WEBVTT

1 00:00:00.120 --> 00:00:02.700 <v ->Jam-packed with both quantitative</v>

2 00:00:02.700 --> 00:00:05.910 and qualitative information.

3 00:00:05.910 --> 00:00:09.740 So first, I would like to welcome each and all of you

4 00:00:09.740 --> 00:00:14.130 to this wonderful opportunity to listen

5 00:00:14.130 --> 00:00:18.510 from Dr. Leith Leon and Leti Torres

6 00:00:18.510 --> 00:00:23.260 about their very important mixed methods research work

7 00:00:24.690 --> 00:00:28.740 focusing on the Cervical Cancer Prevention Program

8 00:00:28.740 --> 00:00:30.720 in Mexico.

9 00:00:30.720 --> 00:00:33.900 Before I do that, I do want to mention

10 00:00:33.900 --> 00:00:38.900 that this is the inaugural seminar for our newly-minted

11 00:00:39.150 --> 00:00:43.860 CMIPS Maternal-Child Health Promotion Program,

12 00:00:43.860 --> 00:00:47.850 and we very intentionally highlight the word promotion

13 00:00:47.850 --> 00:00:52.050 because we think there is already a lot of knowledge

14 00:00:52.050 --> 00:00:57.050 about risk factors for many, many major serious conditions

15 00:00:57.750 --> 00:01:01.290 affecting women and young children,

16 00:01:01.290 --> 00:01:06.290 and that it is really time to focus more on solutions

17 00:01:06.540 --> 00:01:11.517 and on how to co-design effective programs,

18 00:01:11.517 --> 00:01:16.517 how to evaluate them, how to scale up these programs.

19 00:01:17.190 --> 00:01:22.190 And I am very pleased that today's seminar

20 00:01:23.340 --> 00:01:25.890 is co-sponsored by the Yale Scholars

21 00:01:25.890 --> 00:01:29.700 in Implementation Science Career Development Program

22 00:01:29.700 --> 00:01:31.650 from the Yale School of Medicine,

23 00:01:31.650 --> 00:01:33.450 the Global Health Concentration

24 00:01:33.450 --> 00:01:35.790 from the Yale School of Public Health

25 00:01:35.790 --> 00:01:40.790 and the Global Oncology Program at the Yale Cancer Center.

26 00:01:41.520 --> 00:01:45.060 And all of us who represent those programs

27 00:01:45.060 --> 00:01:50.060 as well are very grateful to CMIPS for the opportunity

28 00:01:50.250 --> 00:01:52.740 to join them in the organization

29 00:01:52.740 --> 00:01:56.730 of this wonderful, wonderful seminar.

30 00:01:56.730 --> 00:02:01.317 Just a little advertisement, if I may,

31 00:02:03.420 --> 00:02:07.770 the Maternal-Child Health Promotion Program

32 00:02:07.770 --> 00:02:12.770 has really been launched with a lot of enthusiasm.

33 00:02:13.050 --> 00:02:17.670 And under the leadership of Dr. Amber Hromi-Fiedler,

34 00:02:17.670 --> 00:02:20.550 we now have a formally approved

35 00:02:20.550 --> 00:02:24.060 Maternal-Child Health Promotion track

36 00:02:24.060 --> 00:02:27.990 for the MPH students in our school.

37 00:02:27.990 --> 00:02:32.880 And we also are working very diligently

38 00:02:32.880 --> 00:02:35.940 under the leadership of Amber on the development

39 00:02:35.940 --> 00:02:39.750 of Maternal-Child Health Promotion pathways

40 00:02:39.750 --> 00:02:44.750 for PhD students across departments in the school.

41 00:02:45.540 --> 00:02:50.490 We are also very engaged in advancing

42 00:02:50.490 --> 00:02:54.870 Maternal-Child Health Promotion research within Yale,

43 00:02:56.250 --> 00:03:00.660 across institutions, both in the US and globally.

44 00:03:00.660 --> 00:03:04.140 And I feel especially proud about today's webinar

45 00:03:04.140 --> 00:03:08.010 because the reason we found out about the wonderful work,

46 00:03:08.010 --> 00:03:09.930 or I found out,

47 00:03:09.930 --> 00:03:11.250 Donna already knew about it,

48 00:03:11.250 --> 00:03:13.380 but that I found out about the wonderful work

49 00:03:13.380 --> 00:03:15.630 from Leith and Leti

50 00:03:15.630 --> 00:03:20.400 was because they both gave an amazing lecture

51 00:03:20.400 --> 00:03:24.960 as part of the summer implementation science course

52 00:03:24.960 --> 00:03:26.550 that we did in partnership

53 00:03:26.550 --> 00:03:29.520 with the National Institute of Public Health in Mexico,

54 00:03:29.520 --> 00:03:34.173 which is the institutions where both of them work.

55 00:03:35.040 --> 00:03:40.040 So Leith Leon-Maldonado is a doctor in public health,

56 00:03:41.640 --> 00:03:43.800 who is working as a researcher

57 00:03:43.800 --> 00:03:47.460 in the Department of Cardiovascular Diseases,

58 00:03:47.460 --> 00:03:49.410 Diabetes Mellitus, and Cancer

59 00:03:49.410 --> 00:03:54.270 at the Center for Population Health Research or CISP,

60 00:03:54.270 --> 00:03:56.280 and is also a faculty member

61 00:03:56.280 --> 00:03:58.710 of the School of Public Health

62 00:03:58.710 --> 00:04:02.490 at the National Institute of Public Health in Mexico.

63 00:04:02.490 --> 00:04:06.270 And that is the School of Public Health in Mexico

64 00:04:06.270 --> 00:04:08.350 and is accredited by CISP

65 00:04:09.229 --> 00:04:13.260 as well as the same way that ours is.

66 00:04:13.260 --> 00:04:15.540 She worked on zoonosis programs

67 00:04:15.540 --> 00:04:17.567 at the Michoacan Health Services,

68 00:04:18.698 --> 00:04:21.750 Michoacan is a beautiful state in Mexico,

69 00:04:21.750 --> 00:04:23.197 and has helped coordinate

70 00:04:23.197 --> 00:04:26.340 the FRIDA and FASTER-Tlalpan studies

71 00:04:26.340 --> 00:04:29.940 on cervical cancer screening.

72 00:04:29.940 --> 00:04:31.980 Her principal areas of interest

73 00:04:31.980 --> 00:04:34.800 are alternatives for the prevention

74 00:04:34.800 --> 00:04:38.790 and control of cervical cancer and HPV infections

75 00:04:38.790 --> 00:04:41.343 and associated cancers.

76 00:04:42.180 --> 00:04:46.080 Leti Torres-Ibarra is a doctor in science,

77 00:04:46.080 --> 00:04:50.640 who is also a researcher and faculty member

78 00:04:50.640 --> 00:04:55.640 in the same department at INSP as Leith is.

79 00:04:55.920 --> 00:04:59.210 Her translational research has consistently...

80 00:05:01.710 --> 00:05:03.570 I'm sorry, I got lost here.

81 00:05:03.570 --> 00:05:08.190 Has consistently aimed at reducing HPV cancer burden.

82 00:05:08.190 --> 00:05:10.800 She has been working to carry out a process

83 00:05:10.800 --> 00:05:15.480 of technological assimilation for cervical cancer prevention

84 00:05:15.480 --> 00:05:19.020 and control within the Mexican healthcare system,

85 00:05:19.020 --> 00:05:21.090 and has contributed to the design

86 00:05:21.090 --> 00:05:23.910 and execution of large studies

87 00:05:23.910 --> 00:05:28.320 aimed at evaluating cervical cancer screenings.

88 00:05:28.320 --> 00:05:31.140 The results of her quantitative evaluation

89 00:05:31.140 --> 00:05:35.340 of alternative HPV vaccination schedules for girls

90 00:05:35.340 --> 00:05:38.970 has become a cornerstone of the World Health Organization

91 00:05:38.970 --> 00:05:43.530 updated recommendations for HPV immunization.

92 00:05:43.530 --> 00:05:46.623 And I also know that Leti happened to be,

93 00:05:47.951 --> 00:05:52.620 I think, a predoc/postdoc scholar at Harvard

94 00:05:52.620 --> 00:05:57.620 under the mentorship of Dr. Donna Spiegelman.

95 00:05:57.990 --> 00:06:02.990 So please join me in welcoming Leith and Leticia

96 00:06:04.590 --> 00:06:07.470 by clapping with your symbols if you can.

97 00:06:07.470 --> 00:06:10.770 and I want to give them the floor

98 00:06:10.770 --> 00:06:14.730 so that they can start illuminating us with their talks.

99 00:06:14.730 --> 00:06:17.940 Welcome. (speaks in foreign language)

100 00:06:17.940 --> 00:06:19.620 <v ->Thank you very much.</v>

101 00:06:19.620 --> 00:06:21.600 Thank you for the invitation, thanks.

102 00:06:21.600 --> 00:06:24.753 <v ->Thank you, Rafael, for this wonderful presentation.</v>

103 00:06:26.250 --> 00:06:31.250 And I really would like to thank all of you for having us.

104 00:06:33.810 --> 00:06:37.590 And I really very excited to share with you

105 00:06:37.590 --> 00:06:40.320 the experience and challenge in implementing

106 00:06:40.320 --> 00:06:43.593 the Cervical Cancer Prevention Program in Mexico.

107 00:06:45.120 --> 00:06:47.613 So let me share my screen.

108 00:06:57.357 --> 00:06:59.040 Can you see my screen now?

109 00:06:59.040 --> 00:07:01.200 <v Rafael>Yes.</v> <v ->Yeah, we can see it.</v>

110 00:07:01.200 --> 00:07:02.033 <v ->Okay.</v>

111 00:07:03.698 --> 00:07:08.698 So...

112 00:07:11.465 --> 00:07:16.465 Okay.

113 00:07:17.676 --> 00:07:22.560 So in this talk, we are going to talk about cervical cancer.

114 00:07:22.560 --> 00:07:24.010 Why?

115 00:07:24.010 --> 00:07:28.290 Because this is a public health program

116 00:07:28.290 --> 00:07:30.480 that caused premature death,

117 00:07:30.480 --> 00:07:33.540 and this is a preventable disease

118 00:07:33.540 --> 00:07:38.540 that cause hundreds of thousands of women deaths every year.

119 00:07:40.080 --> 00:07:41.700 And cervical cancer now,

120 00:07:41.700 --> 00:07:45.600 it's an example of a preventable disease.

121 00:07:45.600 --> 00:07:46.740 As we can see later,

122 00:07:46.740 --> 00:07:48.830 mortality due to this disease

123 00:07:48.830 --> 00:07:52.890 is a manifestation of health inequity.

124 00:07:52.890 --> 00:07:56.190 Unfortunately, where women lives,

125 00:07:56.190 --> 00:08:00.270 her socioeconomic ethnocultural or immigration status

126 00:08:00.270 --> 00:08:03.300 mean the difference between life and death

127 00:08:03.300 --> 00:08:08.300 from this common cancer, which already...

128 00:08:10.770 --> 00:08:15.270 This cancer, worldwide, in the 2020,

129 00:08:15.270 --> 00:08:20.270 caused more than 600,000 incident cases

130 00:08:20.907 --> 00:08:24.423 and more than 300,000 deaths.

131 00:08:26.010 --> 00:08:31.010 As I mentioned, as you can see in these two maps,

132 00:08:32.640 --> 00:08:36.690 the top map represent the incident cases

133 00:08:36.690 --> 00:08:41.690 and the bottom one represent the mortality rates.

134 00:08:42.150 --> 00:08:46.890 And you can see that more than 85% of the cases

135 00:08:46.890 --> 00:08:50.043 are diagnosis in less developed countries,

136 00:08:51.060 --> 00:08:54.810 where cervical cancer rocking second only

137 00:08:54.810 --> 00:08:56.163 after breast cancer.

138 00:08:58.380 --> 00:09:01.260 In regions with the scarce resource,

139 00:09:01.260 --> 00:09:04.290 fragile or fragmented health services,

140 00:09:04.290 --> 00:09:07.983 this cancer contributes to the cycle of poverty.

141 00:09:09.690 --> 00:09:14.690 This, despite we have proven cost effective interventions

142 00:09:14.760 --> 00:09:17.730 available for this cancer,

143 00:09:17.730 --> 00:09:19.650 as you can see in these maps,

144 00:09:19.650 --> 00:09:23.340 we can observe substantial variations

145 00:09:23.340 --> 00:09:27.270 between regional and geographic countries.

146 00:09:27.270 --> 00:09:30.561 For example, in this map,

147 00:09:30.561 --> 00:09:32.228 and that represent the...

148 00:09:32.228 --> 00:09:34.170 The mortality rates were white.

149 00:09:34.170 --> 00:09:39.170 We can see that the more intense orange

150 00:09:40.380 --> 00:09:44.853 are the countries with the highest mortality rates.

151 00:09:47.820 --> 00:09:51.780 What happened in Mexico about the incidents?

152 00:09:51.780 --> 00:09:52.650 This cancer

153 00:09:52.650 --> 00:09:55.710 is the second most commonly diagnosed cancer among women.

154 00:09:55.710 --> 00:10:00.710 And according to IARC in 2020,

155 00:10:01.690 --> 00:10:06.690 9,000 new cases of cervical cancer occur in Mexico.

156 00:10:07.470 --> 00:10:08.670 Here is important.

157 00:10:08.670 --> 00:10:12.690 I would like to mention that, for many years,

158 00:10:12.690 --> 00:10:16.920 we didn't have a population-based cancer register.

159 00:10:16.920 --> 00:10:21.920 But the good news is that in the last five years,

160 00:10:24.300 --> 00:10:28.227 the field record has been created in a city,

161 00:10:28.227 --> 00:10:31.590 in desert of Mexico, in the peninsula of Mexico.

162 00:10:31.590 --> 00:10:34.230 And we are very excited

163 00:10:34.230 --> 00:10:39.230 because probably at short term, we can have data too,

164 00:10:39.720 --> 00:10:43.083 a more accurate data about this disease.

165 00:10:45.810 --> 00:10:48.783 And cervical cancer is a second leading cause of death,

166 00:10:49.620 --> 00:10:53.760 also in Mexico among women, among Mexican women.

167 00:10:53.760 --> 00:10:58.760 Annually, more than 4,000 women death by this disease.

168 00:11:02.340 --> 00:11:06.810 A similar disparity exists within our country.

169 00:11:06.810 --> 00:11:11.490 And in this map, you can see the 32 states of Mexico

170 00:11:11.490 --> 00:11:16.463 and the states located at the south of Mexico

171 00:11:18.510 --> 00:11:21.960 are the states with the highest social deprivation

172 00:11:21.960 --> 00:11:26.550 and also are the states with the higher mortality rates

173 00:11:26.550 --> 00:11:27.663 than the rest.

174 00:11:29.850 --> 00:11:31.320 You can see in this map,

175 00:11:31.320 --> 00:11:36.320 the mortality rates is twice the...

176 00:11:37.531 --> 00:11:38.364 The mortality rates...

177 00:11:38.364 --> 00:11:42.480 Sorry, the mortality rates in this area

178 00:11:42.480 --> 00:11:46.203 is twice the mortality rate of Mexico City.

179 00:11:48.090 --> 00:11:53.090 And this is an example that this cancer

180 00:11:55.054 --> 00:11:57.993 is influenced by determinants of access to health.

181 00:12:01.630 --> 00:12:05.430 And this situation, these early situations happen

182 00:12:05.430 --> 00:12:10.430 now in a era where we have options available

183 00:12:10.710 --> 00:12:13.830 for primary and secondary preventions,

184 00:12:13.830 --> 00:12:15.990 which offer an excellent opportunity

185 00:12:15.990 --> 00:12:20.040 to intervene more effectively against this cancer.

186 00:12:20.040 --> 00:12:22.980 So now, we can see that women

187 00:12:22.980 --> 00:12:26.043 shouldn't have to die from this disease.

188 00:12:28.500 --> 00:12:29.373 Actually,

189 00:12:31.140 --> 00:12:31.973 in 2018,

190 00:12:34.098 --> 00:12:37.550 the WHO Director Dr. Tedros,

191 00:12:39.450 --> 00:12:41.520 made a global call for action

192 00:12:41.520 --> 00:12:45.280 towards elimination of cervical cancer because, as we know,

193 00:12:49.890 --> 00:12:54.890 we now have the tools to eliminate the disease

194 00:12:57.060 --> 00:12:59.883 through the vaccination and through the screening.

195 00:13:03.810 --> 00:13:05.548 In this slide,

196 00:13:05.548 --> 00:13:08.070 I would like to show how the prevention program

197 00:13:08.070 --> 00:13:10.440 in Mexico is made up.

198 00:13:10.440 --> 00:13:13.293 We have the body strategies,

199 00:13:14.150 --> 00:13:17.640 primary prevention through vaccination

200 00:13:17.640 --> 00:13:21.090 and secondary prevention through screening.

201 00:13:21.090 --> 00:13:26.090 The vaccination is focused as a public health program.

202 00:13:27.630 --> 00:13:30.060 It's free, and it's focused in girls

203 00:13:30.060 --> 00:13:33.213 to 9 to 11 years old.

204 00:13:34.170 --> 00:13:37.710 And then secondary prevention through this training

205 00:13:37.710 --> 00:13:41.460 and depends of the age,

206 00:13:41.460 --> 00:13:46.460 the women below 35 years old are screening with Pap smear,

207 00:13:50.397 --> 00:13:55.060 and women from 35 to 64 years old

208 00:13:56.323 --> 00:14:00.893 are screening using HPV as primary screening test.

209 00:14:08.013 --> 00:14:11.070 Just a summary.

210 00:14:11.070 --> 00:14:13.200 As you probably know,

211 00:14:13.200 --> 00:14:15.070 HPV vaccines

212 00:14:20.942 --> 00:14:25.942 have an excellent safety efficacy against the HPV infection

213 00:14:26.610 --> 00:14:31.560 and against cervical cancer and another HPV-related disease.

214 00:14:31.560 --> 00:14:36.560 There are three licensed HPV vaccines,

215 00:14:37.140 --> 00:14:40.470 quadrivalent, bivalent, and nonavalent.

216 00:14:40.470 --> 00:14:42.000 In this year,

217 00:14:42.000 --> 00:14:43.890 we celebrate the 15 years

218 00:14:43.890 --> 00:14:47.193 since the first HPV vaccine was FDA register.

219 00:14:50.280 --> 00:14:53.280 The first two vaccines available

220 00:14:53.280 --> 00:14:56.970 that were quadrivalent, bivalent vaccines

221 00:14:56.970 --> 00:15:01.673 include protections against HPV 16 and 18,

222 00:15:01.673 --> 00:15:06.673 that are the main HPV types that contributes

223 00:15:07.260 --> 00:15:12.260 to 70% of cervical cancer cases.

224 00:15:15.420 --> 00:15:19.530 The inclusion of the other seven high-risk HPV types

225 00:15:19.530 --> 00:15:23.350 that are the HPV 31, 33, 45, 52, and 58

226 00:15:25.230 --> 00:15:28.800 will increase the protection to almost 90% of the infection

227 00:15:28.800 --> 00:15:31.950 responsible for cervical cancer prevention.

228 00:15:31.950 --> 00:15:34.473 So these are great news.

229 00:15:36.570 --> 00:15:40.200 By December in 2019,

230 00:15:42.540 --> 00:15:45.450 100 countries had introduced HPV vaccine

231 00:15:45.450 --> 00:15:48.570 in their national immunization programs for girls,

232 00:15:48.570 --> 00:15:51.750 mainly in high-income countries.

233 00:15:51.750 --> 00:15:56.550 At present, 70% of current cervical cancer cases

234 00:15:56.550 --> 00:16:00.900 occur in countries that have not yet introduced HPV vaccine.

235 00:16:00.900 --> 00:16:03.813 And that is why continuous screening is still required,

236 00:16:04.860 --> 00:16:07.470 but the scaling up and sustaining programs

237 00:16:07.470 --> 00:16:12.300 in routine health service in that countries is challenging.

238 00:16:12.300 --> 00:16:17.300 I would like to know that Mexico along with Panama

239 00:16:17.460 --> 00:16:20.680 were the fierce middle income countries

240 00:16:21.960 --> 00:16:23.940 that introduce HPV vaccination

241 00:16:23.940 --> 00:16:28.800 in the National Immunization Programs in 2008.

242 00:16:33.480 --> 00:16:38.480 Mexico has a universal HPV immunization program since 2012.

243 00:16:41.850 --> 00:16:46.850 This photo shows our former Mexican president,

244 00:16:47.190 --> 00:16:52.120 our former Ministry of Health

245 00:16:55.542 --> 00:16:56.580 in a public event,

246 00:16:56.580 --> 00:17:00.150 launched the immunization program.

247 00:17:00.150 --> 00:17:03.000 The HPV vaccine is to all girls

248 00:17:03.000 --> 00:17:05.580 in fifth grade of primary school

249 00:17:05.580 --> 00:17:10.580 or to those girls of 11 years old since 2012.

250 00:17:13.020 --> 00:17:17.190 We have an school-based vaccination program,

251 00:17:17.190 --> 00:17:21.090 and we use a two-dose schedule.

252 00:17:21.090 --> 00:17:26.090 The first dose is administered at month zero,

253 00:17:26.232 --> 00:17:28.240 and then at six months later.

254 00:17:36.120 --> 00:17:39.070 Here, I will like to mention

255 00:17:40.980 --> 00:17:42.990 that Mexico was a pioneer

256 00:17:42.990 --> 00:17:45.660 to implement alternative vaccination skills,

257 00:17:45.660 --> 00:17:50.103 again, HPV since 2009.

258 00:17:51.420 --> 00:17:53.250 Probably your question,

259 00:17:53.250 --> 00:17:55.650 why reduced the number of doses?

260 00:17:55.650 --> 00:17:57.935 The standard dose schedule

261 00:17:57.935 --> 00:18:02.730 was three doses at month zero, two, and six.

262 00:18:02.730 --> 00:18:04.650 But since the beginning,

263 00:18:04.650 --> 00:18:08.700 Mexico proposed an alternative vaccination schedule

264 00:18:08.700 --> 00:18:11.520 against HPV because of cost saving

265 00:18:11.520 --> 00:18:13.320 and programmatic advantage

266 00:18:13.320 --> 00:18:16.440 that may facilitate high coverage.

267 00:18:16.440 --> 00:18:20.073 So at the beginning,

268 00:18:21.660 --> 00:18:24.510 Mexico proposed an alternative vaccination schedule

269 00:18:24.510 --> 00:18:29.340 of month zero, six, and at that month,

270 00:18:29.340 --> 00:18:31.083 and five years later.

271 00:18:31.980 --> 00:18:36.980 But after provide evidence

272 00:18:37.710 --> 00:18:42.710 that a booster five years later is no longer need,

273 00:18:44.190 --> 00:18:46.620 we have now an alternative dose schedule

274 00:18:46.620 --> 00:18:50.073 at month zero and month six.

275 00:18:51.120 --> 00:18:52.558 Why this?

276 00:18:52.558 --> 00:18:54.058 Because this is called saving.

277 00:18:57.870 --> 00:19:00.930 Reducing one dose have an impact

278 00:19:03.900 --> 00:19:05.970 and an easier administration.

279 00:19:05.970 --> 00:19:10.323 We have one visit less to the primary schools.

280 00:19:12.282 --> 00:19:15.420 This strategy allow us to increase the coverage,

281 00:19:15.420 --> 00:19:20.420 saving dozen of doses of vaccine to reach more girls.

282 00:19:22.800 --> 00:19:24.666 According to many studies,

283 00:19:24.666 --> 00:19:29.666 it has been proof that this is a cost effective

284 00:19:29.820 --> 00:19:34.680 if a vaccine coverage reach more than 70%.

285 00:19:36.930 --> 00:19:38.520 We can increase adoption

286 00:19:38.520 --> 00:19:40.380 of the immunization programing population

287 00:19:40.380 --> 00:19:42.543 with limited healthcare access.

288 00:19:44.880 --> 00:19:49.880 Another reason to change this dose regimen

289 00:19:51.450 --> 00:19:56.450 is that if we adopt this to dose schedule,

290 00:19:57.180 --> 00:20:02.180 we can reduce the loss to follow up in this population.

291 00:20:04.140 --> 00:20:08.730 And as I mentioned, I would like to share.

292 00:20:08.730 --> 00:20:13.730 These are our results of a non-randomized clinical trial

293 00:20:16.170 --> 00:20:21.170 that our group conduct since 2009.

294 00:20:23.130 --> 00:20:26.640 This trial was established in Mexico.

295 00:20:26.640 --> 00:20:31.640 We enrolled more than 1,000 healthy girls,

296 00:20:32.940 --> 00:20:37.940 almost 500 women to test if alternative dose schedule

297 00:20:41.850 --> 00:20:46.353 were not inferior to the standard dose schedule.

298 00:20:47.880 --> 00:20:52.413 Our results show that after five years,

299 00:20:53.448 --> 00:20:58.448 the immunogenicity of the bivalent HPV vaccine

300 00:20:59.820 --> 00:21:03.420 in Mexican women is safe and produced

301 00:21:03.420 --> 00:21:06.780 and travels immune response with antibody levels

302 00:21:06.780 --> 00:21:09.030 that remain stable over five years

303 00:21:09.030 --> 00:21:11.790 after primary immunizations.

304 00:21:11.790 --> 00:21:14.850 In this green line, you can see the GMTs,

305 00:21:18.210 --> 00:21:23.210 the geometric mean titers of the HPV vaccine

306 00:21:24.120 --> 00:21:25.893 with a standard dose schedule.

307 00:21:26.834 --> 00:21:30.480 And in this wine bar,

308 00:21:30.480 --> 00:21:33.390 we can see the immunogenicity levels

309 00:21:33.390 --> 00:21:35.847 of the two dose schedule.

310 00:21:35.847 --> 00:21:40.847 And we can see that this immune response

311 00:21:41.760 --> 00:21:44.250 is above the natural infection.

312 00:21:44.250 --> 00:21:48.870 And we found that this antibody response

313 00:21:48.870 --> 00:21:51.610 was not inferior to the response observed in girls

314 00:21:53.126 --> 00:21:54.459 of the same age.

315 00:21:56.010 --> 00:21:56.970 These results,

316 00:21:56.970 --> 00:22:01.970 along with another results of other studies,

317 00:22:02.100 --> 00:22:07.100 contribute to the recommendation of the WHO

318 00:22:07.830 --> 00:22:10.080 about the HPV vaccination

319 00:22:10.080 --> 00:22:13.140 that now says that two-dose schedule

320 00:22:13.140 --> 00:22:18.070 in years aged 9 to 14 years is support.

321 00:22:20.850 --> 00:22:25.850 In Mexico, I can say that the acceptability of all vaccines,

322 00:22:27.060 --> 00:22:28.563 it's very, very high.

323 00:22:30.611 --> 00:22:35.611 These are the results of a study conduct in Mexico City

324 00:22:38.640 --> 00:22:42.330 where in this study,

325 00:22:42.330 --> 00:22:46.260 the investigators asked to mothers of girls

326 00:22:46.260 --> 00:22:48.960 about the acceptability of HPV vaccine,

327 00:22:48.960 --> 00:22:53.880 and there is a high acceptability of almost 90%.

328 00:22:53.880 --> 00:22:57.330 The reasons for not acceptance among these mother

329 00:22:57.330 --> 00:23:00.510 were not knowing enough about HPV

330 00:23:00.510 --> 00:23:04.860 because (indistinct) is not a risk for HPV infection

331 00:23:04.860 --> 00:23:09.860 or because they think that the HP vaccine

332 00:23:10.020 --> 00:23:14.613 is a new vaccine or they are unaware of the side effects.

333 00:23:15.510 --> 00:23:17.790 In adults,

334 00:23:17.790 --> 00:23:22.790 our group also have conduct an study

335 00:23:22.800 --> 00:23:25.800 to evaluate acceptability among adults.

336 00:23:25.800 --> 00:23:30.800 We can observe that the acceptability of the HPV vaccine,

337 00:23:31.260 --> 00:23:32.643 it's also very high.

338 00:23:34.710 --> 00:23:39.676 Now, we have a new challenge in HPV vaccination in Mexico.

339 00:23:39.676 --> 00:23:44.330 First, we have a shortage of vaccine since 2019.

340 00:23:47.250 --> 00:23:51.180 The bivalent vaccine company exits the market.

341 00:23:51.180 --> 00:23:55.323 So we have now a monopoly of HPV vaccine.

342 00:23:56.820 --> 00:24:01.820 In 2016, GSK made a decision to stop supplying Cervarix.

343 00:24:04.710 --> 00:24:08.370 Now, we have to...

344 00:24:08.370 --> 00:24:12.720 Probably, we'll have to buy the other vaccines

345 00:24:12.720 --> 00:24:15.420 but are more expensive.

346 00:24:15.420 --> 00:24:20.420 And the situation worsen with the SARS-CoV-2 pandemic.

347 00:24:20.610 --> 00:24:22.140 As you know, in Mexico,

348 00:24:22.140 --> 00:24:27.140 the schools were closed until two months ago.

349 00:24:27.600 --> 00:24:32.313 And so we need catch-up programs to reach that girls.

350 00:24:34.440 --> 00:24:38.100 And briefly, I would like to share the experience

351 00:24:38.100 --> 00:24:40.770 about cervical cancer screening.

352 00:24:40.770 --> 00:24:42.330 And just to remember,

353 00:24:42.330 --> 00:24:44.730 the goal of the cervical cancer screening

354 00:24:44.730 --> 00:24:46.830 is reduce the burden of cervical cancer

355 00:24:46.830 --> 00:24:50.610 by the early detection of cervical precancers

356 00:24:50.610 --> 00:24:52.290 that can be timely treated

357 00:24:52.290 --> 00:24:55.260 to prevent progression to invasive cancer.

358 00:24:55.260 --> 00:24:58.560 Unfortunately, the impact of the program

359 00:24:58.560 --> 00:25:00.720 has been insufficient in Mexico,

360 00:25:00.720 --> 00:25:03.027 despite the resource allocated

361 00:25:03.027 --> 00:25:05.648 in the Mexican Cervical Cancer Screening Program

362 00:25:05.648 --> 00:25:08.373 has been allocated since 1974.

363 00:25:10.050 --> 00:25:13.140 Most of the cervical cancer cases in Mexico

364 00:25:13.140 --> 00:25:17.623 are detected at advanced stage of the disease,

365 00:25:17.623 --> 00:25:19.950 explaining the high mortality.

366 00:25:19.950 --> 00:25:24.950 In this graph, you can see the bars are the deaths.

367 00:25:28.620 --> 00:25:33.620 This gray line is the standardized mortality rate.

368 00:25:35.040 --> 00:25:38.160 Unfortunately, the call reducing the mortality rate

369 00:25:38.160 --> 00:25:41.860 to less than 11 in 2012 was not met.

370 00:25:48.690 --> 00:25:51.570 The reasons why these efforts

371 00:25:51.570 --> 00:25:54.120 are harboring insufficient,

372 00:25:54.120 --> 00:25:59.120 why that we have a healthcare system that is fragmented,

373 00:26:04.920 --> 00:26:09.120 that is enabled to provide infrastructure resource

374 00:26:09.120 --> 00:26:12.210 and quality control required in each of the stage

375 00:26:12.210 --> 00:26:14.340 from the screening to appropriate management

376 00:26:14.340 --> 00:26:15.933 of diagnosed cases.

377 00:26:16.860 --> 00:26:20.070 For many years, we have used the publish screening test

378 00:26:20.070 --> 00:26:25.070 that has a low sensitivity to detect cervical precancer

379 00:26:26.918 --> 00:26:31.410 at the beginning of the '90s.

380 00:26:31.410 --> 00:26:35.400 And evaluation of the quality of cervical cytology specimens

381 00:26:35.400 --> 00:26:39.660 in Mexico report that more than 60% of the samples

382 00:26:39.660 --> 00:26:41.220 were inadequate.

383 00:26:41.220 --> 00:26:46.140 In addition, some of the cervical cytology screening centers

384 00:26:46.140 --> 00:26:51.003 report more than 50% of false negative results.

385 00:26:52.170 --> 00:26:55.830 We have an opportunistic program with low coverage,

386 00:26:55.830 --> 00:27:00.830 and also we have a lack of tracking system

387 00:27:01.590 --> 00:27:04.443 for abnormal cervical cancer screening follow-up.

388 00:27:05.790 --> 00:27:10.790 That's why the WHO now recommends that high risk HPV

389 00:27:13.350 --> 00:27:16.890 will be the primary screening test for cervical cancer

390 00:27:16.890 --> 00:27:19.080 in countries and regions that don't have

391 00:27:19.080 --> 00:27:21.450 an effective Pap program.

392 00:27:21.450 --> 00:27:24.480 And Mexico introduced the HPV test

393 00:27:24.480 --> 00:27:29.407 as the primary screening test

394 00:27:30.270 --> 00:27:34.350 in the National Cervical Cancer Screening Program in 2009.

395 00:27:40.260 --> 00:27:45.260 Our research group has a lot of experience

396 00:27:46.050 --> 00:27:50.490 evaluate the usefulness of the HPV DNA

397 00:27:50.490 --> 00:27:55.490 in more than 250,000 of Mexican women

398 00:27:58.290 --> 00:28:01.080 through four demonstrative projects.

399 00:28:01.080 --> 00:28:06.080 And the results of these large projects

400 00:28:06.300 --> 00:28:11.300 show that HPV is more sensitive than Pap smear,

401 00:28:12.450 --> 00:28:15.030 that a single HPV test is more sensitive

402 00:28:15.030 --> 00:28:18.933 that even two Pap tests in a one-year period,

403 00:28:19.770 --> 00:28:23.070 that HPV test by vaginal self-collection

404 00:28:23.070 --> 00:28:27.180 detects more than four times more invasive tumors

405 00:28:27.180 --> 00:28:29.673 when compared to cervical cytology.

406 00:28:30.990 --> 00:28:33.750 but also we learn that if we refer

407 00:28:33.750 --> 00:28:36.330 all HPV positive women colposcopy,

408 00:28:36.330 --> 00:28:39.180 we can cause a large burden to the system,

409 00:28:39.180 --> 00:28:43.293 so triage test is required.

410 00:28:44.700 --> 00:28:49.530 This is our HPV-based Cervical Cancer Screening Program

411 00:28:49.530 --> 00:28:52.740 that was launched in 2008.

412 00:28:52.740 --> 00:28:57.740 First, women should attend the primary health center

413 00:29:01.878 --> 00:29:05.343 where the cervical sample collection is made up.

414 00:29:07.080 --> 00:29:10.503 The high risk HPV test is offered.

415 00:29:12.600 --> 00:29:15.843 When the program was launched,

416 00:29:17.460 --> 00:29:22.460 the implementation of this program launch new challenge

417 00:29:23.850 --> 00:29:26.010 because the modification of the program

418 00:29:26.010 --> 00:29:31.010 have an extra medical visit to obtain a new cervical sample

419 00:29:31.710 --> 00:29:33.423 for cytology triage.

420 00:29:35.160 --> 00:29:37.803 So in this program,

421 00:29:39.060 --> 00:29:44.060 the women have to return to receive the result of HPV.

422 00:29:46.710 --> 00:29:50.793 And if they have an HPV positive result,

423 00:29:52.051 --> 00:29:56.270 a second cervical sample should be collected.

424 00:30:00.810 --> 00:30:05.810 Then depends on the results of the triage with cytology,

425 00:30:07.680 --> 00:30:12.250 the women have to return for a third visit

426 00:30:13.255 --> 00:30:15.210 to diagnosis confirmation.

427 00:30:15.210 --> 00:30:18.180 Unfortunately, there was an increase

428 00:30:18.180 --> 00:30:22.080 in the loss of follow-up among high risk HPV positive women

429 00:30:22.080 --> 00:30:26.190 as a consequence of these multiple visits

430 00:30:26.190 --> 00:30:29.370 to acquire an adequate sample for cytology

431 00:30:29.370 --> 00:30:32.580 and because of the lack of tracking systems.

432 00:30:32.580 --> 00:30:35.700 And these problems add to the limited clinical accuracy

433 00:30:35.700 --> 00:30:39.360 of cytology which offer, as you remember,

434 00:30:39.360 --> 00:30:42.813 only a sensitivity of 40%

435 00:30:42.813 --> 00:30:47.250 to the test cervical intraepithelial neoplasia.

436 00:30:47.250 --> 00:30:52.177 So now we have modified this program,

437 00:30:54.510 --> 00:30:56.430 one visit was removed.

438 00:30:56.430 --> 00:31:01.430 Now, the women go to the primary health center

439 00:31:03.030 --> 00:31:07.980 for the cervical sampling.

440 00:31:07.980 --> 00:31:12.980 And then she has to come back only

441 00:31:14.369 --> 00:31:18.603 for the results of the HPV, and the cytology has triage.

442 00:31:19.860 --> 00:31:24.213 Unfortunately, after these modifications,

443 00:31:25.569 --> 00:31:28.380 we remains some challenges.

444 00:31:28.380 --> 00:31:33.380 We now have a very low follow-up

445 00:31:33.660 --> 00:31:37.463 to colposcopy of Pap positive women.

446 00:31:39.810 --> 00:31:44.810 We only have 43% of women with abnormal Pap smears

447 00:31:45.750 --> 00:31:50.750 that are successfully follow up to diagnosis confirmation.

448 00:31:51.150 --> 00:31:54.290 And the women who are...

449 00:31:59.310 --> 00:32:02.260 The women who are attending in colposcopy

450 00:32:03.390 --> 00:32:06.480 have a low proportion of biopsy collect

451 00:32:06.480 --> 00:32:08.613 to confirm that the diagnosis.

452 00:32:09.780 --> 00:32:11.147 So this...

453 00:32:15.057 --> 00:32:19.303 In this slide, I only want to say

454 00:32:20.850 --> 00:32:25.850 that HPV test is effective for cervical cancer detection,

455 00:32:26.190 --> 00:32:27.513 but it's not enough.

456 00:32:28.920 --> 00:32:30.240 In Mexico,

457 00:32:30.240 --> 00:32:33.090 according to the National Health and Nutrition Survey

458 00:32:33.090 --> 00:32:37.260 in 2012, the self-report Pap smear or HPV

459 00:32:37.260 --> 00:32:42.260 in the last 12 months, it's only 50%.

460 00:32:42.720 --> 00:32:45.240 So we have many barriers

461 00:32:45.240 --> 00:32:50.240 to meet the screening coverage of more than 70%.

462 00:32:51.480 --> 00:32:53.760 We have barriers like access

463 00:32:53.760 --> 00:32:56.193 in marginalized or remote places.

464 00:32:57.090 --> 00:33:01.200 We still having some logistical issues of transportation,

465 00:33:01.200 --> 00:33:02.733 inadequate facilities.

466 00:33:04.069 --> 00:33:06.453 And overall, we have many barriers,

467 00:33:08.267 --> 00:33:11.403 cultural barriers like fear, shame about this.

468 00:33:13.770 --> 00:33:16.650 Probably the biggest advantage of HPV testing

469 00:33:16.650 --> 00:33:21.270 is that we can use vaginal samples, self-collected by women.

470 00:33:21.270 --> 00:33:23.885 And this is an example of the flyer

471 00:33:23.885 --> 00:33:28.830 that we use as part of our FRIDA project in Mexico,

472 00:33:28.830 --> 00:33:31.320 where we explain to the women

473 00:33:31.320 --> 00:33:36.320 how they can collect by themselves a vaginal self-sample.

474 00:33:39.810 --> 00:33:44.810 And now, recently the last year, indeed,

475 00:33:45.570 --> 00:33:50.570 we publish results of our pilot test

476 00:33:51.180 --> 00:33:55.890 because we are HPV testing subsample urine

477 00:33:55.890 --> 00:33:58.593 as an alternative primary screening method.

478 00:34:00.390 --> 00:34:05.390 These blood options, vaginal or urine subsample

479 00:34:07.140 --> 00:34:11.727 can be excellent strategies to reach more women

480 00:34:11.727 --> 00:34:16.727 and to overcome the challenge of coverage.

481 00:34:19.508 --> 00:34:23.130 And in summary, I think that these are our challenge

482 00:34:23.130 --> 00:34:25.770 in the Mexican Cervical Cancer Screening Program.

483 00:34:25.770 --> 00:34:28.320 We have to increase the coverage.

484 00:34:28.320 --> 00:34:30.900 We have to improve the participation,

485 00:34:30.900 --> 00:34:34.890 and probably we have to incorporate these alternatives

486 00:34:34.890 --> 00:34:37.260 to pelvic examination.

487 00:34:37.260 --> 00:34:39.570 We have to improve the efficiency of screening

488 00:34:39.570 --> 00:34:42.000 to detect women in the highest cancer risk

489 00:34:42.000 --> 00:34:46.350 using a more efficient triage strategies.

490 00:34:46.350 --> 00:34:49.263 We have to install a cancer information system.

491 00:34:50.520 --> 00:34:53.740 That this cancer information system

492 00:34:55.230 --> 00:35:00.230 can facilitate the follow-up to another stage

493 00:35:02.310 --> 00:35:05.550 like the follow up to colposcopy.

494 00:35:05.550 --> 00:35:10.020 But also we have to talk about this implementation

495 00:35:10.020 --> 00:35:13.840 of some strategies like the Pap smear

496 00:35:14.970 --> 00:35:19.320 as primary screening test in some institutions in Mexico.

497 00:35:19.320 --> 00:35:21.960 But we have to talk about what will be the role

498 00:35:21.960 --> 00:35:26.960 of the cytotechnologist that work in Mexico.

499 00:35:29.340 --> 00:35:34.340 So as you know, we have now effective interventions,

500 00:35:34.770 --> 00:35:39.420 but we have an effective cervical cancer prevention program

501 00:35:39.420 --> 00:35:40.770 in Mexico.

502 00:35:40.770 --> 00:35:42.910 And finally, I would like to thank

503 00:35:46.084 --> 00:35:49.053 to our two senior investigators.

504 00:35:49.920 --> 00:35:53.280 The evidence in Mexico has been possible

505 00:35:53.280 --> 00:35:56.340 thanks to the leadership of Dr. Eduardo Lazcano

506 00:35:56.340 --> 00:35:59.523 and Dr. Jorge Salmeron, who are our mentors.

507 00:36:00.420 --> 00:36:01.863 And thank you so much.

508 00:36:13.560 --> 00:36:17.670 <v Rafael>So I think the speakers</v>

509 00:36:17.670 --> 00:36:21.390 have requested for all questions to be answered

510 00:36:21.390 --> 00:36:24.180 until both presentations are completed,

511 00:36:24.180 --> 00:36:25.740 if that is okay with you,

512 00:36:25.740 --> 00:36:30.740 so that we can Leith now go on to make her presentation.

513 00:36:39.630 --> 00:36:41.973 <v ->Can you see it?</v> <v Rafael>Not yet.</v>

514 00:37:05.010 --> 00:37:06.993 <v ->Can you see it now?</v> <v Rafael>Yes.</v>

515 00:37:07.830 --> 00:37:08.663 <v ->Thank you.</v>

516 00:37:10.440 --> 00:37:12.450 Again, hello, everyone.

517 00:37:12.450 --> 00:37:14.730 My name is Leith Leon-Maldonado.

518 00:37:14.730 --> 00:37:17.520 I work for the National Institute of Public Health

519 00:37:17.520 --> 00:37:22.520 in Mexico, INSP, as a researcher and faculty member.

520 00:37:22.740 --> 00:37:25.140 Thank you, Donna and Dr. Rafael Perez-Escamilla

521 00:37:25.140 --> 00:37:26.190 for the invitation.

522 00:37:26.190 --> 00:37:27.690 Amber, thank you.

523 00:37:27.690 --> 00:37:29.610 It is an honor.

524 00:37:29.610 --> 00:37:33.600 As Dr. Leti Torres comment, in this second part,

525 00:37:33.600 --> 00:37:36.420 I will address implementation

526 00:37:36.420 --> 00:37:39.300 of cervical cancer prevention strategies

527 00:37:39.300 --> 00:37:44.300 based in two studies conducted in Mexico.

528 00:37:44.430 --> 00:37:47.973 The experiences and lessons that we have learned.

529 00:37:50.070 --> 00:37:52.290 That Dr. Escamilla said,

530 00:37:52.290 --> 00:37:55.623 I will answer the question at the end of my presentation.

531 00:37:58.050 --> 00:38:01.980 In the first part, Leti told you why cervical cancer

532 00:38:01.980 --> 00:38:05.523 continue to be a public health in Mexico.

533 00:38:08.070 --> 00:38:11.400 This has led to search for alternatives

534 00:38:11.400 --> 00:38:15.900 to face the border of cervical cancer in our country.

535 00:38:15.900 --> 00:38:20.610 In a scenario where around 4,000 women die per year

536 00:38:20.610 --> 00:38:22.203 for a preventable disease,

537 00:38:23.430 --> 00:38:27.360 Mexico has the advantage of having introduced

538 00:38:27.360 --> 00:38:30.630 early prevention strategies such vaccination

539 00:38:30.630 --> 00:38:34.620 against HPV and HPV test as a strategies

540 00:38:34.620 --> 00:38:36.930 to face the disease.

541 00:38:36.930 --> 00:38:40.140 That is decision making has narrowed the gap

542 00:38:40.140 --> 00:38:42.690 between evidence and action.

543 00:38:42.690 --> 00:38:47.690 However, to have implemented novel strategies wasn't enough.

544 00:38:48.180 --> 00:38:50.130 We faced challenges.

545 00:38:50.130 --> 00:38:51.180 Why?

546 00:38:51.180 --> 00:38:53.580 Mainly because the program continues

547 00:38:53.580 --> 00:38:56.250 having difficulties in increasing coverage

548 00:38:56.250 --> 00:38:58.743 and achieving a decrease in mortality.

549 00:38:59.940 --> 00:39:02.370 We can ask ourselves why.

550 00:39:02.370 --> 00:39:04.680 What's happening in the program?

551 00:39:04.680 --> 00:39:07.800 Why don't women get screened?

552 00:39:07.800 --> 00:39:11.850 And even when we have a more effective screening tool,

553 00:39:11.850 --> 00:39:16.850 that is the HPV test, why don't return to the follow-up?

554 00:39:16.920 --> 00:39:18.527 Did we have problems

555 00:39:18.527 --> 00:39:22.140 during the implementation of the HPV test,

556 00:39:22.140 --> 00:39:25.860 or could it be the strategies?

557 00:39:25.860 --> 00:39:30.860 But Leti said the evidence suggests that they are affected.

558 00:39:31.170 --> 00:39:34.350 Could it be the implementation of the strategies?

559 00:39:34.350 --> 00:39:36.967 Surely the answer is not unique,

560 00:39:36.967 --> 00:39:39.810 and it's not simple in a complex program.

561 00:39:39.810 --> 00:39:41.733 Let's talk about what we have learned.

562 00:39:45.180 --> 00:39:48.933 Within the line of research on HPV and cancer in INSP,

563 00:39:50.460 --> 00:39:54.060 studies have been carried out that show the difficulties

564 00:39:54.060 --> 00:39:57.180 on the Cervical Cancer Prevention Program.

565 00:39:57.180 --> 00:40:00.000 Today, I tell you about two studies.

566 00:40:00.000 --> 00:40:01.920 One conducted in Michoacan State

567 00:40:01.920 --> 00:40:05.190 in the center of the country in 2011

568 00:40:05.190 --> 00:40:09.900 and another in Mexico City carried out in 2018.

569 00:40:12.250 --> 00:40:14.767 And what we learned from the evidence?

570 00:40:16.497 --> 00:40:19.320 The study in Michoacan aimed to identify

571 00:40:19.320 --> 00:40:21.510 information and counseling needs

572 00:40:21.510 --> 00:40:24.030 when HPV test was used

573 00:40:24.030 --> 00:40:27.570 amongst Cervical Cancer Prevention Program users.

574 00:40:27.570 --> 00:40:30.980 The study took place in Chilchota, Michoacan

575 00:40:30.980 --> 00:40:32.940 in an Indigenous community

576 00:40:32.940 --> 00:40:36.063 and a marginally sized area of Morelia City.

577 00:40:37.200 --> 00:40:40.080 Complex scenarios were vulnerable

578 00:40:40.080 --> 00:40:42.240 and disadvantaged women reside

579 00:40:42.240 --> 00:40:44.853 and have greater risk of cervical cancer.

580 00:40:45.750 --> 00:40:49.620 The analysis presented is part of a large study

581 00:40:49.620 --> 00:40:52.170 that we included interviews with women

582 00:40:52.170 --> 00:40:53.943 in different types of screening.

583 00:40:55.020 --> 00:40:57.300 The findings of the group of women

584 00:40:57.300 --> 00:41:02.073 who have received their HPV results are presented today.

585 00:41:03.720 --> 00:41:05.400 What is counseling?

586 00:41:05.400 --> 00:41:09.990 We can understand counseling as a directive, dynamic,

587 00:41:09.990 --> 00:41:14.990 flexible process in a environment of trust and empathy

588 00:41:15.030 --> 00:41:18.150 between users and health professionals.

589 00:41:18.150 --> 00:41:21.870 It is a process of communication, advice,

590 00:41:21.870 --> 00:41:25.773 listening and solving to facilitate decision making.

591 00:41:27.420 --> 00:41:30.600 In the context of the Cervical Cancer Prevention Program,

592 00:41:30.600 --> 00:41:33.840 it is intended that women are informed

593 00:41:33.840 --> 00:41:37.440 about HPV screening test,

594 00:41:37.440 --> 00:41:41.490 clear their doubts about different topics.

595 00:41:41.490 --> 00:41:45.660 They express their concerns about HPV infection,

596 00:41:45.660 --> 00:41:48.420 the vaccine, cervical cancer,

597 00:41:48.420 --> 00:41:52.953 and make assertive decision for prevention by using counsel.

598 00:41:55.500 --> 00:41:58.650 The study approach was qualitative.

599 00:41:58.650 --> 00:42:00.930 It was approved by IRB,

600 00:42:00.930 --> 00:42:03.993 an informed consent was obtained in all the cases.

601 00:42:04.830 --> 00:42:09.390 Women who recently received their HPV results

602 00:42:09.390 --> 00:42:12.030 were interviewed in two settings,

603 00:42:12.030 --> 00:42:14.880 urban area and an Indigenous communities

604 00:42:14.880 --> 00:42:19.650 with different level of marginalization.

605 00:42:19.650 --> 00:42:21.030 During the interviews,

606 00:42:21.030 --> 00:42:25.710 beliefs, perceptions and experiences about HPV,

607 00:42:25.710 --> 00:42:28.623 cervical cancer and screening were explored.

608 00:42:31.290 --> 00:42:36.290 The participants were between 33 and 66 years old.

609 00:42:36.383 --> 00:42:41.383 46% of the Chilchota women spoke Purepecha

610 00:42:41.620 --> 00:42:45.660 and 75 were beneficiaries of Oportunidades Program.

611 00:42:45.660 --> 00:42:50.660 The education level was six years or less in 75%

612 00:42:51.267 --> 00:42:54.333 and 73 didn't have paid jobs.

613 00:42:55.170 --> 00:42:58.530 Oportunidades was a program to support families

614 00:42:58.530 --> 00:43:03.180 living in poverty to improve the capacities for nutrition,

615 00:43:03.180 --> 00:43:05.460 health, and education,

616 00:43:05.460 --> 00:43:08.617 providing financial resources and services.

617 00:43:11.010 --> 00:43:12.600 In this study, briefly,

618 00:43:12.600 --> 00:43:16.200 I present some of the resource on information

619 00:43:16.200 --> 00:43:17.790 and counseling needs.

620 00:43:17.790 --> 00:43:20.640 The findings are topics of HPV,

621 00:43:20.640 --> 00:43:24.765 including doubts about the transmission of the virus,

622 00:43:24.765 --> 00:43:26.430 the severity of the infection.

623 00:43:26.430 --> 00:43:29.589 For example, a woman from Morelia said

624 00:43:29.589 --> 00:43:34.589 that she would have like to ask if HPV is transmitted

625 00:43:34.920 --> 00:43:37.110 by having several partners.

626 00:43:37.110 --> 00:43:39.720 And a woman from Chilchota had doubts

627 00:43:39.720 --> 00:43:44.373 about what HPV is and how it is transmitted.

628 00:43:45.660 --> 00:43:49.710 Another topic of interest was about the screening test,

629 00:43:49.710 --> 00:43:52.920 the usefulness of the test, the procedures,

630 00:43:52.920 --> 00:43:56.550 the meaning of the results, HPV results,

631 00:43:56.550 --> 00:43:59.820 HPV test results and public results.

632 00:43:59.820 --> 00:44:02.483 Why the test results are are different?

633 00:44:02.483 --> 00:44:04.840 A woman from Chilchota felt sad

634 00:44:06.513 --> 00:44:10.230 when she doubt about the having HPV result

635 00:44:10.230 --> 00:44:12.900 and another words confused about the meaning

636 00:44:12.900 --> 00:44:14.913 of the words positive and negative.

637 00:44:16.260 --> 00:44:19.290 Another issue was the stigma about HPV,

638 00:44:19.290 --> 00:44:22.740 including doubts about infidelity,

639 00:44:22.740 --> 00:44:25.350 an issue that greater concern

640 00:44:25.350 --> 00:44:29.010 when understand that an HPV results

641 00:44:29.010 --> 00:44:31.653 is the same as a partner infidelity.

642 00:44:34.440 --> 00:44:36.780 The recommendation of these study

643 00:44:36.780 --> 00:44:40.200 are to straighten information about counseling,

644 00:44:40.200 --> 00:44:45.030 about HPV and cervical cancer to mitigate sadness

645 00:44:45.030 --> 00:44:47.400 and anxiety and stigma

646 00:44:47.400 --> 00:44:50.880 and inaccurate beliefs about HPV infection.

647 00:44:50.880 --> 00:44:54.210 Since it generates negative attitudes

648 00:44:54.210 --> 00:44:55.713 about the screening process,

649 00:44:59.040 --> 00:45:02.160 you have studied a black box concept, right?

650 00:45:02.160 --> 00:45:03.573 Let's think about it.

651 00:45:05.139 --> 00:45:08.490 The input of the Cervical Cancer Prevention Program

652 00:45:08.490 --> 00:45:11.430 was the implementation of the HPV test.

653 00:45:11.430 --> 00:45:14.610 The Pap was already part of the program.

654 00:45:14.610 --> 00:45:17.670 In the output after implementation,

655 00:45:17.670 --> 00:45:20.910 unnecessary emotional impact was identified,

656 00:45:20.910 --> 00:45:23.883 such as stigma, fear, and uncertainty.

657 00:45:25.050 --> 00:45:29.010 Doubts about testing, including the Pap smear,

658 00:45:29.010 --> 00:45:32.973 despite being using Mexico for over 50 years.

659 00:45:34.050 --> 00:45:37.110 What happened inside of the black box?

660 00:45:37.110 --> 00:45:40.020 We can't explain the input and the output,

661 00:45:40.020 --> 00:45:42.870 but we can explain the results,

662 00:45:42.870 --> 00:45:45.180 what procedures were implemented

663 00:45:45.180 --> 00:45:50.043 and how were implemented in the practice.

664 00:45:51.090 --> 00:45:55.440 Were the procedures different in urban areas

665 00:45:55.440 --> 00:45:58.620 than in a foreign or indigenous context?

666 00:45:58.620 --> 00:46:00.570 We need to block the black box,

667 00:46:00.570 --> 00:46:05.010 open it, and study how behavior, culture,

668 00:46:05.010 --> 00:46:06.900 knowledge influence.

669 00:46:06.900 --> 00:46:07.803 We don't know.

670 00:46:08.670 --> 00:46:11.730 By observing the results from the implementation,

671 00:46:11.730 --> 00:46:14.280 we can ask ourselves.

672 00:46:14.280 --> 00:46:17.640 What happening to the intervention?

673 00:46:17.640 --> 00:46:18.870 What was the problem?

674 00:46:18.870 --> 00:46:21.450 The effectiveness of the intervention

675 00:46:21.450 --> 00:46:23.313 of each implementation.

676 00:46:26.520 --> 00:46:30.000 Next, I'm going to share our experiences

677 00:46:30.000 --> 00:46:33.093 and what we learned from the FASTER-Tlalpan study.

678 00:46:34.170 --> 00:46:35.730 FASTER is an strategy aimed

679 00:46:37.920 --> 00:46:41.907 that proposed to combine of the HPV vaccine

680 00:46:41.907 --> 00:46:46.907 and the screening based in the HPV test in adult women

681 00:46:48.090 --> 00:46:51.813 between 25 and 45 years old.

682 00:46:53.070 --> 00:46:56.400 FASTER was conducted in real conditions.

683 00:46:56.400 --> 00:46:59.280 Vaccination and screening were introduced,

684 00:46:59.280 --> 00:47:03.360 combined as Cervical Cancer Prevention Program.

685 00:47:03.360 --> 00:47:06.360 FASTER is a randomized clinical trial,

686 00:47:06.360 --> 00:47:11.310 was implemented in eight healthcare centers in Mexico City.

687 00:47:11.310 --> 00:47:13.653 It was approved by IRB.

688 00:47:16.140 --> 00:47:20.550 Once FASTER study was carried out in healthcare centers,

689 00:47:20.550 --> 00:47:23.940 we aim to evaluate the results of the implementation

690 00:47:23.940 --> 00:47:28.200 of a strategy like FASTER from the accessibility

691 00:47:28.200 --> 00:47:30.750 and feasibility components.

692 00:47:30.750 --> 00:47:35.130 The question is if a strategy like this were introduced

693 00:47:35.130 --> 00:47:37.470 in Cervical Cancer Prevention Program,

694 00:47:37.470 --> 00:47:39.210 would it be acceptable?

695 00:47:39.210 --> 00:47:41.430 Would it be feasible?

696 00:47:41.430 --> 00:47:45.480 The innovation was the vaccine since the HPV test

697 00:47:45.480 --> 00:47:49.350 was already an standard procedure in Mexico.

698 00:47:49.350 --> 00:47:51.990 Therefore, acceptability vaccine

699 00:47:51.990 --> 00:47:55.230 among the participant women was evaluated

700 00:47:55.230 --> 00:47:57.123 using our open questionnaire.

701 00:47:58.557 --> 00:48:01.353 We also evaluate the acceptability.

702 00:48:02.514 --> 00:48:05.250 We use an interview guide with doctors and nurses

703 00:48:05.250 --> 00:48:10.230 based on the study objective, the literature,

704 00:48:10.230 --> 00:48:12.063 and the theoretical framework.

705 00:48:13.140 --> 00:48:17.100 The feasibility was evaluated using a checklist

706 00:48:17.100 --> 00:48:20.580 to identify the minimum infrastructure

707 00:48:20.580 --> 00:48:23.583 needed for vaccination and screening.

708 00:48:26.100 --> 00:48:29.760 There are the tools we use to evaluate these components.

709 00:48:29.760 --> 00:48:34.380 And number one, we used to ask about the reason

710 00:48:34.380 --> 00:48:37.023 for accepting or rejecting the vaccine.

711 00:48:37.860 --> 00:48:40.920 Number two, we used to evaluate acceptability

712 00:48:40.920 --> 00:48:44.220 from the perspective of the health professionals.

713 00:48:44.220 --> 00:48:49.110 And number three, we use to evaluate the feasibility.

714 00:48:49.110 --> 00:48:52.110 We can identify the minimum infrastructure

715 00:48:52.110 --> 00:48:54.273 necessary for vaccine and screening.

716 00:48:57.180 --> 00:48:58.860 Here are some of the results

717 00:48:58.860 --> 00:49:02.070 about the reasons to accept the vaccine.

718 00:49:02.070 --> 00:49:05.940 93% of women accept HPV vaccine.

719 00:49:05.940 --> 00:49:07.680 Some of the reason for accepting

720 00:49:07.680 --> 00:49:11.010 were prevention and healthcare motivated

721 00:49:11.010 --> 00:49:15.000 by sexual behavior, medical history, fear,

722 00:49:15.000 --> 00:49:16.653 and benefits of the vaccine.

723 00:49:17.490 --> 00:49:22.490 The susceptibility of HPV vaccine among adult women

724 00:49:22.800 --> 00:49:25.560 allow us to understand their responses,

725 00:49:25.560 --> 00:49:29.640 their response to a vaccination if a strategy like this

726 00:49:29.640 --> 00:49:32.823 were implemented in health services.

727 00:49:33.990 --> 00:49:38.760 However, some comments suggest that it is necessary

728 00:49:38.760 --> 00:49:42.030 to refer the counseling and training

729 00:49:42.030 --> 00:49:45.183 or help professionals who provide counseling.

730 00:49:47.400 --> 00:49:51.240 While the rejection of the vaccine was less than 10%,

731 00:49:51.240 --> 00:49:55.740 the reason for rejection could represent the barriers

732 00:49:55.740 --> 00:49:57.890 to the implementation of the vaccine

733 00:49:57.890 --> 00:49:59.613 at the population level.

734 00:50:00.480 --> 00:50:01.500 For example,

735 00:50:01.500 --> 00:50:04.920 the perception about the vaccine not being safe,

736 00:50:04.920 --> 00:50:08.403 lack of confidence and information about the benefits,

737 00:50:09.390 --> 00:50:12.224 health education, counseling

738 00:50:12.224 --> 00:50:14.220 and dissemination of the information.

739 00:50:14.220 --> 00:50:17.820 Good health increase awareness and promote

740 00:50:17.820 --> 00:50:20.793 positive attitudes toward vaccination.

741 00:50:22.380 --> 00:50:24.780 The findings from health professionals

742 00:50:24.780 --> 00:50:28.350 suggest a positive attitude towards vaccination

743 00:50:28.350 --> 00:50:30.570 and the combined strategy.

744 00:50:30.570 --> 00:50:35.291 Among the vaccination benefits are decreased incidents

745 00:50:35.291 --> 00:50:39.210 and cervical cancer mortality,

746 00:50:39.210 --> 00:50:40.983 prevention over treatment.

747 00:50:42.180 --> 00:50:45.363 To implement the strategy at population level,

748 00:50:46.320 --> 00:50:50.550 approximately 25% of the participants

749 00:50:50.550 --> 00:50:53.283 believe they were no obstacles at all.

750 00:50:54.150 --> 00:50:56.790 There is the perception that women

751 00:50:56.790 --> 00:50:59.127 would accept the HPV vaccine

752 00:50:59.127 --> 00:51:02.460 and the great challenge to decision making

753 00:51:02.460 --> 00:51:03.933 at institutional level.

754 00:51:04.860 --> 00:51:09.690 They identify deficiencies in infrastructure, supplies,

755 00:51:09.690 --> 00:51:14.160 medical personnel, as well as health information.

756 00:51:14.160 --> 00:51:19.160 The barriers are machismo, myths, and mistrust.

757 00:51:22.050 --> 00:51:27.050 Regarding the feasibility in terms of minimum infrastructure

758 00:51:27.180 --> 00:51:31.020 necessary to implement the vaccine on the screening,

759 00:51:31.020 --> 00:51:35.280 it was observed that eight healthcare centers

760 00:51:35.280 --> 00:51:38.940 had a fridge to store the vaccines

761 00:51:38.940 --> 00:51:40.090 and 75% had a generator

762 00:51:42.223 --> 00:51:45.317 and 88 had at least one portable cooler.

763 00:51:46.560 --> 00:51:47.880 As for the screening,

764 00:51:47.880 --> 00:51:52.140 no healthcare center had a specific space.

765 00:51:52.140 --> 00:51:54.940 50% performed cervical examination

766 00:51:56.092 --> 00:51:58.020 in shared doctor's offices.

767 00:51:58.020 --> 00:52:03.020 And the other 50% didn't have a space for the screening.

768 00:52:05.858 --> 00:52:10.233 63% had a examination table and a lamp

769 00:52:10.233 --> 00:52:12.719 and not had a private space

770 00:52:12.719 --> 00:52:14.957 for delivering results and counseling.

771 00:52:14.957 --> 00:52:18.480 It is important to remember that the screening

772 00:52:18.480 --> 00:52:20.790 had been part of the prevention program

773 00:52:20.790 --> 00:52:24.030 established in Mexico since the '70s,

774 00:52:24.030 --> 00:52:27.390 and that infrastructure should be in place

775 00:52:27.390 --> 00:52:29.043 in healthcare centers.

776 00:52:31.380 --> 00:52:35.130 The findings suggest that it is feasible

777 00:52:35.130 --> 00:52:37.350 to implement a combined strategy.

778 00:52:37.350 --> 00:52:41.250 However, if it's advisable to address

779 00:52:41.250 --> 00:52:43.480 weaknesses of the program

780 00:52:45.120 --> 00:52:47.940 by improving screening infrastructure,

781 00:52:47.940 --> 00:52:51.840 having the supplies and improving attention to users,

782 00:52:51.840 --> 00:52:54.330 informing them of the procedures

783 00:52:54.330 --> 00:52:57.993 and benefits of these tools, screening and vaccination.

784 00:52:58.830 --> 00:53:01.803 Even when the vaccines is acceptable,

785 00:53:02.910 --> 00:53:07.910 we must not forget the reason for rejection.

786 00:53:08.640 --> 00:53:12.030 In order to avoid implementation barriers,

787 00:53:12.030 --> 00:53:15.180 implementing the combined strategy

788 00:53:15.180 --> 00:53:17.130 not only means having the vaccine

789 00:53:17.130 --> 00:53:19.860 at the same time as a screening,

790 00:53:19.860 --> 00:53:23.493 but also strengthened the program operation.

791 00:53:25.500 --> 00:53:28.833 Finally, returning to the idea of the black box,

792 00:53:29.743 --> 00:53:32.460 the input of the Cervical Cancer Prevention Program

793 00:53:32.460 --> 00:53:36.303 is implementation of the HPV vaccine.

794 00:53:36.303 --> 00:53:40.023 The HPV test was already part of the program.

795 00:53:41.010 --> 00:53:45.990 The results suggest that it could be feasible

796 00:53:45.990 --> 00:53:48.930 to implement the vaccine and screening

797 00:53:48.930 --> 00:53:52.890 and the vaccines have high acceptability among women

798 00:53:52.890 --> 00:53:54.140 and health professionals.

799 00:53:54.990 --> 00:53:58.890 But what happened inside of the black box again?

800 00:53:58.890 --> 00:54:03.210 What did we do to achieve high vaccination acceptability

801 00:54:03.210 --> 00:54:05.000 and how we did it?

802 00:54:05.000 --> 00:54:08.337 We need to block the black box, open it,

803 00:54:08.337 --> 00:54:11.290 and study how to achieve acceptability

804 00:54:12.712 --> 00:54:14.520 and how we can reproduce the intervention

805 00:54:14.520 --> 00:54:16.530 at population level.

806 00:54:16.530 --> 00:54:21.240 How can we replicate it and be sustainable?

807 00:54:21.240 --> 00:54:22.593 That is the challenge.

808 00:54:24.510 --> 00:54:26.670 Thank you very much for your attention.

809 00:54:26.670 --> 00:54:30.300 It's a pleasure to share our experience with you.

810 00:54:30.300 --> 00:54:31.714 Thank you very much.

811 00:54:31.714 --> 00:54:32.547 <v ->Thank you.</v>

812 00:54:32.547 --> 00:54:34.650 Thank you very much, Leith and Leti.

813 00:54:35.880 --> 00:54:38.520 Very, very complimentary talks.

814 00:54:38.520 --> 00:54:42.030 I know we're right on time now.

815 00:54:42.030 --> 00:54:44.700 We are scheduled to continue meeting

816 00:54:44.700 --> 00:54:49.700 with Leith and Leticia for the next hour

817 00:54:49.980 --> 00:54:52.020 together with the CMIPS team,

818 00:54:52.020 --> 00:54:54.490 but I'm sure if any of you want to stay on

819 00:54:55.620 --> 00:54:58.500 you could stay to ask questions.

820 00:54:58.500 --> 00:55:01.110 Are we staying in this Zoom, William, or-

821 00:55:01.110 --> 00:55:03.150 <v ->No, I think there's a different one, Rafael,</v>

822 00:55:03.150 --> 00:55:04.710 but maybe we could take, you know,

823 00:55:04.710 --> 00:55:07.260 just a few minutes to take a question or two.

824 00:55:07.260 --> 00:55:09.780 I know at least one person had a question.

825 00:55:09.780 --> 00:55:12.900 <v ->Yeah, Vinita had her hand raised</v>

826 00:55:12.900 --> 00:55:15.506 right after Leti finished her talk.

827 00:55:15.506 --> 00:55:16.339 <v ->Yeah.</v>

828 00:55:16.339 --> 00:55:17.400 <v Vinita>Yeah, hi.</v>

829 00:55:17.400 --> 00:55:19.920 My name is Vinita Parkash, I'm a pathologist.

830 00:55:19.920 --> 00:55:22.710 And so I guess my question to you was,

831 00:55:22.710 --> 00:55:26.247 why does your cytology sort of...

832 00:55:27.840 --> 00:55:30.120 I think you said that the performance

833 00:55:30.120 --> 00:55:33.090 had a very high false negative rate.

834 00:55:33.090 --> 00:55:35.640 What type of Pap smear are you doing?

835 00:55:35.640 --> 00:55:38.010 Is this liquid-based cytology?

836 00:55:38.010 --> 00:55:40.470 And the second question is,

837 00:55:40.470 --> 00:55:44.610 what is the training for cytotechs in Mexico?

838 00:55:44.610 --> 00:55:46.890 I've run programs in India,

839 00:55:46.890 --> 00:55:51.250 so we've been able to bring up the performance

840 00:55:52.735 --> 00:55:55.519 of our cytotechs, and we've actually come up

841 00:55:55.519 --> 00:55:56.352 with a very different program

842 00:55:56.352 --> 00:55:58.593 from the one that is used in the US.

843 00:56:03.540 --> 00:56:04.373 <v ->Thank you.</v>

844 00:56:05.520 --> 00:56:10.520 For many years, we have used the standard Pap smear.

845 00:56:12.300 --> 00:56:16.080 That's why we have a lot of inadequate samples

846 00:56:16.080 --> 00:56:20.220 because there is a lack of training

847 00:56:20.220 --> 00:56:24.750 about how to collect the samples among the nurses.

848 00:56:24.750 --> 00:56:29.750 And also because there are a lot of mucus

849 00:56:30.030 --> 00:56:35.030 and blood in the cervical samples and the training...

850 00:56:41.068 --> 00:56:41.901 I think that the main issue is the lack of quality control

851 00:56:45.450 --> 00:56:50.100 among our cytotechnicians and our cytopathologists

852 00:56:50.100 --> 00:56:54.270 because, for many years,

853 00:56:54.270 --> 00:56:59.270 we have not implement quality control mechanisms

854 00:57:00.180 --> 00:57:05.180 to ensure that these professional have the ability

855 00:57:06.150 --> 00:57:10.833 to read and to interpret these slides.

856 00:57:11.940 --> 00:57:16.940 And recently, we have incorporated a liquid-based cytology

857 00:57:17.550 --> 00:57:22.550 and this is a great opportunity to do the HPV test

858 00:57:23.007 --> 00:57:26.583 and the liquid-based cytology using the same sample.

859 00:57:27.930 --> 00:57:32.930 I think this can improve our screening program.

860 00:57:34.500 --> 00:57:36.390 But yes, you're right.

861 00:57:36.390 --> 00:57:41.390 We have a large percentage of false negative samples.

862 00:57:49.500 --> 00:57:50.873 <v Vinita>Sorry, thank you.</v>

863 00:57:52.270 --> 00:57:54.243 <v ->Okay, are there any other questions?</v>

864 00:57:56.350 --> 00:58:00.240 Okay, if not, I know Leith

865 00:58:00.240 --> 00:58:03.660 that you will be meeting with Beth

866 00:58:03.660 --> 00:58:07.486 as well after the meeting with CMIPS.

867 00:58:07.486 --> 00:58:08.700 And I will be there at that meeting, Beth,

868 00:58:08.700 --> 00:58:11.160 so that you know, okay?

869 00:58:11.160 --> 00:58:12.750 So thank you all very much,

870 00:58:12.750 --> 00:58:17.580 and I guess we all at CMIPS need to move

871 00:58:17.580 --> 00:58:21.840 to another Zoom link to continue our conversations

872 00:58:21.840 --> 00:58:23.820 with Leti and Leith.

873 00:58:23.820 --> 00:58:25.260 Thank you very much.

874 00:58:25.260 --> 00:58:26.730 <v Leti>Thank you.</v>

875 00:58:26.730 --> 00:58:27.690 <v Vinita>Bye, everybody.</v> (overlapping chatter)

876 00:58:27.690 --> 00:58:31.193 <v ->Thank you. (overlapping chatter)</v>