



**What Can be Learnt about Male Circumcision and HIV prevention with a
Cohort of Students and Staff at a Papua New Guinean University?**

Research Report

By

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LIST OF ABBREVIATIONS

ABC	Abstinence, Be Faithful & Condom use
AIDS	Acquired Immune Deficiency Syndrome...
CP	Central Province
EHP	Eastern Highlands Province
ENB	East New Britain
ESP	East Sepik Province
FGD	Focus Group Discussion
HIV	Human immunodeficiency virus
JCU	James Cook University
MC	Male circumcision
NACS	National AIDS Council Secretariat
NACRAC	National AIDS Council Research Advisory Committee
NGI	New Guinea Island Region
NIP	New Ireland Province
NSP	North Solomon's Province
PAC	Provincial Aids Council
PMGH	Port Moresby General Hospital
PAU	Pacific Adventist University
PAUREC	Pacific Adventist University Research and Ethics Committee
PNG	Papua New Guinea
SDA	Seventh Day Adventist
SHP	Southern Highlands Province
STD	Sexually Transmitted Disease
STI	Sexually Transmitted Infection
UNAIDS	Joint United Nations Programme on HIV/AIDS
WHO	World Health Organisation
WHP	Western Highlands Province
WNB	West New Britain
WP	Western Province

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EXECUTIVE SUMMARY

Papua New Guinea (PNG) is experiencing a generalised HIV epidemic with significant burden on individuals, families and communities. Preventing HIV requires a comprehensive range of measures to be implemented to address the multi-faceted drivers of HIV transmission. Male circumcision (MC) is now recommended by World Health Organisation (WHO) as an additional HIV prevention strategy for countries, such as PNG, where HIV is primarily transmitted via heterosexual intercourse, there is a generalised epidemic and most men are not circumcised. WHO urge that there be a locally relevant evidence base to inform any locally relevant male circumcision for HIV prevention response.

This study aimed to provide evidence on male circumcision and other foreskin cutting practices from PNG university staff and students to inform further study and any potential MC for HIV prevention programs. The study has: described and categorised MC and other forms of foreskin cutting; and examined cultural, social and religious understandings and practices of MC and other foreskin cutting. The study has also strengthened research capacity at Pacific Adventist University and informed a large multi-site international collaborative study on the acceptability and feasibility of male circumcision as an intervention to reduce HIV transmission in PNG. The study was conducted at Pacific Adventist University, a faith-based University just outside Port Moresby. Papua New Guinean staff and students completed a self-administered questionnaire (58 males and 36 female participants), participated in a clinical examination (13 male participants), 3 focus groups discussions (13 male and 8 female) and 8 individual semi-structured interviews (4 male and 4 female).

This study documented many different types of foreskin cutting in male participants in addition to circumcision (the full removal of the foreskin). Sixty four percent (64%) of the males reported some form of foreskin cutting. Of the men reporting a foreskin cut, a minority (18%) reported the full removal of the foreskin, while most (82%) reported some form of longitudinal cut to the foreskin that exposed (either partially or totally) the head of the penis, but did not remove the foreskin, While foreskin cutting is a traditional practice in some cultural groups in PNG, it is also becoming a contemporary practice in other groups through influence from peers, and interaction with men from areas where there are traditional practices. Reasons for undergoing foreskin cutting (including full circumcision) identified in the data include: culture, health/hygiene, peer influence, sexual pleasure, masculinity, and biblical alignment.

The study approach which included gender specific information sessions and data collection, utilising existing cultural groupings, anonymity and sensitivity, was successful in conducting research on this sensitive topic in this setting. Most participants openly discussed sex and related topics, including MC, and males were willing to undergo physical examination. Research capacity was strengthened at Pacific Adventist University throughout the study. This study has shown that the different types of foreskin cutting need to be taken into account in the development of research tools for future studies to enable complete and meaningful data relevant for the local PNG context. More research is needed to determine if these other varieties of foreskin cutting provide the same protection from HIV transmission that full circumcision has been proven to provide.

1. INTRODUCTION

1.1 Study aims

The aims of this study were to:

1. Describe and categorise male circumcision and genital modification in Papua New Guinean men;
2. Examine social, cultural and religious understandings and practices of male circumcision;
3. Develop research capacity and inform an international collaborative study on the acceptability and feasibility of male circumcision as an intervention to reduce HIV transmission in PNG.

1.2 Background and literature review

1.2.1 HIV in PNG

PNG has the highest incidence of HIV in Oceania with 90% of all reported infections in the region.¹ At the end of 2009 an estimated 34 100 people, 0.9% of the population were living with HIV.² There were 3200 new infections in 2009, up from 1713 new infections in 2002.³ Significant risk of infection exists in PNG because of unprotected heterosexual sex with multiple partners, high levels of untreated sexually transmitted infections (STIs) and the young age people initiate sexual activity.⁴ Gender inequalities and widespread physical and sexual abuse increase vulnerability of women.^{6,7,8} Weak health care delivery systems and surveillance across PNG contribute to the limited ability to detect and treat STIs including HIV.^{9,10,11} There are almost equal numbers of men and women living with HIV, however young women and older men are disproportionately affected.^{3,11} Husbands infected through extramarital affairs, are reported to have transmitted HIV to one or more wives, who are often unable to insist on condom usage.¹⁵ Voluntary counselling, testing and antiretroviral programs are established as HIV intervention strategies.¹⁰ The Abstinence, Be Faithful and use a Condom (ABC) prevention methodology is challenged by supply chain problems, anti-condom sentiments by some religious groups, and limited incorporation of cultural concepts of sex in HIV prevention. This is of a great concern across PNG's diverse geographic and cultural environment where many sexual activities are generally not openly discussed because of sex being seen as a taboo in many societies.^{12,13} Research is increasingly exploring the numerous social and cultural understandings of STI and HIV in PNG.^{3-5, 9, 11-26} Predictions early in PNG's epidemic stated that unless interventions to address HIV in PNG are scaled up, over 500 000 people could be living with HIV/AIDS by 2025.²⁷ One such intervention in a comprehensive HIV prevention package for PNG may be increasing the prevalence of male circumcision (MC).

1.2.2 Male circumcision and HIV infection

For more than a decade there has been a growing body of literature exploring the largely observational studies that indicate heterosexual circumcised men have lower levels of HIV infection than uncircumcised men.²⁸⁻³¹ This prompted calls to consider medical circumcision as a strategy to reduce HIV transmission, particularly in high prevalence areas where circumcision is uncommon and transmission is via heterosexual intercourse. Clinical trials in Africa have

produced strong evidence that MC reduces the transmission of HIV. The first clinical trial, in South Africa from 2002-2004, was halted after 12 months when HIV transmission was reduced by 60% in men who had undergone circumcision.³² A similar study in Kenya was stopped in December 2006 after interim analyses showed a 53%-60% reduction.³³ Trials in Uganda were also halted in December 2006 following an estimated 51%-53% reduction.³⁴ A recent retrospective study found similar levels of protection from HIV in circumcised heterosexual men with known HIV exposure in the USA.³⁵ Physically removing the foreskin removes HIV target cells (Langerhans' cells, CD4+ T cells and macrophages) present in high density on the inner mucosal surface of the foreskin. This suggests a plausible biological mechanism for MC to reduce HIV transmission.^{32, 33, 34} Although MC does not provide complete protection, WHO and UNAIDS recommend it should be recognised as an additional strategy in a comprehensive HIV prevention package to prevent heterosexually acquired HIV.^{36, 37}

A WHO/UNAIDS technical consultation on MC and HIV prevention, convened to respond to the results of the African circumcision trials, stated that MC should be recognised as an efficacious intervention for HIV prevention.³⁶ The report's conclusions included: the socio-cultural context should inform MC programming; that human rights, gender implications, legal and ethical principles must guide service delivery; and that suitable research is needed to guide MC programs. MC is increasingly becoming an additional HIV prevention strategy with MC services being introduced in sub-Saharan Africa. Research is assessing the safety of MC and health service and training needs for Eastern and Southern Africa.³⁸ UNAIDS have stressed that any MC intervention should be locally relevant, evidence based and responsive to the local contexts.^{39,40} This study aims to contribute to such an evidence base on MC for HIV prevention in PNG.

1.2.3 Circumcision in PNG

Studying MC in PNG is a complex task because of the range of medical, traditional and contemporary genital cutting practiced across the country.^{4,16,41,42} MC is believed to be low, with PNG listed in countries with less than 20% MC prevalence.⁴³ However little has been published about male genital modification practices, the extent to which they occur or their implications for HIV prevention in PNG.⁴ Surgical MC is promoted at Boram Hospital in Wewak and through the East Sepik Province (ESP), an area in which traditional circumcision is practiced, however MC is not currently a part of the PNG National Strategic Plan on HIV/AIDS.¹¹ PNG National AIDS Council has acknowledged the potential of MC in HIV prevention strategies in PNG by listing it as a research priority in the National Research Agenda 2008-2013.²⁶ Research in neighbouring West Papua has documented MC prevalence of 5% in ethnic Papuans (compared with 70% in non-Papuans). In West Papua, 1.0% of circumcised men were HIV positive compared to 5.6% of non-circumcised men.⁴⁴ Given the potential of MC in HIV prevention, an analysis of the types of MC and genital cutting and the social, cultural and religious understandings of MC are essential to inform future programs and research. UNAIDS states that "Effective and well-targeted HIV prevention programme can reverse PNG's epidemic, but reversal will be a challenge"¹⁰ This research aims to build local evidence to inform such targeted HIV prevention programmes.

2.0 RESEARCH DESIGN AND METHODS

This research utilised a mixed methods approach within a single site, Pacific Adventist University (PAU) near Port Moresby, Papua New Guinea.

2.1 Initial process of the study

During 2008 discussions took place between key staff at PAU's School of Health Sciences and James Cook University (JCU) about possible research collaboration on a study of MC and HIV prevention in PNG. In January 2009, Professor John McBride of JCU facilitated a workshop to discuss the partnership. The need for an initial study in one site was discussed to inform a larger multi-site study across PNG. This led to an application to the National AIDS Council of PNG for funds for the study reported here undertaken by researchers at PAU, with the support of JCU colleagues. The study started in March 2010 and data collection completed by September 2010.

To plan for the study with staff and students on the PAU campus a steering committee was established at PAU. This comprised of Deans of the six PAU Schools and the heads of other support services. The university leaders on the steering committee were from various countries: PNG, Tonga, Solomon Islands, Samoa, Fiji, South Africa, Australia and New Zealand. The conservative nature and small size of the campus, newness to research and the contentious nature of the study meant that support of university leaders was critical if the study were to succeed. This committee gave guidance and assistance, including advice for cultural leaders of the four regions of PNG (MOMASE, Highlands, Southern and New Guinea Islands) to work in partnership with the research team. This approach proved to be a key to success for the study.

2.2 Study population and recruitment

The study site, Koiari Campus of Pacific Adventist University, has a population of more than 1000 staff and students from across PNG, Asia and the Pacific. Almost 80% of staff and students live on campus. The research participants were Papua New Guinean University students (single students, both day & boarding, and married students) and staff (teaching and non-teaching). General information on the study was communicated via the University newsletter *Harina*, email, and during the weekly assemblies held in the main church hall on the campus. Since the research topic is sensitive, it was meetings with the cultural groups that staff and students belong to, which were the primary mechanism for detailed information sharing and recruitment for the study. This mechanism worked well given that PNG students are affiliated with one of the four PNG regional groups. Staff members also usually align with these groups.

2.3 Data collection: Techniques, tools, and response rates

Four techniques were used to collect the data:

- Self-administered anonymous written questionnaires: separate male and female questionnaires (see Appendix 1 and 2);
- A clinical examination for male participants, including request for photo of genitalia;
- Focus group discussions (see Appendix 3 and 4);
- Individual semi-structured interviews (see Appendix 5 and 6).

2.3.1 Questionnaires

The female and male questionnaires were subdivided into the following 5 sections:

- Demographic information/background characteristics;
- HIV knowledge
- Sexual history
- Knowledge of and attitude towards MC; and
- For males only, classification of foreskin

A total of 140 male questionnaires were prepared for distribution to male participants and 50 questionnaires prepared for female participants. Questionnaires were distributed to members of the 4 regional groups during meetings with each group.

At the cultural group meetings, the researchers distributed envelopes containing questionnaires to the male and female regional group leaders to distribute to respondents who were present during the briefing. Each questionnaire had a unique 3 digit number identifier. The male version of the questionnaire had a tear off slip also with the unique identifier number and information about the clinical examination. All those who took envelopes were asked to return the questionnaire in a sealed envelope to drop boxes distributed around campus regardless of whether they chose to complete it or not (to increase the anonymity of participation). Participants were given 2 weeks to return the questionnaires to the drop boxes located across the campus. The cultural leaders were asked by the researchers to remind their members to return envelopes within the 2 weeks. Of the 46 female questionnaires distributed, 37 were completed (80% response rate). Of the 137 male questionnaires distributed, 59 were completed (43% response rate). The total response rate was 52%.

2.3.2 Clinical examinations

Males who completed the questionnaire were invited to participate in a clinical examination to assess and document any form of foreskin cutting and confirm participant's self-classification of foreskin cutting. The examination was conducted away from the university campus by a medical officer at the Port Moresby General Hospital (PMHG). The medical officer was provided with the list of numbers for completed questionnaires, to indicate eligibility to participate in the clinical examination (that is, they had completed the questionnaire). A consent form was completed and signed before the clinical examination took place. Each participant in the clinical examination was given K20.00 to cover cost of travel, a meal while off campus and inconvenience.

Additional written consent was requested for a digital photograph to be taken. The medical officer recorded the classification, and attached the photos where possible, noting the unique identifying code number for the participant. This information was returned to the researchers to enable the clinical examination data be matched with the questionnaire data. Consent forms were returned to the male principal researcher based at PAU and kept in a secure location at the University.

Of the 13 males who volunteered for physical examination at PMGH 7 did not submit a questionnaire at PAU. This was noted when corresponding numbers presented at examination with numbers on submitted questionnaires. In all cases photographs were taken by the medical officer.

2.3.3 Focus groups

The focus group participants were also recruited through the existing regional networks, using purposive and convenience sampling. Two males and two females from each regional group were requested to participate in a focus group discussion. There was no identified link between the questionnaire and the focus group participants. Each focus group took between 45 minutes to - 2 hours, was audio recorded and facilitated by a researcher of the same sex with the assistance of a note taker/assistant also of the same sex (*see Appendix 3 and 4*).

In total three focus groups were conducted. These comprised of one female group (8 single participants) and 2 male groups (one with 7 single participants and one with 6 married participants).

2.3.4 Individual semi-structured interviews

More detailed understandings of participants ideas about MC were elicited in in-depth individual interviews (*see Appendix 5 & 6 - interview guide*). In total, 4 female and 4 male individual semi-structured interviews were conducted.

2.4 Data analysis

Quantitative Data: Data were entered into Microsoft Excel and then imported into SPSS version 18 to undertake descriptive analysis of the questionnaire data. Tables and figures are presented in the findings section with comparison of male and female responses.

Qualitative Data: Qualitative data elicited by open ended survey questions, FGD and in-depth interview data were coded into themes which emerged from the data. Key quotes were used to exemplify common responses in each theme.

2.5 Ethical matters and data management

Ethical approval for this study was granted by the PAU Research and Ethics Committee (PAUREC) on November 2009 (*See Appendix 7*) and funding agreement from the National AIDS Council Research Advisory Committee (NACRAC) on December 2009. Given the sensitive nature of this study there was a special emphasis on confidentiality and data management for research workers. While the questionnaire was anonymous and self-administered, participants in clinical examination, focus group discussion and individual interviews signed consent forms (*see Appendix 8 and 9*). All study reports and publications do not identify individuals, and report on aggregate data only.

3.0 RESULTS

This section presents results from the 58 male and 36 female self-administered questionnaires and 13 clinical examinations and incorporates qualitative data from 3 focus group discussions and 8 individual interviews. The tables report data specifically from the self-administered questionnaires; focus group and individual interview data is incorporated from section 3.5 onwards.

Note: the term ‘foreskin cutting’ is used throughout this report to include both the full removal of foreskin (circumcision) and other forms of foreskin cutting such as the common longitudinal dorsal cut to the foreskin which exposes the head of the penis (either full or partial) with the skin not removed but left hanging below the penis. In some tables in this report the term ‘circumcision’ is used. This is to reflect the actual wording used in the question to study participants.

3.1 Province of origin

All of the 58 male and 36 female (total 94) participants who completed the self-administered questionnaire identified as being Papua New Guinean and from across all Provinces. Highest participation was from Eastern Highlands Province, Morobe Province and Central Province. This was followed by East Sepik, Enga and North Solomon and New Ireland Province. The Provincial spread of participants in the study closely reflects the student enrolment at PAU in 2010.

Figure 1: Gender and Province of origin

Province of Origin	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>N</i>	%
Central Province	4	7	5	14	9	10
East New Britain	1	2	4	11	5	5
East Sepik Province	3	5	4	11	7	7
Eastern Highlands	7	12	4	11	11	12
Enga Province	3	5	4	11	7	7
Gulf Province	2	3	1	3	3	3
Madang Province	2	3	1	3	3	3
Manus Province	2	3	3	8	5	5
Morobe Province	8	14	3	8	11	11
New Ireland	2	3	4	11	6	6
North Solomons	5	9	2	6	7	7
Oro Province	1	2	0	0	1	1
Simbu Province	3	5	1	3	4	4
Southern Highlands Province	3	5	0	0	3	3
West New Britain	3	5	0	0	3	3
Western Highlands Province	5	9	0	0	5	5
Western Province	4	7	0	0	4	4
Total	58	100%	36	100%	94	100%

3.1.2 Age distribution

The age of the participants ranged from 18 to 50 years. Most respondents were young adults with 71% of males and 78% of females 18-25 years of age. Only 13% of males and 6% of

females were 31 years or above. This age distribution reflected the age bracket of most of the student population at the university with the involvement of a small number of older staff or mature age students.

Figure 2: Gender and age range

Age group	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
18-25	41	71	28	78	69	73
26-30	10	17	6	17	16	17
31-35	4	7	1	3	5	5
36-40	1	2	0	0	1	1
41-45	1	2	0	0	1	1
46-50	1	2	1	3	2	2
Total	58	100%	36	100%	94	100%

3.1.3 Gender and marital status

Of the 58 males, 52 (90%) were single and 6 (10%) were married. Of 36 females 34 (94%) were single and 2 (6%) were married. The fact that most participants were single reflects the young age and life stage of most of the students participating in the study.

Figure 3: Gender and marital status

Marital status	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Married	6	10	2	6	8	8
Single	52	90	34	94	86	92
Total	58	100%	36	100%	94	100%

3.1.4 Religion affiliation

The majority of respondents (77%) were Seventh-day Adventist (SDA), followed by respondents from Lutheran, Catholic and Pentecostal churches. This reflected that most staff and students on campus are SDA given the university is owned and operated by the Seventh-day Adventist church.

Figure 4: Gender and type of Christian denomination

Name of Denomination	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Assembly of God	2	3	1	3	3	3
Baptist	0	0	1	3	1	1
Catholic	3	5	1	3	4	4
CRC	0	0	1	3	1	1
Independent Baptist	1	2	0	0	1	1
Lutheran	3	5	3	8	6	6
Nazarene	1	2	0	0	1	1
Pentecostal	1	2	3	8	4	4
Seventh-day Adventist	47	81	25	69	72	77
United Church	0	0	1	3	1	1
Total	58	100%	36	100%	94	100%

3.2 Knowledge of HIV

In this section participants were initially asked to report how much they thought they knew about HIV and where their information about HIV came from. Participants then responded yes, no or not sure to a series of questions about HIV transmission.

3.2.1 Self-Assessed Knowledge of HIV

More than two-thirds of participants (69%) reported to have a moderate amount of knowledge on HIV/AIDS with almost a quarter (24%) reporting to having a lot of knowledge and 7% reporting to have 'not much at all.'

Figure 5: Gender and self-assessed knowledge about HIV

Level of knowledge	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
A lot	11	19	11	31	22	24
Moderate	42	72	22	63	64	69
Not much at all	5	9	2	6	7	7
Total	58	100%	35	100%	93	100%

3.2.2 Source of information

The most common source of HIV information for both male and female participants was a health officer (72% both male and female) however males were equally as likely to source information from newspaper (72%) closely followed by TV (66%). More than half of females reported also sourcing HIV information from radio, TV, newspapers, non-government organisations or teachers. Males were least likely to source information from family and females least likely to source information from religious leaders.

Figure 6: Gender and sources of information on HIV

Sources of information on HIV	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Radio	32	55	19	53	51	54
TV	38	66	25	69	63	67
Newspaper	42	72	22	61	64	68
Non-Government Org.	18	31	19	53	37	39
Religious Leader	22	38	12	33	34	36
Teacher	26	45	23	64	49	52
Friends	25	43	16	44	41	44
Family	15	26	13	36	28	30
Health Officer	42	72	26	72	68	72

3.2.3 Knowledge questions on mode of contracting HIV

There were 11 questions which asked to assess participant's knowledge of modes of HIV acquisition. More than 96% of males and 91% of females stated that a man can get HIV through having sex with a woman and 97% of females stated that a woman can get HIV through having sex with a man. (Please note: Because of printing problems with the male questionnaire male participants were not asked the question 'can a woman get HIV through having sex with a man'). Two thirds (68.5%) of males and 54.5% of females state that a man could get HIV from sex with another man with a quarter (26.5%) of men and almost half (45.5%) of women stating they were not sure. Almost three quarters (74%) of males and 83% of females correctly agreed that the contraceptive pill does not protect women from HIV, however only 49% of males and 55%

of females agreed with the statement that if condoms are used during sex they will help protect people getting HIV. The remaining participants were relatively evenly split between disagreeing and stating they were not sure if condoms help protect people from getting HIV. Over 90% of both males and females responded that HIV can be acquired from sharing needles and over 75% of the respondents correctly responded that HIV cannot be transmitted by mosquitoes. More than 80 percent of both gender responded that HIV can be transmitted from mother to child. The vast majority (88%) of participants stated they could not contract the virus from coughing and 91% of males and 100% of females stated they could not get HIV from hugging. In the final question on HIV transmission 91% of males and 97% of females agreed that someone who looks very healthy can pass on HIV.

Figure 7: Mode of contracting HIV

From sharing a needle	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	53	91	33	92	86	92
No	1	2	1	3	2	2
Not Sure	4	7	2	6	6	6
Total	58	100%	36	100%	94	100%
Woman from sex with a man	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes			34	97		
No			1	3		
Not Sure			0	0		
Total			35	100%		
From a cough	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	2	3.5	1	3	3	3
No	51	89.5	31	86	82	88
Not Sure	4	7	4	11	8	9
Total	57	100%	36	100%	93	100%
Man from sex with a man	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	39	68.5	18	54.5	57	63.5
No	3	5	0	0	3	3
Not Sure	15	26.5	15	45.5	30	33.5
Total	57	100%	33	100%	90	100%
From Mosquitoes	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	3	5	3	8	6	7
No	43	77	28	78	71	77
Not Sure	10	18	5	14	15	16
Total	56	100%	36	100%	92	100%
Can a baby get HIV from a mother with HIV	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	46	85	30	83	76	84
No	4	7.5	3	8.5	7	8
Not Sure	4	7.5	3	8.5	7	8
Total	54	100%	36	100%	90	100%
From hugging	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	3	5	0	0	3	3
No	51	91	36	100	87	95
Not Sure	2	4	0	0	2	2
Total	54	100%	36	100%	90	100%

Can the contraceptive pill protect women from HIV?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	3	5	1	3	4	4.3
No	42	74	30	83	72	77.4
Not Sure	12	21	5	14	17	18.3
Total	57	100%	36	100%	93	100%
Can a man get HIV through having sex with a woman?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	55	96.5	32	91	87	95
No	2	3.5	2	6	4	4
Not Sure	0	0	1	3	1	1
Total	57	100%	35	100%	92	100%
Do condoms used during sex help protect people from getting HIV?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	27	49	20	55	47	52
No	15	27	6	17	21	23
Not Sure	13	24	10	28	23	25
Total	55	100%	36	100%	91	100%
Can someone who looks very healthy pass on HIV infection?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	52	91	35	97	87	94
No	2	4	0	0	2	2
Not Sure	3	5	1	3	4	4
Total	57	100%	36	100%	93	100%

3.3 Sexual practice

In the next section of the questionnaire participants were asked about sexual practices and covered: Ever had sex, age at first sex, number of sexual partners, and condom use.

3.3.1 Ever had sexual intercourse

Of 91 respondents 65% reported having ever had sex. However there were almost twice as many males (78%) reporting ever having sex than females (42%).

Figure 8: Ever had sex

Have you ever had sexual intercourse at any time in your life?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	45	78	14	42	59	65
No	13	22	19	58	32	35
Total	58	100%	33	100%	91	100%

3.3.2 Age at first sex

Of the 56 respondents 24% of males and 21% of females reported having sex before turning 16 years of age and a further 71% of males and 36% of females having first had sex between 16-20 years old. Only 5% males reported first sex at 21 years or above while 43% of females reported first sex at or above 21 years.

Figure 9: Gender and age group at first sexual debut

Age at First Sexual Intercourse?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Less than 16 years old	10	24	3	21	13	23
16-20 years old	30	71	5	36	35	62
21-25 years old	1	2.5	5	36	6	11
26-30 years old	1	2.5	1	7	2	4
More than 30 years old	0	0	0	0	0	0
Total	42	100%	14	100%	56	100%

3.3.3 Age of partner at first sex

There was considerable variance in age of partner at first sex between males and females. 26% of males reported their partner at first sex was less than 16 years old, while none of the females reported their partner at first sex was 16 years or less. 65% of males and 29% of females reported their partner at first sex was between 16-20 years old, while only 9% males compared to 70% females reported their partner at first sex was 21 years or above.

Figure 10: Gender and age of partner at first sexual debut

Age of Partner at First Sexual Intercourse?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Less than 16 years old	11	26	0	0	11	19
16-20 years old	28	65	4	29	32	56
21-25 years old	3	7	7	50	10	17
26-30 years old	1	2	1	7	2	4
More than 30 years old	0	0	2	14	2	4
Total	43	100%	14	100%	57	100%

3.3.4 Condom use

Low rates of condom use were reported at first sex with 86% of both males and females reporting not using a condom at first sex.

Figure 11: Gender and condom use at first sex

Did you use a condom the first time you had sex?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	6	14	2	14	8	14
No	36	86	12	86	48	86
Total	42	100%	14	100%	56	100%

3.3.5 Reasons for using condoms:

Of the 8 people that did report wearing a condom at first sex, seven reported that their main reason for using a condom was to prevent pregnancy and avoid Sexually Transmitted Diseases (STD) or both. One participant stated that along with avoiding pregnancy and STD it was also their partner's choice.

Figure 12: Gender and reasons for using a condom at first sex

Why did you use a condom?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Avoid pregnancy	1	17	1	50	2	25
Avoid pregnancy and avoid getting STD	4	66	1	50	5	62.5
Avoid pregnancy, avoid transmitting an STD, partner's choice	1	17	0	0	1	12.5
Total	6	100%	2	100%	8	100%

3.3.6 Reasons for not using condom

Of the 46 responses to the reason why condoms were not used at first sex, the most common reason, by far, was that condoms were not available with 46% all participants stating this reason. 'Don't like using them' was the next most common reason (13% of all respondents). Other reason included being drunk, not knowing how to use one, partner objected and wanting to feel each other properly.

Figure 13: Gender and reasons for not using a condom at first sex

Why didn't you use a condom?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Didn't know about condoms at that time	2	6	0	0	2	4
I was drunk/Did not know what was happening to me	0	0	2	17	2	4
Do not like using them	3	9	3	25	6	13
Don't know how to use it	1	3	0	0	1	2
Don't know much about condoms	1	3	0	0	1	2
I don't know	0	0	1	8	1	2
I trusted her	0	0	0	0	0	0
Inside marriage	1	3	1	8	2	4
Partner was a virgin	1	3	0	0	1	2
Not available	19	56	3	25	22	48
Not available, don't like using them	1	3	0	0	1	2
Not available, partner objected, don't like using them	1	3	0	0	1	2
Partner objected	1	3	1	8	2	4
The thought of using a condom was not in my mind	1	3	0	0	1	2
Wanted to feel each other properly/enjoy contact	1	3	1	8	2	4
Was in a rush, not available	1	3	0	0	1	2
Total	34	100	12	100	46	100

3.3.7 Condom used last sex

Of the 57 respondents 32% of males and 46% of females reported of using condom at last sex.

Figure 14: Gender and condom use at last sex

Did you use a condom the last time you had sex?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Yes	14	32	6	46	20	35
No	30	68	7	54	37	65
Total	44	100%	13	100%	57	100%

3.3.8 Reasons for using condom at last sex

Of the 20 respondents who reported using condom at last sex, 5 of the 6 females reported condom use to avoid pregnancy while 1 of 6 reported both avoiding pregnancy and avoiding STD. 4 men reported avoiding STD, 3 to avoid pregnancy and the remainder a combination of avoiding STD, pregnancy and partner's choice.

Figure 15: Gender and reasons for using a condom at last sex

Why did you use a condom?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Avoid getting STD	4	29	0	0	4	20
Avoid pregnancy	3	21	5	83	8	40
Avoid pregnancy and avoid getting STD	4	29	1	17	5	25
Avoid pregnancy, avoid getting STD, avoid transmitting STD,	1	7	0	0	1	5
Avoid pregnancy, Avoid transmitting STD, partner's choice	1	7	0	0	1	5
Avoid pregnancy, partners choice	1	7	0	0	1	5
Total	14	100%	6	100%	20	100%

3.3.9 Reason for not using condom during last sex

Of the 37 participants who reported not using condom during last sex the most common reason was lack of availability (40%). The next most common reason was 'don't like using them' (22%). Other reasons were that their partner objects, that condoms don't work, and sex with a long-time partner. Others indicated they were married so did not use condoms.

Figure 16: Gender and reasons for not using a condom at last sex

Why didn't you use a condom?	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Condoms don't work	2	7	0	0	2	5
Don't like using them	6	20	2	29	8	22
I don't know	1	3	1	14	2	5
I had sex once	1	3	0	0	1	3
We've been together for a long time	0	0	1	14	1	3
Married	2	7	0	0	2	5
Not available	13	44	2	29	15	40
Not available, condoms don't work	1	3	0	0	1	3
Not available, don't like using them	1	3	0	0	1	3
Partner objected	2	7	1	14	3	8
Reduces friction (feelings)	1	3	0	0	1	3
Total	30	100%	7	100%	37	100%

3.3.10 Number of sexual partners

Males reported having more sexual partners in their lifetime than females. Where 39% of males reported having 1-2 partners, 77% of female reported having had 1-2 partners. No females reported 5 or more partners compared to 39% of males reporting 5 or more partners in their lifetime.

Figure 17: Gender and number of sexual partners

Number of sexual partners	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
1-2	16	39	10	77	26	48
3-4	9	22	3	23	12	22
5-10	9	22	0	0	9	17
More than 10 partners	7	17	0	0	7	13
Total	41	100%	13	100%	54	100%

3.5 Knowledge and attitude towards foreskin cutting

The next section of the questionnaire asked questions about knowledge and attitudes towards MC and foreskin cutting. Open ended questions on this topic were also asked in the focus group discussions and individual interviews. Results presented in the remainder of this section combine data collected using these three methods.

3.5.1 Responses to male circumcision statements

Seventeen statements were made in both male and female questionnaires asking participants to state if they 'agree', 'disagree' or 'don't know'. An additional 5 statements were included on the male questionnaire only and an additional 2 statements were included on the female questionnaire only. Results from these 5 statements to males and 2 statements to females are presented, followed by results from the 17 statements to both males and females.

Responses to statements on male circumcision by male participants

More than half (61%) of the 56 males agreed that MC proves manhood, while 21% disagreed and 18% did not know. A similar proportion of men (63% and 54%) agreed that a circumcised penis increased sexual pleasure during sex, and that the circumcised penis enhanced sexual performance. An equal proportion of men 37.5% and 37.5% agreed and disagreed that circumcised men earn respect from their peers, with 25% not knowing. Almost equal proportions of men (40% and 38%) agreed and disagreed that circumcision procedure is bearable for an adult male (see Figure 18.1).

Responses to statements on male circumcision by female participants

For questions for women only, about a quarter (26%) agreed, but the majority (63%) did not know if most women preferred circumcised men and less than half (44%) of women agreed that pain during circumcision is bearable for a male child (see Figure 18.2).

Responses to statements on male circumcision by male and female participants

Responses to the statement that circumcision protects against HIV and AIDS were spread, a third (33%) agreed, a quarter (26%) disagreed and 41% didn't know. The majority of males (79%) agreed that circumcised men can still become infected with HIV while only half (50%) of females agreed, however 44% responded that they didn't know. The majority of males (70%)

disagreed that circumcised men can safely have sex with many women, however only 44% of women disagreed with 31% agreeing and a quarter stating they didn't know. In response to the statement that circumcised men do not need to use condoms to protect from STI and HIV, the vast majority (85%) of both males and females disagreed. Two thirds of participants disagreed that circumcision was old fashioned, while three quarters agreed that some people might die from infection or blood loss during traditional circumcision. Responses varied to the statement that traditional circumcision is time consuming with a third of males agreeing; a third disagreeing and a third stating they don't know. Over one third (39%) agreed that one can get infected by HIV during circumcision with a quarter disagreeing. Very few participants (6% and 11%) agreed that circumcision was forbidden by their religion or that circumcision encourages adultery. There was no dominant response to whether circumcision could be done elsewhere apart from medical and traditional settings with 41% agreeing, 34% disagreeing and 25% stating they don't know. All females and 86% of males agreed that circumcision is safe when carried out by a general practitioner but half (48%) stated they don't know if circumcision in a medical unit is expensive. While 50% of males and 38% of females agreed that their partner supports circumcision 48% of males and 62% of females stated they don't know. Similarly 39% of males and 38% of females agreed that their family supported circumcision but more than half of both males and females stated they don't know. Around half of all participants agreed that male infants should be circumcised soon after birth.

Note: Statements and responses in Figure 18.1 – 18.3 below are ordered in original sequence as listed in the questionnaire. The summary of results in the paragraph above cluster responses to similarly themed questions and does not follow the actual order of statements and responses in the table (see Figure 18.3)

Figure 18.1: Responses to male circumcision statements by males only

Circumcision proves manhood	Male	
	<i>n</i>	%
Agree	34	61
Disagree	12	21
Don't know	10	18
Total	56	100%
The circumcised penis increases pleasure during sex	Male	
	<i>n</i>	%
Agree	35	63
Disagree	4	7
Don't know	17	30
Total	56	100%
The circumcised penis enhances sexual performance	Male	
	<i>n</i>	%
Agree	30	54
Disagree	2	4
Don't know	24	43
Total	56	100%
Circumcised men earn respect from their peers	Male	
	<i>n</i>	%
Agree	21	37.5
Disagree	21	37.5
Don't know	14	25
Total	56	100%

The circumcision procedure is bearable for an adult male	Male	
	<i>n</i>	%
Agree	22	40
Disagree	21	38
Don't know	12	22
Total	55	100%

Figure 18.2: Responses to male circumcision statements by females only

Most women prefer circumcised men	Female	
	<i>n</i>	%
Agree	9	26
Disagree	4	11
Don't know	22	63
Total	35	100%
Pain due to circumcision is bearable for a male child	Female	
	<i>n</i>	%
Agree	16	44
Disagree	9	25
Don't know	11	31
Total	36	100%

Figure 18.3: Responses to male circumcision statements by males and females

One can get infected during traditional male circumcision	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	31	55	20	56	51	55.5
Disagree	9	16	4	11	13	14
Don't know	16	29	12	33	28	30.5
Total	56	100%	36	100%	92	100%
Circumcised men can safely have sex with many women	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	5	9	11	31	16	17
Disagree	40	70	16	44	56	60
Don't know	12	21	9	25	21	23
Total	57	100%	36	100%	93	100%
Some people might die from infection or blood loss during traditional circumcision	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	42	75	27	75	69	75
Disagree	7	12.5	2	6	9	10
Don't know	7	12.5	7	19	14	15
Total	56	100%	36	100%	92	100%
Circumcised men do not need to use condoms to protect them from STIs and HIV	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	1	2	0	0	1	1
Disagree	49	86	30	83	79	85
Don't know	7	12	6	17	13	14
Total	57	100%	36	100%	93	100%

Circumcision is forbidden by my religion	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	4	7	2	6	6	6
Disagree	43	75	22	61	65	70
Don't know	10	18	12	33	22	24
Total	57	100%	36	100%	93	100%
Circumcision encourages adultery	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	5	9	5	14	10	11
Disagree	37	65	18	50	55	59
Don't know	15	26	13	36	28	30
Total	57	100%	36	100%	93	100%
Circumcision is old fashioned	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	10	18	6	17	16	17
Disagree	36	64	24	67	60	65
Don't know	10	18	6	17	16	17
Total	56	100%	36	100%	92	100%
Traditional circumcision is time consuming	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	19	30	2	6	19	21
Disagree	19	34	7	19	26	28
Don't know	20	36	27	75	47	51
Total	56	100%	36	100%	92	100%
Circumcision in the medical unit is expensive	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	11	19	10	28	21	23
Disagree	21	37	6	17	27	29
Don't know	25	44	20	55	45	48
Total	57	100%	36	100%	93	100%
One can get infected by HIV during circumcision	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	23	40	13	36	36	39
Disagree	14	25	9	25	23	25
Don't know	20	35	14	39	34	36
Total	57	100%	36	100%	93	100%
Circumcision can be done elsewhere apart from medical & traditional settings	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	24	42	14	39	38	41
Disagree	19	33	13	36	32	34
Don't know	14	25	9	25	23	25
Total	57	100%	36	100%	93	100%
Circumcised men can become infected with HIV	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	45	79	18	50	63	68
Disagree	6	10.5	2	6	8	8
Don't know	6	10.5	16	44	22	24
Total	57	100%	36	100%	93	100%
My partner supports circumcision	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	26	50	11	38	37	68
Disagree	1	2	0	0	1	8
Don't know	25	48	18	62	43	24
Total	52	100%	29	100%	81	100%

My family support circumcision	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	21	39	11	38	32	39
Disagree	5	9	0	0	5	6
Don't know	28	52	18	62	46	55
Total	54	100%	29	100%	83	100%
Circumcision procedure is safe when carried out by a general practitioner	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	49	86	36	100	85	91.5
Disagree	3	5	0	0	3	3
Don't know	5	9	0	0	5	5.5
Total	57	100%	36	100%	93	100%
Circumcision protects against Aids and HIV	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	19	33.3	12	33	31	33
Disagree	15	26.3	9	25	24	26
Don't know	23	40.4	15	42	38	41
Total	57	100%	36	100%	93	100%
Male infants should be circumcised soon after birth	Male		Female		Total	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Agree	34	60	18	51	52	56.5
Disagree	7	12	10	29	17	18.5
Don't know	16	28	7	20	23	25
Total	57	100%	35	100%	92	100%

3.6 Circumcision experiences and plans for male participants

Male participants were then asked a series of questions about their own circumcision experience and/or plans for circumcision.

3.6.1 Circumcision status

Of the 57 respondents 37 (65%) reported having been circumcised and 20 (35%) had not had circumcision.

Figure 19: Circumcision status

Are you circumcised?	Male	
	<i>n</i>	%
Yes	37	65
No	20	35
Total	57	100%

3.6.2 Types of foreskin cutting

Of the 44 males who answered the question on type of foreskin cut, 25 percent reported of no foreskin cut; 61 percent reported that they have had their foreskin cut but not removed and 14 percent reported of having their foreskin totally removed.

Figure 20: Types of foreskin cutting

Style of circumcision?	Male	
	<i>n</i>	%
Longitudinal cut – foreskin cut but not removed	27	61
Circumferential cut – foreskin totally removed	6	14
No foreskin cut	11	25
Total	44	100%

3.7 Responses from males with male circumcision and/or foreskin cutting

3.7.1 Self-reported name of foreskin cut

Self-reported names of different types of cuts were as follows:

- Banana cut
- Butterfly cut
- Cobra cut
- Dorsal slit
- Long cut
- Round cut
- Sepik way
- Straight cut
- V cut

Responses to open-ended questions related to the name of foreskin cutting included:

- *Traditionally man has different types of cuts and it varies from different cultures. These cuts are done for identity reasons. For example, WNB have their own cuts, ESP has their own cuts, and Tolais have their own cuts.*
- *In my area, one cut that I know is they just make a straight cut and allow the skin to hung loose under the penis, this is “V” cuts. It is just a one slit cut, not two. I don’t know the Name of this cut, but its cutting one cut above the penis and allow the skin to hang on both sides. “V” cut is the most commonly used method among young people in most areas*

3.7.2 Age at foreskin cutting

The most common age males reported having foreskin cutting/circumcision between 10-19; 30% between 10-14 years old and 49% between 15-19 years old.

Figure 21: Age of foreskin cutting

Age at circumcision?	Male	
	<i>N</i>	%
1-4	2	5
5-9	3	8
10-14	11	30
15-19	18	49
20-24	1	3
25-30	1	3
30+	1	3
	37	100

3.7.3 Reasons for foreskin cutting

There were many reasons reported by both males and females for men to be circumcised or have some form of foreskin cutting. Common themes were around health and cleanliness; cultural or traditional reasons; peer influence; sexuality; and masculinity reasons. The following are typical quotes from participants on reasons for foreskin cutting:

Health/Cleanliness

- *Makes it easier to keep my penis clean and healthy*
- *Also to keep the penis from bad smell*
- *To provide health and to enhance pleasure during sexual intercourse*
- *For healthy and hygiene purposes and the idea behind it is girls do prefer circumcised men than uncircumcised men*

Peer Influence/Pressure

- *Saw my peers being circumcised that is why I did it*
- *Just for fun and avoid shame from other boys who circumcised*
- *Because all my peers were either circumcised or were getting circumcised*
- *I grew up from a settlement in Lae, and when boys are not circumcised the boys will tease them and make fun of them. That's why most boys go for MC. We were also told, by the bigger boys that if you don't get circumcised, when you get married, your wives will not enjoy having sex with you.*
- *MC is done traditionally; now in most places the young boys are doing it on themselves, without following traditional practices. So it's changing in almost all regions.*

Avoid Sexually Transmitted Infections

- *Because I belief it will protect me from STD apart from HIV*
- *Because health reasons such as sexually transmitted infections*

Make Penis Bigger

- *Thought would have my penis grown to a bigger size*

Culture/Tradition

- *It is the custom of my village a traditional which has passed from descendent*
- *Is a traditional custom for us to be circumcised*
- *In the Highlands region we don't practice MC traditionally. We even don't hear of these. However, now a day's many young men from our region are going for MC*
- *MC and crocodile marks cut on the back are performed in the haus man "Tabaran" and they will live there for 3-4 weeks. When they come out of the house, they now become men. That is, they can now use their father's spear for hunting; he can now use his father's canoe and go out fishing, and many other roles. This is called initiation ceremonies etc.*
- *We mi come from, emi compulsory practice blong olgeta. I mean olgeta male where born on my island must go through MC.*
- *When I did my circumcision, they told me exactly that, they said, now you will get rid of your mother's blood and you would now become a man. So when the blood flows from my penis, they told me, when this stops you will now have new blood and you will become a man now.*
- *MC is compulsory... That's in my village. When a child is born male, he has to go through MC at the age of 7.*

Release maternal blood

- *My brother told me that it was for my own good ie I had to release my birth blood from my mother*
- *Way of losing the dead bloods when I was born*

Increase sexual pleasure

- *When having sex my counterpart will enjoy and think of me only*
- *to enjoy sex; women like circumcised men*
- *It prolong the sexual intercourse and make the ladies not to forget you in life*
- *Bigger boys told me that it was good for sex, and women would prefer circumcised men for sex.*

Bright and handsome/masculinity

- *I was told that I would look bright and handsome*
- *to be regarded as man*
- *A man who has been circumcised can now use his father's canoe and go out fishing and can perform many other roles.*

Spiritual

Positive views:

- *If God had put it there, why try to get rid of it?*
- *Circumcision is biblical and so all males must circumcise. For myself I cannot wait but want that skin under the penis head must be cut off completely*
- *It is a healthy practice and also was preferred by the Israelites in the bible so it is a good practice*

Negative views

- *Circumcision proves manhood*
- *circumcision is forbidden by my religion - interview from pastors if a person is baptised;*
- *circumcision is old-fashioned - bible times;*

3.7.4 Location for foreskin cutting

There were many places/locations reported by respondents for foreskin cutting. Of the 34 respondents 79% reported it done in the village and its surroundings and 21% had their foreskin cut at a hospital or medical centre.

Figure 22: Location for cutting

In what setting were you circumcised?	Male	
	<i>n</i>	%
Village/local	27	79
Hospital/medical	7	21
Total	34	100%

Males reported comments such as:

- *[I had my foreskin cut] in a settlement setting where peers have influence in each other to do things*
- *[I had my foreskin cut] in the bush, my uncles coconut plantation where there was no one except the skilled circumcision cutting guy*

3.7.4 Person performing foreskin cutting

Of 37 males 41% reported having their foreskin cut by a friend, 22% by their brother and 19% by a Health Worker or Doctor. The remaining reported being cut by a traditional doctor, father or uncle.

Figure 23: Person performing foreskin cutting

Who Performed Circumcision?	Male	
	<i>n</i>	%
Brother	8	22
Friend	15	41
Health Worker/Dr	7	19
Traditional Dr	4	11
Father	1	3
Uncle	2	5
Total	37	100

3.7.5 Regrets for foreskin cutting

Most males (87%) reported having no regrets of being circumcised/having foreskin cut.

Figure 24: Regrets for foreskin cutting

Any regrets about being circumcised?	Male	
	<i>n</i>	%
Yes	5	13.5
No	32	86.5
Total	37	100%

Regrets listed by the 5 males were:

Sexual

- *I should have been circumcised earlier so could enjoy sex with the young one that I had sex with*

Foreskin Removal

- *Not really big regret just that sorry my skin being cut*
- *After circumcised I found cut on the penis was not cut properly*
- *Hate to see the skin under the penis head after circumcision*
- *I don't like the method that has been used*

3.7.6 Adverse outcomes from foreskin cutting

Just over half of the males (53%) reported some form of adverse outcome/side effects and 47% reported no adverse effects of the foreskin cutting.

Figure 25: Adverse outcomes for foreskin cutting

Adverse outcomes from circumcision?	Male	
	<i>n</i>	%
Yes	19	53
No	17	47
Total	36	100%

Adverse effects ranged from minor inconvenience, to pain, to sexual reactions. Responses included:

- *Straight after circumcision I was afraid because of the wound but when the wound was healed I was happy*
- *Painful when they cut the thinner layer that lies underneath the skin. Done without anesthetic*
- *Like in my community we normally use traditional setting to circumcise and this practice is much more painful and to me I can still remember how painful it was*
- *I was bleeding heavily because we used a blunt razor used on razor comb (unsterile technique)*
- *My penis always react to girls or girlfriend when seeing them in a different or sex angle*
- *It always react when passing by the girls whom their dressing looked sexy*

3.8 Responses from males with no circumcision or foreskin cutting

3.8.1 Reasons for no foreskin cutting

Males that did not have any foreskin cutting stated numerous reasons for this. These included:

Lack of Opportunity/Expertise

- *Cos don't know of anybody is expert at doing it*
- *Don't know where to go*
- *Never had the chance to*
- *No reason probably there is no one to perform it (MC) a doctor*

Not Part of Culture

- *Because it not my cultural norm*
- *Because not being part of cultural practice*
- *In the past this [MC] was seen as bad, this is from the Aroma and Wanigela side. It was seen as bad, it was like taking part of the men's side away so they did not approve of MC because the belief was, you came home, you were born, so you are not allowed to remove anything from your body, and you go back, die like that*

Age

- *I thought it was too young for me to get circumcised*

Fear

- *I don't want to feel the pain and loose blood*
- *I felt scared of blood loss and wanted general practitioner to carry out the procedure*

Personal Choice

- *I guess I choose not to*

No Reason

- *I do not have a genuine reason and I am speaking honestly*

Church/Religion

- *Because I am a SDA (Seventh-day Adventist) church member youth being baptized so it makes me think to circumcised or not*

Feel Pleasure

- *Experience the pleasure before taking if off to experience circumcision*

No Knowledge

- *I have no idea about circumcision*

3.8.2 Plans for male circumcision in the future

Of the 20 males who had no cut 17 (85%) reported that they were planning to be circumcised in the future. All of the 19 males with no foreskin cutting reported that they would remove their foreskin if it had health benefits with 95% of non-circumcised males indicating a preference to have any procedure undertaken in a health centre.

Figure 26: Planning to circumcised in the future

Are you planning to be circumcised in the future?	Male	
	<i>n</i>	%
Yes, definitely	17	85
Maybe	3	15
Total	20	100%

Figure 27: Accept circumcision if health benefits

Would you become circumcised if it had a health benefit?	Male	
	<i>n</i>	%
Yes	19	100%

Figure 28: Proposed place for location of circumcision

If you decided to become circumcised, where would you go to be circumcised?	Male	
	<i>n</i>	%
Medical centre	19	95
No preference	1	5
Total	20	100%

3.8.3 Recommendation of male circumcision to friends

Of the 36 male respondents 94 % reported to recommend MC to their friends and 6% said they would not recommend it to their friends

Figure 29: Recommendation of male circumcision to friends

Do you recommend circumcision to your friends?	Male	
	<i>n</i>	%
Yes	34	94
No	2	6
Total	36	100%

3.9 Females' views on the negative and positive aspects of foreskin cutting including male circumcision

Women's views were both positive and negative, but stated benefits outweighed the disadvantage. Responses included:

Positive views

- *There is more satisfaction when having sex, it is more satisfaction, they feel more satisfied*
- *Knowing this now that it reduces risk of HIV I'd rather have him, my husband to be circumcised and ah may be from planning to have what the girls have said*
- *The penis, it's cleaner and they find it healthier.*

- *A man who is circumcised as a real man (trupela man) because this is done traditionally when a boy enters the haus man, to be initiated to be a man.*
- *A male who gets circumcised is part of the community; those who don't are referred to as outcast/inferior.*
- *Oh circumcised male in the community are much appreciated. They become men. I personally prefer circumcised men, they just look good and sexy*
- *Thinks he is powerful and handsome. Can do a lot of difficult and hard task. Able to marry many women because he is strong*
- *It makes sexual intercourse an enjoyable one*
- *Generally, circumcised male may look more healthy, and will also not cause friction and pain during sexual intercourse*
- *If circumcision is Biblical and healthy; why not encourage it in church today*

Negative views

- *I don't want to see a man who is circumcised; I don't like the look of it (penis), it looks ugly*
- *Some boys think when they are circumcised they are not going to catch any Sexually Transmitted Infections, so they go out and have sex with anybody and think that they will not get HIV.*
- *Doing MC outside of health settings is dangerous for boys because they may have infections or they may have excessive bleeding if done by a less skilled person or not a medical person*

3.10 Description of foreskin during physical examination

13 male participants presented at Port Moresby General Hospital for physical examination of the penis by a medical practitioner. Of these 13 males 7 did not submit a questionnaire at PAU leaving 6 males with both clinical examination/classification of foreskin and self-reported foreskin classification. In 5 of these 6 males there was agreement between self-classification and clinical classification. One male was classified as having complete removal of foreskin by clinical examination but self-assessed as having had a slit along the side of the penis resulting in skin not being able to cover the head of the penis. No males who self-classified as circumcised were classified as having not been circumcised at clinical examination.

4.0 DISCUSSION

The following discussion initially focuses on the first two study aims: (i) description and categorisation of male circumcision and foreskin cutting in PNG men; (ii) social, cultural, and religious understandings and practices of male circumcision and foreskin cutting with reflection on appropriateness of the study methods and tools to inform other larger male circumcision and foreskin cutting studies. It then finally discusses, capacity building.

4.1 Description and categorisation of foreskin cutting in PNG men

Most studies in Africa and internationally^{4,6& 43} have been conducted on the premise of a circumcised (foreskin absent)/non-circumcised (foreskin present and covers the head of the penis) dichotomy with only limited discussion of intermediate forms of 'circumcision' where the foreskin is cut to expose the head of the penis, but not removed. This study has identified a variety of foreskin cutting in PNG that reflect both traditional and contemporary practice that challenge this circumcised/non circumcised dichotomy. Although PNG is included in a list of countries with less than 20% men having circumcision⁴³ this study has identified almost two thirds of male participants have a cut foreskin, the major type of cut which exposes the head of the penis but does not remove the foreskin. While the scientific evidence of HIV prevention because of the full removal of the foreskin has been well documented from the African studies (with a reduction rate of 60%), more work needs to be done on longitudinal foreskin cutting that expose the head of the penis but do not remove the foreskin and its potential for HIV prevention in PNG and other countries with similar practices.

4.2 Social, cultural and religious influences on the acceptability of MC for HIV prevention

The great diversity of foreskin cutting and MC practices documented in this study reflect the diversity inherent in other social, cultural and religious aspects of Papua New Guinea's populations. Although many of the traditional foreskin cutting practising areas are within the Momase and New Guinea Island region with fewer from the Southern and Highlands regions, participants from all provincial and regional groups indicated that boys and young men are having their foreskin cut even if the practice is not of their traditional culture of origin.

4.2.1 Cultural aspects

Thirty two percent (32%) of the respondents reported foreskin cutting done as part of their cultural or traditional practice, although the reasons for cutting, the process for cutting, types/styles and location of cutting varied from one culture to another.

Male participants reported that in some cultures young boys are taken to the men's house by elders to perform foreskin cutting together with other rituals. In other cultures it is believed that blood that flows from the cutting signifies the birth or maternal blood, referred to as "dirty blood", being removed or released from the young man and he is able to grow healthy with the new blood from there onwards. For example one stated, "*taim yu katim skin b'long kokb'longyu, em kain olsem yu raosim blood nogut ia - blood we mama karim yu long en ia, yu raosim i go na niup'la blood we i kam, em bai mekim olsem yu bai grow, or strong na muscel*" ["When you cut your foreskin, it is like you remove bad blood - your mother's blood from during childbirth, you will remove it and new blood will come, it will make you grow strong and muscular"].

It is reported that in East Sepik when going through this cutting process they receive supernatural power being passed from the elders to the young men. Others from the same Province reported that foreskin cutting is done at the *haus tambaran* (spirit house) together with the crocodile cutting of their skin. This signifies that they can bear the pain to challenge the world in becoming a man. This means they are no longer dependent on their parents and are now able to build houses, canoes and make gardens and fences like grown up men are expected to do. Participants from these areas indicated that foreskin cutting is part of the initiation ceremony and signified them transiting from childhood to adulthood.

The study also revealed that cultural MC practice is an expensive and time consuming ritual in the MOMASE and NGI Regions. Participants expressed that during MC programs the mother and her relatives of the man child is acknowledged and respected by giving gifts such as cash, food and other valuables in raising the child into a young adult. In addition, decision making was mostly done by the parents because of the expense involved. They (parents) then indicate to the elders that they are prepared for their child/children's MC rituals.

The place of cutting was reported as sacred and the procedure is performed by male elders of the village; furthermore, female or ordinary people were not allowed to enter the area.

Age of cutting varies with different cultures; most participants from MOMASE region reported that cuttings are done at the early childhood years (4-6 years) or around the puberty stage (10-12 years). It is more similar to NGI region, except in the New Ireland Province (NIP) participants indicated that age of cutting were from infancy (2- 4 weeks).

4.2.2 Religious aspects

Seventy percent (70%) of the study participants disagreed that circumcision was forbidden by their religion; 6% indicated that their religion forbid MC practice and 24% were not sure. It was identified that individual participants from the same Christian denomination had diverse views on whether the church supported the idea or not. Few participants expressed that it was acceptable to practice MC because God instructed Israelites to perform circumcision and as Christ followers they were to follow the same instruction. Others said their pastor said it was an Old Testament practice and it was not for practising Christians of today's generation.

Individual church goers were interviewed of their views but no data was collected from church leaders of their beliefs and attitudes towards MC. Therefore most of the data was a reflection of the individual's beliefs and may not reflect official church teaching.

4.2.3 Social aspects

This study shows that peer influence, sexual activities and masculinity are some of the common reasons for penile cuttings.

Peer influence

Almost twenty percent (20%) of male participants reported removing their foreskin due to peer influence. The idea of 'belonging' and being initiated into the group is a common understanding between young men from many different Provinces and not only from provinces traditionally practising circumcision. Many reported that older boys force the younger ones to go through this foreskin cutting practice while at school or in peer groups. Others reported that they go

through this process so boys of their age group could not look down on them; a few reported that this process protects them from being bullied by other boys.

Many participants reported that they had different types of cuts and styles being introduced by their peers. The study shows that most participants who had foreskin cutting had longitudinal cuts and not fully removal of the foreskin. Most of the cuttings were done during school years from upper primary to secondary schools. Most boys were cut between 10-19 years old which reflects cutting of foreskin at the school ground or at the village setting (river, bush etc.) during their holidays.

In cases of peer influenced cutting, the procedure is often performed by their peers. A few participants expressed fear of bleeding and infection. Others expressed that surgical blades and dressings were provided by their relatives who work at the health care facilities.

Sexual activity

Around one in ten (11%) male participant with penile cutting expressed that the main reason for cutting was for sexual activities. Sexual reasons from male respondents was variable and included: enlargement of the penis, giving sexual pleasure to opposite sex, for long hours of sex, penis stays erect and active and have more energy to perform sexual activities.

Interestingly most women did not have any views /ideas on the sexual aspect of cutting. Two participants expressed that their boyfriends informed them that it reduces friction during sexual intercourse and also it enlarges their penis. A few women participants reported that circumcised men become sexually active and may promote promiscuity.

Masculinity

Although very few (3%) males reported that masculinity and 'style' was the main reasons for foreskin cutting many reported that they do this for self-esteem or to feel good. These men reported that when they cut their penis they will grow strong and muscular and their penis will grow strong and healthy. Some women participants from traditionally circumcising cultures reported that their community perceived circumcised men as masculine and strong and they can handle any manly situation that arises. These men are seen as 'real men' who are ready to take men's role.

4.3 Health & hygiene issues

Apart from the cultural, religious and social reasons given for foreskin cutting, the study has found out that many (35%) of the young men did the penile cutting due to health reasons, most commonly to prevent sexually transmitted diseases such as syphilis and gonorrhoea. When asked about HIV/AIDS, they had little idea of the linkage between circumcision and HIV until the awareness was provided during the study period. Another common reason was to keep the penile area clean and free from smell.

Many women reported circumcision as an advantage because it keeps the male penis clean and healthy and so believe that it will protect male from transmitting sexually transmitted disease to their partners. Like male participants, most were unaware of the linkage between MC and HIV transmission.

4.4 Appropriateness of study methods and tools

One of the aims of the study was to inform a large multi-site MC study in terms of the approach, methods and tools. The study was conducted to ascertain: Will people openly talk about sex? Will men undergo physical examination and photographs of their genitalia? Will the survey questions and interviews be able to collect relevant information from participants? The study findings highlight the following important factors which are able to inform the larger study: sensitivity, gender separation, anonymity and tools.

4.4.1 Sensitivity

Discussion on sex and related topics is a taboo in most PNG cultures. Therefore this study was keen to explore the views and opinions on whether the male and female participants will openly discuss or share their views and opinions on this topic. Interestingly, the study revealed that almost all of the participants (both male and female) openly discussed issues regarding MC and other forms of foreskin cutting. Male participants were particularly enthusiastic regarding the topic. Male participants also volunteered to participate in physical examination of their genitalia which is considered a brave action in the cultural context of PNG. This evidence suggests that undertaking similar studies at similar sites would be an achievable goal. While the response rate for the questionnaire was at a satisfactory level for both males and females (43% and 80% respectively), it is interesting to note, that males had a much lower response rate than the females. This has not been systematically assessed and it remains unclear why this is the case.

Engaging a steering group, consisting of department leaders, and then working through the student cultural group leaders on the university campus, also increased the sensitivity to culture and process. Given the sensitive nature of the study topic, broader understanding from leaders and students alike was required. Effectively engaging existing networks and structures within the study site enabled the research to be conducted with full support and participation from key leaders and groups on campus.

4.4.2 Gender separation

The necessity of conducting gender specific information sessions and data collection methods was a key learning from this pilot study. Female and male participants were separated to provide information as well as to conduct focus groups and semi-structured interviews. Male researchers attended to male participants and female researchers to female participants. This approach greatly facilitated the openness of both males and females to collect rich data without fear or shame. By respecting cultural norms around gender separation for dealing with sensitive matters, the study was able to elicit quality data on MC and HIV in a faith-based University context.

4.4.3 Anonymity

Anonymity was another factor that contributed to collect much needed information on the survey questionnaires that were distributed to male and female participants. Numbers were provided to all participants without names. This allowed information regarding sexual history, HIV knowledge and attitudes and MC to be collected from participants in a faith-based University setting; this is significant as students in this setting are expected to uphold the lifestyle promoted by the SDA church, including refraining from sex outside of marriage. If students do not uphold these behavioural expectations it can result in termination from studies

at PAU. Ethical procedures, protecting the identity and anonymity of participants, were important to facilitate the research and ensure quality data was collected.

Male participants who volunteered for physical examination were asked to tear off a sheet at the end of the questionnaire that contains their participant's numbers to link it when they went for examination. The examination was at PMGH a few kilometres from the study site and was done by a Melanesian medical doctor that was not of PNG origin. This process enabled trust with the researchers and the participants.

The feedback from males on the physical examination was that the off-site venue was somewhat prohibitive to participation; many suggested having the physical examination in the same general location as other aspects of the study. Another suggestion was that transport be organised so the men could attend the physical examination together. It became apparent from such feedback in researchers' discussions with participants and students leaders in particular, that the men were not concerned about anonymity amongst themselves for participation; however, it was clear that they were not so comfortable with females being aware of their participation.

4.4.4 Tools

The tools and methods used for the data collection worked well for the study, however, given the great diversity in foreskin cutting documented in this study future questionnaires and interview questions need to be able to systematically collect information about not just 'circumcision' and 'non-circumcision', but the various other forms of foreskin cutting present in PNG .

4.5 Capacity building

Undertaking this study provided researchers with the opportunity to develop knowledge and skills in HIV Research. This development was evident in relation to the entire research process (from negotiation skills, writing proposals to seek funding and seeking of ethical clearance, developing questionnaires and formatting tools for interviews, collecting of data, data entry and transcribing to analysing and reporting of feedback). This study has encouraged and motivated the researchers to embrace more research work and better prepared researchers for contributing to the large study which followed.

An important aspect of capacity building in this study was that for the duration of the fieldwork, colleagues from James Cook University, Cairns, Australia, (Dr David MacLaren and Michelle Redman-MacLaren) were resident on the PAU campus (for a sixth month-period). This enabled positive collaborative working relationships to flourish between new and more experienced researchers, and provided support for PAU-based researchers on the ground. Furthermore, it enabled the Australian colleagues to benefit from being more 'grounded' in the context of the study and to develop networks which assisted in preparations for the larger, multi-site study. In the assessment of the researchers, capacity building was a positive key outcome of the study and being able to work/live in the same community, in the context of the study, facilitated this achievement.

5.0 CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

Papua New Guinea (PNG) is experiencing a generalised HIV epidemic with significant burden on individuals, families and communities. Preventing HIV requires a comprehensive range of measures to be implemented to address the multi-faceted drivers of HIV transmission. Male circumcision (MC) is now recommended by World Health Organisation (WHO) as an additional HIV prevention strategy for countries, such as PNG, where HIV is primarily transmitted via heterosexual intercourse, there is a generalised epidemic and most men are not circumcised. WHO urge that there be a locally relevant evidence base to inform any locally relevant male circumcision for HIV prevention response.

This study documented many different types of foreskin cutting in male participants in addition to circumcision (the full removal of the foreskin). Sixty four percent (64%) of the males reported some form of foreskin cutting. Of the men reporting a foreskin cut, a minority (18%) reported the full removal of the foreskin, while most (82%) reported some form of longitudinal cut to the foreskin that exposed (either partially or totally) the head of the penis, but did not remove the foreskin. While foreskin cutting is a traditional practice in some cultural groups in PNG, it is also becoming a contemporary practice in other groups through influence from peers, and interaction with men from areas where there are traditional practices. Reasons for undergoing foreskin cutting (including full circumcision) identified in the data include: culture, health/hygiene, peer influence, sexual pleasure, masculinity, and biblical alignment.

The study approach which included gender specific information sessions and data collection, utilising existing cultural groupings, anonymity and sensitivity, was successful in conducting research on this sensitive topic in this setting. Most participants openly discussed sex and related topics, including MC, and males were willing to undergo physical examination. Research capacity was strengthened at Pacific Adventist University throughout the study. This study has shown that the different types of foreskin cutting need to be taken into account in the development of research tools for future studies to enable complete and meaningful data relevant for the local PNG context. More research is needed to determine if these other varieties of foreskin cutting provide the same protection from HIV transmission that full circumcision has been proven to provide.

5.2 Recommendations

The following are recommendations arising from this study:

1. Public health implications to be considered for prevention of infection, haemorrhage and scaring of penile tissues amongst the population who have foreskin cutting outside of health care facilities.
2. Further research to be undertaken to determine if other varieties of foreskin cutting present in PNG (foreskin cut but not removed) provide the same protection from HIV as full circumcision (complete removal).
3. Further research to be undertaken on the biological mechanism reducing the risk of HIV transmission for both full circumcision and other varieties of foreskin cutting.

4. Research tools in PNG on MC to take account of the range of types of penile cutting taking place in contemporary PNG.
5. Gender specific information and data collection methods to be employed when undertaking sensitive health research in the PNG context.
6. Cultural groups or other relevant groups/social institutions should be engaged to guide and facilitate in the implementation of HIV research.
7. Capacity building to be an objective of HIV research in PNG so that local researchers and institutions develop research capacity and capability. Furthermore, capacity building efforts need to be extended upon equitable and respectful relationships between parties.

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Appendix 1: Questionnaire for Male Participants

What can be learnt about male circumcision with a cohort of students and staff at a PNG University?

Participant or Study Number

SECTION I: BACKGROUND VARIABLES (5 questions)

1. Gender; circle the number that describes your gender

1 = Male

2 = Female

2. Age; Circle the number that describes your age range

1. 18 – 25 years

2. 26 – 30 years

3. 31 – 35 years

4. 36 - 40 years

5. 41- 45 years

6. 46 – 50 years

7. 51 years and over

3. Circle the number indicating your Province of origin.

1 = North Solomon

2 = New Ireland Province

3 = East New Britain

4 = West New Britain

5 = Manus

6 = Madang

7 = Morobe

8 = East Sepik Province

- 9 = West Sepik Province
- 10= Eastern Highlands Province
- 11= Western Highlands Province
- 12 = Simbu Province
- 13 = Southern Highlands Province
- 14 = Enga Province
- 15 = Western Province
- 16 = Gulf Province
- 17 = Central
- 18 = ORO
- 19 = Milne Bay Province

4. Circle the number that indicates your religion.

- 1 = Catholic
- 2 = Lutheran
- 3 = Anglican
- 4 = Pentecostal
- 5 = SDA
- 6 = Other (Specify) _____

5. Circle the number that indicates your marital status

- 1 = single
- 2 = married
- 3 = widow
- 4 = widower
- 5 = defacto

SECTION 2. KNOWLEDGE TOWARDS HIV /AIDS & STI's (13 Questions)

In this section you will be asked questions about what you know about HIV and AIDS

6. How much do you know about HIV/ AIDS & STI? Circle the description

1. Not much at all
2. Moderate amount
3. A lot

7. Please indicate any of the sources listed below in which you have used to acquire information on HIV/AIDS & STI's. (Circle one or more numbers accordingly)

1. Radio
2. TV
3. News papers
4. NGO officers
5. Religious leaders
6. Teachers
7. Friends
8. Family members
9. Health officers
10. Others (specify) _____

HIV, which is sometimes called the AIDS virus, is becoming one of the major health problems in PNG. Several questions are being asked on how someone can contract HIV. Circle 1, 2 or 3 for your answers.

	Yes	No	Not sure
8. Can a person get HIV (the AIDS virus) by sharing a needle and syringe with someone when injecting drugs?	1	2	3
9. Can a woman get HIV (the AIDS virus) through having sex with a man?	1	2	3
10. If someone with HIV coughs or sneezes near other people, can they get the virus?	1	2	3
11. Can a man get HIV through having sex with a man?	1	2	3

- | | | | |
|---|---|---|---|
| 12. Can a person get HIV from mosquitoes? | 1 | 2 | 3 |
| 13. If a woman with HIV is pregnant, can her baby become infected with HIV? | 1 | 2 | 3 |
| 14. Can a person get HIV by hugging someone who has it? | 1 | 2 | 3 |
| 15. Does the pill (birth control) protect a woman from HIV infection? | 1 | 2 | 3 |
| 16. Can a man get HIV through having sex with a woman? | 1 | 2 | 3 |
| 17. If condoms are used during sex does this help to protect people from getting HIV? | 1 | 2 | 3 |
| 18. Can someone who looks very healthy pass on HIV infection? | 1 | 2 | 3 |

SECTION 3. SEXUAL BEHAVIOUR (12 Questions)

Questions from 20 – 30 focuses on your sex life. These are very personal questions and your answers will be kept very confidential. Please write N/A for (Not applicable) on question 29 & 30

19. Have you ever had sex (penetrative sexual intercourse) with anyone at any time in your life? Circle the number for your answer

1. Yes
2. No *(If your answer is no, go to question 31 of section 4)*

20. How old were you when you first had sexual intercourse? Circle the number that describes the approximate age in Years.

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old

21. How old was your sexual partner when you first had sexual intercourse?

Circle the number that describes the approximate age in Years.

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old

22. The *first* time you had sex did you use a condom? Circle the appropriate answer.

(If your answer is a 'Yes' then go to question 23. If it is a 'No' go to question 24)

1. Yes
2. No

23. If Yes, Why did you use a condom? Circle the number that represents the reasons

1. Avoid pregnancy
2. Avoid transmitting a sexually transmitted disease
3. Avoid getting a sexually transmitted disease
4. Partner's choice
5. Others, please specify _____

24. If No, Why did you not use a condom? Circle the number that represents the reasons

1. Not available
2. Too expensive
3. Partner objected
4. Do not like using them
5. Condom's don't work
6. Others, please specify _____

25. The *last* time you had sex did you use a condom? Circle the appropriate answer

(If your answer is 'Yes' go to question 26 and if it is 'No' go to question 27.)

1. Yes
2. No

26. If Yes, Why did you use a condom? Circle the number that represents the reasons

1. Avoid pregnancy
2. Avoid transmitting a sexually transmitted disease
3. Avoid getting a sexually transmitted disease
4. Partner's choice
5. Others, please specify _____

27. If No, Why did you not use a condom? Circle the number that represents the reasons

1. Not available
2. Too expensive
3. Partner objected
4. Do not like using them
5. Condom's don't work
6. Others, please specify _____

Questions 28 & 29 only apply if you are married, 30 applies to all

28. How old were you when you got married? Circle the appropriate range of your age group

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old
6. Not applicable

29. How old was your spouse at the time when you got married? Circle the appropriate range of his age group

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old
6. Not applicable

30. How many partners have you had sex with in your life? Circle the appropriate number

1. 1 partner
2. 2 partners
3. 3 partners
4. More than 4 partners

SECTION 4. KNOWLEDGE OF AND ATTITUDE TOWARDS MALE CIRCUMCISION.

(23 QUESTIONS)

In this section you will be asked about your thoughts on male circumcision. Please circle the most appropriate answer beside each statement.

No.	Questions and filters	Coding categories		
31.	<p>Please circle the most appropriate answer on how much you agree or disagree with the statement.</p> <p>A. Circumcision proves manhood</p> <p>B. The circumcised penis decreases pleasure during sex</p> <p>C. The circumcised penis enhances sexual performance</p> <p>D. Circumcised men earn respect from their peers male</p> <p>E. Circumcision procedure is bearable for an adult male</p> <p>F. One can get infected during Traditional male circumcision</p> <p>G. Circumcised men can safely have sex with many women</p> <p>H. Some people might die from infection and or blood loss during traditional circumcision</p> <p>I. Circumcised men do not need to use condoms to protect them from STI's and HIV</p> <p>J. Circumcision is forbidden by my religion</p> <p>K. Circumcision encourages adultery</p> <p>L. Circumcision is old-fashioned</p> <p>M. Traditional circumcision is time consuming</p> <p>N. Medical Circumcision is expensive</p> <p>O. One can get infected by HIV during circumcision</p> <p>P. Circumcision can be done elsewhere apart from medical & traditional settings</p> <p>Q. Circumcised men can become infected with HIV</p> <p>R. My partner supports circumcision</p> <p>S. My family support circumcision</p> <p>T. Circumcision procedure is safe when carried out by a general practitioner (doctor)</p> <p>U. Circumcision protects against AIDS and STDs</p> <p>V. Pain due to circumcision is bearable for a male child</p> <p>W. Male infant should be circumcised soon after birth</p>	<p>I agree</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	<p>I disagree</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>	<p>Don't know</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p> <p>3</p>

32. What do people in your community think about a man who gets circumcised?

33. Are you circumcised? Circle the description accordingly

1. Yes

2. No

If your answer is NO GO TO Q 34- 36, if your answer is YES GO TO 37- 42

Not-circumcised men only (34-36)

34. Are you planning to be circumcised in the future? circle the number that describe your answer

1. Yes, definitely

2. Maybe

3. It is unlikely

4. Definitely not

35. What is your main reason for not being circumcised?

36. If you decide to become circumcised, where would you go to be circumcised?

Circumcised men only (Q 37-42)

37. In what setting were you circumcised?

Q38. What is the main reason why you were circumcised?

39. How old were you when you were circumcised? Circle the number that describe your age range

1. 18 – 25 years

2. 26 – 30 years

3. 31 – 35 years

4. 36 - 40 years

5. 41– 45 years

6. 46 – 50 years

7. 51 years and over

40. Do you have any regrets about being circumcised? Circle the number for your answers

1. Yes

2. No

Explain further, if your answer is no

41. Do you recommend circumcision to your friends? Circle the number for your answers

1. Yes
2. No

42. When you were circumcised did you have any adverse outcomes or body reaction?

1. Yes
2. No

If your answer is yes, please explain what type of body reaction did you have

43. Do you have anything else you would like to share with us about male circumcision?

SECTION 5. FORESKIN CLASSIFICATION: 2 QUESTIONS

In this section you will be asked about your own circumcision status. We know that there are a lot of different ways to have a circumcision done and that different circumcision styles means that the foreskin on your penis may look different from other men. You will identify from the series of circumcised pictures attached and indicate which picture looks mostly like yours.

46. Does your penis look like any of the following styles on the pictures provided? Circle the number that describe the type of foreskin you have

1. The foreskin has not been cut and completely covers the head of penis
2. The foreskin has been cut but still covers half of the head of penis
3. The foreskin has been cut but a small amount of foreskin remains but is loose behind the head of the penis.
4. The foreskin has been cut along one side and hangs loosely under the penis – it cannot cover the head of penis
5. The foreskin completely absent
6. g. penile inserts
7. Other forms of penile cutting

Very important information to take Note.

If you wish to volunteer to continue the physical viewing of your genital area by the medical doctor and/or participate in self- photographing of your genital part. You can now visit the medical doctor as per indicated earlier on the information sheet to complete this section of the study. There will be 4 Sundays allocated for 2-3 hours by the medical doctor. This process starts as soon as you are done with this questionnaire. The regional male student leader will provide the venue, name of the doctor and specific time schedules when you are ready for the examination. Your incentive of K50.00 will be given by the medical doctor after the completion of the examination at the Port Moresby General Hospital.

Appendix 2: Questionnaire for Female Participants

What can be learnt about male circumcision with a cohort of students and staff at a PNG University?

Participant or Study Number

611

SECTION I: BACKGROUND VARIABLES (5 questions)

1. Gender; circle the number that describes your gender

1. Male
2. Female

2. Age; Circle the number that describes your age range

1. 18 – 25 years
2. 26 – 30 years
3. 31 – 35 years
4. 36 - 40 years
5. 41– 45 years
6. 46 – 50 years
7. 51 years and over

3. Circle the number indicating your Province of origin.

- 1 = North Solomon
- 2 = New Ireland Province
- 3 = East New Britain
- 4 = West New Britain
- 5 = Manus
- 6 = Madang
- 7 = Morobe
- 8 = East Sepik Province
- 9 = West Sepik Province
- 10= Eastern Highlands Province
- 11= Western Highlands Province
- 12 = Simbu Province

13 = Southern Highlands Province

14 = Enga Province

15 = Western Province

16 = Gulf Province

17 = Central

18 = ORO

19 = Milne Bay Province

4. Circle the number that indicates your religion.

1 = Catholic

2 = Lutheran

3 = Anglican

4 = Pentecostal

5 = SDA

6 = Others (Please Specify) _____

5. What is your marital status? Circle the number for the appropriate answer

1 = single

2 = married

3 = widow

4 = widower

5 = defacto

SECTION 2. KNOWLEDGE TOWARDS HIV /AIDS & STI's (13 Questions)

Questions relating to your views and knowledge on HIV and AIDS.

6. How much do you know about HIV/ AIDS & STI? Circle the number for the description

1. Not much at all

2. Moderate amount

3. A lot

7. Please indicate any of the sources listed below in which you have used to acquire information on HIV/AIDS & STI's. (Circle one or more numbers accordingly)

1. Radio
2. TV
3. News papers
4. NGO officers
5. Religious leaders
6. Teachers
7. Friends
8. Family members
9. Health officers
10. Others (specify) _____

HIV, which is sometimes called the AIDS virus, is becoming one of the major health problems in PNG. Several questions are being asked on how someone can contract HIV. Circle 1, 2 or 3 for your answers.

	Yes	No	not sure
8. Can a person get HIV (the AIDS virus) by sharing a needle and syringe with someone when injecting drugs?	1	2	3
9. Can a woman get HIV (the AIDS virus) through having sex with a man?	1	2	3
10. If someone with HIV coughs or sneezes near other people, can they get the virus?	1	2	3
11. Can a man get HIV through having sex with a man?	1	2	3
12. Can a person get HIV from mosquitoes?	1	2	3
13. If a woman with HIV is pregnant, can her baby become infected with HIV?	1	2	3
14. Can a person get HIV by hugging someone who has it?	1	2	3

- | | | | |
|--|---|---|---|
| 15. Does the pill (birth control) protect a woman from HIV infection? | 1 | 2 | 3 |
| 16. Can a man get HIV through having sex with a woman? | 1 | 2 | 3 |
| 17. If condoms are used during sex does this help to protect people from getting HIV? | 1 | 2 | 3 |
| 18. Can someone who looks very healthy pass on HIV infection? | 1 | 2 | 3 |

SECTION 3 SEXUAL BEHAVIOUR (12 Questions)

Questions from 19 – 30 focuses on your sex life. These are very personal questions and your answers will be kept very confidential. Please write N/A for (Not applicable) on question 28 & 29

19. Have you ever had sex (penetrative sexual intercourse) with anyone at any time in your life? Circle the number for your answer

1. Yes
2. No *(If your answer is no, go to question 31 of section 4)*

20. How old were you when you first had sexual intercourse? Circle the number that describes the approximate age in Years.

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old

21. How old was your sexual partner when you first had sexual intercourse?

Circle the number that describes the approximate age in Years.

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old

22. The *first* time you had sex did you use a condom? Circle the appropriate answer.

(If your answer is a 'Yes' then go to question 23. If it is a 'No' go to question 24)

1. Yes
2. No

23. If Yes, Why did you use a condom? Circle the number that represents the reasons

1. Avoid pregnancy
2. Avoid transmitting a sexually transmitted disease
3. Avoid getting a sexually transmitted disease
4. Partner's choice
5. Others, please specify _____

24. If No, Why did you not use a condom? Circle the number that represents the reasons

1. Not available
2. Too expensive
3. Partner objected
4. Do not like using them
5. Condom's don't work
6. Others, please specify _____

25. The *last* time you had sex did you use a condom? Circle the appropriate answer

(If your answer is 'Yes' go to question 26 and if it is 'No' go to question 27.)

1. Yes
2. No

26. If Yes, Why did you use a condom? Circle the number that represents the reasons

1. Avoid pregnancy
2. Avoid transmitting a sexually transmitted disease
3. Avoid getting a sexually transmitted disease
4. Partner's choice
5. Others, please specify _____

27. If No, Why did you not use a condom? Circle the number that represents the reasons

1. Not available
2. Too expensive
3. Partner objected
4. Do not like using them
5. Condom's don't work
6. Others, please specify _____

Questions 28 & 29 only apply if you are married, 30 applies to all

28. How old were you when you got married? Circle the appropriate range of your age group

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old
6. Not applicable

29. How old was your spouse at the time when you got married? Circle the appropriate range of his age group

1. Less than 16 years old
2. 16- 20 years old
3. 21- 25 years old
4. 26- 30 years old
5. More than 31 years old
6. Not applicable

30. How many partners have you had sex with in your life? Circle the appropriate number

1. 1 partner
2. 2 partners
3. 3 partners
4. More than 4 partners

SECTION 4: KNOWLEDGE OF AND ATTITUDE TOWARDS MALE CIRCUMCISION.

(21 QUESTIONS)

In this section you will be asked about your thoughts on male circumcision. Please circle the most appropriate answer beside each statement.

No.	Questions and filters	Coding categories		
		I agree	I Disagree	I Don't Know
30.	Please circle the most appropriate answer on how much you agree or disagree with the statement.			
	A. Most women prefer circumcised men	1	2	3
	B. One can get infected during Traditional male circumcision	1	2	3
	C. Circumcised men can safely have sex with many women	1	2	3
	D. Some people might die from infection and or blood loss during traditional circumcision	1	2	3
	E. Circumcised men do not need to use condoms to protect them from STI's and HIV	1	2	3
	F. Circumcision is forbidden by my religion	1	2	3
	G. Circumcision encourages adultery	1	2	3
	H. Circumcision is old-fashioned	1	2	3
	I. Traditional circumcision is time consuming	1	2	3
	J. Medical Circumcision is expensive	1	2	3
	K. One can get infected by HIV during circumcision	1	2	3
	L. Circumcision can be done elsewhere apart from medical & traditional settings	1	2	3
	M. circumcised men can become infected with HIV	1	2	3
	N. My partner supports circumcision	1	2	3
	O. My family support circumcision	1	2	3
	P. Circumcision procedure is safe when carried out by a general practitioner (doctor)	1	2	3
	Q. Circumcision protects against AIDS and STDs	1	2	3
	R. Pain due to circumcision is bearable for a male child	1	2	3
S. male infant should be circumcised soon after birth	1	2	3	

31. What do people in your community think about a man who gets circumcised?

32. Do you have anything else you would like to share with us about your experience with male circumcision?

Appendix 3: Focus Group Discussions (Females)

Introduction (5mins):

Welcome, group rules (including respecting diverse opinions, confidentiality etc), purpose of having this group discussion.

Group Activity to Start (10mins):

Introduce yourself sharing your name, where you come from, why interested to participate in this discussion, something unique or funny about you that people here wouldn't know.

FGD Questions (45mins):

- Q.1. Tell me about MC in your area. What is the tradition of MC in your area? Tell us what you know about MC in PNG more broadly (using map).
- Q2. What do you think is the main reason/s for men undergoing male circumcision?
- Q3. Who makes the decision for MC in your area?
Prompts: How is it done? Who does it? At what age? Has there been a change recently and why?
- Q4. What are the positive and negative aspects of MC as you see it?
- Q5. What do you, as women, think of men who are circumcised? How does it impact your view of his 'manliness'? How does it impact relationships? Tell me more about that?
- Q5. What have we missed in our discussion today that you would like to share with the group in regard to MC?

Appendix 4: Focus Group Discussions (Males)

Introduction (5mins):

Welcome, group rules (including respecting diverse opinions, confidentiality etc.), purpose of having this group discussion.

Consent

Group Activity to Start (10mins):

Introduce yourself sharing your name, where you come from, why interested to participate in this discussion, something unique or funny about you that people here wouldn't know.

FGD Questions (45mins):

Q.1. Tell me about Male Circumcision where you come from.

Prompts: Discuss traditional and modern Male Circumcision

Q2. What do you think are the main reason/s men undergo male circumcision?

Prompts: How male circumcision affect your 'manliness'

Q3. Who makes the decision for Male Circumcision where you come from?

Prompts: How was it done? Who does it? At what age? Has there been a change recently and why? What are the names of the Do different styles of circumcision have different names?

Q4. What are the positive and negative aspects of Male Circumcision as you see it?

Q5. What have we missed in our discussion today that you would like to share with the group in regard to MC?

Appendix 5: Semi-Structured Interview Questions (Female)

1. Can you tell us about Male circumcision from the region you come from?

Prompt: Circumcision is an English word, what terms/words people use in your area or other areas you have heard about

2. Do you know of the association between male circumcision and a reduced risk of HIV infection before we contacted you? Yes/No

If the answer is “yes” can you tell me more of what you know about it?

If the answer is “No” give a brief overview of the issue

Follow up: what do you think about it now that you have heard about it?

3. Who makes the decision for a male to be circumcised?

Prompt: as this changed from before or is the decision making power is still the same as in the past?

4. Is there any difference between sex with a circumcised men and sex with an uncircumcised men?

5. What do women think are the benefits of male circumcision?

Prompt: what do women think are the negative or bad aspects of a male child or a man circumcised?

6. Would women like her partner to be circumcised?

Prompt: can you tell me more?

7. As male circumcision only reduced the chance of infection what other ways of avoiding HIV should people use?

8. How did you find the questions when you responded to the self-administered questionnaires?

9. Have we missed anything or is there anything that we missed that we would have used in the self-administered questionnaire?

Appendix 6: Semi-Structured Interview Questions (Male)

1. Can you tell us about Male circumcision from the region you come from?

Prompt: Circumcision is an English word, what terms/words people use in your area or other areas you have heard about

2. Do you know of the association between male circumcision and a reduced risk of HIV infection before we contacted you? Yes/No

If the answer is “yes” can you tell me more of what you know about it?

If the answer is “No” give a brief overview of the issue

Follow up: what do you think about it now that you have heard about it?

3. Who makes the decision for a male to be circumcised?

Prompt: as this changed from before or is the decision making power is still the same as in the past?

4. What do women think are the benefits of male circumcision?

Prompt: what do women think are the negative or bad aspects of a male child or a man circumcised?

5. As male circumcision only reduced the chance of infection what other ways of avoiding HIV should people use?

6. How did you find the questions when you responded to the self-administered questionnaires?

7. Have we missed anything or is there anything that we missed that we would have used in the self-administered questionnaire?

Appendix 7: PAUREC Ethics Approval



10th December 2009

Rachel Tommbe and Lester Asugeni,
School of Health Sciences

Dear Rachael and Lester,

Resubmission of Application 09-05 R Tommbe and L Asugeni “What can be learnt about male circumcision with a cohort of students and staff at a Papua New Guinea University”

At its meeting on 5th November, the PAU Research and Ethics Committee AGREED to give ethical approval for this study to go ahead with the requirement that CONSENT is not collected for self-administered questionnaire, in order to increase anonymity of questionnaire participants (it is only taken for the focus group, in-depth interview and clinical examination participants); and further, that minor formatting and editing corrections are made to the information sheet, consent form and questionnaire.

I confirm that the above matters have now been attended to and PAUREC approval is confirmed.

All the best with your study,

Dr Tracie Mafle'o

Secretary for PAUREC

Appendix 8: Consent Form for Male & Female Semi-Structured Interview and FGD

What can be learnt about male circumcision with a cohort of students and staff at a PNG University?

Participant or Study Number:

CONSENT FORM FOR FOCUS GROUP DISCUSSION & INDEPTH INTERVIEW

Please tick box if agree

I am an adult 18 years or over.

I voluntarily agree to participate in the Focus Group Discussion

I have read and understood the participant information sheet for the above study that explains the nature, object and possible risks of this study, and have had the opportunity to ask questions.

I understand that I will not be identified or named in the publication of the results and findings of this project.

If invited, I agree to be involved in in-depth interview with the researcher

Name	Date:	Signature
.....

Name of the researcher	Date:	Signature:
.....

Appendix 9: Consent Form for Male Physical Examination

What can be learnt about male circumcision with a cohort of students and staff at a PNG University?

CONSENT FORM FOR PHYSICAL EXAMINATION

Please tick box if you agree

I am an adult 18 years or over.

I voluntarily agree to take part in this study by undergoing:

1. a visual examination of my genitals by a male medical doctor and/ or

2. I agree to having a self - taken photograph of my genitals

I have read and understood the participant information sheet for the above study that explains the nature, object and possible risks of this study, and have had the opportunity to ask questions.

I understand that I will not be identified or named in the publication of the results and findings of this project.

Participant or Study Number

Date:

Signature

.....

Name of the researcher

Date:

Signature:

.....