PACIFIC JOURNAL OF REPRODUCTIVE HEALTH

ORIGINAL ARTICLE OPEN ACCESS

Cervical screening in South Tarawa, Kiribati: understandings, attitudes and barriers to access.

Holly COULTER

Cervical Screening Systems Adviser, Kiribati Family Health Association/ Volunteer Service Abroad New Zealand Volunteer, Tarawa, Kiribati.

ABSTRACT:

Background: Cervical cancer is a major public health issue in Kiribati, and a significant cause of morbidity and mortality among women. This persists despite the effectiveness of cervical screening meaning cervical cancer is now largely preventable. There is a need for empirical research into understandings, attitudes and barriers to cervical screening for I-Kiribati women, in order to improve the current low uptake rate.

Methods: A mixed-methods approach was used to identify current understandings, attitudes and barriers to cervical screening. A community survey was administered to 90 men and women across South Tarawa, and three focus groups were conducted with 15 men and women to explore the topic in-depth.

Findings: Knowledge around cervical screening was low for both men and women. 41% of survey respondents identified experiencing symptoms was the primary driver for participating in cervical screening. Barriers to access included embarrassment, fear of the test or results, feeling healthy, believing the practice is inappropriate, and jealousy from males.

Conclusion: There is a need for health promotion and education around cervical screening which builds knowledge, normalises the process, and highlights the need for cervical screening as part of maintaining good health. Health promotion should target both men and women.

Keywords: cervical screening, Kiribati, pap smear, cervical cancer

BACKGROUND

Cervical cancer affects hundreds of thousands of women worldwide ever year,[1] and disproportionately affects developing countries.[2] Cervical cancer is a major public health issue in Kiribati, and a significant cause of morbidity and mortality among women. It is one of the leading causes of cancer death amongst I-Kiribati women.[3] This persists despite the efficacy of cervical screening in reducing cervical cancer morbidity and mortality.

The Republic of Kiribati is one of the most geographically isolated places in the world. It is categorised as a least developed country, and faces a number of major challenges, including high infant, child and maternal mortality rates, low life expectancy, and a lack of resources and infrastructure to meet the needs of the population.

Cervical cancer is one of many health problems experienced by I-Kiribati, but one which has seen

Corresponding author: Holly Coulter
hollycoulter92@gmail.com

Received: 24.08.2017; Published: 31.12.2017

Citation: Coulter. Cervical screening in South Tarawa, Kiribati: understandings, attitudes and barriers to access. *Pacific Journal of Reproductive Health* 2017;1(6):312-320. DOI: 10.18313/pjrh.2017.916.

Copyright: © 2017 Coulter. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

minimal improvement in incidence and mortality over the last several years. It has a population of 110,000 people, but in 2016 there were only 2,368 visits to health centres and clinics for pap smears.[4]

Rationale

By exploring current attitudes, understandings and barriers to cervical screening, service providers in Kiribati can provide effective, acceptable and accessible cervical cancer prevention. An increase in uptake of services will improve the health of women and their families, and reduce the number of preventable deaths from cervical cancer.

Existing Research

Globally, research has been conducted into cervical screening to identify key barriers to access. Research has identified several barriers, including a lack of suitable, free services with skilled practitioners and the necessity of taking time off work or arranging childcare,[5] as well as embarrassment, fear of the procedure and a lack of knowledge around screening.[6,7]

For many women, it may be inappropriate for someone other than a husband or partner to have access to intimate parts of the body, as occurs in cervical screening.[8] A perceived link to sexual activity can mean there is shame and stigma associated with an abnormal result, and make participating in cervical screening difficult.[9] Barriers to cervical screening access are often exacerbated for marginalised women, particularly women with disabilities, those living in rural or isolated areas, and those who have experienced sexual abuse.[10]

Attempts have been made in Kiribati to address several of these known barriers through the provision of free clinics in local communities, as well as through education and health promotion through community visits, posters, pamphlets and radio messaging. However, there is a lack of empirical research into barriers to cervical screening for I-Kiribati women, and current efforts have necessarily been based on anecdotal evidence. There is a need for local research, to identify solutions which are relevant and meaningful for the community.

METHODS

Research was conducted among men and women in South Tarawa, Kiribati. South Tarawa is the largest urban population in Kiribati, home to around half the total population. The decision to include both men and women in the research was made as in Kiribati culture, men are typically the decision makers for the household, including women's health care.[11] Further, given Kiribati's high rate of gender-based violence, any health initiatives need to protect the safety of I-Kiribati women, and working to ensure men are supportive of their partners and families participating in cervical screening is an important step in achieving this.

The research used a mixed-methods approach to explore understandings, attitudes and barriers to cervical screening. A community survey was conducted, followed by focus groups to explore understandings, attitudes and barriers in more depth. The research was conducted in collaboration with Kiribati Family Health Association (KFHA), a major cervical screening provider in Kiribati.

The research was conducted in line with Massey University's Code of Ethical Conduct for Research, Teaching and Evaluations Involving Human Participants,[12] which is accredited by the Health Research Council of New Zealand.

Survey Phase

Data was collected from a total of 90 individuals, made up of 26 men and 63 women. Two thirds of participants were aged between 18 and 39 (**Table 1**).

Table 1: Survey participant demographics

Age group (years)	Female	Male	Not specified	
Under 18	2	0		
18-24	8	6		
25-29	11	3		
30-34	10	5	1	
35-39	11	3		
40-44	5	2		
45-49	5	5		
50-54	2	1		
55-59	3	1		
60+	4	0		
Not specified	2	0		
Total	63	26	1	90

The survey explored exposure to information about cervical screening, knowledge of cervical screening, uptake of cervical screening, reasons for attending and not attending cervical screening and potential objections from male family members. The surveys were conducted in the local language, I-Kiribati.

The survey was tested with nurses at KFHA before being administered by trained volunteers. Participants were recruited randomly through door-to-door visits.

They were presented with informed consent forms which were explained verbally to ensure understanding before being invited to participate.

The volunteers were instructed to administer the survey to men and women aged 18 or over, and to aim to recruit a broad range of ages. The decision was made not to limit participants to those currently eligible for cervical screening, but to include those older and younger to gain insight from different age groups.

Because cervical screening may be a sensitive topic, participants were advised that they did not have to answer a question if they did not want to. This means that for some questions, the total is less than 90. The results of the surveys were entered electronically to be analysed. Graphs were generated to illustrate results.

Focus Groups

Three focus groups were conducted, one male group (6 participants), and two female groups (4 and 5 participants), giving a total of 15 focus group participants. This sample size was selected due to limited resources.

Focus groups were led by skilled I-Kiribati facilitators, who also ensured the focus groups were culturally appropriate. Each opened with a prayer and introductions, and closed with a prayer or song and sharing food and drink, as is customary in Kiribati.

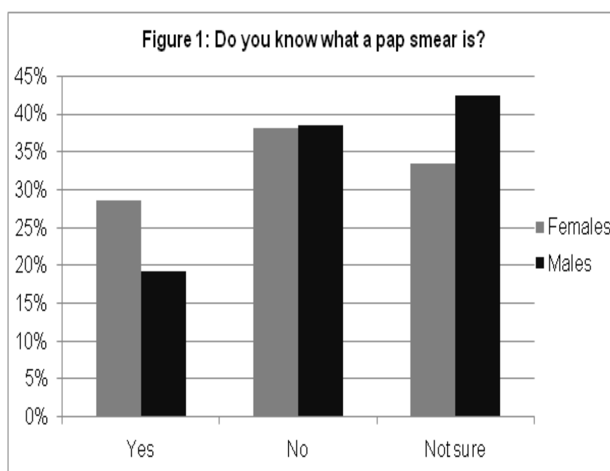
Informed consent was obtained and ground rules were established. Questions covered knowledge and attitudes around cervical screening and cancer, including family members' attitudes, and explored barriers and facilitators to cervical screening. Facilitators asked broad, open questions, as well as probing and clarifying questions as required. Hypothetical scenarios were offered to generate discussion without requiring participants to disclose personal information if they did not want to. The focus groups were conducted in I-Kiribati.

Both audio recordings and notes were produced at each focus group. The recordings and notes were used by a skilled translator to generate transcripts in English. Responses were analysed manually for common themes. These were grouped within the categories of attitudes, knowledge, drivers, barriers and facilitators; and have been included for illustrative and elaborative purposes alongside survey responses.

RESULTS

Knowledge of cervical screening

Knowledge around pap smears was low for both genders, and lower for males than females. Many respondents did not know what a pap smear was or were unsure (**Figure 1**). Many females (39%) did not know where to go for a pap smear. Half of participants were not sure how often women should have pap smears, while only 5% gave the response that is currently recommended in Kiribati of 3 years, and a significant number (17%) suggested that they should attend when they experienced symptoms (**Table 2**).



Exposure to information on cervical screening was also low, with 51% of participants indicating they had not received any information on pap smears before. For those that had received any information on cervical screening, the primary source of this information was from volunteers coming into the community (45% of all respondents) (**Table 3**).

Table 2: Knowledge around cervical screening

Do you know what a pap smear is?			Where would you go for a pap smear/where did you go for your last one?		How often do you think someone should have a smear?		
	Females	Males		Females		Females	Males
Yes	18	5	KFHA static clinic	4	Every few months	5	3
No	24	10	KFHA mobile/ after-hours clinic	5	Every year	11	1
Not sure	21	11	Tungaru Hospital	8	Every 2 years	3	2
			Not sure	10	Every 3 years	4	0
					When there are symptoms	11	2
					Not sure	26	11
TOTAL	63	26		27		60	19

Table 3: Exposure to information on cervical screening

FEMALES ONLY: Have you ever had a pap smear before?		FEMALES ONLY: If yes, roughly when was your last pap smear?	
Yes	21	Less than 1 year ago	7
No	38	1-3 years ago	4
Not sure	4	3-5 years ago	5
		5-10 years ago	1
		More than 10 years ago	4
		Not sure	4
TOTAL	63		25

Uptake of cervical screening

Only a small proportion of female respondents (32%) had ever had a pap smear. For those who had ever had a pap smear, the length of time since their last smear varied widely, although 44% had had a pap smear within the past three years in line with clinical recommendations (**Table 4**).

Drivers of cervical screening

Respondents were asked what they thought the main reason that a woman might decide to undergo cervical screening was. The key reasons identified were experiencing health problems or symptoms (41%), being invited or encouraged to attend (31%), and to prevent cervical cancer (24%) (**Figure 2**).

When asked about the drivers of cervical screening attendance, focus group participants generally suggested that it was to test for cervical cancer, although other ideas included maintaining the health of women and their families, or detecting general cervical health issues.

> *"For the wife to stay healthy, so they can have a long happiness in their family lives."* – male participant

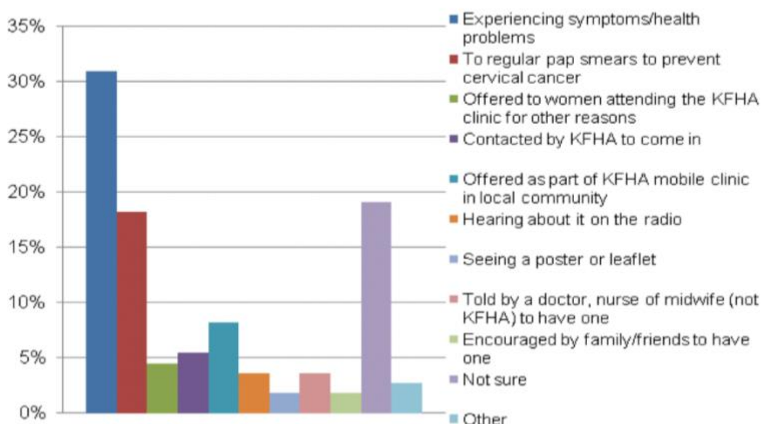
> *"I really want to live-long so that also encourages me to go for pap smears."* - female participant:

> Female participant: *"It is a "must" for women to inform them if they have problems with their cervical parts or not."*

Table 4: Uptake of cervical screening

Have you received any information on pap smears before?			If yes, where did you receive this information?		
	Females	Males		Females	Males
Yes	25	4	Posters	2	1
No	30	14	Pamphlets	2	0
Not sure	8	5	KFHA staff/ volunteers in the community	13	5
			From a doctor, nurse or midwife	5	1
			Radio	8	1
			Other	9	4
TOTAL	63	23		39	12

Figure 2: What do you think the main reason for people coming in for smears is?



Barriers to cervical screening

Respondents were asked to select possible reasons why women might not attend a pap smear. Responses were varied, but the most frequently reported reasons were being scared of the test (21%) and embarrassed (24%) (**Table 5**).

Focus group responses elaborated on these barriers, including why women might not return for their results or for future pap smears. Feeling shy or embarrassed, access issues (particularly in relation to transport costs and for those with disabilities), and fear of results were identified by male focus group participants.

"Some of the women refuse to because they are too shy to be seen."- male participant

"Migration to other islands where a woman will surely miss her expected time for Pap smear." - male participant

> *"Some will think that it is better not to know rather than knowing it. If she discovers* [an abnormal result] *it will worsen the situation she in. So she will prefer not knowing it and spend her time happy with her friends until she finally dies from that."* - male participant

Female focus groups participants also identified several barriers to participation. These included shyness, feeling scared of the test or results, believing they were healthy, and a lack of knowledge around cervical screening and cancer.

> *"Feeling and looking healthy means for some people, they don't need to go for pap smears."*- female participant

> *"In some cases, women feel scared of pap smears as they don't really know how a pap smear is done on women."* - female participant

Participants were also asked to identify reasons why men might not want female partners or family members to attend. Survey responses varied, but the most frequently reported reasons

Table 5: Barriers to uptake of cervical screening

Why might someone not for a pap smear?			Why might a male family member not want a woman to go for a pap smear?		
	Female	Male		Female	Male
Too busy with work	6	2	They are busy with work	4	1
Feel healthy/fine	7	4	They are busy with the family	3	4
Scared of test	13	5	Think they are healthy/fine	10	6
Scared of what result might be	7	3	Scared of what result might be	6	2
Too far to travel	5	3	It is too far to travel	2	3
Don't think it would make you better	3	3	Don't think it would make her better	5	2
Partner/family do not approve	5	2	Religious beliefs	2	1
Religious beliefs	0	1	Don't think it is appropriate to do	8	2
Embarrassed	16	4	Not sure	14	7
Don't think it is appropriate to do	6	3	Other	8	2
Not sure	12	6			
Other	5	1			
TOTAL	85	37		62	30

were thinking that they are fine (20%) and think it is not appropriate to do (13%) (**Table 5**).

Focus group discussions expanded on the reasons why males might not want female family members to participate in cervical screening. Jealousy was established as a key barrier, particularly in relation to not understanding what was involved in the procedure.

> Male participant: *"In our custom it is too difficult for men to allow their wife to have a cervical cancer test if they are not really sure of how does it is operated on their women."*

> Female participant: *"Jealous. Since a pap smear is done on women's genital parts, the husband will feel jealous of the male nurses. If not the husband, the mother in law will."*

A lack of faith in the effectiveness of the medical system was also established as a barrier, and some individuals shared anecdotes of negative experiences with the health system, which affected their and others' attitudes to and likelihood of engaging with services. Others shared a belief that if women appeared and felt healthy they did not need to attend screening.

> *"Men won't allow their wife to go for Pap smears if they are not feeling confident about those who will do it."* - male participant:

> *People think you are healthy so there's no point for you to go for pap smears. They don't know what a pap smear is."* - female participant:

Facilitators to access

Focus group participants discussed factors that might facilitate women attending cervical screening. Practical tools such as reminders were established as facilitators, as well as combining cervical screening with other services such as family planning. Participants also discussed the responsibility lying with the

smear-taker to follow up with women. The role of radio advertising had a mixed response, with some believing it was a useful tool, but others expressing concerns about privacy.

> *"Better to write a date and reminder somewhere you can't lose it. One good idea is to write a date and notice of your next pap smear on a big board."* - female participant:

> *"I really suggest KFHA should be responsible in reminding women about their next time to come back for pap smear... I think this kind of role is in the heart of its establishment so KFHA has to take up this challenge."* - female participant:

The role of males in supporting their family members was also discussed as an important facilitator. This was not limited to reminders, but also included the need to be supportive and encourage women to attend screening and treatment.

> *"Loving your wife, means you have to allow your wife to go for a pap smear. This proves your concern about your wife to stay healthy."* - male participant:

> *"Sometimes in cases where the daughter is having cervical cancer then, then there's a need to talk to parents so that they support their daughters to seek help."* - male participant:

Mobile services and community outreach were identified as a useful facilitator to access. This included both service delivery and health promotion. Tapping into other community events was also identified as a good way to connect with people.

> *It's better if there's a service that will visit households especially."* - male participant:

> *"Reminding people through awareness programs. These can be done by KFHA youth volunteers through reaching out community and reminding women about their appointment."* - female participant:

> *"It would be a good idea if hosting some sort of gathering, for example hosting festival, where drink and food are provided. In that way it can be expected that many people will come."*- male participant:

Trust in the effectiveness of available treatment was also identified as a facilitator.

> Female participant: *"Women's experiences of being cured or helped by taking up their treatment given from hospital, would encourage them to feel confident in getting more treatment and would likely go back...whenever they are needed."*

DISCUSSION

The findings of this research demonstrate low understanding and awareness of cervical screening, and identify a number of barriers to accessing services. There is a clear deficit of knowledge around cervical screening among both men and women, with a large number of those asked not knowing what a pap smear is, how often a woman should have one, or where to go to access cervical screening services. Further, many respondents had never received any information on pap smears. A lack of knowledge and awareness has been identified as a significant barrier to participation in international research.[13] Key to the success of a cervical screening programme is informed decision making, which equips women with information on cervical cancer and the role of cervical screening in prevention.

For many respondents, cervical screening was seen as something that was only needed when a woman experienced symptoms. A key barrier to screening, both in terms of why women would not go for screening and why a male might not want a woman to go for screening, was the belief that they were healthy. In addition, the main reason identified by respondents for a woman seeking cervical screening was due to experiencing symptoms or health problems. This is particularly problematic as it potentially creates a stigma around accessing cervical screening services, which has been identified as a barrier to participation.[13] Experiencing gynaecological health issues may be associated with sexually transmitted infections, and this may make it difficult for women to access cervical screening, as well as leading to disapproval from their partners, families or friends. Further, the success of cervical screening to prevent cervical cancer is reliant on asymptomatic, well women participating in regular screening. Pre-cancerous cell changes, which are targeted in cervical screening, usually occur without symptoms, and by the time

symptoms appear, invasive cancer may have developed.

Fear of the cervical screening test and fear of the results were identified as barriers to participation in the community survey, as well as through interviews with key stakeholders. Possible reasons for this fear may stem from misunderstandings about the test itself, or about cervical cancer and prognosis if diagnosed, especially given the lack of knowledge held about cervical screening and cancer. This fear was also linked to a lack of trust in the effectiveness of screening and treatment services.

The attitudes and beliefs of males play an important role in acting as both a barrier and facilitator to accessing cervical screening services. Within Kiribati culture, males are typically the decision makers within a family, and the support or lack thereof of male heads of the family can strongly influence the likelihood of women participating in screening. Jealousy was a key issue identified by participants, particularly related to the process of undergoing a pap smear. Given the high rate of gender-based violence in Kiribati, there is a need to address issues of jealousy in a sensitive manner, through education and normalising of cervical screening, and ensure that women's safety is protected first and foremost. This may also involve improving processes to ensure confidentiality, or in some cases, it may not be safe for a woman to participate in cervical screening at that point in time, and this must be respected.

Of the participants in this research, one third of females had had a pap smear in their lifetime, and 44% of those had had a pap smear in the last three years. These rates are low, and only apply to those living on South Tarawa, the main urban settlement in Kiribati which is in close proximity to the main cervical screening providers. Those living in rural locations, such as outer islands, with less access to services can be expected to have much lower uptake rates.

The findings of the research demonstrate areas of success for service provision and health promotion, and the potential for these services to influence cervical screening attitudes, knowledge and uptake. Although there was a low rate of receiving information on cervical screening, among those who had received information several effective methods of information dissemination were identified. 45% of those who had received information did so from KFHA representatives in their community, 24% through radio, and 31% identifying other sources, including friends, family members, or as part of maternity care from a midwife. Focus groups identified community based services and health promotion as successful ways to increase screening uptake. These are areas which can be further developed to increase community exposure to messaging about cervical screening, and increase the likelihood of women participating.

It is important to acknowledge some of the limitations of this research. Firstly, as it was conducted only with people living in South Tarawa, the findings cannot necessarily be applied to those living on outer islands. However, given that more than half of the Kiribati population lives on South Tarawa, it provides a good starting point for developing cervical screening systems. Possible methodological issues exist through the necessity of producing results in English to be analysed by the researcher. Some loss of meaning may have occurred by conducting interviews with key stakeholders in English, although all of those interviewed had a strong grasp of the English language and were experienced in communicating with English speakers. Focus groups were conducted in i-Kiribati and translated into English. To minimise loss of meaning, a skilled translator with experience with providing translation services for health research with KFHA in the past was used.

The findings of this research indicate several areas where changes can be made to improve cervical screening services and uptake in Kiribati. Initiatives will need to take into account the current lack of knowledge and barriers to access, as well as the facilitators identified in the research. The findings can be used to guide health promotion and education in order to address some of the barriers to accessing cervical screening services. Several key areas for improvement were identified.

There is a need to develop key messages to underpin health promotion activities which address the barriers identified in this research. This includes: building knowledge around cervical cancer and screening; normalising cervical screening including addressing embarrassment, fear and jealousy from males; and promoting cervical screening as a way of maintaining good health. Further, health promotion resources and programmes which incorporate these key messages and which target both men and women, and which are delivered using a coordinated approach are

required. Health promotion should build the capacity of community leaders and equip them to reach their own communities. Finally, the continued and increased delivery of health promotion messaging through community outreach services, radio announcements, and a presence at community events will build awareness and reduce barriers to access.

ACKNOWLEDGEMENTS

The Kiribati Family Health Association (KFHA), for supporting the project, offering help with translation, logistics and community engagement and providing ongoing guidance; the members of the community who gave up their time to participate in surveys and focus groups, and shared their experiences and knowledge; VSA New Zealand for funding support.

REFERENCES

1. World Health Organisation [Internet]. Cervical Cancer: Estimated Incidence, Mortality and Prevalence Worldwide in 2012. [cited 2017 May 25]. Available from http://globocan.iarc.fr/old/FactSheets/cancers/cervix-new.asp
2. World Health Organisation. Comprehensive cancer control: A guide to essential practice (2nd Edition ed.). Geneva, Switzerland: World Health Organisation; 2014.
3. Ministry of Health and Medical Services. *Kiribati Annual Health Bulletin.* South Tarawa, Kiribati: Ministry of Health and Medical Services; 2016.
4. Ministry of Health and Medical Services. *Kiribati Annual Health Bulletin.* South Tarawa, Kiribati: Ministry of Health and Medical Services; 2016.
5. Foliaki S, Matheson A. Barriers to cervical screening among Pacific women in a New Zealand urban population. *Asian Pacific Journal of Cancer Prevention.* 2015; 16 (4): 1565-1570.
6. Jameson A, Sligo F, Comrie M. Barriers to Pacific women's use of cervical screening services. *Australian and New Zealand Journal of Public Health. 1999;* 23(1): 89-92.
7. Naidu SL, Heller G, Qalomaiwasa G, Naidu S, Gyaneshwar R. Knowledge, attitude, practice and barriers regarding cervical cancer and its screening using Pap smear, in rual women of Ba, Lautoka and Nadi, Fiji. *Pacific Journal of Reproductive Health.* 2015; 1(2): 50-59. DOI: https://doi.org/10.18313/pjrh.2015.913
8. Lovell S, Kearns RA, Friesen W. Sociocultural barriers to cervical screening in South Auckland, New Zealand. *Social Science & Medicine.* 2007; 65: 138-50.
9. Jameson A, Sligo F, Comrie M. Barriers to Pacific women's use of cervical screening services. *Australian and New Zealand Journal of Public Health.* 1999; 23(1): 89-92.
10. Peters K. Politics and patriarchy: Barriers to health screening for socially disadvantaged women. *Contemporary Nurse.* 2012*;* 42(2): 190-97.
11. Massey University [Internet]. Code of ethical conduct for research, teaching and evaluations involving human participants. [cited 2017 May 30]. Available from https://www.massey.ac.nz/massey/research/research-ethics/human-ethics/code-ethical-conduct.cfm