

Understanding HIV and STI risk among young iTaukei women in Suva, Fiji

Preliminary research findings report

Prepared for the University of the South Pacific Research Ethics Committee and community stakeholders

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GLOSSARY OF TERMS

AIDS	Acquired Immunodeficiency Syndrome
ESM	Ecological systems model
FBO	Faith based organisations
FGD	Focus group discussions
FLE	Family Life Education program
HIV	Human Immunodeficiency Virus
IDI	In-depth interviews
INGO	International non-government organisations
MARG	Most at risk groups
MoE	Ministry of Education
MoH	Ministry of Health
NGO	Non-government organisations
PLHIV	People living with HIV
PPS	Probability proportional to size
SGS	Second generational surveillance
SRH	Sexual and reproductive health
SRHR	Sexual and reproductive health rights
STI	Sexually transmitted infections
UNGASS	United Nations General Assembly Special Session
USP	University of the South Pacific

Introduction

This report presents preliminary results from a research project conducted as part of a PhD entitled *Sexually transmitted infection and HIV risk among young women in Suva, Fiji*. This study was conducted in collaboration with the University of the South Pacific between June 2011 and August 2012. The Principal Investigator for this research project was Elke Mitchell, who conducted the research as part of her PhD in Global Health at the University of Melbourne. This report first justifies the significance of the research topic, and describes the objectives and methods of this research. The report then presents preliminary research findings collected via a range of qualitative and quantitative methods including: focus group discussions (FGDs), interviews, and a survey. The report concludes with a discussion of the implications of research findings and presents a draft Fiji specific model of HIV and STI risk for university students.

Justification

Globally, young people are considered to be vulnerable to contracting sexually transmitted infections (STIs), including HIV (UNFPA 2012; UNICEF, UNAIDS, and WHO 2002). University students have been identified as one group particularly vulnerable to infection due to their life circumstances, living arrangements and isolation from parental supervision (Iwuagwu, Ajuwon & Olaseha 2000; Masvawure et al 2009; Sabone et al. 2007; Sadgrove 2007). University campuses can provide an environment where young people have greater opportunity to engage in risky behaviours, such as premarital sex, multiple sexual partners, low level condom use and binge drinking.

At the end of 2011 Fiji was considered a low HIV-prevalence country, with just 420 confirmed cases (UNAIDS 2012). However, like much of the Pacific, other STIs are particularly prevalent in Fiji (Cliffe, Tabeizi, and Sullivan 2008; Ministry of Health 2012; UNAIDS 2012). Available data indicates that young people and specifically young iTaukei (Indigenous Fijians) are disproportionately affected by HIV and other STIs. In 2010, the 20-29 year age group recorded the highest rates of Chlamydia (69%), and in 2011 the highest rates of HIV (47%) in the country (Ministry of Health 2012; UNAIDS 2012). iTaukei make up 82% of all recorded HIV cases in the country, and in 2010 made up 81% of Chlamydia, 85% of syphilis and 79% of gonorrhoea cases (Ministry of Health 2012; UNAIDS 2012). High STI rates among young iTaukei emphasises the potential for high rates of sexual transmission of HIV among this group. Addressing endemic STIs rates and increasing HIV rates among young people in Fiji is integral to ensuring the country does not experience a HIV epidemic like that of nearby Papua New Guinea.

The University of the South Pacific (USP) is Fiji's largest university. USP operates three campuses across Fiji (the largest, Laucala is located in the capital Suva), and a further 11 in other South Pacific Islands countries (USP 2010). Young people come from across Fiji and the Pacific to study at USP's Fiji campuses. The university actively promotes safe sex behaviour, including the use of condoms through its Peer Education Program. Recent data has shown that despite good knowledge concerning HIV and STIs, university students in Fiji continue to engage in high-risk behaviours such as multiple sexual partners, low and inconsistent condom use and binge drinking (Hammar 2011; Kaitani 2003; UNAIDS 2010).

There has been little documented on the sexual and reproductive health (SRH) behaviours of university students in Fiji, apart from a small number of studies that examine university students as part of a wider group (i.e. Hammar 2011; Kaitani 2003; UNAIDS 2010). Prior to this study there was no in-depth systematic research that examines HIV and STI risk behaviours and health service access of university students in Fiji. This research addressed this gap in knowledge.

Objectives

This project aimed to investigate the STI and HIV risk and vulnerability of young iTaukei women attending USP in Suva, Fiji. This research had three objectives: 1) to identify what HIV and STI risk behaviours are occurring among female university students; 2) to identify the determinants of HIV and STI risk behaviour among female university students; 3) to determine what is needed to develop a gender and culturally sensitive HIV and STI prevention program on campus that addresses the specific determinants of risk for female university students.

Methods

This research was a mixed method study that consisted of 15 months of fieldwork conducted between June 2011 and August 2012. Data was collected in the form of FGDs, in-depth interviews (IDI), and a survey. This data was further supplemented by social mapping, participant observation and informal interviews. Ethics approval for this research was obtained from the Human Research Ethics Committee of the University of Melbourne, the Fiji National Health Research Committee, and the USP Research Ethics Committee.

A survey was conducted with USP students to assess their knowledge, attitudes and practices concerning HIV and STIs, including their use of SRH services. A total of 340 surveys were distributed throughout the Halls of Residence at Laucala Bay campus using a probability proportional to size (PPS) sampling technique. 158 surveys were returned and 157 were analysed using SPSS and STATA. The gender breakdown of survey participants was 52% male and 48% female. The mean age of participants was 21.9 years of age. The majority of participants relationship status was single (65%), followed by steady relationships (20%), casual or new relationship (12%) and married (3%). Most participants were enrolled in an undergraduate degree (83%), followed by pre-degree (10%), post-graduate degree (5%) and sub-degree (2%). The ethnicity breakdown of participants was 44% other Pacific Islander, 36% iTaukei, 16% Indo-Fijian and 4% other ethnicity.

A total of five FGDs were conducted with groups of iTaukei university students. One mixed-sex, two female-only and two male-only focus groups were held. A total of 40 young people (22 female and 18 males) aged between 18-29 years of age participated in the FGDs. The mixed-sex and female FGDs were conducted in English by the principal researcher. To ensure cultural sensitivity a male iTaukei was trained by the principal researcher to facilitate the male FGDs. These FGDs were conducted in a mixture of English and Fijian. Themes discussed in FGDs included: attitudes and beliefs towards condom use and access; beliefs about gender roles in sexual decision making; dating and courtship practices, SRH and campus life, and social and cultural taboos around sex and sexuality.

Semi-structured IDI were conducted with 17 iTaukei women attending the USP aged 18-29 years. These interviews were conducted in English by the principal researcher. Themes discussed in the interviews included: childhood and gender socialisation, menarche and puberty, university life, alcohol use, sexual morality, attraction, courtship and dating practices, premarital relationships, sexual jealousy, marriage and children, SRH, and sexual and relationship history. FGD and IDI participants were recruited through peer introductions and chain referrals and informed consent was sought from all participants.

Interviews were also carried out with 22 key informants. Key informants were defined as people with significant knowledge of the issues surrounding HIV and STIs in Fiji as well as people working in areas that may be associated with HIV and STI risk. These included medical practitioners working in the area of SRH, representatives of non-government organisations (NGOs) and international non-government organisations (INGOs) involved in HIV and STI work, health policy makers, USP counselling staff, church youth leaders and pastors, and nightclub managers. Interviews were conducted in English by the principal researcher. Key informant interview participants were recruited via email, telephone contact and in person by the principal researcher.

The official Fiji response to HIV and STIs

The official Fiji response to HIV and STIs is multi-sectoral with a strong focus on the prevention of HIV and STIs, particularly among youth and other most at risk groups (MARG) through the provision of HIV and STI education and prevention programs and SRH services. This work is largely done by government, NGOs and INGOs, faith based organisations (FBOs) and the USP. The national HIV and STI response operates within a human rights-based framework that includes a focus on gender equality, SRH rights (SRHR) and the rights of people living with HIV (PLHIV). The enactment of the 2011 HIV/AIDS Decree provided the legal framework for this rights-based approach (Government of Fiji 2011; UNAIDS 2012).

Fiji's national response is coordinated by a multi-sectoral HIV/AIDS Board and guided by the National Strategic Plan on HIV and STIs, 2012-2015 (Ministry of Health 2011). SRH services are mainly offered through government run clinics managed by the Ministry of Health as well as through private doctors and NGOs. SRH education is offered in primary and secondary schools through the Ministry of Education's Life Education (FLE) program (UNAIDS 2012). FBOs integrate SRH education into wider youth programs and a variety of NGOs offer SRH education to youth. SRH education is also provided on campus to USP students through the USP Peer Education Network.

The strength of Fiji's national response to HIV and STIs comes from its multi-sectoral collaborative approach. Key strengths include a strong focus on prevention among youth and other MARGs through the use of peer educators to disseminate SRH information, increased focus on gender equality and SRHR, and the expansion of FBOs prevention programs. The development of a HIV/AIDS Decree and the increased focus on a rights-based approach are also key strengths to the overall response. Despite recent improvements, gaps remain. This includes the limited scope and depth of education programs that focus largely on an abstinence model of education, and poor access and uptake of HIV and STI testing. The absence of a national monitoring and evaluation reporting mechanism means that data is rarely analysed to identify trends which limits the overall response.

As does the lack of nationally representative HIV and STI surveillance data and limited research examining HIV and STI risk behaviours.

Findings

This section will detail the preliminary findings of this study. It will focus on the data collected through the survey, FGDs and the IDIs with young iTaukei women.

Knowledge, attitudes and health seeking behaviours

Data on students' knowledge, attitudes and health seeking behaviour was collected in the survey. HIV knowledge was tested using the UNGASS 'correct knowledge' indicator, which assess participants' ability to correctly identify ways of preventing the sexual transmission of HIV and reject major misconceptions about HIV transmission (Table 1). Knowledge concerning HIV prevention was good, but lower than desirable. Levels of knowledge between women and men varied slightly, with 65% of male and only 50% of female participants answering all five knowledge questions correctly. These results are somewhat similar to the 2008 SGS survey which was conducted in Fiji with a number of sub groups, including tertiary students in which 50% male and 54% female participants answered the same five knowledge questions correctly (UNAIDS 2010).

Table 1. Correct knowledge of HIV prevention

	% answered correctly Female n= 76	% answered correctly Male n= 81
Sex with one, uninfected faithful partner can reduce the chance of getting HIV.	65 (86%)	74 (91%)
Using condoms correctly can reduce the chance of getting HIV.	61 (80%)	79 (98%)
A healthy looking person can have HIV.	67 (88%)	75 (92%)
A person can get HIV from mosquito bites.	62 (81%)	66 (81%)
A person can get HIV from sharing a meal with someone who has HIV.	71 (93%)	75 (93%)
All answers correct	38 (50%)	53 (65%)

Students' knowledge of STIs symptoms and the reproductive health implications of STIs were also tested through five questions in the survey (Table 2). Knowledge of STIs was much lower than desirable with only 21% of women and 9% of men able to answer all five STI knowledge questions correctly. FGDs and IDI data also showed that female and male participants had limited knowledge concerning STIs, including the signs and symptoms of STIs and the difference between HIV and AIDS. Participants also lacked an understanding of the link between STIs and infertility, and knowledge of the availability of emergency contraception. Female participants expressed a particular desire to have access to more SRH information, including the different types of contraceptives available in Fiji.

Table 2. Correct knowledge of STIs signs and symptoms

	% answered correctly Female n= 76	% answered correctly Male n= 81
Pain during sex could be a sign of a STI.	34 (45%)	33 (41%)
Unusual discharge from the penis or vagina could be a sign of a STI.	54 (71%)	56 (69%)
Painful urination is not a sign of a STI.	47 (62%)	44 (54%)
The contraceptive pill protects against STIs.	53 (70%)	42 (52%)
STIs can lead to infertility.	39 (51%)	36 (44%)
All answers correct	16 (21%)	7 (9%)

Students' attitude towards HIV positive people were assessed through five questions in the survey (Table 3). Findings suggest that there is significant fear and stigma associated with PLHIV as indicated by their willingness to discriminate. For example less than half of female and male participants answered 'yes' to all five questions measuring willingness to socialise and or communicate with PLHIV (41% and 48% respectively). Students appear most concerned with eating food prepared by PLHIV, which suggests major misconceptions about routes of transmission persist in Fiji. Similar results were noted among tertiary students in the 2008 SGS survey with less than 50% of youth aged 15-24 reporting they would buy food from a shopkeeper or food seller if they knew they had HIV/AIDs (UNAIDS 2010).

Table 3. Attitudes towards HIV positive people

	% who answered 'yes' Female n= 76	% who answered 'yes' Male n= 81
Would you eat food prepared by a person who is HIV-positive.	42 (55%)	52 (64%)
Would you hold hands with someone who is HIV-positive.	53 (70%)	67 (83%)
Would you share a room with someone living with HIV/AIDS.	41 (54%)	52 (64%)
A teacher who is HIV positive should be allowed to continue teaching.	61 (80%)	67 (83%)
A student who is HIV-positive should be allowed to stay in class.	65 (86%)	67 (83%)
Answered 'Yes' to all five questions	31 (41%)	39 (48%)

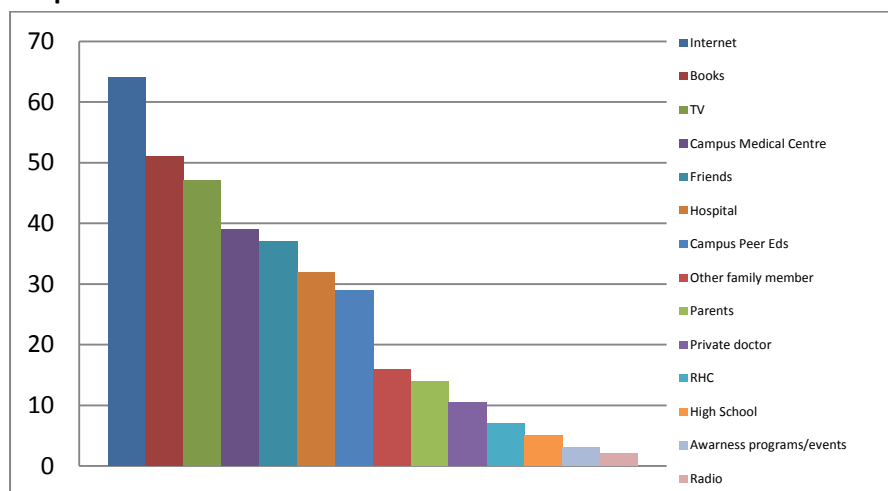
The survey sought to identify students' main source of HIV and STI information (Graph 1). Findings indicate that anonymous methods such as the internet (64%), books (51%) and television (47%) were students' main sources of information. FGD and IDI data also showed that participants preferred to access their SRH information through anonymous and 'discrete' methods, such as television advertisements and the Love Patrol television series as well as from their peers. Love Patrol was particularly popular among female FGD participants who felt they could easily connect with the

shows characters because of its Pacific setting. Both female and male FGD participants expressed difficulty in openly discussing SRH issues and seeking information because of the *tabu* associated with sex, sexuality and SRH in Fijian culture. In particular, participants discussed the silence surrounding SRH topics in the family environment and the subsequent need for information to be made available to them within the university setting.

'I think coming from the Fijian culture talking about sex is tabu and I think...[for] many of us students, Fiji students ah talking about sex in the open is like ah yeah it's not on' (Male FGD participant).

'Cause in the Fijian culture for some of us we don't talk about that, even with our mum's, like ah reproductive and sexual health. So for us here if they have something here in university it will be really help[ful]' (Female FGD participant).

Graph 1. Main source of HIV and STI information



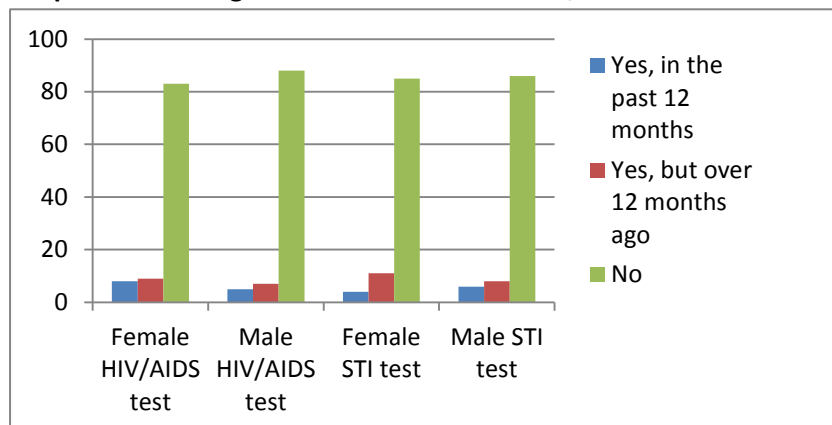
Students' use of SRH services for HIV and STI testing was measured in the survey (Graph 2). The percentage of students who had ever had a test for HIV/AIDS or other STIs was very low. Only 17% of female and 12% of male participants had ever had a HIV/AIDS tests, and only 15% of female and 14% of male participants had ever had a test for an STI, other than HIV. This is significantly lower than results recorded in the 2008 SGS survey where 53% female and 54% male youth reported having been tested for HIV in the past 12 months (UNAIDS 2010). The most popular location for HIV/AIDS and STI testing among participants was at hospital followed by reproductive health clinics and private doctors. A small percentage reported schools, blood donors and special events as their site for testing.

FGD and IDI data provides some insight into why HIV and STI testing may be low amongst young people in Fiji. Participants expressed concern about how they would be perceived and treated by family, peers and the wider community if they were seen accessing SRH services for HIV and STI testing. Female participants were particularly concerned about the potential for gossip, compromised personal and family reputation, discipline from family members, and public disapproval that may result from being associated with premarital sexual activity. Concern surrounding the extent of confidentiality in SRH services was also highlighted by both male and female participants as significant deterrents from accessing testing and other SRH services.

'Something about us here in Fiji is that when we go for these kinds of tests [HIV/STI test] people are not so opened minded about it. They...are scared about what people think you know? Going through those kinds of clinics means um you are regularly having sex. So that is quite discouraging' (IDI iTaukei woman).

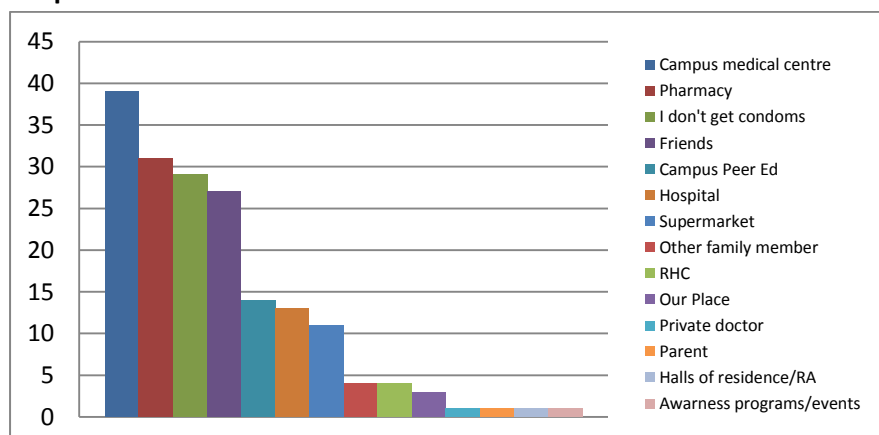
'When I told some of my friends to go [to get tested for HIV/STIs] and their girlfriends would tell them "Don't go, what if like my cousin or what[ever] find out we were sitting there in the clinic?"' (Female FGD participant).

Graph 2. Percentage who have ever had a HIV/AIDS and STI test



Students' preferred sites for condom acquisition were measured in the survey. The most popular location in Suva for collecting condoms was the Medical Centre on campus at USP (39%), followed by pharmacies around Suva (31%), friends (27%) and peer educators (14%) (Graph 3). This suggests students feel more comfortable collecting condoms from discrete locations on campus such as the Medical Centre where condoms are wrapped in newspaper and off trusted friends and peers. Similar to HIV and STI testing, FGD and IDI participants expressed concern over how they would be perceived and treated if seen collecting or buying condoms from SRH services or retail shops. The fear of negative and judgemental attitudes of shopkeepers was also highlighted as a deterrent from buying condoms.

Graph 3. Preferred condom access sites



Social and sexual behaviours

Data on students' sexual practices, dating and courtship, and high-risk behaviours was collected. Rate of sexual activity was measured in the survey with more male than female participants reporting ever having sex (78% and 40% respectively). This figure is higher than in the 2008 SGS survey where 63% of male and 25% of female tertiary students aged 15-24 years reported ever having sex (UNAIDS 2010). The mean age at first sex was 17 years for male and 21 years for female participants, with 9.5% of male and 0% of females falling into the 'high-risk' category of sexual debut before the age of 15 years. This is a positive finding and suggests participants are delaying sexual debut until their late teens.

Information on sexual activity as well as dating and courtship practices was also collected during FGDs and IDIs. Many young women reported hiding their premarital sexual relationships from family and friends. This was in large part due to concerns that open disclosure of dating and premarital sexual activity may result in gossip, public disapproval and a compromised reputation. Young women expressed particular concern of the impact of public knowledge of their sexual activity may have on their family honour, and subsequently bring shame on their family. The clandestine nature of these sexual relationships limits young women's capacity to seek SRH information and services, as this would require public acknowledgement that premarital sex was taking place.

'Women need to like keep themselves holy and pure for if we get married...if you're not a virgin and they find out on your wedding day...you'll be stigmatised for life!' (Female FGD participant).

A number of questions in the survey sought to determine high-risk behaviours among participants. The mean number of sex partners in the past 12 months for participants who reported ever having sex was 2.4, with 50% of male and 15% of female participants falling into the 'high-risk' category of having had sex with 2 or more people in the last 12 months. More male (36%) than female (4%) participants reported more than one sexual relationship at the same time in the past 12 months which further increases HIV and STI risk. Of particular concern was the rate of group sex among participants, with 8% of male and 4% of female participants reporting they had sex with more than one person at the same time in the past 12 months. These participants are at a significantly higher risk of HIV and other STIs. Being drunk at last sex was also used to identify high-risk behaviours, with 18% of male and 7% of female participants reported being drunk at last sex. Of those who reported being drunk at last sex, 24% of male and 0% of female participants reported non-use of condoms.

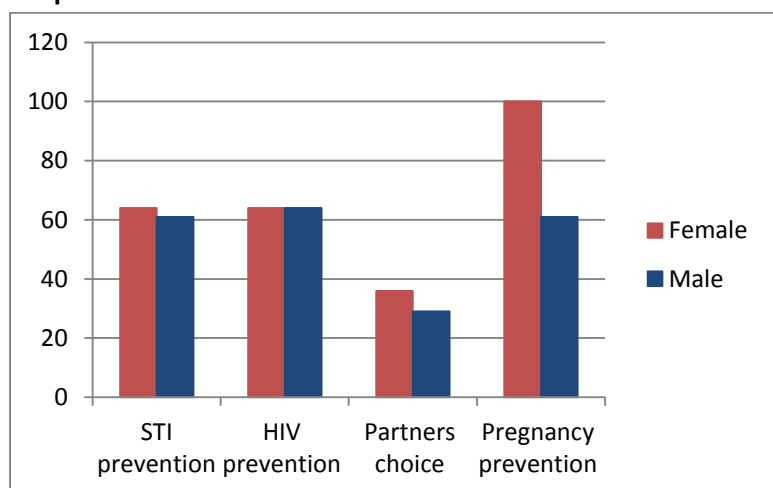
FGD and IDI data suggests that alcohol consumption, binge drinking and nightclubs attendance is very popular among USP students. Both female and male FGD participants spoke about the influence of alcohol consumption on decreasing inhibition, increasing sexual desire, as well as causing individuals to go 'crazy' and have sex. In particular, male FGD participants spoke of girls under the influence of alcohol as more willing to have sex, often casual sex in public places. Data from FGD and IDI also suggests that condom use whilst under the influence of alcohol is likely to be low. FGD and IDI data suggests young men and women have limited knowledge on strategies to drink responsibly and minimise the harms of alcohol consumption.

'Mostly when the girl like goes out for drinking anything goes. Like whatever, you want to have sex come let's go, anywhere any place' (Male FGD participant).

The survey also sought to identify rates of condom use among participants. Condom use at last sex was lower than desirable, with slightly more male (46%) compared to female (37%) participants using a condom at last sex. Reason for condom use at last sex was similar between female and male participants (Graph 4). All female participants indicated they used a condom at last sex to prevent pregnancy, with some also reporting use to avoid HIV and STIs. Male participants cited HIV prevention as their main reason for condom use. IDI and FGD data also indicated that condom use amongst participants was low. Male and female participants strongly associated condoms with causal and commercial sex, MSM, mistrust, infidelity and disease and often distanced themselves from these categories by asserting condoms were not necessary in the context of their trusting, committed relationships. Amongst those FGD and IDI participants who disclosed using condoms, avoiding pregnancy and HIV and STI transmission were of utmost importance.

'If I'm [having sex] with my casuals [sexual partners] I use condoms. Which is more concrete for me with a solid ground where I can be sure that I'm not getting any STIs or whatever' (IDI iTaukei woman).

Graph 4. Reason for condom use at last sex



Reason for non-use of condoms at last sex varied between male and female survey participants (Graph 5). The main reason reported by male participants for non-use of condoms at last sex was a preference for 'skin-on-skin' (40%), with a further 26% reporting that 'it doesn't feel as good' as the reason for non-use. Whilst female participants also reported a preference for 'skin-on-skin' (16%), their main reason for non-use was reported as 'my partner didn't want to use one' (37%). This suggests men dominate the decision making about use of condoms in sexual relationships among survey participants. FGD and IDI data also suggest women lack self-efficacy in condom negotiation and often receive pressure from male partners to engage in unprotected sex.

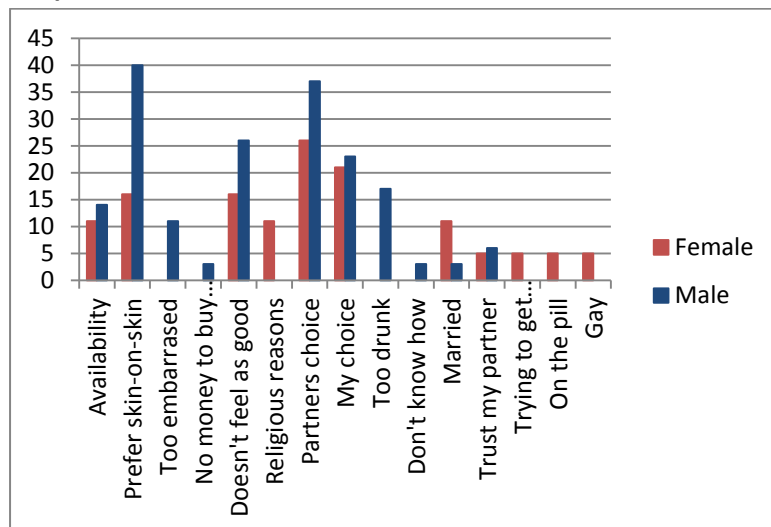
Similar to the survey data, FGD and IDI data also indicated that pleasure within sexual relationships is highly valued among both sexes. The perception that condoms reduce sexual pleasure was noted as a significant deterrent for their non-use, with male participants voicing the greatest concern over

a perceived reduction in sexual satisfaction. Emotional reasons, including love and the desire to share intimacy with partners were also noted as reasons for not using condoms. Female participants in particular saw non-use of condoms as integral to facilitating and maintaining emotional intimacy, as well as a tangible way of showing male partners love and commitment. FGD and IDI participants expressed a preference for other family planning methods, and in particular ‘natural methods’ such as the withdrawal method over the use of condoms.

‘Every time I used to sleep with my girlfriend she’s the only one who cares about condoms. She’s the only one who use to pull out the condom...I told her I don’t like using condoms. On one side I like condoms because it give me, I last longer, give me power but on the other side it’s like no taste. It’s like you know, a lolly pop with the wrapper still on’ (Male FGD participant).

‘I’ve done it [sex without a condom] and I’ve tried it that way and it’s just like my mentality has changed from using a condom to not using a condom. It feels like I love you more which is stupid, I know it’s stupid but it just turns out that way’ (Female FGD participant).

Graph 5. Reason for non-use of condom at last sex



Conclusion

The aim of this research was to investigate the HIV and STI risk and vulnerability of young iTaukei women attending USP in Suva, Fiji. This report has detailed the preliminary findings from data collected during the survey, FGDs and IDIs with young iTaukei women. Findings show that knowledge concerning HIV prevention is good, but lower than desirable. Knowledge of STIs symptoms and the reproductive health implications of STIs is much lower than desirable. These findings suggest that students require additional, more in-depth SRH education that covers topics such as family planning methods and STI signs and symptoms. Research findings suggest that there is considerable fear and stigma among students concerning PLHIV. Increasing advocacy concerning the rights of PLHIV and debunking myths concerning routes of HIV transmission in SRH education will help to address this issue.

Research findings show students prefer to access their SRH information from anonymous and 'discrete' methods such as the internet, television and trusted friends. The development of an internet site designed specifically for USP students with detailed SRH information could help to ensure students are receiving up-to-date and in-depth information. One of the most concerning findings from this research was the low levels of HIV and STI testing among students. Increasing testing rates could be addressed through introducing SRH services at the Medical Centre at USP and the introduction of rapid STI testing in Fiji. Advocacy around the importance of testing would also be beneficial. Research findings show that students feel comfortable accessing condoms on campus. Increasing knowledge of the availability of free condoms on campus and increasing access points would be beneficial.

Research findings have shown that a significant proportion of USP students are sexually active and are therefore vulnerable to STIs and HIV. The low and inconsistent use of condoms and high-risk behaviours including multiple sexual partners, group sex and binge drinking reported in this research further increases HIV and STI risk. The very low HIV and STI testing uptake and reluctance among participants to access SRH services is of high concern and requires attention. Research findings suggest that unequal gender relations in Fijian society decrease young women's ability to have safe sex. Cultural tabus around sexuality also sustain a dual sexual culture for young people, where they tend to hide their sexual activity to maintain a public image of respectability and purity, and this decreases their willingness to access SRH services and to test for STIs and HIV. Addressing these research findings requires additional SRH education on campus that promotes gender equality and increases women's capacity to successfully negotiate condom use and access SRH services. Education strategies on campus should incorporate responsible drinking, and discussions of desire, pleasure and intimacy.

A Fijian ecological model of HIV and STI risk

The findings from this research have led to the development of a Fijian ecological model of HIV and STI risk (FEMSHR) (Diagram 1). This model is a work in progress and draws from the Ecological Systems Model (ESM), which focuses on the interwoven relationships that exist between an individual and their environment (Gombachika et al. 2012; Sallis and Owen 2002). The ESM is ideal for HIV and STI risk theory because it places greater emphasis on the environmental and social context of HIV and STI vulnerability, and can assist in the development of prevention approaches at

multiple levels. The ESM does have a number of shortcomings such as its focus on the Western concept of the individual, its limited understanding of religious morality and quantitative focus that assumes a large population, all of which means it is not easily transferrable into a Fiji context. The FEMSHR currently being developed in response to research findings moves past some of the ESM shortcomings.

Similar to the ESM, the FEMSHR focuses on five interconnected components: 1. individual, which includes characteristics that influence behaviour such as knowledge, beliefs and attitudes; 2. relational aspects which shape social identity and family structures such as family, partners, friends and peers; 3. institutional aspects which includes polices, programs and services; 4. community aspects which incorporates established norms and values, and social structures and networks; and 5. societal aspects which includes cultural context, political and economic condition, and national policies on SRH. The model examines how these interconnected components shape individual and collective practices, and HIV and STI risk-behaviours. Importantly the FEMSHR incorporates a Fijian understanding that the self is anchored in social relations rather than existing as a disconnected individual (Becker 1995). The model also incorporates the impact of colonisation, capitalism and exposure to western lifestyles together with more traditional beliefs and practices on shaping the lives and identities of young Fijians.

Diagram 1. A Fijian ecological model of HIV and STI risk (FEMSHR)

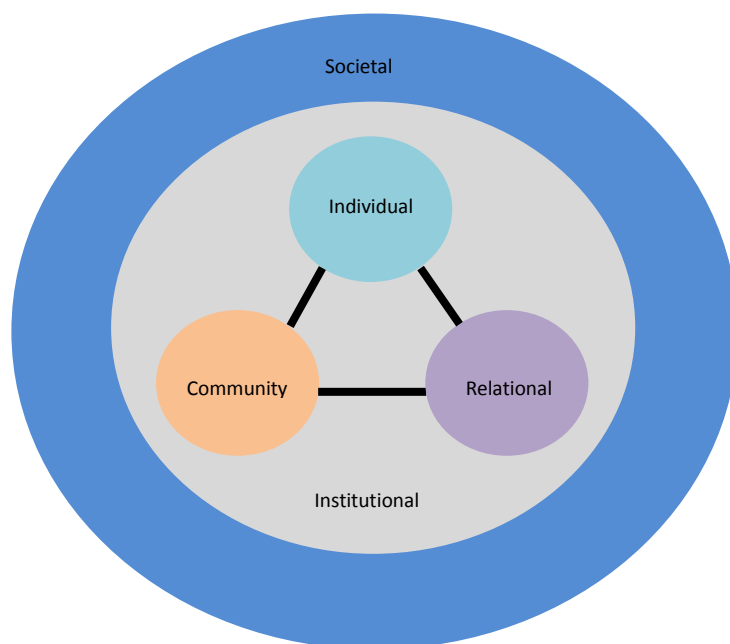


Table 4 uses the FEMSHR to identify the policy and programming requirements needed to address the preliminary research findings. Once broken down it is evident that in order to adequately address research findings, future policy and programming must respond at all five levels. Whilst still a work in progress the FEMSHR offers an understanding of young iTaukei women’s risk and vulnerability of HIV and STI risk that takes into account the social, cultural, religious, gender, economic and political circumstances and structures in which they live.

Table 4. Identifying future policy and programming using the Fijian ecological model of HIV and STI risk

Research findings	Individual	Relational	Institutional	Community	Societal
Need for increased education on HIV/STI prevention & reproductive health	<p>Increase availability of peer outreach activities & online SRH information for students.</p> <p>Increase SRH education through community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Increasing parents & senior community members knowledge of SRH issues (educational workshops).</p> <p>Increase SRH education through community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Increase funding, technical up-skilling & support for peer educators on & off campus.</p> <p>Increase the number of 'youth-friendly' services in Suva.</p> <p>Increase the scope of current SRH education programs.</p>	<p>Increase SRH education through community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Increase funding, technical up-skilling & support for peer educators on & off campus.</p> <p>Increase the number of 'youth-friendly' services in Suva.</p>
Need for reduction in HIV stigma and discrimination	<p>Address HIV stigma & discrimination through peer outreach activities.</p> <p>Advocate for the rights of PLHIV through community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Address HIV stigma through increasing dialogue with parents & senior community members (educational workshops).</p> <p>Advocate for the rights of PLHIV through community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Ensure services are equipped to deal with stigma issues.</p> <p>Ensure HIV advocates are employed in all SRH services.</p>	<p>Advocate for the rights of PLHIV through community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Implement policies and procedures set out in the HIV/AIDS Decree to ensure the rights of PLHIV are upheld.</p> <p>Increase funding, technical up-skilling & support for advocacy organisations.</p>
Need for increase HIV and STI testing	<p>Increase availability of peer outreach activities & online SRH information for students.</p> <p>Increase advocacy concerning HIV & STI testing through effective widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Increase advocacy concerning HIV & STI testing through effective widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Ensure services are culturally appropriate to deal with tabu & stigma issues.</p> <p>Increase funding, technical up-skilling & support for peer educators on & off campus.</p> <p>Need for a cultural shift with health services to ensure young people feel comfortable accessing services for testing.</p>	<p>Ensure services are culturally appropriate to deal with tabu & stigma issues.</p> <p>Increase advocacy concerning HIV & STI testing through effective widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Policy reform (increase number of testing sites, introduce rapid testing, & increase health service opening hours).</p> <p>Need for a cultural shift with health services to ensure young people feel comfortable accessing services for testing.</p>
Need for improvements to condom access	<p>Improve knowledge of condom availability on & off campus through advertisements & peer educators.</p>	<p>Improve knowledge of condom availability on & off campus through advertisements.</p>	<p>Increase condom access points on & off campus (toilets on campus, in health services & nightclubs).</p>	<p>Ensure services are culturally appropriate to deal with tabu & stigma issues.</p>	<p>Policy reform (increase health service opening hours).</p> <p>Need for a cultural shift with</p>

			<p>Ensure services are culturally appropriate to deal with tabu & stigma issues.</p> <p>Need for a cultural shift with health services to ensure young people feel comfortable accessing services & collecting condoms.</p>		<p>health services to ensure young people feel comfortable accessing services & collecting condoms.</p>
<p>Need to address harms associated with alcohol consumption</p>	<p>Provide harm reduction education through peer education.</p> <p>Improve knowledge of the risk binge drinking through widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Improve knowledge of the risk binge drinking through widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Integrate harm reduction approaches into SRH education (peer education, & SRH programs).</p> <p>Improve institutional culture around serving of alcohol.</p>	<p>Improve knowledge of the risk binge drinking through widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Improve policy and law enforcement concerning alcohol sale and consumption.</p> <p>Limit establishment opening hours and enforce responsible serving of alcohol laws.</p>
<p>Need for improvements in rates of condom use</p>	<p>Improve the perceptions of HIV & STI risk through effective widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p> <p>Develop a cultural appropriate ‘sex positive’ approaches that allow room for a discussion about desire, pleasure & intimacy within HIV/STI discourses.</p> <p>Increase male involvement in SRH.</p>	<p>Improve the perceptions of HIV & STI risk through effective widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p> <p>Develop a cultural appropriate ‘sex positive’ approaches that allow room for a discussion about desire, pleasure & intimacy within HIV/STI discourses.</p> <p>Increase male involvement in SRH.</p> <p>Address the <i>tabu</i> & stigma surrounding premarital sex & condoms through increasing dialogue with parents & senior community members (educational workshops).</p>	<p>Develop a cultural appropriate ‘sex positive’ approaches that allow room for a discussion about desire, pleasure & intimacy within HIV/STI discourses.</p> <p>Address the <i>tabu</i> & stigma surrounding premarital sex & condoms through increasing dialogue with parents & senior community members (educational workshops).</p> <p>Increase community discussions around gender inequalities & gender based violence as well as integrate gender issues into all programs and services.</p> <p>Capacity building of church programs & increased partnership between government & churches.</p>	<p>Improve the perceptions of risk through effective widespread community based awareness programs at multiple levels (church, university, sporting clubs, Hibiscus festival, television & other forms of media).</p>	<p>Increase community discussions around gender inequalities & gender based violence as well as integrate gender issues into all programs and services.</p> <p>Capacity building of church programs & increased partnership between government & churches.</p>

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ANNEX 1. SURVEY TOOL

SEXUAL HEALTH AND RELATIONSHIPS AMONG UNIVERSITY STUDENTS IN SUVA

Are you...

- a USP Student
 Over 18

If you ticked both boxes you are eligible to take part in this survey. Please note that by completing and returning this survey you have indicated your consent to participate.

This is an anonymous survey. Please **do not** write your name anywhere on the survey.

Section A: About you

We want to know a bit about you. This will help us understand differences between female and male students. We will not ask for your name, and we cannot identify you by any of the information you give us.

A1. How old are you?

years

A2. Are you...

male female

A3. What is your relationship status?

single married
 steady relationship casual or new relationship
 separated widow/widower
 divorced

A4. How many children do you have?

children I don't have any children

A5. Are you currently studying a...?

pre-degree (preliminary/foundation) undergraduate degree
 sub-degree (certificate/diploma) postgraduate degree

A6. How far into your current course are you?

first year second year

third year fourth year or over

A7. What is your ethnicity?

Indigenous Fijian (i taukei) Indo-Fijian (Fiji Indian)
 other Pacific Islander other

Section B: What you know about HIV and sexually transmitted infections (STIs)

We want to know what you know about STIs and HIV. This will help us understand students' reproductive and sexual health knowledge.

B1. Have you ever heard of HIV or the disease called AIDS?

yes no [go to B3.]

B2. The following questions are statements about how HIV may be transmitted. Please indicate if you think the statement is true or false or if you don't know. It is ok if you do not know the answers because we want to find out about student knowledge of HIV transmission.

B2.1 Having sex with only one, uninfected, faithful partner can reduce the chance of getting HIV.

true false don't know

B2.2 Using condoms correctly can reduce the chance of getting HIV.

true false don't know

B2.3 A healthy looking person can have HIV.

true false don't know

B2.4 A person can get HIV from mosquito bites

true false don't know

B2.5 A person can get HIV from sharing a meal with someone who has HIV.

true false don't know

B3. Do you know of any other infections that you can get through sex?

yes no [go to C1.]

B3.1 Which of the following infections can you get through sex? (Check all that apply)

SARS Hepatitis B Syphilis Gonorrhoea) don't know
 Chlamydia Genital herpes Genital warts Typhoid

B4. The following are statements about sexually transmitted infections (STIs). Please indicate if you think each statement is true or false or if you don't know.

B4.1 Pain during sex could be a sign of a STI
 true false don't know

B4.2 Unusual discharge from the penis or vagina could be a sign of a STI.
 true false don't know

B4.3 Painful urination is not a sign of a STI.
 true false don't know

B4.4 The contraceptive pill protects against STIs
 true false don't know

B4.5 STIs can lead to infertility?
 true false don't know

Section C: What you think about HIV

The following questions are statements about HIV positive people. Please answer each question as honestly as you can.

C1. Would you eat food prepared by a person who is HIV-positive?
 yes no don't know

C2. Would you hold hands with someone who is HIV-positive?
 yes no don't know

C3. Would you share a room with someone living with HIV/AIDS?
 yes no don't know

C4. Do you feel that a teacher/lecturer who is HIV-positive should be allowed to continue teaching?
 yes no don't know

C5. Do you feel that a student who is HIV-positive should be allowed to stay in classes?
 yes no don't know

Section D: Your experiences using reproductive and sexual health services

This section is about your experiences using reproductive and sexual health services in Suva, and where you could go to get HIV and STI information.

D1. Have you ever had a test for HIV/AIDS?

yes, in last 12 months yes, but more than 12 months ago no [go to D3]

D2. If 'Yes', where did you go for your test?

hospital reproductive health clinic (Brown St. Clinic) can't remember
 private doctor other (specify _____)

D3. Have you ever had a test for sexually transmitted infections, other than HIV/AIDS?

yes, in last 12 months yes, but more than 12 months ago no [go to D5.]

D4. If 'Yes', where did you go for your test?

hospital reproductive health clinic (Brown St. Clinic) can't remember
 private doctor other (specify _____)

D5. Are condoms available on campus at USP?

yes no [go to D7.] don't know

D6. If 'Yes', please write where it is possible to get condoms on campus.

D7. Not including the USP campus, where can you get condoms in Suva?

D8. If you use condoms, where do you usually get your condoms?

friend USP health service supermarket private doctor
 hospital USP peer educator parent Our Place
 pharmacy other family member reproductive health clinic (Brown St.)
 other (please write _____) I don't get condoms

D9. Where do you get most of your information on sexually transmitted infections (STIs) and HIV? (Check all that apply)

friend USP health service parent private doctor
 hospital Internet book/magazine USP peer educator TV other
family member reproductive health clinic (Brown St. Clinic)
 other (please write _____)

D10. In the past 6 months have you received any STI/HIV education, such as workshops or a talk that was led by an expert or peer educator at USP?

yes no don't know/can't remember

D11. In the past 6 months have you collected condoms from any of the sites on campus at USP?

yes no don't know/can't remember

Section E: Relationships and Sex

This section asks questions about relationships and sex. We want to learn more about university students' relationships and sexual practices. We recognise that this part is sensitive and we appreciate your honest answers to the questions. Remember, your name is not on the survey and there is no way you can be identified.

E1. Have you ever had sexual intercourse?

yes no [end of survey, thank you for your participation]

E2. How old were you the first time you had sex?

years old

E3. The first time you had sex, did you use a condom?

yes no no, I hadn't heard of a condom

E4. Have you had sex in the past 12 months?

yes no [go to question E8.]

E5. If 'Yes', in the last 12 months how many people have you had sex with?

people

E6. In the last 12 months have you had more than one sexual relationship at the same time?

yes no

E7. In the last 12 months have you had sex with more than one person at the same time, or have you been in a convoy or line up?

yes no

The following questions are about the last person you had sex with.

E8. The last person you had sex with was...

your boyfriend/girlfriend your wife/husband friend a sex worker
 a casual acquaintance someone you didn't know/a stranger

don't know/can't remember

E9. The last time you had sex did you enjoy it?

yes no

E10. The last time you had sex were you in love with the person?

yes no

E11. The last time you had sex did you use a condom?

yes [go to E12.] no [go to E13.]

E12. The last time you had sex you used a condom because... (check all that apply)

I didn't want to get an STI I didn't want to get HIV my partner wanted to use a condom
 I didn't want to get pregnant/I didn't want to get my female partner pregnant
 other (please write _____)

E13. The last time you had sex you didn't use a condom because... (Check all that apply)

it wasn't easy to get one I prefer 'skin-on-skin' I was too embarrassed
 I didn't have the money to buy one the sex doesn't feel as good religious reasons
 my partner didn't want to use one I didn't want to use one
 I was too drunk to use one I don't know how to use a condom
 other (please write _____)

E14. The last time you had sex were you or your partner drunk?

yes, I was drunk yes, both myself and my partner were drunk
 yes, my partner was drunk no, neither I or my partner were drunk

E15. The last time you had sex did you...?

E15.1 Give money to someone to have sex with you?

yes no

E15.2 Get money from someone to have sex with you?

yes no

E15.3 Give goods or favours to someone to have sex with you? (goods or favours might be gifts, clothes, food, taxi ride, alcohol, etc)

yes no

E15.4 Get goods or favours from someone to have sex with you? (goods or favours might be gifts, clothes, food, taxi ride, alcohol, etc)

yes no

E16. The last time you had sex were you...?

E16.1 Physically forced to have sex? (were you held down or physically forced or hurt by your sexual partner).

yes no

E16.2 Scared or threatened with violence if you did not have sex?

yes no

E17. The last time you had sex did you...?

E17.1 Physically force your sex partner to have sex? (did you hold down or physically force or hurt your sexual partner).

yes no

E17.2 Scare or threaten to hurt your sex partner to get them to have sex?

yes no

END OF SURVEY

Thank you for your participation!