:00:53.410 Answer probably cancer is one of the most prominent example of disparity in the world. Because being a preventable disease. It still causes a maser Borden in developing world. So 85% of the cases are from the developing countries.

NOTE Confidence: 0.906091034412384

00:00:54.950 --> 00:01:06.630 HPV human papilloma virus is a known cause of survival cervical cancer and is attributable to more than 90% of all cervical cancer cases.

NOTE Confidence: 0.945667505264282

00:01:07.240 --> 00:01:15.860 And specifically a subtype 16 and 18 are responsible for 70% of the total cervical cancer.

NOTE Confidence: 0.900608777999878

00:01:16.930 --> 00:01:33.150 A man cervical cancer is spreading table. There are 2 distinct strategies. The primary strategies to do vaccination against HBV and the secondary strategies to do cervical cancer screening and treatment.

NOTE Confidence: 0.92595237493515

00:01:33.810 --> 00:01:58.590 So, which we've actually has been shown to be very effective in developed countries. This is data from Schottland. They started that's PV immunization national program in 2008 and then they analyze the data. Among the bot chords from 1988 to 1992, who also attended the Scottish cervical cancer screening program.

NOTE Confidence: 0.929538905620575

00:01:59.110 --> 00:02:14.930 And they found that there was almost 50% decline in cervical cancer incidence rates. Among those who were vaccinated, compared to those who weren't vaccinators all both chords that they analyzed.

NOTE Confidence: 0.925739705562592

00:02:16.990 --> 00:02:30.630 However, implementing vaccine in low resource. Elting is very challenging. And because of two distinct regions versus the cost. For example, in the US, it cost about \$360.00 to get 3 doses of vaccine.

NOTE Confidence: 0.927688360214233

00:02:31.810 --> 00:02:54.420 Gabby Gabby's is Global Alliance for vaccination and immunisation. They negotiated the price up to \$15 about like 13 point, \$4.00 per person, which is still high in terms of going nationwide in developing world. So the affordable prices really if it comes down to 1:00 to 2:00 dollars purposes.

NOTE Confidence: 0.918793439865112

00:02:54.970 --> 00:03:07.360 And there is also use social stigma related to sexual transmitted infection. So it even if the cost comes down, it would still be challenging to reach to the adolescent boys and girls in this part of the world.

NOTE Confidence: 0.903492867946625

00:03:08.020 --> 00:03:18.510 There are 3 like widely available cervical cancer screening strategies on the psychology evaluation visual test and HBV infection test.

NOTE Confidence: 0.903613388538361

00:03:19.220 --> 00:03:38.860 Psychology has been shown to be very successful in their left country so it was started in 1950s and there has been shown all like Lars decline in cervical cancer incidence as well as mortality and all of these is attributable to the pap smear test.

NOTE Confidence: 0.906759679317474

00:03:39.620 --> 00:03:55.710 Yeah, I can see that the Finland is the green board line and the blackboard is the US where you can see the? Who's decline from 1957 to 1997 and it is majorly attributable to the pap smear test.

NOTE Confidence: 0.872034549713135

00:03:56.730 --> 00:04:01.040 However, the survive the psychology program requires.

NOTE Confidence: 0.927195250988007

00:04:01.570 --> 00:04:14.850 Lab infrastructure trained specialist quality control system of communication with the women and multiple visits. All of these are not possible in the largest or setting so it's been.

NOTE Confidence: 0.918698251247406

00:04:15.570 --> 00:04:17.610 Not very appropriate in that setting.

NOTE Confidence: 0.899433195590973

00:04:17.680 --> 00:04:47.730 Then comes V, Ian HPV testing so this is one of the largest studies that was conducted in low resource setting from India. It's a randomized cluster, randomized control trials with 130. One thousand women and they randomly assigned women into 4 groups. HPV testing cytologic testing VI. A visual inspection with acetic acid and Control Group. I'm just going to present the main results.

NOTE Confidence: 0.941756963729858

00:04:48.480 --> 00:04:51.770 What they found after 8 years of follow-up was?

NOTE Confidence: 0.896887421607971

00:04:52.480 --> 00:04:55.580 It's BV testing was significant in reducing.

NOTE Confidence: 0.897615551948547

00:04:56.140 --> 00:05:07.710 Cervical cancer in screening as cervical cancer like incidents advanced dates of cervical cancer incidence and mortality by almost 50%.

NOTE Confidence: 0.855180978775024

00:05:08.350 --> 00:05:18.610 However, in that setting cytologic test and at an VI a test was not significantly affective.

NOTE Confidence: 0.932371735572815

00:05:19.760 --> 00:05:30.920 Another study from South Africa, which is also considered one of the very prominent studies in this area is they randomly assigned women.

NOTE Confidence: 0.875227749347687

00:05:31.580 --> 00:05:45.860 Do HPV treatin visual infection entry and control group, so everybody got SP with his thing, and VIA testing, but they are randomly assigned the treatment based off whether it was at speedy positive or VI positive.

NOTE Confidence: 0.879483044147491

00:05:46.570 --> 00:06:02.510 So they published 2 papers one was at 6 months and then the publish the fellowship followup paper at 36 months. This is the results from 36 month follow up and they found that boat.

NOTE Confidence: 0.83245176076889

00:06:03.700 --> 00:06:15.230 Methods VA and HPV was effective in reducing the prevalence of CI and 2nd grade and see. I integrate the pre cancer.

NOTE Confidence: 0.867294788360596

00:06:15.730 --> 00:06:23.320 And HBV and treat strategy was, however more effective than VI enter. It is sad is in that setting.

NOTE Confidence: 0.889777779579163

00:06:23.990 --> 00:06:48.150 So it's PVNVI also have their own limitations like SBB is still very expensive and it's not readily available in low resource settings and it has to do with specificity so there is overtreatment. Similarly, with VI that cure easy of the screening test really depends on who is testing are there the specificity is low.

NOTE Confidence: 0.897806167602539

00:06:48.790 --> 00:07:01.910 There is no permanent record to review and then cross validates the screening results. It also requires spaces equipments and supplies and pelvic examination, which existed mine are also setting.

NOTE Confidence: 0.892627120018005

00:07:02.480 --> 00:07:22.170 So it is difficult to say like which taste to use like how to save women from cervical cancer in low resource setting WH who came up with this algorithm so they gave the skyline to decide which taste test to use based on what resources at every level, so if.

NOTE Confidence: 0.8990079164505

00:07:22.770 --> 00:07:35.530 If there is enough resources and you can assure the quality assure quality control, then go for psychology an or HPV test with called post copy.

NOTE Confidence: 0.917075932025909

00:07:36.230 --> 00:07:45.510 If there is no guarantee of quality control, then go for SPV testing followed by VIA testing and cryotherapy.

NOTE Confidence: 0.870540797710419

00:07:46.230 --> 00:07:49.880 If there is no is resources just do HPV.

NOTE Confidence: 0.842415273189545

00:07:50.630 --> 00:08:15.020 Testing and even if there is an there is no resources for even adds PV testing then just do VIA testing so this is like a broad guideline provided by WHO an many loads of setting countries are following the skyline is nipple is also following this. Kayla nanad opting VI, Anne very alone and Cry Therapy to reach population are nationwide.

NOTE Confidence: 0.909673035144806

00:08:16.380 --> 00:08:44.910 So, coming back to Nepal just to give you a little bit of background level is a tiny country in SE Asia. It's between India and China compared to us. It is 67 times smaller it has 11 times fewer people are GDP is only 4.3% of the us. GDP an life expectancy is about 71 years, which is 9 years and less than the US population.

NOTE Confidence: 0.902427911758423

00:08:49.920 --> 00:08:59.410 So. Sorry. This is this is intended I was, I wanted to show you a video before I move forward.

NOTE Confidence: 0.661898732185364

00:09:01.880 --> 00:09:02.490 OK.

NOTE Confidence: 0.895002126693726

00:09:03.310 --> 00:09:09.080 So somehow, the height didn't work, so another came up excuse me.

NOTE Confidence: 0.852618634700775

00:09:10.490 --> 00:09:22.280 So, in Nepal cervical cancer pro program in the powder is almost it is almost nonexistent. There is no any problem for HIV HPV email azatian.

NOTE Confidence: 0.909875869750977

00:09:23.170 --> 00:09:47.900 There is national cervical cancer screening guidelines uh that was endorsed in 2010 that aims to target about 50% of women using VI in cryotherapy. But there is no any systematic organized screening program so the the only about 3% of women are E and that's also opportunistic.

NOTE Confidence: 0.872362494468689

00:09:48.590 --> 00:10:06.610 Uh you know screening and the population based cancer registry started only in 82,000 and 18. So there is no way to say like what even what is the real burden of cancer. But we from like others. Indirect sources we can say that it's the burden is really high.

NOTE Confidence: 0.903146684169769

00:10:07.120 --> 00:10:29.110 So we started this cancer screening program in rural iPod in through the government University School of Medical Sciences. They have cancer prevention program. And this too. I'll show you a video just so that you are. You get a context of where this information is coming from and how people are working there.

NOTE Confidence: 0.930225908756256

00:10:34.490 --> 00:10:46.640 Nipple the land of Mount Everest with diverse intensity. Religion culture and tradition. Yet people living in peace and Harmony, a country of unity in diversity.

NOTE Confidence: 0.888080716133118

00:10:48.290 --> 00:11:20.520 80% of the country's population lives in the rural areas and Tamales. One of them do. The place is just 75 kilometers far from the capital, Kathmandu. It is one of the remotest areas of the country. In this male dominated Patriarchal Society of 30,000,000 people, the lives of woman is not same all over the country.

NOTE Confidence: 0.916435480117798

00:11:21.090 --> 00:11:51.920 Life is totally different in the way the city. Women are leaving and how the women of the newly areas are struggling for their everyday's leaving here. The women are the one early to rise and lead to eat and sleep. There are the less privileged. People in every aspect of living. There are socio economically and culturally predisposed to various Women's Health issues, including cervical cancer and its risks factors.

NOTE Confidence: 0.924602925777435

00:11:52.690 --> 00:12:23.240 Ali marriage, giving birth to multiple children until they give birth to a son, Poly Gamy or hygiene. Cigarette smoking and sexually transmitted infections seems like all these ill health has been ignored by this woman herself. But the truth is totally different because. They are completely unaware of these D Jesus and the risks factors that they are leaving with every day, the nearest Health Center.

NOTE Confidence: 0.885186195373535

00:12:23.270 --> 00:12:53.660 Is an hours distance and the merely 6:00 or goes there for health care service unless it is 2 disabling them most of them die. Without seeing a doctor in their whole life span or some of them land up in the hospital at the advanced age of disease. So it is fast reach them until they can resource and this is what I have often heard Doctor Ram.

NOTE Confidence: 0.900535404682159

00:12:54.070 --> 00:13:25.380 Near of technical hospitals since I met him 12 years back. I saw him doing the same his stab lish. The Buledi Outlet Center are subsidiary of clinical hospital, where round the clock services available and is offered through resident medical doctor, a paramedic and eggs ilary midwife. We did a small study among the women living in this village to find out how many of these women knew about cervical cancer.

NOTE Confidence: 0.911622881889343

00:13:26.070 --> 00:13:48.030 How many are prone to develop it surprisingly the finding was there is lack of knowledge on their own reproductive organs an on cervical cancer. Among these women and none of them have ever heard of the term Baptist and most of them have never undergone gynecological checkup.

NOTE Confidence: 0.896113514900208

00:13:48.890 --> 00:14:04.410 Are you after that baseline assessment in collaboration with auntie and you? The cervical cancer prevention program? Was started in timil reason does enhancing the globalization program of NTNU.

NOTE Confidence: 0.887337386608124

00:14:05.070 --> 00:14:35.460 Management of cervical cancer screening program in each VDC begins with meeting with VDC healthforce in chars female coming to help volunteers teachers and had Masters to decide on how where and when to conduct the awareness and screening program in their community and accordingly. Verbal invitations are sent through them to rest of the women's in the village translate item. They dancing and an email people remain.

NOTE Confidence: 0.745088696479797

00:14:35.870 --> 00:15:07.080 Are you looking to anything anything in training while any color but also in each VDC multiple educational program are held?

NOTE Confidence: 0.926105678081512

00:15:07.870 --> 00:15:18.190 The screening our screening sides are 3 to 4 hours drive from Dhulikhel hospital. Ann further have to work for half an hour to an hour.

NOTE Confidence: 0.834677398204803

00:15:21.860 --> 00:15:43.570 I was the screening sites chosen by the community can be sub. Health post school buildings or the corporative houses. Our first job is to set up a mobile clinic over there.

NOTE Confidence: 0.56607186794281

00:15:44.260 --> 00:15:45.650 Sorry.

NOTE Confidence: 0.733492136001587

00:15:55.260 --> 00:16:06.190 Talk about somebody so this afternoon.

NOTE Confidence: 0.547288537025452

00:16:06.860 --> 00:16:11.130 Be lucky block alone way bitch.

NOTE Confidence: 0.811151146888733

00:16:11.780 --> 00:16:41.700 For those who are hesitated to take part in examination. Our Father Council. Once again in a group on the same day, the samples are taken to Julie kill hospitals molecular and Microbiological Laboratory's.

NOTE Confidence: 0.701845824718475

00:16:44.280 --> 00:17:15.490 Oh my God, I know they take my mathematical some Magnum convertibles on line a penny training that had any particle. Quick answer comparing am Lebanese singer Cortina millenia. Sorry Gardenia, Sarah Gardner actually done an esper. TSR Igor Nova October. These women they are not coming to the clinic and they don't have access to the hospital.

NOTE Confidence: 0.856410682201386

00:17:22.670 --> 00:17:38.150 Sitting in the clinic and solving on one on one basis. It doesn't work for Nippon. Once we finish the screening program in one V DC the same process begins for the next.

NOTE Confidence: 0.913457274436951

00:17:41.260 --> 00:17:50.370 So yeah, so this is how things work over there an 80% of people in Nepal, leaving these kinds of rural areas.

NOTE Confidence: 0.909187853336334

00:17:51.040 --> 00:18:14.540 So there is very limited access to health care and even to provide to even just to have a contact with health worker ease of big thing for for a woman who is living in the held like in these kinds of ruler areas and this is one of the accessible areas. So there are areas where you would we have to walk like.

NOTE Confidence: 0.893579304218292

00:18:15.070 --> 00:18:27.290 For 5 days just to like reach to that area because there is no road and Nepalese 2, thought of Nepalese on Hills and mountains, so it is challenging.

NOTE Confidence: 0.101270079612732

00:18:29.330 --> 00:18:30.850 On.

NOTE Confidence: 0.887264549732208

00:18:35.980 --> 00:19:05.990 So we started with with a feasibility to see whether or not. It is feasible to conduct a cervical cancer screening in there at community because if we call the women into the health Health Center, then it is very unlikely for them to come so on, and a lot of other health services in Nepal. Like immunization family planning a safe motherhood are also delivered at through the outreach clinics, something like this so we started with a small.

NOTE Confidence: 0.911740601062775

00:19:06.780 --> 00:19:25.270 Feasibility study with 122 women and then we provided them. Some Health, Education, about 1:00 and half hours of discussion on what is cervical cancer like? How and how to seek their cervical cancer screening services and how to?

NOTE Confidence: 0.911405265331268

00:19:25.980 --> 00:19:42.410 I can follow up with the test is positive and a mean uhm message versavel cancer is preventable and then we asked him to come for this cleaning after 15 days and then we ask them to give these messages to their peers as well.

NOTE Confidence: 0.916207373142242

00:19:43.280 --> 00:20:03.330 So these are the characteristics of the women. Uh most of them were in their early reproductive age group majority were illiterate 62%. They have their own income. It is because we read them in their Micro Finance Group, which is the specific groups that are formed in the villages in Nepal.

NOTE Confidence: 0.923987209796906

00:20:03.640 --> 00:20:09.640 And most of them have even more than 60% of them were married before the age of 17.

NOTE Confidence: 0.89112389087677

00:20:09.680 --> 00:20:31.900 Or, who received the education and 222 were there appears the test positive were 13D were brought to the hospital for called Corpus Copy and we found one cancer was treated at the hospital cervical cancer before the health education class and none have hard about HPV or pap smear test.

NOTE Confidence: 0.907976686954498

00:20:32.990 --> 00:21:04.120 So you also saw that in the video that we did education session with this women, an after this session. We are so before and after the session. We ask them whether or not. They are willing to undergo a test for cervical cancer prevention. If they are if it is offered free of cost before the education only 16%, said that they are willing after the education. All of them, said that they are willing to undergo the test so on the test they?

NOTE Confidence: 0.908610343933105

00:21:04.590 --> 00:21:28.700 Kim all of them who received health education came in and then they brought their peers. So we were able to test 344 women, 122 were those who were who received the education and 222 were there appears the test positive were 13D were brought to the hospital for called Corpus Copy and we found one cancer was treated at the hospital.

NOTE Confidence: 0.89620566368103

00:21:29.390 --> 00:21:55.290 Another study that we did was to look at the prevalence of HPV infection among rural women in a pool and then this was we also had the same approach versus we went to the villages and then conducted a small group meetings on SD eyes and cervical cancer and then then I ask them to come for screening the participation rate was 56%.

NOTE Confidence: 0.908810198307037

00:21:57.470 --> 00:22:22.700 Uh the characteristics of the women were similar. They were mainly in the reproductive age group like early age group. Most of them were elite rate if 84% on more than 50% had the marriage before the age of 19 and they have with majority of them had 3 or more children and when is 4% were smokers?

NOTE Confidence: 0.0763014480471611

00:22:23.470 --> 00:22:24.110 Um.

NOTE Confidence: 0.847825646400452

00:22:24.770 --> 00:22:55.400 The overall HPV prevalence was 14.4% in this population. The high risk was 7.9 and the Low is like 6.5% and the 5 most common. HPV types of SBVSPV, India. Paul was at our topmost was HPV 18 and then 5159. Thirty one in 16. And we tell we thought that it was important to profile. The I like profile the prevalence of HPV.

NOTE Confidence: 0.881123006343842

00:22:55.970 --> 00:23:02.630 Cause it might help was to uh when it hard time comes to decide on. What kind of vaccine that we want to choose.

NOTE Confidence: 0.931146562099457

00:23:03.240 --> 00:23:06.050 But there is a long way to reach there.

NOTE Confidence: 0.899927735328674

00:23:06.840 --> 00:23:38.830 Then we also did a feasibility of a visual inspection with asset IC acid. Same approach so the VIA was actually not done at the outreach clinic. But we trained the nurses at the outlet centers. So we invited 20 nurses from the centers that would already working in the health post. And health centers in the rural areas and the women went back and then they provided education to the the nurses went back and they provided education to the women in their villages.

NOTE Confidence: 0.875628173351288

00:23:38.950 --> 00:23:49.770 And then they invite them for the VIA testing in a predetermined area. This is we I only have a preliminary findings to present here, but

NOTE Confidence: 0.871330738067627

00:23:50.550 --> 00:23:53.490 9% our VI positive.

NOTE Confidence: 0.89994740486145

00:23:54.150 --> 00:24:05.680 And you can see that by the place of screening the positive percent varies a lot and our.

NOTE Confidence: 0.904663026332855

00:24:06.350 --> 00:24:09.480 Hypothesis is that big it is because of?

NOTE Confidence: 0.917759597301483

00:24:10.020 --> 00:24:39.800 Different levels of skills of women who are performing the VI. A tease because it really depends a lot on who is doing it. And it is very difficult to cross validate because there is no like no recorded. We just like see. And then you decide and that's done and then we asked the all of the

positive women to come to the hospital for further checkup and not surprisingly, only 30% ended up in the hospital.

NOTE Confidence: 0.924206972122192

00:24:40.420 --> 00:25:03.470 So our experience so far is that it's it's very difficult first it is very difficult to do is that read the women 2nd? It's even more difficult to bring it to the Health Center and thought like even much more difficult to provide them. The treatment to those who are who are most in need.

NOTE Confidence: 0.254702270030975

00:25:04.020 --> 00:25:06.490 So.

NOTE Confidence: 0.916696488857269

00:25:07.290 --> 00:25:27.870 Right now, the government of Nepal has just adopted an AA2 package of essential communicable diseases intervention for primary health care so the long-term plan of government of nipple is to provide cervical cancer screening to all over the napal through its network of health centers in all of the villages.

NOTE Confidence: 0.871308505535126

00:25:28.560 --> 00:25:35.300 Hiver none none of the health centers are equipped and.

NOTE Confidence: 0.885670781135559

00:25:35.860 --> 00:26:06.950 A lot of and health workers have not received training in VIA so we are partnering with an HTC DePaul. Health training center to provide via a training to the government health nurses. We finished 5 batches of 20 women, so far, but then also an it's disease also partnering with other institutions all over the nipple to prevent that's kind of that's training to there.

NOTE Confidence: 0.864190578460693

00:26:07.460 --> 00:26:21.890 So at the carpet University what we are doing we in near future is redoing our implementation trial. So to help government of Nepal to scale up this VI Cry Therapy single visit.

NOTE Confidence: 0.896977186203003

00:26:22.660 --> 00:26:53.230 Approach and we're implementing it in 22 villages training. The nurses and then seeing the measuring the acceptability adoption visibility Fidelity. Penetration cost under our cost for sustainability of the program and this is what is really lacking to the government of Nepal because there is a lot of plan there's mass there is a strategy plan. There is guideline and now the endorse this package is and there is a list of all the equipment.

NOTE Confidence: 0.902575016021729

00:26:53.860 --> 00:27:21.780 On paper looks so good but the implementation is like really poor so we want to help them get the appropriate information to scale up this program and next thing that we really interested is introduced care. HPV do that a program. However, it's been the care. HPV also looks very good on paper, the cost with low cost point of care.

NOTE Confidence: 0.883596241474152

00:27:22.360 --> 00:27:50.520 Uh SBB tasting but the country. Wise prices still high because it has not been negotiated in group, so the price quote that we got from carrots. BBS \$25 per person, which is really, really high in our setting so we have not been able to even pilot test it. But we were devastating applies to a pilot IST and this the in in the area where we work.

NOTE Confidence: 0.928005278110504

00:27:51.170 --> 00:27:54.540 So that's the update thank you.