# SECOND GENERATION SURVEILLANCE SURVEY OF SEXUAL AND RISK BEHAVIOUR AMONG YOUTH IN THE REPUBLIC OF THE MARSHALL ISLANDS 

Report prepared by the Marshall Islands SGS Management Team


Ajmuur Ej Adwõj Jimor Eddo
(Health is a Shared Responsibility)

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SGS Management team members are: Lina Hills, Dr. Zachraias Zachraias, Wilbur Heine, Dr. Hassan Balachandra, Dr. Kevin Basili, Dr. Godfrey Waidubu, Sala Elbourne, Hellen Jetnil-David, Emi Chutaro, Irene Paul, Oling de Brum.

The Youth to Youth in Health team members are: Julia Alfred, Huston Minor, Carlinda Jabjulan, Erlain Milne, Helpy Mote, Lunes Maun, Mack John, Tauki Reimers.

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## List of Abbreviations

AIDS Acquired Immune Deficiency Syndrome
BSS Behavioural Surveillance Survey
FHI Family Health International
HIV Human Immunodeficiency Virus
MDG Millennium Development Goals
NGO Non-Government organization
PICTs Pacific Island Countries and Territories
RMI Republic of the Marshall Islands
SGS Second Generation HIV Surveillance
SPC Secretariat of the Pacific Community
STI Sexually transmitted infection
UNGASS United Nations General Assembly Special Session

## Executive summary

The Republic of the Marshall Islands (RMI) consists of five islands and 29 atolls with a population of approximately 52,000 people.

Second Generation Surveillance (SGS) aims to develop and enhance existing surveillance system for sexually transmitted infections (STIs), HIV/AIDS and behavioral surveillance systems. The outcome should be high quality epidemiological data to support the design and evaluation of interventions. The implementation of specific HIV programs such as the Second Generation Surveillance survey of risk behaviors, targeting all unmarried youths on each atoll is an initiative that can contribute to address issues related to sexual health for the young people of the Marshall Islands.

The participants were aged $15-24$ years old, unmarried and not living with a permanent partner. A target sample size of 400 participants was determined and the participants were selected randomly from those recruited in seven locations on two atolls (Majuro and Ebeye). An interviewer-administered questionnaire was used to assess sexual experience, behavior and risk factors among the selected population. Participation was voluntary and during the time of the survey (June - July 2006) 403 people participated and 388 completed the survey and were included in the analysis.

The key findings of the survey were:

- Only 19\% of the participants used a condom during last sex
- More than $60 \%$ of the sexually active participants have never used a condom
- the main reason given for not using condoms was 'none easily available'
- A high percentage of participants (27\%) reported that they have been forced to have sex
- Knowledge of HIV/AIDS prevention and transmission was very low
- no injecting drug use was reported in the survey

The main issues exposed by the survey are those of access to condoms and to STI/HIV testing and education on HIV and STI transmission. These areas need to be addressed to prevent and limit the transmission of HIV and STIs in the Republic of the Marshall Islands.
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## Introduction

## Marshall Islands background

The Republic of the Marshall Islands (RMI) consists of 34 islands and atolls with a population of approximately 52000. More than half of the population lives on Majuro where the main hospital and the seat of government is located. There is an American military base on Kwajalein and the nearby island of Ebeye which is has the second largest population in the country. The rest of the population lives on the outer islands in small villages.
More background needed.

## SGS background

The HIV prevalence in most Pacific countries with the exception of Papua New Guinea is limited or low according to WHO reports (1), notification rates and existing surveys. There is however a lack of reliable surveillance systems in the region. Second Generation HIV Surveillance (SGS) aims to develop and enhance existing surveillance system for sexually transmitted infections (STI), HIVIAIDS and behavioral surveillance systems. The outcome should be high quality epidemiological data to support the design and evaluation of interventions. SGS is current best practice in HIV surveillance where the population groups surveyed are dependent on the epidemic state of the individual country. $(2,3)$

The surveys range from HIV/STI case reporting to STI prevalence surveys among high risk groups such as seafarers or pregnant women to behavioral surveys among populations at risk. The implementation of specific HIV programs such as the Second Generation Surveillance survey of risk behaviors, targeting all unmarried youths on each atoll is an initiative that can contribute to address issues related to sexual health for the young people of the Marshall Islands.

## Methodology

## Survey

The survey questionnaire was based on a design by Family Health International, modified by the University of New South Wales, Australia and further adapted for use with youth in the RMI with the assistance of SPC. It consists of 24 pages and the questions cover sexual experience, condom use and HIVIAIDS knowledge and attitudes.

The questionnaire is also designed to meet reporting requirements for the Millennium Development Goals (MDG) and United Nations General Assembly Special Session on HIVIAIDS (UNGASS). The millennium development goals and targets come from the Millennium Declaration, signed by 189 countries, including 147 heads of State and Government, in September 2000. The goals and targets are interrelated and should be seen as a whole. They represent a partnership between the developed countries and the developing countries "to create an environment - at the national and global levels alike which is conducive to development and the elimination of poverty". This survey addresses the indicators related to condom use and HIV knowledge.

The UNGASS indicators are designed to help countries assess the current state of their national response while simultaneously contributing to a better understanding of the global response to the AIDS pandemic, including progress towards meeting the targets in the Declaration of Commitment on HIVIAIDS. Under the terms of the Declaration of Commitment on HIV/AIDS, success in the AIDS response is measured by the achievement of concrete, time-bound targets. They call for careful monitoring of progress in implementing agreed-on commitments and require the United Nations Secretary-General to issue progress reports annually. These reports are designed to identify problems and constraints and recommend action to accelerate achievement of the targets. In keeping with these mandates, in 2002 the UNAIDS Secretariat collaborated with UNAIDS co-sponsors and other partners to develop a series of core indicators to measure progress in implementing the Declaration of Commitment on HIV/AIDS.
This survey covers the following UNGASS and MDG indicators:

- HIV testing (UNGASS indicator 7)
- knowledge about HIV prevention (MDG indicator 19b, UNGASS indicator 13)
- sex before the age of 15 (UNGASS indicator 15)
- sex with more than one partner in 12 months (UNGASS indicator 16)
- Condom use at last high risk sex (MDG indicator 19a; UNGASS indicator 17)


## Database

The questionnaire was created in Epilnfo and the data was entered and analyzed using the same software.

## Sampling methods

The survey was carried out from June to July 2006 and 300 participants were selected at random from six locations (Rita, Uliga, Delap, Rairok, Ajeltake, and Laura) of the main atoll Majuro and 100 from one location on Ebeye. Participants were interviewed at the Youth Health Centre and at two school sites. Participants were informed about the survey goals and privacy rules and could select a female or male interviewer. Interviews were conducted in private. The questionnaire included standardized questions on behavioral risk factors and attitudes towards HIVIAIDS. The seven interviewers were trained by SPC staff to ensure full understanding of the questionnaire and correct data entry and recording. Participation in the survey was voluntary and informed consent was obtained from all eligible participants prior to data collection.

Table 1: Summary of methods of BSS, Marshall Islands

| Population | Youth aged 15-24 years old, unmarried and not living <br> with a partner |
| :--- | :--- |
| Sample size | 388 |$\quad$| Participants were selected at random |
| :--- |
| Sampling method | | Six villages on Majuro and one location on Ebeye |
| :--- |
| Site locations | | Verbal |
| :--- |
| Type of consent |
| Administration of questionnaire administered with an average time of |
| completion of 30 minutes |
| Data collection period | | June - July 2006 |
| :--- |

## Eligibility criteria

All residents of the RMI aged between 15 and 24 years old, not married and not living with a partner were eligible for the survey.

## Data collection /entry

Data was collected through an interviewer administered questionnaire. Verbal consent was obtained by the interviewer prior to the start of the interview and a non disclosure statement signed by the interviewer. The data was entered by the staff at the Ministry of Health in Majuro. No names or other personal information was collected or entered into the database.

## Data analysis

The data was analyzed using Epilnfo Version 3.4.3. Graphs were done in Microsoft Excel. There were some problems on the survey forms with the mandatory jumps to another page or section, which resulted in inconsistent denominators. Interviewers did not always follow instructions on the questionnaire and entered answers to questions that should only have been asked of subgroups of participants, e.g. only those who have had sex in the last 12 months. This was addressed by selecting the denominator based on key questions in the survey and that denominator is specified in all tables and graphs.

## Results

## Demographic characteristics

Of the 403 questionnaires completed, 15 were excluded for the following reasons:

- one participant identified as transgender and was excluded due to concerns about confidentiality.
- One participant did not complete the questionnaire
- Age and/or gender was not recorded by 13 participants

After exclusions the final number of questionnaires analyzed was 388. The number of refusers is unknown as no information about them was recorded.

The Marshall Islands have a population of about 52000 people of mainly Micronesian origin ( $98 \%$ of the survey participants). The majority of participants stated their occupation as student (50\%), followed by currently not employed (25\%) and domestic help/housewife (22\%). Nearly all participants were living with parents or with other relatives at the time of the survey ( $97 \%$ ). The survey participants are mainly (more than $80 \%$ ) in the $15-19$ year age group and this needs to be taken into consideration when interpreting the findings.

Table 2: Demographic Characteristics of Respondents

| Male |  |  | Female |  |
| :--- | ---: | :---: | :---: | :---: |
|  | Number | $\%$ | Number | $\%$ |
| Sex | 202 | $52.1 \%$ | 186 | $47.9 \%$ |
|  |  |  |  |  |
| Age Group | 156 | $77.2 \%$ | 161 | $86.6 \%$ |
| $15-19$ | 46 | $22.8 \%$ | 25 | $13.4 \%$ |
| $20-24$ |  |  |  |  |
| Mean/Median age |  |  |  |  |
| Country of Birth | 201 | $99.5 \%$ | 184 | $98.9 \%$ |
| Marshall Islands | 1 | $0.5 \%$ | 2 | $1 \%$ |
| Other |  |  |  |  |
|  | 159 | $78.7 \%$ | 140 | $75.3 \%$ |
| Place of residence | 43 | $21.3 \%$ | 46 | $24.7 \%$ |
| Majuro |  |  |  |  |
| Ebeye | 0 |  |  |  |
|  | 4 | $2 \%$ | 1 | $0.5 \%$ |
| Education Level | 41 | $20.3 \%$ | 19 | $10.2 \%$ |
| Never attended school | 17 | $8.4 \%$ | 38 | $20.4 \%$ |
| Some Elementary | 130 | $64.4 \%$ | 119 | $64 \%$ |
| Elementary school | 10 | $5 \%$ | 9 | $4.8 \%$ |
| Middle school |  |  |  |  |
| High School | 198 | $98 \%$ | 178 | $95.7 \%$ |
| Tertiary | 1 | $0.5 \%$ | 6 | $3.2 \%$ |
| Ethnic Group |  |  |  |  |
| Marshallese |  |  |  |  |
| Mixed ethnicity |  |  |  |  |

## Sexual behaviors

The questionnaire aims to record the sexual behavior of the participants with particular focus on risk behavior. The questions cover issues such as number of partners, age at first sex, condom use and sex while travelling overseas. When a participant stated that she/he had never had sex, no further questions on sexual behavior were asked. All tables and charts showing percentages are based on those participants who have had sex. The question on age at first sex did not specify if it was sexual abuse or not.

Table 3: Sexual behaviors

|  | Male | Female |
| :--- | :---: | :---: |
| Participants who have ever had sex | $150(78.3 \%)$ | $113(60.8 \%)$ |
| Mean/Median age at first sex in years | $15.4 / 15$ | $15.9 / 16$ |
| Age range in years | $5-20$ | $11-20$ |
| Condom use at first sex | $14.6 \%$ | $12.4 \%$ |
| Have ever used a condom | $38 \%$ | $37.2 \%$ |
| Participants who had a commercial partner in the last 12 | 19 | 6 |
| months |  | 1.2 / 1.5 |
| Commercial partners in the last 12 months: | $3.5 / 4$ | $1-2$ |
| Mean/Median number | $1-34$ | 59 |
| Range | 60 |  |
| Participants who had a casual partner in the last 12 |  | $2.9 / 2.5$ |
| months | $1-55$ | $1-20$ |
| Casual partners in the last 12 months: |  |  |
| Mean/Median number |  |  |
| Range |  |  |

Due to inconsistencies in the survey data in regards to the question "have you had sexual intercourse in the last 12 months" and the subsequent questions about the number of partners in the last twelve months the denominator stated in the above table is those participants who answered yes to the question if they had sexual intercourse with either a commercial or casual partner in the last twelve months respectively and did not give zero as an answer for the number of partners.

Chart 1: UNGASS indicator 15: Percentage of participants who had first sex when younger than 15 - by age group


Chart 2: Number of casual partners in the last twelve months for sexually active participants


Chart 3: Number of commercial partners in the last twelve months for sexually active participants


Chart 4: Frequency of condom use in the last 12 months during casual sex


Chart 5: Frequency of condom use in the last 12 months during commercial sex


Table 3: Commercial sex during the last 12 months (for sexually active participants only)

|  | Male | Female |
| :--- | :---: | :---: |
| Participants receiving money or goods for sex | $12 \%$ | $7 \%$ |
| Participants paying or giving goods for sex | $6 \%$ | $0 \%$ |

Commercial sex was defined as paying for sex with money or goods, for example food, alcohol, shelter or other things or as receiving payment in money or other goods for sex.

Table 4: Sexual behaviors - Condom use

|  | Male | Female |
| :--- | :--- | :--- |
| Condom use in the last 12 months during casual sex: |  |  |
| Always: | $9.7 \%$ | $4.5 \%$ |
| Sometimes: | $37.5 \%$ | $24.2 \%$ |
| Never: | $38.9 \%$ | $54.5 \%$ |
| No answer/Don't know | $9.7 \%$ | $9.1 \%$ |
| Condom use during last casual sex | $30.6 \%$ | $15.2 \%$ |
| Condom use in the last 12 months during commercial sex: |  |  |
| Always: | $11 \%$ | $33 \%^{*}$ |
| Sometimes: | $78 \%$ | $67 \%^{*}$ |
| Never: | $11 \%$ | $0 \% 0^{*}$ |
| Condom use during last commercial sex | $66.7 \%$ | $0 \% 0^{*}$ |
| (*very small numbers) |  |  |
|  |  |  |

Table 5: Condom knowledge and use

|  | Male | Female |
| :--- | :---: | :---: |
| Have heard of a male condom | $83.7 \%$ | $68.8 \%$ |
| Have used a male condom (only sexually active <br> participants) | $37.2 \%$ | $38 \%$ |
| Have heard of a female condom <br> Have used a female condom (only sexually active <br> participants) | $9.9 \%$ | $14.5 \%$ |

Table 7: Other sexual behavior

|  | Male | Female |
| :--- | :---: | :---: |
| Percentage participants with overlapping (concurrent) <br> sexual relationships in the last 12 months | $24.7 \%$ | $12.1 \%$ |
| Percentage of participants who practiced group sex (2 or <br> more simultaneous partners) in the last 12 months | $12.3 \%$ | $4.5 \%$ |
| Percentage of participants ever forced to have sex (all <br> participants were asked this question) | $24.1 \%$ | $31 \%$ |

139 participants were sexually active during the last 12 months ( $73 \mathrm{~m}, 66 \mathrm{f}$ ).

Chart 6: Relationship to the last person who forced participant to have sex


Chart 7: UNGASS indicator 16: percentage of participants who had more than one partner in the last 12 months - by age group


Chart 8: UNGASS indicator 17: percentage of participants who had more than one partner in the last 12 months and used a condom the last time they had sex - by age group


Chart 9: Reason for not using condoms at last casual sex for males, as percentage of reasons given (multiple answers possible)


Chart 10: Reason for not using condoms at last commercial sex for males, as percentage of reasons given (multiple answers possible)


Chart 11: Reason for not using condoms at last casual sex for females, as percentage of reasons given (multiple answers possible)

$\square$ None easily available
$\square$ Partner didn't want
-Trusted Partner
-Don't like condoms
■ Partner didn't mention
$\square$-Partner looked healthy
$\square$ Didn't think necessary
-Didn't think of it
■ Didn't want to
$\square$ Sex doesn't feel as good
-Too drunk/high
-Don't know

- Other

Chart 12: Reason for not using condoms at last commercial sex for females, as percentage of reasons given (multiple answers possible)


Sexually active participants were asked if they had travelled overseas to another country from where they usually lived. Only five women and two men had travelled overseas in the twelve months prior to the survey and no further analysis of the sexual behavior of these seven participants was performed.
Male participants were asked if they ever had sex with another man and six individuals (4.3\%) answered yes, and out of these six only two had had male partners in the last twelve months. Due to the small numbers no further analysis was performed.

Table 8: UNGASS indicators $7,15,16$ and 17 in detail

|  | Male | Female |
| :---: | :---: | :---: |
| Denominator for UNGASS indicators: |  |  |
| All participants: |  |  |
| 15-19 years | 156 | 161 |
| 20-24 years | 46 | 25 |
| 7: Proportion (number) of all participants who had an HIV test in the last 12 months and know the results: |  |  |
| 15-19 years | 2.6\% (4) | 1.2\% (2) |
| 20-24 years | 2.2\% (1) | 8\% (2) |
| 13: Proportion (number) of all participants who gave correct answers to all HIV prevention questions: |  |  |
| 15-19 years | 7.7\% (12) | 3.7\% (6) |
| 20-24 years | 10.9\% (5) | 4.0\% (1) |
| 15: Proportion (number) of all participants who had first sex under the age of fifteen: |  |  |
| 15-19 years | 17.3\% (27) | 11.2\% (18) |
| 20-24 years | 17.4\% (8) | 0\% (0) |
| 16: Proportion (number) of all participants who more than one partner in the last 12 months: |  |  |
| 15-19 years | 20.5\% (32) | 16.8\% (27) |
| 20-24 years | 32.6\% (15) | 24\% (6) |
| 17: Proportion (number) of all participants who had more than one partner in the last 12 months and used a condom during last sex: |  |  |
| 15-19 years | 15.6\% (5) | 18.5\% (5) |
| 20-24 years | 26.7\% (4) | 0\% (0) |

## Chart 13: Source of tattoo

$31.5 \%$ of males and $25.8 \%$ of females had tattoos at the time of the survey.


## Substance use

Questions on alcohol use and binge drinking were asked to assess the frequency and amount of alcohol consumed. Binge drinking was defined as five or more standard drinks in one session. A standard drink was defined as one small bottle (stubby) of beer, a glass of wine or a shot of liquor. No participants reported injecting drug use.

Table 9: Binge drinking

|  | Male | Female |
| :--- | :---: | :---: |
| Percentage of participants who practiced binge <br> drinking monthly or more frequently | $21.7 \%$ | $8.6 \%$ |

Chart 24: Alcohol use frequency in the last 12 months


Chart 35: Amount of standard drinks in a typical session in the last 12 months


Chart 46: Number of drinking sessions with more than 5 standard drinks in the last 12 months


Chart 57: Substance use (ever tried)


Chart 68: Substance use in the last 30 days


## HIVIAIDS knowledge and attitude

108 (59\%) female and 133 (65.7\%) male participants had heard of HIVIAIDS and were asked the following questions on knowledge and attitude. The questions relate to the UNGASS and MDG indicators which reflect the success of national information, education and communication programs and other efforts in promoting knowledge of valid HIV-prevention methods and reducing misconceptions about the disease. The tables below show the percentage of participants giving the correct answer to the statements/questions. As defined by the UNGASS indicators the denominator includes those participants that had not heard of HIVIAIDS - the whole survey population.

Table 10: Proportion of participants with correct knowledge of HIV prevention as defined by UNGASS indicator 13

|  | Male | Female |
| :--- | :---: | :---: |
| Having sex with only one, faithful uninfected partner <br> can reduce the chance of getting HIV | $56.9 \%$ | $47.3 \%$ |
| A person can get HIV from sharing a meal with <br> someone who is infected with HIV | $27.2 \%$ | $10.8 \%$ |
| Using a condom correctly every time during sex can <br> reduce the chance of getting HIV | $55 \%$ | $44 \%$ |
| A healthy-looking person can have HIV | $33.2 \%$ | $25.8 \%$ |
| A person can get HIV from mosquito bite | $25.7 \%$ | $10.8 \%$ |
| All answers correct: | $8.4 \%$ | $3.8 \%$ |

Table 11: Proportion of participants with correct knowledge of other HIV questions

|  | Male | Female |
| :--- | :---: | :---: |
| A person can reduce their chance of getting HIV by <br> avoiding anal sex <br> A person can reduce the chance of getting HIV by <br> abstaining from sexual intercourse | $43.5 \%$ | $40.8 \%$ |
| A mother can pass HIV to their baby through <br> breastfeeding? <br> A pregnant woman can pass HIV on to her unborn <br> baby <br> A person can get HIV from the saliva of someone <br> with HIVIAIDS <br> Only gay men get HIVIAIDS | $51.5 \%$ | $46.2 \%$ |
| A person can get HIV from a used syringe | $27.1 \%$ | $39.8 \%$ |

Chart 19: HIV attitude - I would share a meal with a person I know has HIVIAIDS


Chart 20: HIV attitude - I would buy food from a shopkeeper or food seller if I knew they had HIVIAIDS


Chart 21: HIV attitude - If a relative of mine became ill with AIDS I would be willing to care for them in my household


Chart 22: HIV attitude - If a member of my family became ill with AIDS I would want it to remain secret


Chart 23: HIV attitude - All newcomers to the Marshall Island should be tested for HIV


Chart 24: HIV attitude - The names of all persons infected with HIV should be displayed in a public place


Chart 75: HIV attitude - All persons with HIV should live away from the community


Chart 86: HIV attitude - Knowingly passing HIV onto someone should be a criminal offence


## Access to HIV testing

$70 \%$ of the women and $82 \%$ of the men said it was possible to have a confidential HIV test done in their community. Out of those who answered 'don't know' or 'not possible' a high percentage lived in Ebeye (41\%).

Table 12: HIV testing - for all participants

|  | Male | Female |
| :--- | :---: | :---: |
| Ever had an HIV test: | $15.9 \%$ | $9.1 \%$ |
| Test done in the last 12 months | $4.5 \%$ | $3.2 \%$ |
| Received results of the test done in the last 12 months | $2.5 \%$ | $2.2 \%$ |
| Received counselling before the test done in the last 12 months | $3 \%$ | $2.2 \%$ |

Chart 97: HIV testing - percentage of answers given by male participants as to why they can't get a confidential HIV test


Chart 108: HIV testing - percentage of answers given by female participants as to why they can't get a confidential HIV test


## Knowledge and symptoms of STIs

All sexually active participants were asked if they had experienced any symptoms of STIs in the last 12 months and were give three categories of symptoms to choose from:

- Genital or anal discharge
- Genital or anal ulcer or sore
- Burning or sharp pain on urination

Table 13: STI knowledge and testing - all sexually active participants

|  | Male | Female |
| :--- | :---: | :---: |
| Ever heard of STIs? | $73.3 \%$ | $75.9 \%$ |
| Ever been diagnosed with an STI? | $4.7 \%$ | $1.8 \%$ |
| Any symptoms in the last 12 months? | $6.7 \%$ | $8 \%$ |
| Among those with symptoms (19 individuals) <br> percentage who sought treatment in the last 12 <br> months? | $30 \%$ | $33.3 \%$ |
| Partners were treated for STI (out of 8 individuals) | $60 \%$ | $33.3 \%$ |

Chart 11: Percentage of people with symptoms seeking treatment


Chart 120: Reason for people with symptoms not to seek treatment


## Discussion

The survey provides a picture of knowledge and behavior of the population aged between 15 and 24 in the Marshall Islands. A high proportion of participants were aged between 15 and 19 years (nearly 82\%) at the time of the survey. Census data and population projections from 1999 don't show a great difference between those two age groups. Therefore is unlikely to be a reflection of the population distribution in the Marshall Islands but more likely to be caused by a sampling bias. Some inconsistencies in the data were encountered, mainly due to the interviewers disregarding instructions to skip fields. The analysis was performed following the instructions in the questionnaire by selecting the relevant population group using the key answers like "Have you ever had sex?" or "Have you had sex in the last 12 months" depending on the variable. Denominators are specified throughout the report.
$67.8 \%$ of the participants have had sex and condom use at first sex was low at $13.7 \%$. Overall less than $37.6 \%$ of the sexually active participants have ever used a condom, despite more than $53 \%$ knowing that condom use can reduce the chances of getting HIVIAIDS. 77\% of participants who had a partner in the last 12 months did not use a condom during the last time they had sex. For those with more than one partner in the last 12 months around $19 \%$ of the older participants (20-24) and $17 \%$ of the 15-19 year olds used condoms. When asked about the reasons for not using a condom the main reason given by men and women was 'none easily available'. More sexually active men (12\%) stated that they had been given money or goods for sex than those who had paid for sex (6\%). No information about the paying partner was recorded. Prostitution is illegal in the Marshall Islands and this could influence the participants in regards to answering related questions truthfully. The high number of participants ( $31.5 \%$ of the males and $42.9 \%$ of the females) stating that they were forced to sex is concerning. The majority named either their partner or someone known to them as the person who forced them. The answers to the questions on group sex and concurrent relationships must be treated with caution as the Marshallese translation of these questions could have been misunderstood by the participants. If the numbers are correct, a high proportion of young men has concurrent relationships ( $25 \%$ ) and $12 \%$ of men have experienced group sex.

Only 7 of those participants who had sex in the last 12 months travelled overseas during the 12 months prior to the survey. No further analysis was done as the numbers are too small.

Among people with tattoos (28.4\%) the majority (more than 80\%) was done by friends and neighbors. $22 \%$ of males and $8 \%$ of females were drinking more than 5 standard drinks monthly or more frequently during the last 12 months. There is a large number (54\%) of participants who didn't drink at all in the 12 months prior to the survey, which reflects the young age of most participants. The main substances used are betel nut, tobacco and marijuana for both men and women. None of the participants reported injecting drug use.

HIV knowledge questions revealed that less than $5 \%$ of all participants knew the correct answers to the prevention related questions, with twice as many men as women answering correctly. Attitude questions in regards to HIVIAIDS showed that participants were protective of their families and their country but also discriminating against people with HIVIAIDS. 4.5\% of the male and $3.2 \%$ of the female participants had been tested for HIV in the last twelve months. About half of these had received their results and had received counseling prior to the test. Those participants who said that no confidential HIV testing is possible in their community were asked for their reasons and the main reason given by the men was that the opening hours were not convenient, where as the majority of women gave 'issue with hospital
staff accessing results' as a reason. A high percentage of men and women gave no answer or refused to answer which may indicate a lack of trust in the interviewer or the confidential treatment of the survey data. A high proportion of those participants who did not think that a confidential HIV test was possible lived on Ebeye (41\%). Overall answers indicated that concerns over confidentiality and lack of information about the service made the participants believe that no confidential testing was available.

About 75\% of participants had heard of STIs, and only 4.7\% of males and $1.8 \%$ of females have ever been diagnosed. $8 \%$ of women and $7 \%$ of men have experienced symptoms of STIs in the last 12 months, but only $30 \%$ of them sought treatment. The most frequently given reason by males was 'being too scared', by women 'too busy'.

Further refinement of some survey questions and improved interviewer training prior to the next survey would be beneficial.

This Second Generation Surveillance survey of sexual and risk behavior among youth in the RMI gives a picture of youth behavior in this country. As this is the first survey of this kind conducted in the RMI the data will provide valuable information to guide future education and intervention needs. It will also stand as a base line to compare success of ongoing campaigns targeting risk behavior and sexual health in general.

## References

1. WHO, Western Pacific Regional Office. HIVIAIDS in Asia and the Pacific Region 2003. Manila, Philippines: WHO Regional Office for the Western Pacific; 2004(a).
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3. UNAIDS/WHO Working Group on Global HIV/AIDS and STI Surveillance. Initiating second generation HIV surveillance systems: Practical guidelines. Geneva, Switzerland: Joint United Nations Program on HIVIAIDS; 2001.
