A Descriptive Analysis of Health Practices, Barriers to Healthcare and the Unmet Need for Cervical Cancer Screening in the Lower Napo River Region of the Peruvian Amazon

Journal:	*Women's Health*
Manuscript ID	WHE-18-0040.R1
Manuscript Type:	Primary
Date Submitted by the Author:	21-May-2019
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Keywords:	Cervical Cancer, Screening, Prevention, Peru, Inequality, Amazon, NCDs
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Article type- Original Article

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Abstract

Objectives: To undertake an descriptive analysis of the health needs, healthcare practices, and barriers to accessing healthcare faced by women in **Lower Napo River Region, Peru,** and to understand health literacy regarding cervical cancer and the need for more effective cervical cancer screening services.

Methods: We performed a community based needs assessment adapting Demographic and Health survey methodology with additional questions determining female health literacy on cervical cancer and assessing the availability and need for cervical cancer screening services. We surveyed women (N=121) **across all households in 6 communities along Lower Napo River, Loreto, Peru in May 2015**. Data was collected as part of the larger *Amazon Community Based Participation Cervical Cancer Screen-and-Treat Programme*. Survey data were compared to national results from ENDES 2014.

Results: Comparison between our findings and the ENDES 2014 survey highlighted considerable inequality between indigenous or mixed indigenous, rural populations in Loreto Peru and national population data averages over level of formal education,

literacy, barriers to accessing healthcare and maternal and sexual health. Whilst only 5.9% (n= 7/117) of women had no formal health insurance cover, money was reported as the leading barrier accessing healthcare (N=88/117, 75.2%). Health literacy regarding cervical and breast cancer was poor. A high proportion of women highlighted fear of screening processes (70.8%, N=80/113) and lack of available services (53.6%, N=60/112) as barriers to cervical cancer screening.

Conclusions: Although progress has been made in improving healthcare access in Peru, such gains have not been experienced equitably and women living in remote communities face persistent marginalization regarding their health. There is a significant need for education related to and screening for cervical cancer in this region that is tailored to the reality of women's lives in remote communities in Loreto.

Key Words: Cervical Cancer, Screening, Prevention, Peru, Inequality, Amazon, NCDs

Introduction

Globally, there is marked inequality between indigenous and non-indigenous populations in key socio-economic and health indicators.[1] Inhabitants of the rural communities of the Lower Napo River (LNR), in the Loreto Department of Peru, face persistent barriers to accessing health services, including limited health literacy, low rates of formal education, high levels of poverty and geographic barriers to health.[2-4] Whilst significant national economic growth since the turn of the century has led to reduction in national poverty levels and gross income inequality in Peru[5,6], rural and urban disparities in key indicators of health and healthcare access persist.[7,8]

Although much hearsay evidence suggests that women in rural Amazonian communities face high burden of disease, there are currently limited survey data to provide insights into the healthcare needs. Structural drivers of health inequity such as poverty, ethnicity and remoteness intersect with broader and culturally entrenched gender inequities to create significant barriers to health service use.[9] As women play a central role as care providers within these communities, understanding their health beliefs and healthcare practices, is essential for the successful implementation of culturally and ethnically sensitive and effective health services.[10]

To further understand the health needs of women in the LNR, the local healthcare organisation DB Peru teamed up with a group of researchers at University College London (UCL), University of Birmingham, and University of Warwick, to undertake a systematic evaluation of the demographic and health situation of women in the region. This study took place within the broader *Amazon Community Based Participation Cervical Cancer Screen-and-Treat (ABCS) Program*, a cervical cancer prevention initiative which was the first of its kind in the region. The overall goal of the ABCS program was to reduce death and

disability from cervical cancer for women in the LNR. The project aimed to involve community members in a cervical cancer education and prevention program, and encourage collaboration with the Peruvian Government, Iquitos Hospital and Mazan Health Centre. This was done through several steps including accurately quantifying women's health needs and the burden of disease of cervical cancer in the region, providing education about the natural history, risk factors, and prevention strategies for cervical cancer and designing and finally delivering a sustainable cervical cancer screen and treat program. Additionally, concurrent vaccination against Human Papillomavirus (HPV) was provided in partnership with local government services. Two forthcoming papers will describe and evaluate, in detail, the impact of the ABCS education programme and the screening project itself. Prior to publication additional information about the project can be found via the DB Peru website (http://dbperu.org/).

The primary aim of this article – which details the first part of the ABCS study – was to explore the health, healthcare practices, and barriers to healthcare access faced by women within the LNR communities in rural Loreto and to draw comparisons with national health indicator data in Peru. The secondary aim was to explore female health literacy regarding cervical cancer and to determine barriers faced in accessing screening services.

Methods

Setting

Peru's largest and northernmost region, Loreto, is covered almost in its entirety by the Amazon floodplains. The port city of Iquitos, the region's capital and one of the least accessible cities in the world, is home to 45% of the region's population[11] with the remaining inhabitants forming communities dotted along the Amazon River and its numerous tributaries. Those living within these remote river settlements are largely of indigenous or *mestizo* (mixed indigenous) heritage who identify as *riberno* (people of the river). Predominantly subsistence farmers, members of these communities have a rich cultural history centred around both the river and the jungle including a history of traditional medicine and plant-based healing.

DB Peru is a not for profit organisation registered as a 501c3 non-profit charitable organisation in the United States of America and as an *organism no gubernamental* in Peru. DB Peru was founded in 2003, and aims to provide healthcare, outreach and health education to the remote communities of the LNR, Loreto, Peru. At present, it serves over 5000 people living in 25 villages in the LNR. DB Peru has run health education programmes in the areas of infectious diseases and tuberculosis, antenatal care, breast and cervical cancer screening and dental health. Historically their work has targeted the Indigenous people of the LNR in the Peruvian Amazon jungle, who have limited access to healthcare. DB Peru works closely with the Ministry of Health and the local municipalities to augment their established programs.

Community Access and Ethical Approval

We gained access to the communities through existing DB Peru activities. Our work was facilitated by a team of community health workers (*promotores*). We were given permission to undertake research and the ABCS programme by community leaders.

Ethics approval for this survey was secured through the Universidad Peruana Cayatano Heredia, Lima, and formed a part of doctoral research performed by GS.

The overall ABCS project employed a community-based participatory (CBP) project model, incorporating local community meetings, consultations and involvement at each stage of the process. Education sessions around women's health, cervical cancer and cervical screening were drafted in collaboration with the community and identified needs. The ultimate Screen and Treat program was delivered between **October 2015 and October 2016.**

Survey

We performed a locally adapted demographic and health survey in six of the 25 LNR communities. **These communities were selected as a representative sample of the wider LNR region because of both their population size and demographic characteristics. Furthermore all six communities had previously been host to DB Peru and were logistically feasible for the study.** The survey consisted of women's health questions based on internationally standardised and locally validated Demographic and Health Survey (Encuesta Demogafica y de Salud Familiar, ENDES).[12] We added context-specific questions to evaluate women's health needs, and focused on women's knowledge and unmet needs in breast and cervical cancer. (Supplementary material 1)

We recruited women aged above 15 years via *promotores* **from every household within each community** and invited all women who were interested to a group meeting prior to collecting data. We were present in the villages before and after the survey to raise awareness and respond to any concerns. Inclusion criteria were: women aged above 15 years, a permanent resident of the selected village and cognitive ability to consent to the survey. Exclusion criteria were: women or girls outside of this age range, those who are temporary residents or who are visitors and those who are unable to provide informed consent.

The surveys were conducted in May 2015 by a team of ten trained volunteers working with DB Peru. Each survey was anticipated to last up to 2 hours, including verbal information and consent (given the anticipated low literacy rate in the region). We collected 121 surveys and visited six communities. The participation rate varied between 55 and 82% of women estimated to be present in each community on the day of the survey.

Results

Survey participants

In the 121 women surveyed, the mean age of respondents was 42 (range 21-76). **91 women of childbearing age (N=91/121 75.2%), whose ages ranged between 21 and 49 years were included**. The women surveyed were mainly subsistence farmers or small-scale agricultural labourers (n=112) or service providers (n=9). Table 1 details the characteristics of the survey population.

We compared the results of our survey with ENDES data from 2014. Table 2 shows a comparison of results between the women of child bearing age within this sample and the average ENDES 2014 results.

** Insert Tables 1 and 2

Table 1. Study participant characteristics

Table 2. Comparison between women of childbearing age in the LNR and national ENDES Data (2014)

Education/Literacy

Formal education was limited with most women having only received incomplete primary education (42.1%, n=51/121). Only 12.1% of women of childbearing age in our sample had completed secondary education or higher, considerably fewer than national ENDES average of 59.7%.[7] Similarly, illiteracy levels in the survey population were nearly double the national average at 11.1% within the surveyed population.

Partnerships and empowerment

Most women (89.7% N=105/121) reported being married or part of a consensual union. In partnered women, average reported education levels of male spouses were higher than the women themselves: 20.2% reported their partners had completed secondary education or higher (N=20/99) compared to 6.7% of interview respondents. Seventy-two percent (N= 88/121) of women listen to the radio but only 19% (N=23/121) used a mobile phone and very few (3.3% N=4/121) had access to internet.

Access to Healthcare and Traditional Medicine

Six percent (N= 7/117) of women were uninsured, 83.8% (98/117) were covered by Peru's national comprehensive health insurance (*Seguro Integral de Salud*, (SIS)) and the remaining were covered by another form of medical insurance (N=12/117). In the national Peruvian population, 68.6% of women are covered some form of health insurance, of which 40.6% are covered by SIS and 31.4% remain uninsured.[7] Despite a generally high coverage of insurance within the LNR, over two thirds of women stated that money acted as a barrier to accessing health care (N=88/117, 75.2%). This may indicate direct costs associated with seeking healthcare that are not adequately covered by the SIS insurance, such as the cost of transport between the river and healthcare facilities. Other barriers to healthcare access include transport (54.7%, N=64/117), childcare

(42.7%, N=50/117) or not wanting to go alone (39.3%, N=46/117). Whilst the ENDES survey results demonstrated significant barriers to access, including finical barriers (59.7%), transport (35.4%) and not wanting to go alone (38.8%),[7] these were notably lower than reported within our sample.

Largely, decisions about their own health are made by women in tandem with their partners (64.9% N=74/114) or by themselves (23.7% N=27/114) with a small proportion having health care decisions made for them by their partners (5.3% N=6/114). However, 49.4% of women reported they felt they needed to seek permission to access healthcare compared to only 18.1% of women within the ENDES.[7]

Eighty percent (80.3% N=94/117) of women reported using natural or traditional medicines when a member of their family was unwell. Many of respondents who use natural medicines learnt about plant based medicine from their mothers (30.4% N=28/92) or grandparents (23.9% N=22/92). Accordingly, 95.6% (N=87) have taught their children about traditional medicine. ENDES 2014 did not contain information about traditional medicine; however, this remained an important aspect of healthcare in the region.

General Health

Self-reported health status was poor with the majority of women reporting "feeling slightly unwell" *(un poco mal)* (47.6%) compared to only eight women feeling "very well" (8.5% n=8/117). The most commonly reported health complaint within the survey sample was joint or back pain which was present in 55.2% of respondents, however this was not reflected in care seeking behaviours. Of the women who had needed to seek care recently the most common reasons included gynaecological complaints or pap smears (28.6% N=12/42), feeling generally unwell (19% n=8/42) and for dental work (11.9% N=5/42).

Sexual Health

The median age of first sexual encounter was 16 years. Fifty of the 79 non-pregnant women of childbearing age who responded reported using contraception (65.7%). Of these 50 women, 45 used modern forms (90%) with the most commonly used form being the depot injection (N=27/50, 60%). Five used traditional methods such as the rhythm method or withdrawal techniques. **Twenty-two of the women surveyed reported being sexually active whilst no using any form of contraception and reporting they did not wish to currently become pregnant, or only wished to become pregnant in the future, leading to an unmet need for contraception in 24.1% of respondents of childbearing age**. Of the respondents that answered, 66 out of 86 women (76.7%) of childbearing age reported receiving some form of information or education relating to family planning.

Maternal Health and Infant

The mean number of pregnancies for each woman was 5, with an average number of 4.6 births per woman in the 113 survey respondents who had ever been pregnant. A large proportion of women gave birth before their nineteenth birthday (n=61/108, 56.5%) with very few women giving birth after the age of twenty-five (N=5/108, 4.6%). Eighty percent of reported deliveries (derived from information pertaining to the most recent delivery in survey respondents) occurred in the home (N=87/109). Of the women who delivered at home, 20% (N=17/87) reported no form of birth attendance, and 80% (N=70/87) reported the presence of a traditional birth attendant. This **differs from** national ENDES data, which estimated that 91.6% of births were attended by a skilled attendant.[7] Some form of prenatal care was received by 64.5% (N=69/107) of respondents and nearly all mother reported exclusively breastfeeding their children (98.2%, N=107/109).

Breast Cancer Knowledge

Over two thirds of women surveyed had ever heard of breast cancer (75.7%, N=87/115) and 42.2% (N=49/116) of women knew someone who has or has had breast cancer, but only half of respondents felt comfortable explaining what breast cancer is (50%, N=58/116). Only 32% (N=37/116) could identify one of the main symptoms. Accurate knowledge **of early detection and treatment was limited. No respondents accurately identified measures for early detection of breast cancer (such as regular breast exams), and only eighteen women identified the need to access health services when symptomatic** (15.5%).

Cervical Cancer knowledge

Table 3 shows the responses to survey questions surrounding cervical cancer. Less than a third of women had ever heard of cervical cancer (32.7%, N=34/116) with just over a fifth who felt they could explain what cervical cancer is (22%, N=25/116). Across the respondents 20% reported knowing someone who had been diagnosed with cervical cancer (N=23/115). Only seven women (6%) identified routine pap smears as a preventative measure **and only 18 (15.5%) indicated that if symptomatic they should access health services for assessment and treatment.** The most common barriers to cervical cancer screening was fear surrounding the screening process (70.8%, N=80/113) and lack of access to services (53.6%, N=60/112). A vast majority of women expressed a need for cervical cancer screening programmes in their communities (80.2%).

****Insert Table 3**

Table 3. Key findings from survey questions concerning knowledge of cervical cancer and cervical cancer screening

Discussion

The aims of this study were twofold: to explore the health, health practices and access to healthcare for women living in the Lower Napo River communities and to assess

women's knowledge surrounding cervical cancer and the need for **appropriate** services within these communities. We found that women living in these communities face considerable barriers to accessing healthcare largely due to their socio-economic status and the area's remote geography. **Furthermore, we highlighted the considerable difference between data collected from women within these communities and the national Peruvian ENDES survey data , highlighting substantial inequality spanning both social-economic outcomes (literacy, years of formal schooling) and health outcomes (access to healthcare and maternal and sexual health).**

Our research demonstrates prominent within-country disparities in both **women's health and socio-economic indicators** in Peru and highlights the importance of the social and structural determinants of health in geographically remote and impoverished river communities of the Amazon. The creation of SIS insurance programme in 2002 and widespread health sector reform in 2009, aimed at improving health service equity, has led to a considerable increase in health insurance coverage for poorer members of Peruvian society.[5] This was supported by our findings, as only 5.9% of women reported being uninsured with a clear majority insured under the SIS scheme. Concerningly, we found that lacking money for treatment remained the leading barrier to accessing care in this population, supporting recent similar findings across both female and male populations across this region.[3,4] Opportunity costs associated with seeking healthcare are significant, with women from low income households spending a higher proportion of personal income on care seeking than those from higher income backgrounds.[13] Despite high national coverage of health insurance, out of pocket expenditure continues to make-up a considerable proportion of health funding within Peru, inhibiting national goals of achieving UHC.[14] Opportunity costs associated with care seeking are **fundamental** barriers to access within the LNR. Those wishing to access care face up to a 12-hour journey by boat from the LNR communities to Iquitos, where the nearest health facilities are situated, costing a large proportion of annual income. **Respondents to our survey clearly** highlighted that care-seeking was also hampered by issues surrounding childcare with many women unable to find help to care for their children when they needed to access services. We found that even when women can make the journey to the city they continue to face financial barriers through out of pocket expenditure for services and medications despite qualifying for free care; similar findings were reported by Kristiansson and colleagues[15] who explored care seeking for children within the Peruvian Amazon.

Despite poor health indicators from the Amazon states in Peru, significant progress has been made nationally in health metrics. **Following widespread social sector reform across Latin America in the 1980s and Peruvian health system reforms centred around health coverage (UHC), key health indicators such as life expectancy at birth,[16] under five mortality[16] and maternal mortality[17] all significantly improved between 1990 and 2015. However inequalities driven by an individual's gender[9], ethnicity[18, 19] and region of residence[7] persist. Total government health expenditure is lower than similar sized nations within the region[5], in part contributing to supply side gaps in both health infrastructure and workforce numbers[5]. Due to persistent challenges to incentivise an already depleted health care workforce to practice in**

rural communities[20], inhabitants of communities such as the LNR face further marginalisation.

Novel responses to service delivery and mechanisms to ensure sustained financial protection are **key** to improving coverage and reduce barriers to access. The work of local and international NGOs remains **important in** improving health in the region. **Our findings support that** costly and lengthy journeys down river **inhibit women's willingness to seek care**. Furthermore, fluctuant seasonal water levels can, for certain portions of the year, make the journey itself increasingly difficult. Projects like the Vine Trusts Amazon Hope improve coverage of health services through using boat clinics staffed with local medical professionals and international volunteers to traverse the river, brining care to communities.[21] A sustainable and community focused solution is being **led** by DB Peru who are working to upskill *promotores* to ensure they can provide local basic healthcare within communities and importantly to identify clinical need for referral to larger health care centres. Globally, Community Health Workers have become pivotal in improving coverage of key health services in LMICs[22] and are effective in ensure improvement of access to essential services for women's health.[23]

Importantly, we found that women surveyed were considerably less likely to access key maternal health services than women surveyed within the most recent ENDES survey. The average number of deliveries per women **in our sample** was high at 4.6 and with a large majority of women not delivering in health facilities or receiving any form of skilled birth attendance. Furthermore, the coverage of prenatal care delivered by a trained healthcare professional was twenty percent lower than the national average.[7] These indicators, as risk factors for preventable maternal mortality,[24] highlight the significant risks associated with pregnancy and birth in this region. High fertility and parity is likely driven by a considerable unmet need for family planning within this population, which we found to be 24.1%, triple recent national estimates.[7] Despite considerable global investment in maternal health, inequities between and within countries such as Peru are persistent within key indicators, including access to and coverage of essential services.[25] Investment in improving maternal health must be rooted in equity and health system strengthening to reduce the considerable barriers marginalised women face within access to care.[26, 27]

Women's limited access to health services and health education is reflected in the low level of health literacy regarding cervical and breast cancer within this population. With a focus on cervical cancer, our findings show women have limited knowledge of behavioural risk factors that may contribute to development of the disease and are largely unaware of the need to undergo regular screening or to seek medical treatment for suspected cases. Barriers to undertaking screening are extensive, driven mainly by fear of the screening process and an identified lack of accessible services. Over eighty percent of respondents highlighted the need for accessible screening services within their communities. DB Peru has worked to understand the logistical barriers compounding the issue of high cervical cancer incidence. Whilst screening services do exist within Loreto, in the city of Iquitos, a number of challenges to **preventative** care surrounding cervical cancer were evident. Previously, screening

involving cytology testing through a pap smear was ineffective for women within LNR communities. The process of undertaking screening and returning to the city for results collection is incredibly time intensive and costly leading to significant loss to follow-up compounded by ineffective processing of results at local health facilities delaying results.

This needs assessment was conducted as part of the larger *ABCS Project*, a community-based approach to cervical cancer prevention. The crux of the approach involves bringing screening and treatment to women, rather than them needing to travel to town or to a clinic, thus overcoming barriers to access and reducing the disease burden. Furthermore, the project aims to shift focus towards prevention away from treatment which is more expensive and often too late in the disease progression. Cervical cancer remains the most prevalent form of female cancer in low and middle income countries with 90% of mortality focused in low resource settings.[28] Peruvian cancer statistics reflect this with a cumulative risk of women developing cervical and breast cancer before the age of 75 as 4.3% and 2.4% respectively.[29] Cervical cancer incidence in the LNR populations is compounded by the high proportion of high risk HPV subtypes within the Loreto region[30] and limited knowledge of HPV transmission and its contributory role in cervical cancer across the country.[31]

Indigenous communities' experience of cancer screening programmes varies significantly between populations in regard to knowledge, practices and beliefs[32] suggesting a need for programmes appropriately tailored to the needs of communities. National screening programmes that fail to account for cultural and geographic disparities between indigenous and non-indigenous populations may be unsuccessful in delivering effective coverage of screening programmes.[33] The ABCS project is hinged upon a community-based approach and works in line with WHO guidance to deliver a screen and treat programme based on visual inspection of the cervix with ascetic acid (VIA) and immediate cryotherapy of identified lesions where clinically indicated.[34] This process is recommended in low resource settings due the limited practicality of traditional screening which is hindered by lacking human resources, long waits for results and referral pathways meaning women would need to make long journeys to receive treatment. [34,35]

Our study had a number of limitations. Data was collected from a relatively small number of respondents within the LNR region with participation limited to 55-83% of eligible community members at the time of the survey. This could have introduced selection bias into the results and limited the generalisabilty of the results. For many women, this was their first experience of ever participating in a 'survey.' This posed challenges where many women had difficulty in articulating their opinion and could possibly have introduced recall bias when reporting medical history. This was overcome by providing in-depth group explanations of the survey process and providing education to each woman as needed. We also opened-up discussions around breast and cervical cancer, performed all interviews in a safe and culturally-appropriate manner, and maintained dialogue and communication with all community members.

Conclusion

Whilst significant progress has been made at improving health within Peru, gains have not been experienced equitably across the population. We have found marked inequities between the women living in communities across the LNR and national ENDES data. As well as identifying the extent to which these women were socially marginalised and experienced health inequalities, we identified a significant **unmet** need for **health** education, preventative and curative interventions for prevalent issues of women's health within this region, particularly for cervical cancer.

Acknowledgements

We would like to acknowledge the health workers of the LNR communities who helped facilitate this project, the team of DB Peru volunteers, and Circo and Pilar Petite who provided local care and guidance.

Funding

The ABCS Project was funded by a Dining for Women grant.

Declaration of Conflicting Interests

No conflicting interests to report

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Figure and Table Legends.

Table One – Study Participants Characteristics

	Variable	**N**	**%**
	N	121	-
	Age Mean Range	42 (21-76)	
Marital Status	Married/ Consensual Union	105	89.7%
	Single/Divorced/Widowed	16	11.3%
Education Level	No Education/Incomplete Primary Education	54	45%
	Complete Primary Education	29	24.2%
	Incomplete Secondary Education	24	20%
	Complete Secondary Education	8	6.7%
	Complete University Education	5	4.2%
Employment	Agriculture/ Subsistence Farming	103	85.1%
	Service Industry	9	7.4%
	No Reported Employment	9	7.4%
Community	San Pedro	29	24%
	Mangua	33	27.3%
	Auca Cocha	13	10.7%
	Puinahua	21	17.4%
	San Juan de Floresta	10	8.3%
	Centro Unido	15	12.4%

Table Two- Comparison between women of childbearing age in the LNR and national ENDES Data (2014)

	Variable	ENDES 2014	Lower Napo River (Women of childbearing age) N=91
Education	Illiteracy	6.6%	11.1% (N=10)
	No Complete Education	2%	36.3% (N=33)
	Complete Primary Education	8%	25.3% (N=23)
	Complete Secondary Education	27.2%	6.6% (N=6)
	Complete University Education	32%	5.5% (N=5)
Barriers to Accessing Healthcare	Money	59.7%	75.9% (N=66/87)
	Not wanting to go alone	38.8%	35.6% (N=31/87)
	Transport	35.4%	54.2% (n=47/87)
	Needing Permission to Seek Care	18.1%	49.4% (n=43/87
Health Insurance	Health Insurance (any form)	68.6%	93.1% (N81/87)
	Comprehensive Health Insurance (SIS)	40.6%	85.1% (N=74/87)
Marriage and Family Planning:	Married or Consensual Union	56.7%	92.2% (N=82/87)
	Median Age of Commencing Sexual Activity	19	16
	Currently Using Contraception	74.6%	72.1% (N=49/68)
	Traditional Contraception	22.4%	8.2% (N=4/49)
	Modern Contraception	52.2%	92.8 (N=45/49)
	Depo injection as Contraception	18.1%	51% (N=25/49)
Pregnancy and Birth:	Median Age of First Birth (all women)	21.8	18
	Average Number of Births	2.5	3.6
	Prenatal Care Coverage	96.9%	76.5% (N=62/81)

	Last child delivered by a Skilled Birth Attendant	91.4%	9.9% (n=8/81)
	Facility Birth	89.2%	23.5% (N=19/81)

Table Three- **Key findings from survey questions concerning knowledge of cervical cancer and cervical cancer screening**

Question	Affirmative Response
Have you ever heard of cervical cancer?	32.7% (N=34 /116)
Can you explain what it is?	21.6% (N=25/116)
Do you know the main symptoms?	18.8% (N=22/117)
Do you know what causes cervical cancer?	0.9% (N=1/114)
Do you know how cervical cancer can be prevented (through early detection, for example)?	12% (N=14/117)
Do you know how it is treated?	15.4% (N=18/117)
Do you think lack of education is a barrier to screening [medical checks]?	31% N=35/113
Do you think "lack of access to check up" is a barrier to screening?	53.6% (N=60/112)
Do you think fear is a barrier to screening [medical checks]?	70.8%, (N=80/113)
Do you think you require improved access to cervical cancer screening in your community?	80.2% (N=93/116)

DB Peru Encuesta de Demografía General y Cuidados Básicos de Salud
Comunidades del Rio Bajo Napo

Fecha:_____ **Encuestador/a:** _____ **Comunidad:** _____

Nombre: _____

¿Siempre ha vivido en esta comunidad?
(Sí)
(No) ¿Viniste a una comunidad de Napo inferior?

Fecha de Nacimiento: _____ (Sí) ¿Cuál comunidad? _____
Sexo: H M (No) ¿Dónde vienes?_____
Numero DNI (Documento Nacionale Identificacion) _____

EDUCACION Y COMMUNICACION

¿Cuál es el grado más alto que asistió en la escuela?	_____anos
Si asistió a secondaria ¿Donde asistió?	
si ha completado secondaria, fue a universidad?	(Sí) Donde? (No)
¿Escuchas radio?	(Sí) (No)
¿Usas teléfonos celulares?	(Sí) (No)
¿Usas Internet?	(Sí) (No)
¿Usas el teléfono público?	(Sí) ¿Dónde está? (No)
¿Puede leer esta frase?	*El Rio Amazonas es muy grande y largo*

EMPLEO Y USA DEL TIEMPO

¿Participa en earing dinero para usted o su familia?	
¿Le pagan…	En dinero? En los productos? Otras?
¿Mantiene el dinero para usted o compartirlo con su familia/otras?	a) Mantiene para usted b) compartir con otras personas
¿Qué estás hacienda para ganar dinero?	
¿Crías animales para vender?	(Sí) (No)
¿Cultivas vegetales u otros cultivos?	(Sí) (No)
¿Fabricas productos para vender?	(Sí) (No)
¿Otro?	

PAREJA Y FAMILIA

¿Tienes una pareja?	(Sí) (No)
¿Hasta qué grado del colegio asistió tu pareja?	
¿Qué es lo que hace para ganar dinero?	
¿Quién normalmente decide como los ingresos tuyos y de tu pareja serán usados?	(a) tú (b) tu pareja (c) los dos juntos
¿Quién normalmente decide acerca del cuidado de tu salud	(a) tú (b) tu pareja (c) los dos juntos

RECURSOS DEL HOGAR Y EL DIARIO VIVIR

¿Tu familia/casa tiene un bote?	(Sí) (No)
¿Este bote tiene un motor peque peque?	(Sí) (No)

¿Qué es la fuente principal del agua potable para los miembros de su hogar?	
¿Dónde está ubicada esta fuente?	
¿Cuán distante es el agua de tu hogar?	_____m/km _____tiempo
¿Haces algo para asegurar que el agua está saludable para tomar (potable)?	(Sí) (No) ¿Qué?

¿Tienes un panel solar en su hogar?	(Sí)	(No)
¿Tu comunidad tiene el servicio de electricidad (luz)?	(Sí) ¿Con que frecuencia?	(No)
¿Tienes un grupo electrógeno (generador) en tu hogar?	(Sí)	(No)
¿Tienes una máquina de coser en tu hogar?	(Sí)	(No)

¿A dónde vas al baño (haces tus necesidades)?	
Que haces para disponer (descartar) del excremento?	

¿Qué haces con tu basura?		
¿Qué tipo de combustible que utiliza para cocinar?	a) Gas / propano b) Madera c) Otros	
¿Tienes y usas mallas para mosquitos?	(Sí)	(No)
¿Eres dueño/a de esta casa o Cuál quiera otra casa solo/a o con alguien más?	(Sí) (a) solo (b) con alguien más	(No)
¿Eres dueño de cualquier terreno , ya sea solo o conjuntamente con otra persona?	(Sí) (a) solo (b) con alguien más	(No)

SALUD GENERAL

¿Has visto un médico o enfermera desde la última visita de DB Perú?	(Sí) ¿ Donde? ¿Por qué?	(No)

¿El medico hizo o mandó que hagas:	(a) Analices de sangre? (b) Analices de orina/heces?	(c) Rayo X? (d) Otro?

¿El médico o enfermera le explicó después que es lo que tiene?	(Sí) ¿Qué?	(No)

Muchos factores pueden impedirle obtener asesoramiento o tratamiento médico. Cuando usted está enfermo y desea obtener tratamiento médico , que son los mayores problemas para usted ?

(a) Hallar transporte al servicio de salud (b) Conseguir dinero necesario para el consejo o tratamiento (c) Conseguir permiso para ir al médico	(d) No querer ir solo/a (e) Conseguir alguien para cuidar los niños (f) Otros

¿Tienes algún seguro médico?	(Sí)	(No)
¿Tienes un SIS número y carnet?	(Sí)	(No)

¿Estás tomando medicación ahora?	(Sí) ¿Cuál?	(No)
¿Dónde consigues las medicinas?		

¿En general, como estás sintiéndote ahora?

¿Ha cambiado este sentir en el último año? (Sí) (No)
¿Cómo te sentiste?

¿Cuantas veces al día comes?		
¿Qué comes en una comida típica? Desayuno		
¿Qué comes en una comida típica? Cena		
¿Has bajado de peso recientemente?	(Sí)	(No)
¿Experimentas escases de comida?	(Sí)	(No)
¿Si es que sí, quién en la familia tiene la preferencia para comer durante las comidas	(a) tu pareja (b) los niños	(c) tu (d) comparten

		igualmente

¿Puedes ver bien?	(Sí)	(No)
¿Puedes oír bien?	(Sí)	(No)

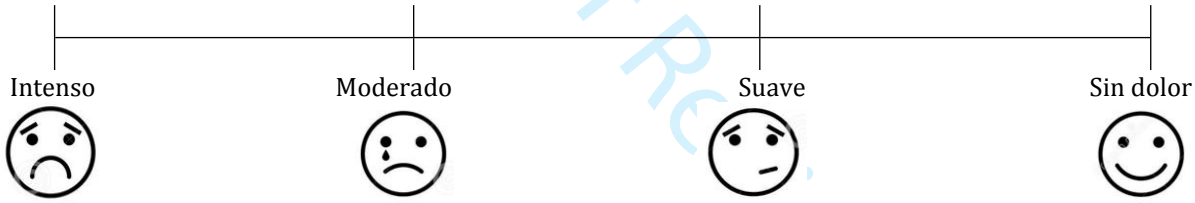
¿Hay Cuál quier cosa fuera de tu cuerpo, o en tu piel, que es diferente, molesta, o duele (bultos, heridas, crecimientos)?	(Sí) Cuál es?	(No)

¿Tus articulaciones duelen o molestan?	(Sí) donde? Desde cuándo?	(No)

¿Puedes respirar normalmente?	(Sí)	(No) ¿Duele cuando respiras hondo? (Sí) (No) ¿Tienes una tos que no sana? (Sí) (No) ¿Tienes esputo? (Sí) (No) ¿Rojo? ¿Amarillo?

¿Tienes dolor ahorita?	(Sí) Donde? Desde cuando?	(No)
¿Sabes porque tienes el dolor?	(Sí) Porque?	(No)
¿Hay algo que ayuda a aliviar el dolor?	(Sí) Cuál ?	(No)

¿Cómo es el dolor ahora?



Cuándo tú o alguien en tu familia está enfermo o herido: ¿Le tratas con hierbas naturales o plantas?	(Sí) ¿Si es que sí, con cuáles? ¿Con que frecuencia las usas? ¿Por cuánto tiempo?	(No)
¿De dónde aprendiste a usar estas hierbas o plantas?		
¿Enseñas tus hijos acerca de ellas?	(Sí)	(No)

CUIDAD DENTAL

¿Te has hecho ver con un dentista antes?	(Sí) ¿Visita de DB Peru? ¿Otro?	(No)
¿Has aprendido como debes cuidar tus dientes?	(Sí) ¿Visita de DB Peru? ¿Otro?	(No)
¿Qué haces para cuidar tus dientes?		
¿Tienes problemas con tus dientes ahorita?	(Sí)	(No)

OTRAS SYMPTOMAS

¿Tienes problemas al orinar?	(Sí) Como?	(No)
¿Tienes problemas al defecar?	(Sí) Como?	(No)
¿Tiene algún problema de pene : - sangrado - Aprobación de la gestión - Picor - Dolor Otro?	(Sí) Como?	(No)
¿Tiene problemas vaginales : - sangrado - Aprobación de la gestión - Picor - Dolor Otro?	(Sí) Como?	(No)
¿Ha tenido alguna infección de transmisión sexual ?	(Sí) Como?	(No)
¿Tiene algún problema o malestar de los senos ?	(Sí) Como?	(No)

SALUD DE MUJERES

¿A qué edad comenzaste a menstruar (sangrar)?	_____años	
¿Todavía menstruas?	(Sí)	(No) ¿Cuándo dejó de tener su ciclo menstrual ?

¿Has tenido un embarazo? (Sí) (No)

Si es que sí:

¿Cuántos embarazos ha tenido?		
¿Cuántos nacieron vivos?		
¿Alguno de sus niños mueren antes de cumplir los 5 años ?		
¿A qué edad tuviste tu primer hijo?		
¿Dónde diste a luz a tu último hijo?		
¿Tuviste la ayuda de una partera durante el parto?	(Sí)	(No)
¿Asiste a chequeos prenatales durante el embarazo?	(Sí) Donde? Cuanto?	(No)
¿Le diste de mamar a tu último hijo?	(Sí) ¿Por cuánto tiempo?	(No)
¿Estás embarazada ahora?	(Sí) ¿Es un embarazo deseado?	(No)

¿Estás actualmente activo/a sexualmente?	(Sí) ¿A qué edad comenzaste tu actividad sexual?	(No)
¿Estás tú o está tu pareja actualmente haciendo algo para postergar o evitar un embarazo?	(Sí) ¿Qué método de contracepción estás usando? ¿De dónde conseguiste lo que estás usando para practicar planificación familiar?	(No)
¿Algún empleado en el servicio de salud (posta médica) te habló de métodos de planificación familiar?	(Sí) Dónde?	(No)
¿Aprendiste acerca de planificación familiar de otra fuente?	(Sí)	(No)

¿En el futuro quisieras tener otro hijo?	(Sí)	(No) ¿Usando contracepción? (Sí) (No) ¿Porque no estás usando algún método para evitar un embarazo?
¿Dirías que el uso de contracepción es mayormente tu decisión, mayormente la decisión de tu pareja, o los dos deciden juntos?	(a) Tu (b) Tu pareja (c) Los dos deciden juntos	
¿Crees que usarás algún método de contracepción para postergar o evitar un embarazo alguna vez en	(Sí) ¿Si es que sí, qué?	(No)

el futuro?		

CANCER DE LA MUJER

Ahora vamos a hacer algunas preguntas sobre cáncer de mama y de cuello uterino. Se trata de dos tipos de cáncer que afectan a las mujeres en su comunidad, y puede hacer que se sienta muy enfermo e incluso causar la muerte.

CÁNCER DE MAMA

¿Has oído alguna vez de cáncer de mama?	(Si) (No)	
¿Me puedes decir que cosa es? ¿Cuáles son los síntomas principales (Sugerir – nódulos, dolor, secreción, sangrado)?		
¿Se puede prevenir cáncer de mama?	(Sí) ¿Cómo?	(No)
¿Se puede tratar cáncer de mama?	(Sí) ¿Cómo?	(No)
¿Conoces alguien en la comunidad que lo ha tenido?	(Sí) ¿Cuántas mujeres?	(No)
¿Qué hicieron al respecto?		

CÁNCER CERVICAL

Alguna vez has oído de cáncer cervical? ¿Puedes decirme que cosa es? ¿Cuáles son los síntomas principales (Sugerir – dolor, secreciones, sangrado)? ¿Cuantas personas recuerdas? ¿Qué hicieron al respecto? Have you heard about cervical cancer before?	(Sí)	(No)
¿Qué es lo que causa cáncer cervical?	(Sí) ¿Cómo?	(No)
¿Se puede prevenir cáncer cervical?	(Sí) ¿Cómo?	(No)
¿Se puede tratar cáncer cervical?	(Sí) ¿Cómo?	(No)
¿Conoces alguien en la comunidad que lo ha tenido?	(Sí) ¿Cuantas personas recuerdas?	(No)
¿Qué hicieron al respecto?		

¿Cuáles de los siguientes son las causas o barreras principales para que las mujeres no tengan chequeos y tratamientos para cáncer de mama o cáncer cervical:	(a)Falta de educación? (b) Falta de acceso a chequeos? (c) Miedo? (d)Otro?
Para probar y prevenir el cáncer de mama , debe tener un examen de mama : ¿estarías dispuesto a hacer esto en el futuro?	
Para probar y prevenir el cáncer de cuello uterino , debe tener un examen vaginal : ¿estarías dispuesto a hacer esto en el futuro?	
¿Preferiría tener las pruebas en una clínica o en el interior de su casa ?	a) clínica b) Casa c) no estoy seguro

¿Prefiere hacer la prueba usted mismo o tener un médico que lo haga por ti?	a) hacerlo usted mismo b) médico para hacerlo c) no estoy seguro