

**REPUBLIC OF MALDIVES
REPRODUCTIVE HEALTH
BASELINE SURVEY**

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**Final Report
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**for
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EXECUTIVE SUMMARY

Introduction

The survey provides baseline data for evaluating the reproductive health situation of the Maldives and the five-year Reproductive Health Programme of the Ministry of Health in the Maldives, and for guiding aspects of programme implementation. Data primarily represent the national level. The survey was commissioned by the Ministry of Health. CIETinternational provided technical support for survey design, data collection, entry and analysis, and are responsible for preparation of the report. The Health Information and Research Unit in the Ministry of Health were responsible for data collection and data entry. A technical group selected the survey sample, designed the data collection instruments and participated in the data analysis. The technical group included CIETinternational, the Health Information and Research Unit, the Department of Public Health, UNFPA and personnel from the Ministries of Health and Planning and National Development and other bodies involved in the Reproductive Health Programme. The survey was funded by UNFPA.

Methods

Sample

The sample is a multistage cluster sample. The first stage was stratification into six regions. The islands in each region were divided into three groups: those with a regional hospital (one hospital per region); those with a health centre; and those without either. Islands within each group were randomly selected. For most of the selected islands the sample site includes all the households on the island. For larger islands, an area sample of approximately 100 households was randomly selected as the sample site. In Male' five sites were selected randomly from among enumeration blocks in the 1995 census. A total of 24 sites were selected. Weights were calculated to take into account the uneven sampling fraction between strata and have been applied when calculating national figures.

Survey instruments

Indicators to be included in the survey and instruments were agreed in consultation with the Health Information and Research Unit (HIRU) of the Ministry of Health, the Department of Public Health, UNFPA, NGOs and other concerned agencies. The survey instruments include: the household questionnaire, the key informant interview schedules, the schedules for institutional reviews of health facilities, and the guides for the focus group discussions.

Data collection

Five teams of interviewers and supervisors were trained and undertook fieldwork in different regions. In each site, all the households were visited and interviewed, including an interview with women in the household aged 15-49 years and with male household heads.

Focus group discussions with adult males and females were carried out in every island site (19). Focus group discussions with adolescent boys and girls were carried out only in islands with a health centre (8 sites). In Male', focus group discussions with

adult males and females and with adolescent boys and girls were carried out in 2 of the 5 sites.

Key informant interviews were carried out in each sample island to collect information from the island chief, the magistrate and the head teacher/supervisor. No key informant interviews were carried out in Male'. An institutional review of the local health facility was carried out in all the sample islands. No health facility in Male' was included in the institutional review.

Data entry and analysis

Data entry used Epi Info. All household data were entered twice and verified. Basic analysis was carried out immediately in Male' and further analysis was undertaken later. Data analysis used Epi Info and SPSS software packages.

Results

The survey population includes:

- ✍ 2254 households
- ✍ 15646 people living in these households
- ✍ 4087 household respondents (household heads and women aged 15-49 years)
- ✍ 2208 married women aged 15-49 years among the household respondents

1. Knowledge and practice of contraception

- ✍ The mean number of children of women aged 15-49 years is 4.2, and the mean 'ideal number' of children mentioned by these women is 3.0.
- ✍ More than two thirds of married women (68%) do not want more children.

Contraceptive Prevalence Rate (CPR)

The CPR among married women aged 15-49 years is:

- ? 42% for all methods of contraception (including traditional, 'natural' methods)
- ? 32% for modern methods of contraception
- ? 23% for modern, temporary methods of contraception (excluding sterilisation).

The CPR (modern temporary methods) has increased from 10% in 1991 (KAP survey), to 17% in 1995 (census data), to 23% in this survey.

Use of contraception

- ✍ Women are more likely to use contraception if they do not want any more children, if the household head has formal education and if the household has been visited by the FHW.
- ✍ The most common reasons for choosing a particular method of contraception are convenience of use (42%) and lack of side effects (34%).
- ✍ The most common reasons given by those who have never used contraception are no need (45%), not wanting to use (27%) and information or service not available (12%). For the older respondents the decision not to use contraception may have been taken some years ago, when the use of contraception was rare.

Unmet need for contraception

Among married women aged 15-49 years, 42% do not want more children yet are not using a modern method of contraception. The gap of unmet need is wider among older women.

Knowledge of contraceptive methods

- ? Most household respondents (86%) know of at least one modern method of contraception.
- ? Few household respondents (11%) know the correct time during the menstrual cycle when a woman is most likely to conceive; women are twice as likely to know as men.
- ? Half (57%) of respondents know any side effects of contraceptives. The most common side effects mentioned are irregular periods (19%), dizziness and headaches (19%), weight changes (15%) and spotting (15%).

2. Knowledge of sexually transmitted diseases (STDs) and AIDS

Health workers' awareness about STDs

- ✗ The majority (68%) of health workers interviewed think STDs are “very rare” in the communities they serve.
- ✗ Quite a few of the reproductive health problems mentioned by health workers are, or could be, related to STDs. More than a third of the health workers interviewed think there is ‘no problem’ with reproductive health’ in the communities they serve.

Knowledge about STDs

- ✗ Two thirds (65%) of household respondents do not know of any signs of STD.
- ✗ If the invalid signs are excluded, only 31% (1132/3551) of respondents are able to mention any sign of STDs.
- ✗ The majority (86%; 1112/1300) of respondents say they would go to a health center or hospital to seek health care if they developed signs of STD.
- ✗ Respondents are more likely to know of signs of STD if they have ever been married, if they live on an island with a health centre and if they have been visited by the FHW.
- ✗ About half (54%) of household respondents know a valid way of catching STDs.
- ✗ Respondents are more likely to know how to catch STDs if they have had formal education and have a job outside the home.

Knowledge about AIDS

- ✗ Nearly all (99%) household respondents have heard of AIDS.
- ✗ Nearly all (92%) household respondents know a valid way of catching AIDS.

3. Antenatal care

- ✗ Most (88%) women aged 15-49 years with any pregnancies report at least one antenatal care visit in their last pregnancy.
- ✗ Two thirds (62%) of women had four or more antenatal care visits in their last pregnancy.
- ✗ Women are more likely to attend for antenatal care if they have had formal education, if they live in a community where the facility gives out home based mother cards, and if they are less than 31 years old.

Iron supplements during pregnancy

- ✗ Only half (46%) of women took any iron supplements during their last pregnancy.

- ✘ Only a third (35%) of women took iron for two months or more during their last pregnancy.
- ✘ Women who had any antenatal care visits in their last pregnancy are more than 20 times more likely to have taken iron supplements; only 5% of those who did not have antenatal care took any iron.
- ✘ Women who had at least four antenatal care visits are three times as likely to have taken iron during the pregnancy, compared with women who had no visits or less than four.
- ✘ Women with formal education and younger than 31 years are more likely to take iron.
- ✘ 17 of 19 health facilities visited had a stock of iron; women from communities where the facility did not have a stock of iron are less likely to take iron in pregnancy.

4. Visits of Family Health Workers

- ✘ Only 48% (740/1617) of households report that they have ever had a visit from the FHW.
- ✘ A third (33%) of households report a visit of the FHW within the last two months.
- ✘ Households are more likely to have been visited by the FHW if they are in an island with a health centre

5. Reproductive health services available to communities

- ✘ There is understaffing of health facilities, particularly among nurses.
- ✘ Most facilities visited have the full range of medicines and equipment, but there are gaps: antibiotics were only present in 6 of the 10 health posts. Urine testing kits were only found in 2 health posts. A height scale was only found in 2.
- ✘ Most (74%) of the facilities hear complaints from the local community. The most common complaints are: lack of medicines/no pharmacy (30%), the long process to reach a doctor (30%), and bad behaviour of health staff (20%).

6. Opinions of reproductive health services

- ✘ The majority (77%) of household respondents rate the reproductive health services in their area as 'good'.
- ✘ Women are more likely than men to rate the services as 'good'.

Perceived problems with reproductive health services and suggested improvements

- ✘ Most (77%) household respondents do not cite any problems with reproductive health services.
- ✘ Perceived problems commonly concern staff behaviour and staff shortages, as well as lack of medicines and services.
- ✘ Commonly suggested improvements are for more information, for more doctors, and for improved physical conditions of the facilities.

7. Use and experience of health services

- ✘ A third (37%) of women aged 15-49 years have made at least one visit to a health facility in the three months before the survey.
- ✘ 78% of the reported visits are for illness of the woman or her children; these illnesses may not directly related to reproductive health. The remainder of the visits are specifically related to reproductive health.

- ✘ More than half (53%) the reported visits are to hospitals and a third (33%) are to health centres.

Availability of required medicines and costs of visits

- ✘ All required medicines are available in 93% of reported visits to health services.
- ✘ Nearly all service users (95%) paid something for the visit to a health facility. The mean amount paid is 1316 Rf (median 200 Rf).
- ✘ The amount paid is highest in the northern region and in Male'. This probably reflects high transport costs in the northern region and high private costs in Male'.

Satisfaction with service received

- ✘ Nearly all (94%) women aged 15-49 years are satisfied with the service they received on their last visit to a health facility.
- ✘ Nearly all (96%) women who used health services are satisfied with the privacy and confidentiality of the service.

8. Adolescents and reproductive health

Eight focus group discussions with adolescent boys and eight with adolescent girls (aged 15-18 years) were held in different regions.

- ✘ Boys and girls are aware of a range of modern methods of contraception.
- ✘ They get information about contraception from the media (especially radio) and from friends, more than from sources such as health workers and teachers.
- ✘ They are generally in favour of family planning.
- ✘ Both boys and girls can mention a range of STDs and, in discussion, know how they are transmitted.
- ✘ The awareness of AIDS and knowledge of transmission methods is high.

9. Views of opinion leaders

21 island chiefs, 16 magistrates and 18 head teachers/supervisors were interviewed.

- ✘ Nearly all are in favour of the use of contraception by married couples.
- ✘ Nearly all island chiefs and head teachers and over half of magistrates are in favour of waiting homes for pregnant women with 'high risk' pregnancies. Those against fear the homes would not be used properly in practice.
- ✘ About half are against the emergency transport scheme, suggesting it may be expensive and may not work properly in practice.
- ✘ Most are in favour of the use of volunteers in the reproductive health programme, believing they will make a useful practical contribution.

19 Presidents of women's committees were interviewed.

- ✘ About half the committees have no activities to support reproductive health and family planning or to promote gender equity.
- ✘ Their most frequent activities related to reproductive health and family planning are giving information and counseling (10/19).
- ✘ A third of committees (6/19) either set up businesses for women or assist women to set up businesses.

Commentary

This survey has produced data on a number of key indicators, as a baseline against which to measure the impact of the Reproductive Health programme. It has also

provided insights into attitudes and behaviours related to reproductive health that can help in the design and targeting of areas of the programme.

Contraception

Attitudes about contraception in focus groups of male and female adults and adolescents are generally positive, as are the attitudes of island chiefs and other opinion leaders. The steady rise in the CPR since 1991 is encouraging. There is a need for more information about contraception, especially for older women without formal education and for adolescents.

Knowledge of STDs and HIV/AIDS

The apparent success of the public information programme about AIDS is striking. The contrast with knowledge about other STDs is marked. A stronger programme to inform people about STDs is needed. This could build on the already good knowledge of health workers. Health workers are also trusted by many people as reliable sources of information about these issues.

Antenatal care

The high proportion of women attending for the recommended four or more antenatal care visits is encouraging. However, even though women who have antenatal care are more likely to take iron during pregnancy, the proportion taking iron is still much too low. The reasons for this need to be investigated further, including holding further discussions with women. Some health providers have suggested that women may not take iron even when they are given it, perhaps because of side effects. If this is the case after further investigation, education and support is necessary and perhaps provision of alternative iron preparations. If iron supplements are not always being offered to pregnant women as part of antenatal care, this needs to be corrected.

Visits of the FHW

The reasons why FHWs are not always visiting households routinely need to be investigated in more detail. The policy of routine visiting needs to be reviewed. There is some evidence from this survey that visited households have a higher rate of contraceptive use and better knowledge about STDs. In reviewing the policy of FHW visits, it would be a good idea to involve the FHWs and the public in the discussion and seek their views about possible changes in the policy.

Experience and perceptions of reproductive health services

The high rating of reproductive health services by household respondents is a good reflection on the services. There is still room for improvement and service providers as well as household respondents have suggestions for improvements. The suggestions concerned with staff behaviour and training could be addressed relatively quickly.

The relatively educated population of the Maldives may well have increasing expectations of their health services in the coming years and the provision of services will need to keep pace with expectations. One way to avoid a mismatch between expectations and the actual service will be to involve the public in the planning and monitoring of service provision. This baseline survey is a useful beginning in involving the public in the future development of reproductive health services.

CONTENTS

EXECUTIVE SUMMARY	[1]
CONTENTS	[7]
ACKNOWLEDGEMENTS	[9]
LIST OF TABLES, FIGURES AND ANNEXES	[10]
ABBREVIATIONS AND DEFINITIONS	[12]
INTRODUCTION	1
Survey objectives	2
METHODS	3
Methodological approach	3
Survey sample	3
Household sample	3
Weighting of the household sample	4
Sample for qualitative data collection	4
Survey instruments	5
Training and fieldwork	5
Data management	6
RESULTS	8
1. The survey population	8
Population structure	8
The household heads	9
Household respondents	11
2. Knowledge and practice of contraception	14
Number of children	14
Contraceptive use	15
Ever used any contraception	15
Current use of contraception	15
Reasons for choice of contraceptive methods	16
Sources of advice about contraceptive methods	16
Decision maker about use of contraception	17
Reasons for discontinuing contraception	17
Reasons for never using contraception	17
Factors related to use of modern contraception	17
Unmet need & information needed to increase contraceptive use	20
Knowledge of contraceptive methods	21
Factors related to knowledge of modern methods of contraception	22
Knowledge of side effects of contraceptives	23
Factors related to knowledge of side effects of contraceptives	24
Knowledge of most fertile period during the menstrual cycle	25
3. Knowledge of sexually transmitted diseases and AIDS	26
Health workers perceptions of STDs as a problem	26
Knowledge of signs of STDs	27

Actions taken if developing signs of STDs	28
Factors related to knowledge of signs of STDs	28
Knowledge of ways of catching STDs	29
Factors related to knowledge of ways of catching STDs	30
Knowledge of AIDS and ways of catching AIDS	31
Factors related to knowledge of ways of catching AIDS	31
4. Antenatal care	33
Antenatal care coverage	33
Factors related to antenatal care coverage	33
Iron supplementation	34
Factors related to iron supplementation during last pregnancy	35
5. Visits of Family Health Workers (FHWs)	37
6. Reproductive health services available to communities	39
Complaints about service and suggested improvements	40
7. Opinions about reproductive health services	41
Seeking medical care after miscarriages	41
Opinions about reproductive health services available	41
Factors related to rating of reproductive health services	41
Perceived problems with reproductive health services	42
Suggestions for improvements to reproductive health services	44
8. Use and experience of health services	45
Use of health services	45
Experience of health services	46
Availability of required medicines	46
Costs of visits to health facilities	46
Satisfaction with service received	47
Satisfaction with privacy of services	48
9. Adolescents and reproductive health	49
Knowledge of contraceptive methods	49
Attitudes about family planning	50
Knowledge about STDs and HIV/AIDS	50
10. Views of opinion leaders	51
Use of contraception	51
Provision of waiting homes for pregnant women	52
Emergency transport for delivery	52
Use of volunteers in the reproductive health programme	53
COMMENTARY	53
1. Indicators	54
2. Behind the indicators: pointers for action	56
REFERENCES	58

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We thank all the team leaders, supervisors and interviewers for their hard work in the field during the survey. Many of them left their families and children behind in order to join in the fieldwork of the survey. Their names and teams are shown in the following table.

Region	Team leader/supervisor	Interviewers
Southern Atolls	Ahmed Khaleel/ Dunya Maumoon	Aishath Sadiq, Fathmath Zaeema, Hafsa Mohamed Husnee, Shazra Mohamed Saeed, Waseema Fikuree
South	Jagat Basnet/	Fathmath Abdul Gayoom, Fathmath Suneetha, Hawwa
Central Atolls	Hassan Manik	Shifa, Ibrahim Ashrsaf, Nasiha Abdul Hakeem, Aminath Shafga
Male'	Fathmath Shafeega/ Ahmed Khaleel	Aishath Hussain Manik, Fathmath Shazly, Razana Shareef, Aishath Afnaan, Khadeeja Hussain, Maahliga Adam, Nazima Basim, Mariyam Shifhina, Hawwa Shifa, Nashia Abdul Hakeem, Aminath Shafga, Shazra Mohamed Saeed
Male' Economic Region	Ahmed Afaal	Waseema Fikury, Nazima Basim, Mariyam Shifhina, Khadeeja Hussain
North	Ahmed Afaal/	Mariyam Shifhina, Fathmath Fareesha, Azmeela Hassan,
Central Atolls	Aishath Nasheeda	Aishath Rashaad, Hudha Haleem, Fathmath Shazna
Northern Atolls	Luwei Pearson/ Nashida Sattar	Aishath Afnaan, Aishath Zahir, Kahdejeja Hussain, Maahliga Adam, Nazima Basim

We are particularly grateful to the people in communities of the Maldives who took the time to answer questionnaires and participated in focus group discussions. As recompense for their time, we hope that the survey will help to support improvements to the reproductive health services available to these people and others like them.

LIST OF TABLES, FIGURES AND ANNEXES

Tables

1. Islands in the sample	4
2. Population in the household survey by island	8
3. Age distribution of sample population	8
4. Family size by region	9
5. Occupation of household head	10
6. Mean age of respondent and education level	11
7. Occupation of female respondents	12
8. Age of first marriage and education of women	12
9a. Age of first marriage and education in women	13
9b. Age of first marriage and education in men	13
10. Reasons given for suggested right age of marriage from focus groups of female adolescents	13
11. Number of children by age of mothers	14
12. Mix of contraceptive methods used in 1991 and 1999	16
13. Reasons given by women for choice of contraceptive method	16
14. Use of modern contraceptive methods and education in married women aged 15-49 years	18
15. Current contraceptive use by age group	18
16. Adjusted effects of variables in combination on the likelihood of using modern contraception (among married women aged 15-49 years)	19
17. Information needed by women and men to increase use of contraception	21
18. Trusted sources of Information about contraceptives (from focus groups)	21
19. Contraceptive methods known to household respondents	22
20. Side effects of contraceptives known to household respondents	23
21. Knowledge of side-effects of contraception by level of education	25
22. Views about when during the menstrual cycle a woman is most likely to conceive	25
23. Health workers' views about the main RH problems in communities	26
24. Signs of STDs reported by respondents	27
25. Signs suspicious of STDs (reported by health workers)	28
26. Actions that would be taken if signs of STD developed	28
27. Awareness of household respondents of ways of catching STDs	30
28. Awareness of household respondents of ways of catching AIDS	31
29. Allocated and filled posts in health facilities	39
30. Health worker suggestions for improvements to their services	40
31. Perceived problems with reproductive health services, from household respondents	42
32. Household respondents' suggestions for improving reproductive health services	44
33. Purpose of visiting health facilities (women aged 15-49)	45

Figures

1. A household interview	6
2. Workshop in Male'	7
3. Age and gender distribution of the sample population	9
4. % of female headed households by region	9
5 Education of household heads	10
6. Education of household heads by age	10
7. Education of male and female respondents	11
8. Marital status of household respondents	12
9. % of women not wanting more children, by age	14
10. % women wanting more children and no. existing children	14
11. % women who have ever used contraception, by age	15
12. CPR (modern temporary methods) 1991-1999	15
13. Source of advice about contraception	16
14. Unmet need for modern contraception, by age group	20
15. % respondents aware of any modern contraceptive method	23
16. % respondents who know any sign of STDs, by health facilities present on island	29
17. % households aware of valid way of catching AIDS, by region	32
18. Number of antenatal care visits in last pregnancy	33

19. % women with 4 or more antenatal visits in last pregnancy, by region	33
20. Length of iron supplementation during last pregnancy	35
21. Time since last visit of FHW to households	37
22. % households ever visited by FHW, by region	37
23. Numbers of health facilities visited	39
24. % households with views on necessity of seeking medical help after miscarriage	41
25. Household respondents' ratings of reproductive health services	41
26. % household respondents rating RH services as 'good', by region	42
27. % household respondents who cite any problems with RH services, by region	43
28. % respondents citing any problem with RH services, by type of facility available	43
29. % of visits to different health facilities	45
30. % visits with all medicines available, by type of facility	46
31. Mean (blue) and median costs of visits to health facilities, by region	46
32. Median costs of visits to different facilities	47
33. A focus group discussion	49
34. Interview with a key informant	51

Annexes

1. CIET methodology
2. The survey sample and weighting
3. The survey instruments
4. Weighted and unweighted indicators at national level
5. Focus group discussion themes, reviews of health facilities serving the sites, and interviews with key informants
6. Geographic distribution of key variables

Abbreviations and Definitions

Abbreviations:

AIDS	Acquired Immune Deficiency Syndrome
FHW	Family Health Workers
HIRU	Health Information and research Unit
HIV	Human Immunodeficiency Virus
MOH	Ministry of Health
RHS	Reproductive Health Service
STDs	Sexually Transmitted Diseases
UNFPA	United Nations Population Fund

95% CI:	95% Confidence Interval
OR:	Odds Ratio

Statistical and epidemiological terms

This report is deliberately written avoiding too many specialised statistical and epidemiological terms. However, some are unavoidable. A brief explanation of the main terms used in the report is given here; readers who are interested in more detailed explanations should refer to a textbook on modern epidemiological methods.

95% confidence interval:

A measure of the accuracy of an estimate, based on the normal distribution curve. The true value is 95% likely to lie between the upper and lower values of the 95% confidence interval.

Standard Deviation:

A measure of the spread of the distribution of a variable, based on the normal distribution curve. 99% of the population will have values within \pm two standard deviations from the mean value of the variable.

Odds Ratio:

One way of estimating Relative Risk. In a 2X2 table, with cells a,b,c,d, the Odds Ratio is calculated by ad/bc .

Relative Risk:

The risk in one group compared with another group (for example the risk of stunting in girls compared with the risk of stunting in boys). When the actual rates in each group are known (for example, the total number and the number with stunting), the relative risk can be estimated either by the Odds Ratio or by the Rate Ratio (the rate in one group divided by the rate in the other group). In a case-referent study, only the Odds Ratio can be calculated. For relatively rare conditions, the two estimates of Relative Risk give a similar answer. There is discussion about which estimate of Relative Risk it is better to use. For further details, a textbook of modern epidemiology should be consulted. In CIET methodology, the Odds Ratio is used as the estimate of Relative Risk

INTRODUCTION

Background

The Republic of Maldives has 201 inhabited islands and about 1000 other islands including resorts stretching across 500 miles of Indian Ocean. These islands form 26 natural atolls, which for purposes of administration are grouped into 20 units, also called atolls. Most of the islands are small, few with a land area in excess of one square kilometer, and are low lying, with an average elevation of 1.6 m above sea level. The geography of the country, with the costs of transport and diseconomies of scales, makes delivery of services of any kind very expensive and difficult. Nevertheless, the country has made great efforts to establish and expand its service delivery network.

The population of the Maldives was 244,814 in 1995 (Census 1995). In addition to this there are 19,000 resident foreign workers and their dependents. About 26% of the population live in the capital island of Male'. In addition to Male's permanent population, it also has a floating population of several thousands who arrive from other islands for commercial purposes, education and medical treatment. Population is growing at an annual rate of 2.77% (Statistical Yearbook of Maldives 1996, MPHRE).

Rationale for the Survey

Reproductive Health is one sub-program in the second UNFPA Country Program 1998-2002 in the Republic of Maldives. The context for implementation of the sub-program is one of low contraceptive prevalence, high total fertility, rapid population growth, high life time risk of maternal death in the atolls, increasing coverage by health services, rising primary school enrolments but small numbers of girls in education above secondary level, limited employment and training opportunities for women, poor average nutritional status, but high EPI coverage.

The Maldives situation is not homogenous. There are considerable differences between islands and the UNFPA program recognises the need for targeted approaches to different communities and sub-groups and intends to reach people (especially women) in greatest need, who may be least well covered by present programs. This calls for a program that is complex, innovative, culturally sensitive and yet still provides high quality services in remote locations.

The baseline study aims to provide information about behavioral, attitudinal and knowledge characteristics of the population, including men and women of different ages, and their access to and use of the health sector services available. The results of the baseline study will be used to design a wide range of project activities (such as IEC messages for specific groups). They will also provide data for evaluating the outcomes, effect, and possibly impact, of the sub-program.

Survey Objectives

The main objectives of the survey are:

- ? To measure knowledge of sexual health, Sexually Transmitted Diseases (STDs), AIDS, fertility and miscarriages.
- ? To investigate attitudes towards modern and traditional contraceptive methods, family planning and family size.
- ? To assess the levels and patterns of use of RH services by the community and the availability, access and quality of RHS offered.
- ? To assess women's participation in decision making related to RH issues
- ? To describe features of contraceptive use including method mix, unmet need for contraception, and reasons for discontinuation.
- ? To investigate factors associated with reproductive health knowledge and behaviour and with experience and opinions of reproductive health services.

METHODS

Methodological approach

The CIET methodology used in the baseline reproductive health survey has the underlying aim of 'building the community voice into planning'.

The essence of CIET support for public sector service improvement programmes is to generate community-based evidence on impact, coverage and costs of public services; at the same time building skills, habits and confidence for results-based management. The CIET Methodology (Annex 1) uses a cross-design of quantitative and qualitative methods for reiterative, cyclical data gathering and analysis. The methods provide a substrate for ongoing interaction between programme managers and intended service users. The idea is to contribute to a culture of quality service delivery based on evidence of results.

The baseline reproductive health (RH) survey has employed the CIET methodology to provide both baseline indicators for measuring programme impact and information to assist planning of aspects of the programme as it evolves. The survey may be repeated at the end of the programme in order to estimate change in target indicators during the programme period.

The survey sample

The target population for the RH sub-program is “people in need of reproductive health care” the providers of that care and the community stakeholders. This also defines the target population for the baseline survey. The estimated programme target population size is 132,000 people living on 201 inhabited islands (Male’ and the atolls).

Household Sample

The sample is designed to give representative results at national level. It is a multistage cluster sample. The sampling process is described in detail in Annex 2. The first stage was stratification into six regions. In the next stage, the islands in each region were divided into three groups: those with a regional hospital (there is only one of these per region); those with a health centre; and those without either. Islands within each group were randomly selected, the sampling fraction chosen to give a sample size in each stratum proportional to the relative population in each stratum.

For most of the selected islands, the number of households is under around 150 and the sample site includes all the households on the island. For larger islands, an area sample of approximately 100 households was randomly selected as the sample site. In Male’ five sites consisting of three contiguous enumeration blocks were selected randomly from among enumeration blocks in the 1995 census.

The selected islands in the sample, by region and type of island, are shown in Table 1.

Table 1. Islands in the sample

Island	Region	Type of island
Hoarafushi	N	HC
Hanimaadhoo	N	Neither
Hirimaradhoo	N	Neither
Kulhudhuffushi	N	RH
Maalhendhoo	NC	Neither
Ugoofaaru	NC	RH
Kihaadhoo	NC	Neither
Eydhafushi	NC	HC
Kurendhoo	NC	Neither
Rasdhoo	MER	HC
Hangnameedhoo	MER	Neither
Muli	SC	RH
Mulah	SC	Neither
Maaeboodhoo	SC	Neither
Hirilandhoo	SC	Neither
Hithadhoo	SC	HC
Hoadedhdhoo	S	Neither
Fuvahmulah	S	HC
Hithadhoo	S	RH
Male' (5 clusters)	NA	NA

HC= Health Center RH= Regional Hospital

Weighting of the household sample

The sample is not fully proportional to the population, since some strata were relatively over sampled in order to collect sufficient information. For example, all islands with a regional hospital are included in the sample. In order to take this into account and avoid bias in the national figures calculated from the sample, weighting factors were calculated as shown in Table 3 in Annex 2. In each case the weight is the proportion of the actual population in the stratum divided by the proportion of the sample population in the stratum.

Sample for qualitative data collection

Focus group discussions were conducted in each site (island). Focus group discussions with adult males and females were carried out in every island site. Focus group discussions with adolescent boys and girls were carried out only in islands with a health centre. In Male', focus group discussions with adult males and females and with adolescent boys and girls were carried out in 2 of the 5 sites.

Key informant interviews were carried out in each sample island to collect information from the island chief, the magistrate, the head teacher/supervisor and the president of the women's committee. No key informant interviews were carried out in Male'.

An institutional review of the local health facility was carried out in all the sample islands. No health facility in Male' was included in the institutional review.

Survey instruments

Selection of indicators

Indicators to be included in the survey were agreed in consultation with the Health Information and Research Unit (HIRU) of the Ministry of Health, the Department of Public Health, UNFPA, NGOs and other concerned agencies. Indicators were included based on programme priorities and review of recent information from existing data sources.

The instruments themselves

The survey instruments were developed in collaboration with HIRU and UNFPA colleagues. They include: the household questionnaire, the key informant interview schedules, the schedules for institutional reviews of health facilities, and the guides for the focus group discussions. The survey instruments are given in Annex 3.

In the household questionnaire closed questions (with a limited choice of responses, such as yes/no or a range of three possible opinions) were employed where appropriate. For issues about opinions and knowledge (of signs of STD, for example), open-ended questions were used. This means that the possible range of answers is not artificially constrained. For open-ended questions, post-coding prior to data entry is required.

The instruments were initially produced in English, then translated into Dhivehi and back-translated into English to check the preservation of the intended meaning. Before finalisation, the instruments were pre-tested in non-sample field sites and minor changes were made as a result.

Training and fieldwork

Supervisors and interviewers

Five teams, each containing a team leader, a supervisor and 4-6 interviewers, were recruited. The members of the teams are mentioned earlier in the Acknowledgements.

The five field supervisors and five team leaders were staff from DPH, MOH, UNFPA, SHE and CIET International. Interviewers were mostly female high school graduates from Male'. Most of the interviewers were women. This was deliberate because the household questionnaire was mainly aimed at women in the households. The task of the interviewers was to administer the household questionnaire to all households in the site, while the focus group discussions and other interviews were conducted by the team leaders and supervisors.

Training

Field staff were recruited in the beginning of February 1999 and trained in Male'. The training for interviewers lasted 2 days and included a field practice of administering the household questionnaire in a non-sample site. The training for supervisors lasted 3 days and included training in facilitating focus group discussions as well as in how to administer and check the household questionnaire.

Fieldwork



Figure 1. A household interview

The fieldwork for the different areas took place more or less simultaneously. The teams travelled to their regions and stayed there until they had completed data collection from that region. The fieldwork for the North, North Central, South Central and South regions was completed by 20th of February 1999. The fieldwork for Male' and Male' economic region was started later than the other regions and was completed by 8th of March 1999.

Data management

Survey supervisors and staff from MOH coded the data from the household interviews prior to data entry. Codes for the open-ended questions were developed, based on the pre-test results and on the responses from the first survey sites.

Data entry took place in Male' and was programmed using the Epi Info software package(1). Data from the household interviews was entered twice and validated, using the Epi Info programme Validate. Logical checks were applied to the data set and corrections made as necessary by reference to the raw data in the field data collection books. Data entry and validation was completed by 10th March, and data cleaning was completed by 14th March.

Data from the key informant interviews and institutional reviews was coded and then entered using Epi Info. The focus group reports were translated into English and then the themes expressed were coded and entered, again using Epi Info. The focus group themes identified are shown in Annex 5.

Data analysis

Basic analysis of the key quantitative data was undertaken in Male' immediately after data entry and cleaning. This analysis was carried out by CIET in collaboration with HIRU and UNFPA staff who were involved in the whole survey process from the design stage onwards. The EPI-Info programme CSAMPLE was used to calculate weighted proportions of key indicators. In practice, the weighted proportions are very close to the unweighted proportions for the key indicators (see Annex 4). Unless stated otherwise, values of indicators quoted in the Results section for the whole of the Maldives are weighted.

The key findings were discussed in two workshops in Male' in March 1999. One technical workshop was attended by programme managers and others who had participated in the initial design and planning phase of the survey. The other meeting was attended by the Minister of Health, the UNFPA Representative and Country Director, and senior personnel in the Ministry of Health and other



Figure 2. Workshop in Male' to discuss key findings

relevant ministries. In these workshops interpretation of the findings was discussed and issues for further detailed analysis of the data were identified.

More detailed analysis was subsequently undertaken. The associations between various factors and outcomes of interest were explored, both separately for each variable (univariate analysis) and combining the variables (multivariate analysis). Epi Info was used for the basic descriptive analysis and for exploration of univariate and some multivariate associations (using stratification). Further multivariate analysis was by logistic regression and SPSS was used for this. The aim of the more detailed analysis is to explore what interventions might be most likely to improve outcomes, taking into account the effects of other variables.

In the detailed analysis the qualitative findings were considered, both in their own right and as a way of giving context to the quantitative findings. Qualitative data were analysed in three ways: basic descriptive analysis of the summarised findings, extraction of key issues raised (the “community voice”), and analysis linking qualitative and quantitative data together.

RESULTS

1. The survey population

Population structure

Some 15646 people from 20 islands live in the 2254 households included in the survey. They represent 6.5% of the total Maldivian population from the 201 inhabited islands. A total of 4087 respondents from 2254 households were interviewed. Table 2 shows the number of households, respondents and people in each of the sample islands. Each island has one sample site, except Male' where there are five separate sites.

Table 2. Population in the household survey by island

Island	No. HHs	No. of respondent	No. of people
Hoarafushi	99	204	700
Hanimaadhoo	103	149	592
Hirimaradhoo	50	93	306
Kulhudhuffushi	97	150	583
Maalhendhoo	91	122	525
Ugoofaaru	129	197	933
Kihaadhoo	48	60	304
Eydhafushi	92	164	704
Kurendhoo	98	128	588
Rasdhoo	85	130	604
Hangnameedhoo	29	46	218
Muli	122	265	920
Mulah	92	190	681
Maaeboodhoo	90	189	574
Hirilandhoo	110	237	731
Hiithadhoo	81	170	481
Hoadedhdhoo	104	128	498
Fuvahmulah	103	172	709
Hiithadhoo	124	231	837
Male'	507	1062	4158
Total	2254	4087	15646

Table 3 shows the age distribution of the sample population. Nearly 60% of the sample population are under 20 years old.

Table 3. Age distribution of sample population

Age group	No. (%) of population
Under 5	2344 (15)
6-10	2439 (16)
11-20	4434 (28)
21-30	2377 (15)
31-40	1841 (12)
41-50	972 (6)
51-60	704 (5)
Above 60	523 (3)
All	15634

Among the sample population, information on gender was available for 15598 people. Among them, 7607 (49%) were male and 7991 (51%) were female. The age and gender structure of the sample population is shown in Figure 3.

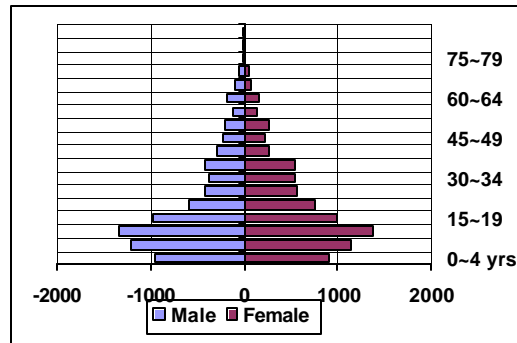


Figure 3. Age and gender distribution of the sample population

The mean household size nationally is 8.8, median 8. Household size varies by region. Male' has the largest household size (mean 10.9) and the northern region has the smallest (mean 7.9).

Table 4. Household size by region

Region	Family Size	
	Mean	Median
Northern	7.9	7
N. central	8.3	8
Male'	10.9	10
Male' region	8.2	8
S. central	8.4	8
South	7.9	8

The household heads

Information about the household head is available from 2254 houses.

Nationally, 51% (1193/2254) of household heads are male.

The proportion of female-headed households varies between regions. Male', Northern and Male' Economic Regions have a higher proportion of female-headed households than other regions (Figure 4).

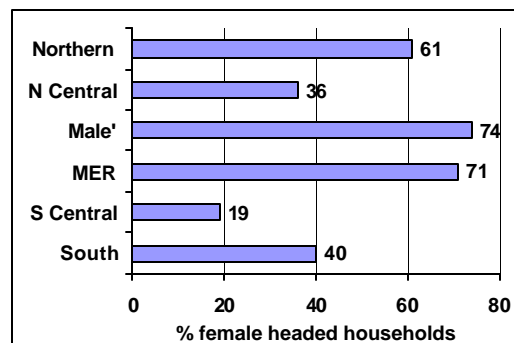


Figure 4. % of female headed households by region

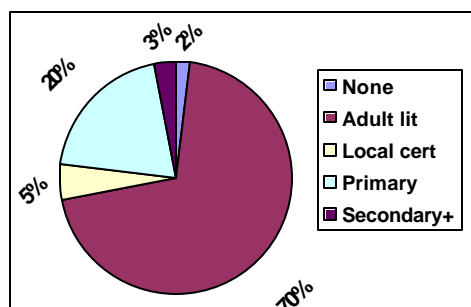


Figure 5. Education of household heads

Only 2% of the household heads have received no education. Some 70% have attended adult literacy classes, 5% have a local certificate, 20% have had primary education and 3% of them have received secondary or higher education. Figure 5 shows educational level of the household heads in the survey.

Adult literacy is more common among household heads over 40 years old, while education from primary schools is more common among household heads younger than 40 years of age (Figure 6). This reflects the impact of education policy in the past few decades.

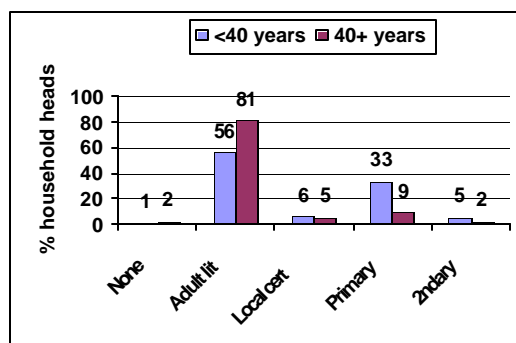


Figure 6. Education of household heads by age

In contrast to many developing countries and particularly other countries in the South Asia region, education of the female household heads in the survey is little different from that of male household heads. In fact, a somewhat higher proportion of female household heads (27%) have received formal education at primary level or above, compared with male household heads (23%). This is explained by age. The mean age of male household head is 46 years and of female household heads 41 years of age.

Fishing, handicraft and government jobs are the three most common occupations among household heads in the survey (Table 5). About a third (32%) of household heads do not have any occupation; this is more common for female household heads (59%) than male household heads (8%).

Occupation	Number (%) hh heads	
	Male	Female
None	94 (8)	620 (59)
Fishing	348 (30)	16 (2)
Government job	227 (19)	98 (9)
Private business	190 (16)	54 (5)
Handicraft	131 (11)	196 (19)
Day labour	103 (9)	17 (2)
Tourism	33 (3)	1 (0.1)
Agriculture	27 (2)	39 (4)
Retail shop	21 (2)	3 (0.3)
Joint venture	4 (0.3)	1 (0.1)
Total	1178	1045

Three quarters (77%; 1676/2170) of household heads are present at home all the time. On average, male household heads are at home for 10.0 months in 12 months, while female household heads are at home for an average of 11.6 months in 12 months.

Household respondents

The survey was designed to obtain information on knowledge and practice on contraception, and STD/AIDS from male household heads (of any age) and all women between 15 and 49 years of age in each household present at the time of this survey. Information on antenatal care and use of health services was only collected from women between 15-49 years of age. In total, 3713 respondents answered the household questionnaire. Among them, 3199 (86%) are female.

The mean age of respondents is 31 years, median 30 years. Male respondents tend to be older than female. This is because women respondents were limited to those less than 50 years old. Therefore whenever a comparison between male and female respondents is made in the following analysis, only respondents less than 50 years of age have been included in order to draw a fair comparison.

The education of male (n=301) and female (n=3165) respondents below 50 years old is illustrated in Figure 7.

Younger respondents have achieved a higher level of education than older respondents (Table 6). This better educated younger generation may have different levels of knowledge about the issues explored in this survey (see below) because of their better education.

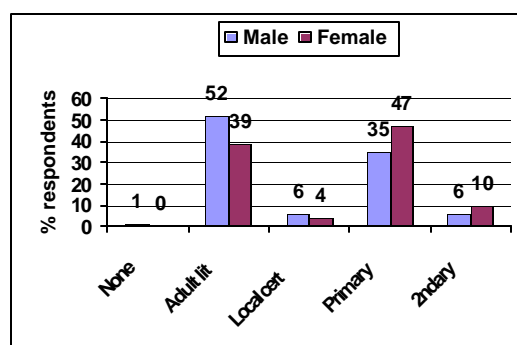


Figure 7. Education of male and female respondents

Table 6. Mean age of respondent and education level

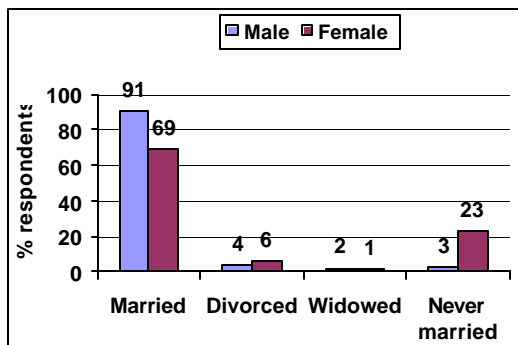
Education	No. of respondents	Age	
		Mean	Median
None	22	44.0	41
Adult literacy	1574	38.3	36
Local certificate	146	34.3	33
Primary	1611	25.1	23
Low secondary	270	23.4	21.5
High secondary	36	25.6	21
Higher education	21	32.0	32

Female respondents were asked what kind of work in addition to household work, either paid or voluntary, they undertook. More than two thirds (68%) of them are not involved in anything other than household work. Among different types of work outside the household, women are most often involved in handicrafts (Table 7).

Table 7. Occupation of female respondents (n=3127)

Occupation	Number (%) of respondents
Nothing	2111 (68)
Handicraft	408 (13)
Government job	188 (6)
Tourism	145 (5)
Private job	137 (4)
Agriculture	52 (2)
Fishing	38 (1)
Voluntary	34 (1)
Retailer shop	14 (0)

Marital status of household respondents



Nearly all (91%; 464/509) of the male and 69% (2208/3180) of the female respondents are currently married. Some 3% (14/509) of the male and 23% (739/3180) of the female respondents have never been married. The higher proportion of female respondents never married is because they are younger than the males (all of whom are household heads). The marital status of respondents is illustrated in Figure 8.

Figure 8. Marital status of household respondents

The mean age of first marriage for male and female respondents is 21.3 years and 17.5 years respectively, and the median age of first marriage for male and female respondents is 20 years and 17 years respectively.

The age of first marriage among female respondents who have received education through formal schooling is significantly higher than the age of first marriage among women who have received no education or only non-formal education (Table 8).

Table 8. Age of first marriage and education of women

Education	No. women	Age of first marriage (yrs)	
		Mean	Median
Primary and above	1082	18.4	18
None or non-formal	1325	16.8	16

Educational level and age at first marriage are not related in male respondents.

Respondents below 30 years of age at the time of survey married one year (median) later than respondents over 30 years of age (Table 9). This suggests that the age of first marriage has increased among the younger generation.

Table 9a. Age of first marriage and age group in women

Age group	No. respondents	Age of first marriage	
		Mean	Median
Up to 30	1185	17.9	18
> 30	1239	17.1	17

Table 9b. Age of first marriage and age group in men

Age group	No. respondents	Age of first marriage	
		Mean	Median
Up to 30	45	21.0	21
> 30	443	21.4	20

Ideal age of first marriage

During focus group discussions with adolescent boys and girls, they were asked for their views about the right age of first marriage for men and women. The consensus is 24-25 years for boys and 20 years for girls (see Annex 5). This ideal age of first marriage is a little higher than age of marriage in practice (see table 9).

Adolescents in focus groups were also asked *why* their suggested ages are the right ages for marriage for boys and girls. The views of adolescent girls are shown in table 10.

Table 10. Reasons given for suggested right age of marriage from focus groups of female adolescents (n=8)

Reasons	No (%) groups
Less labor pain for mother	1 (25)
Mother would be physically and mentally prepared to give birth	4 (50)
Could earn enough at that age	1 (13)
Girls grow old faster than boys	1 (13)
Husband should be matured mentally and physically to fulfill his duties	1 (13)

2. Knowledge and practice of contraception

Number of children

The mean number of children of women 15-49 years is 4.2, and the mean 'ideal number' of children reported by these women is 3.0.

The average number of children of women of different age groups in the baseline survey is shown in Table 11.

Table 11. Number of children by age of mothers

Age group	Total number of women	Number of children	
		Mean	Median
15-20	162	0.8	1
21-30	1025	2.6	2
31-40	931	5.5	5
41-49	311	7.1	7

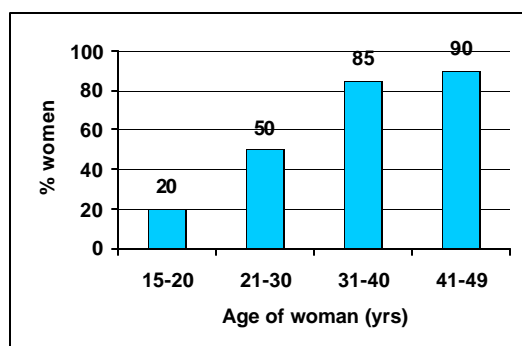


Figure 9. % of women not wanting more children, by age

More than two thirds of married women (68%) do not want more children. Not surprisingly, a higher proportion of older women report that they do not want any more children (Figure 9).

The proportion of women wanting to have more children declines with the number of children that they have already, from 95% among those who have no children to around 5% in those who already have 8 children or more.

The relationship between number of children and wish to have more children is shown in Figure 10.

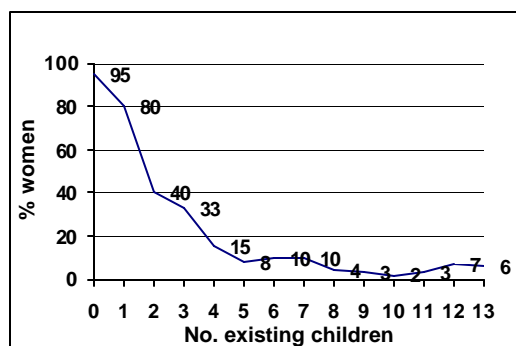


Figure 10. % women wanting more children and no. existing children

Contraceptive use

Ever used any contraception

Some 54% (1284/2399) women and 43% (209/482) men reported that they have ever used a contraceptive method, including traditional methods.

The proportion of women that have ever used any contraceptive method is highest among women of 31-40 years (Figure 11). Among young women below 20 years of age, 33% report that they have used a contraceptive method.

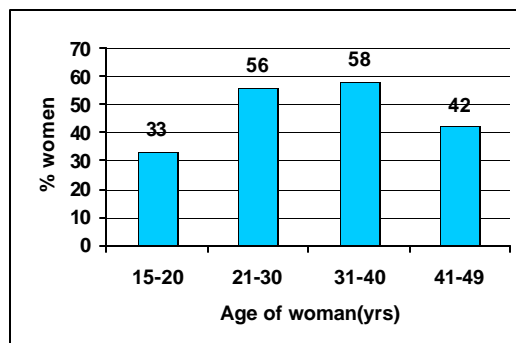


Figure 11. % women who have ever used contraception, by age

Current use of contraception

The Contraceptive Prevalence Rate (CPR) among married women aged 15-49 years has been estimated based on the reported current use of contraception.

The CPR is:
 42% for **all methods** of contraception
 32% for **modern** methods of contraception
 23% for **modern temporary** methods of contraception

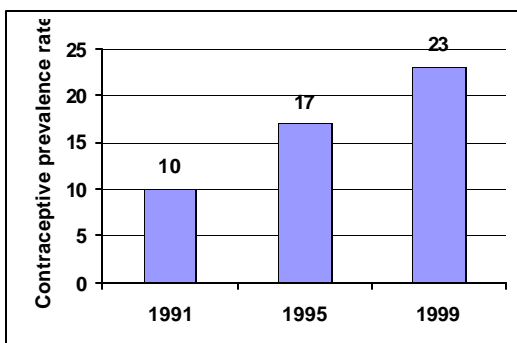


Figure 12. CPR (modern temporary methods) 1991-1999

The CPR (modern temporary methods) has increased from 10% in 1991 (KAP survey)(3), to 17% in 1995 (census data)(4), to 23% (506/2182) in this survey (Figure 12).

Among married women 15-49 years of age in the survey who are currently using any method of contraception, pills, female sterilisation and condoms are the most popular methods. The mix of different methods in 1991 and 1999 is illustrated in Table 12. Compared with 1991, less women in 1999 are non-users of contraception (58% in 1999 vs 77% in 1991). There has been an increase in the use of all contraceptive methods, except traditional methods, the use of which has remained more or less constant.

Table 12. Mix of contraceptive methods used in 1991 and 1999

Methods	No (%) women	
	1991	1999
None	(77)	1259 (58)
Pills	(10)	273 (13)
Injectables	(2)	60 (3)
Condom	(2)	140 (6)
Female sterilisation	(4)	207 (10)
Male sterilization	(0)	10 (1)
IUCD	(1)	24 (1)
Diaphragm	(0)	1 (0)
Norplant	(0)	8 (0)
Traditional methods	(10)	200 (9)
Total		2182 (100)

Reasons for choice of contraceptive methods

Women currently using contraceptives were asked the reason for choosing their current method over other contraceptive methods. Among respondents who provided a relevant answer to this question, the two most common reasons for choosing a particular method of contraception are convenience of use (41%; 235/576) and lack of side effects (33%; 190/576). Reasons for contraceptive method choice are shown in table 13.

Table 13. Reasons given by women for choice of contraceptive method

Reasons	No. (%) respondents
Convenient to use	235 (41)
Less side effects	190 (33)
Easy to get supply	33 (6)
Advised to use	26 (5)
Due to medical condition	78 (14)
Don't want permanent method	6 (1)
Don't know	8 (1)
Total	576 (100)

Source of advice about contraceptive methods

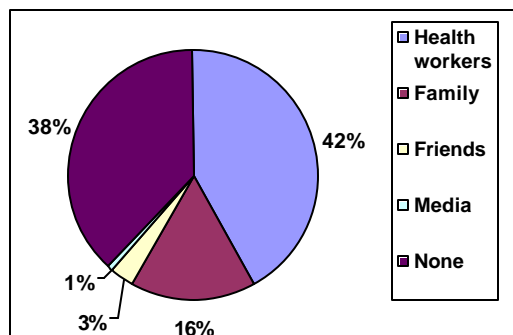


Figure 13. Source of advice about contraception

decisions on their own. However, this does not exclude the possibility of their getting some information from mass media and other channels.

Respondents were asked who advised them on choice of contraceptive method. Health workers (42%; 425/984) are the most popular advisors, followed by family members (16%; 153/984) and friends (3%; 33/984) (Table 14). This shows the importance of health workers in providing information and helping clients to choose appropriate

contraceptive methods. Apparently 38% of respondents do not get advice from anyone and therefore make

Decision maker about use of contraception

Current users of contraception were asked who made the decision to use contraception. Among women contraceptive users, 70% (1041/1483) say they made the decision about using contraception together with their spouse, 15% (218/1483) say they made the decision themselves, and 15% (224/1483) say their spouse made the decision.

Some women feel it is the final responsibility of the husband to make these decisions, even though they might discuss the matter together.

“I might discuss with my husband about family planning issues. But it is up to him to make the final decision about contraceptive methods for child spacing and limiting. I feel it is his responsibility to decide about the ideal number of children for us.”

30 year old literate mother of three children

Reasons for discontinuing contraception

Among the 1284 women who have ever used any contraception, 299 of them had discontinued contraceptive use at the time of the survey. The most common reasons they give for discontinuation are side effects (34%), absence of the spouse (21%), and wanting more children (11%). Some 6% say they stopped because of pregnancy/method failure; they may have been using traditional methods (the method used before discontinuation was not asked).

Reasons for never using contraception

The most common reasons given by the 1063 women who have *never* used contraception are no need (47%; 498), do not want to use (28%; 294), information or service not available (7%; 79), and husband disagreeing (6%; 67). For the older respondents the decision not to use contraception may have been taken some years ago, when the use of contraception was rare.

In focus groups, some people mentioned that a disincentive for using contraception in some islands is the perceived need to increase the island population so as to increase the government services they receive.

“Some people have started thinking that it is better not to control population growth because the government gives more assistance to islands with a bigger population and less assistance to islands with a smaller population.”

38 year old Muddim

Factors related to use of modern contraception

Occupation of women

There is no significant association between working outside the home and the uses of modern contraception, among married women aged 15-49 years.

Education of women

There is no consistent relationship between educational level and use of modern methods of contraception (Table 14).

Table 14. Use of modern contraceptive methods and education in married women aged 15-49 years

Education level	No (%) using contraception
No education	3 (27)
Adult literacy	365 (34)
Local certificate	28 (30)
Primary	280 (33)
Secondary plus	42 (33)

Among married women aged 15-49 years, women whose only education is adult literacy classes use modern contraception at the same rate as women with primary or secondary education. Age at marriage is a complicating factor, with more educated women marrying late. Younger women also tend to be more educated than older women, as a generational effect.

Education level of household head

Among married women aged 15-49 years, those from households where the head (whether male or female) is educated to primary level or above are more likely to use a modern method of contraception than those from households where the head has received no education or only informal education¹. This suggests that the household head is important in deciding about contraception and that more educated household heads are more in favour of contraception.

Age of women

Among married women aged 15-49 years, use of contraception is lower among women under 21 years old or over 40 years old (Table 15). The youngest women may be keen to start a family and the older women may feel there is less need for contraception (some of them may have reached an early menopause). In all age groups, about 10% of women are using traditional methods of contraception (Table 15, compare 2nd and 3rd columns). The rate of contraception using permanent methods is higher in women over 30 years old (Table 15, compare 3rd and 4th columns). This is probably because older women feel they have completed their families and do not want to have further children later.

Table 15. Current contraceptive use by age group

Age group	No (%) women using contraception:		
	Any method	Modern method	Modern temporary method
15-20	39 (27)	25 (18)	25 (18)
21-30	404 (43)	311 (33)	273 (29)
31-40	396 (47)	325 (39)	179 (21)
41-49	81 (33)	60 (24)	28 (11)

Desire for more children

Married women aged 15-49 years who want more children are less than half as likely to be using modern contraception, compared with those who want more children².

¹ 37% (199/534) eligible women from households with a more educated head use modern contraception, compared with 32% (509/1592) eligible women from households with a less educated head. Odds Ratio 1.26 (95% CI 1.02-1.56)

² 20% (140/690) eligible women who want more children use modern contraception, compared with 40% (574/1451) eligible women who do not want more children. Odds Ratio 0.39 (95% CI 0.31-0.49)

Household visits from Family Health Worker

The proportion of households ever visited by the Family Health Worker (FHW) is discussed later. Among married women aged 15-49 years, those from households that report they have been visited by the FHW are more likely to use modern contraception than those from households which have never been visited by the FHW³. This analysis excludes the sites in Male’.

It is not clear whether this association with visits from the FHW is direct, due to advice and support from the FHW, or because communities where the FHW makes more visits are also ones where women are more likely to use contraception.

Combined risk analysis

The combined effects of the variables individually associated with the likelihood of married women aged 15-49 years using modern contraception were examined by logistic regression using SPSS. Households in Male’ are not included.

The effects of the variables in the final model of the logistic regression are shown in Table 16.

Table 16. Adjusted effects of variables in combination on the likelihood of using modern contraception (among married women aged 15-49 years)

Variables	Adjusted Odds Ratio (95% CI)
Woman does not want more children	1.70 (1.52-1.89)
Household head has formal education to primary level and above	1.12 (1.02-1.20)
Household has been visited by FHW	1.12 (1.04-1.20)

The use of modern contraceptive methods has increased steadily since 1991. The information from this survey suggests that efforts to increase the rate of use further could be assisted by ensuring good information about contraception gets to households, particularly from health workers (such as FHWs). It may also be important to address women’s (and men’s) views about how many children they want to have.

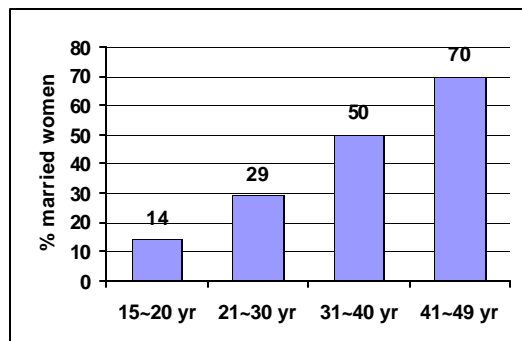
³ 35% (258/737) eligible women in households visited by the FHW use modern contraception, compared with 30% (244/809) eligible women in households never visited by the FHW. Odds Ratio 1.25 (95% CI 1.00- 1.56)

Unmet need for contraception and information needed to increase contraceptive use

Unmet need for contraception

Among married women aged 15-49 years, 42% do not want more children and yet, at the time of the survey, they are not using any modern method of contraception.

The unmet need for modern contraception among married women aged 15-49 years is 42%



The proportion of married women with unmet need for modern contraception increases with age as shown in Figure 14. Older women are less likely to want to have more children (see Figure 9) and also (among those over 40 years old) less likely to be using contraception (Table 16). Thus the proportion not wanting more children but not using contraception increases.

Figure 14. Unmet need for modern contraception, by age group

Married women over 30 years of age are three times more likely to have unmet need for modern contraception, compared with women up to 30 years of age⁴. This suggests that particular attention should be paid to the unmet needs for modern contraception among women over 30 years old.

Among married women aged 15-49 years, those with no education or only non-formal education are more than twice as likely to have an unmet need for modern contraception, compared with those with primary or secondary education⁵. Thus women without formal education could also be a group for particular attention in the programme, in order to reduce their unmet need for contraception.

There is no significant difference in unmet need for modern contraception between married women from islands with a regional hospital, with a health center or without either. The regional variation in unmet need for modern contraception is shown in Annex 6.

Information required for increasing contraceptive use

During focus group discussions with women and men, they were asked what they would need to hear in order to increase their use of modern methods of contraception. Their suggestions are shown in table 17.

⁴ 55% (587/1071) married women 31-49 years old have unmet need for modern contraception, compared with 27% (289/1066) married women 15-30 years old. Odds Ratio 3.37 (95% CI 2.71-3.94)

⁵ 49% (570/1158) eligible women without formal education have unmet need for modern contraception, compared with 31% (300/968) eligible women with formal education. Odds Ratio 2.16 (95% CI 1.80-2.60)

Table 17. Information needed by women and men to increase use of contraception

Information needed	No. (%) groups	
	Women	Men
On modern method	16 (84)	14 (67)
On the contraceptives with least and most side effects	11 (58)	13 (62)
On the safest method that avoids pregnancy and does not spoil romance during sex	1 (5)	
About the most risky day to conceive	1 (5)	2 (10)
Regular supply of contraceptive	1 (5)	
Nothing		1 (5)

Focus groups also discussed who they would trust to give them information on these issues. Their suggestions are in shown in Table 18.

Table 18. Trusted sources of Information about contraceptives (from focus groups)

Source for information	No. (%) groups	
	Women	Men
A female Doctor	11 (58)	13 (62)
A nurse/midwife	7 (37)	2 (10)
A doctor who can speak Dhivehi	3 (16)	1 (5)
An experienced male doctor	1 (5)	6 (29)
Teacher	1 (5)	
TV/radio	1 (5)	
Film stars		1 (5)

Many of the groups, of both men and women, mention doctors as a trusted source of information. More women’s groups mention midwives and more men’s groups mention experienced male doctors. Some men are embarrassed to have contraceptive advice from a woman.

“We male members of this community are not satisfied with the reproductive health and family planning services because the health worker for our island is female. It is embarrassing for us and also for her to discuss about our sexual behaviour and contraceptive use.”
35 year old fisherman

On the other hand, some women are quite happy to receive advice about contraception from male health workers.

“Although the doctor and health assistant of our health centre are males, we are happy about their friendly advice and regular supply of contraceptives for us.”
Adult woman

Knowledge of contraceptive methods

Household respondents were asked what contraceptive methods they knew of, in an open-ended question. Most respondents (86%; 3133/3649), both male and female, know of at least one modern method of contraception. Pill, condoms and injectables are the three most common methods known, followed by “operation” and IUCD. Table 19 shows the proportion of respondents who are aware of different methods.

Table 19. Contraceptive methods known to household respondents

Methods	No. (%) of respondents
Pill	2787 (76)
Condom	2293 (63)
Injectables	1873 (51)
Operation	833 (23)
IUCD	826 (23)
Traditional methods	454 (12)
Others	43 (1)
Diaphragm	19 (1)
Norplant	5 (0)
Don't know	489 (13)

Up to 3 answers were recorded

Factors related to knowledge of modern methods of contraception

Use of contraception

Respondents who have ever used any contraceptive method are nearly 12 times more likely to be aware of at least one modern method of contraception, compared with respondents who have never used any method of contraception⁶. Almost all (98%) of those who have ever used a contraceptive method are able to mention at least one modern method.

Marital status

Respondents who have never been married are only half as likely to be aware of at least one modern method of contraception compared with respondents who are or who have ever been married⁷. It may be that respondents who have never been married, especially young girls, are less likely to volunteer information on knowledge of contraception, either due to shyness or social pressure.

On the other hand, currently married respondents are more than twice as likely to be aware of at least one modern methods of contraception, compared with the rest⁸.

Age of respondents

Respondents up to 30 years of age are slightly more likely to be aware of at least one modern contraceptive method compared with respondents more than 30 years of age⁹. This relationship with age is mainly due to the low awareness of older men (more than 49 years old). When the analysis is restricted to people less than 50 years old, people less than 30 years are slightly *less* likely to know about a modern method of contraception.

⁶ 98% (1451/1484) of women and men who have ever used contraception are aware of at least one modern method, compared with 79% (1078/1369) of those who have never used contraception. Odds Ratio 11.97 (95% CI 8.14-17.69)

⁷ 77% (569/739) of those never married know of at least one modern method, compared with 88% (2564/2910) of those who are or who have ever been married. Odds Ratio 0.45 (95% CI 0.37-0.56)

⁸ 89% (2352/2640) of currently married respondents know at least one modern method, compared with 77% (781/1009) of those not currently married. Odds Ratio 2.38 (95% CI 1.96-2.91)

⁹ 87% (1715/1966) of respondents up to 30 years old know at least one modern method, compared with 84% (1413/1676) of respondents more than 30 years old. Odds Ratio 1.27 (95% CI 1.05-1.54)

Regional variation

The proportion of respondents that are aware of any modern contraceptive method differs by region. Respondents from Male' economic region and south region have the highest awareness of modern contraceptive methods. This is shown in Figure 15.

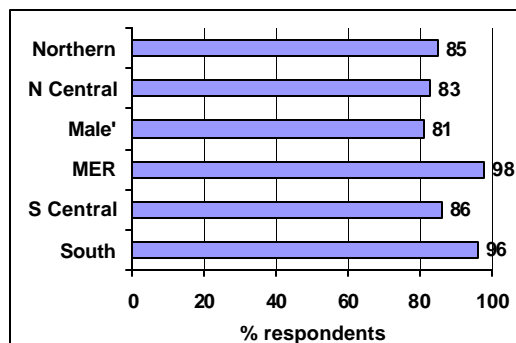


Figure 15. % respondents aware of any modern contraceptive method

Knowledge of side effects of contraceptives

Just over half (57%; 1986/3527) of household respondents are able to name at least one side-effect of contraceptives. Thus nearly half (44%) of respondents do not know *any* side effects of contraceptives. The most common side effects mentioned by respondents in an open question are irregular periods (19%), dizziness and headaches (19%), weight changes (15%) and spotting (15%) (Table 20).

Table 20. Side effects of contraceptives known to household respondents

Side Effects	No (%) of respondents
Irregular periods	671 (19)
Spotting	534 (15)
Local effects on genital tract	21 (1)
Discomfort on intercourse	32 (1)
Dizziness/headache	665 (19)
Nausea/vomiting	195 (6)
Weight changes	542 (15)
Back pain or stomach pain	260 (7)
Swelling	239 (7)
Weakness	87 (3)
Anaemia	26 (1)
High blood pressure	8 (0)
Infection	31 (1)
Fatal to mother and child	23 (1)
Method failure	10 (0)
Others	59 (2)
Don't know	1542 (44)

Up to 3 answers were recorded

Not all the side-effects mentioned by respondents are actually side-effects of contraceptive methods. If the invalid answers are excluded, 53% (1838/3527) of all the respondents know any valid signs of side effects of contraception (as compared with 56% who can mention any side-effect, valid or not). Some of the apparently valid side-effects mentioned may nevertheless represent a misconception about the frequency and severity of likely side effects.

Knowledge of side-effects is important. If people do not understand what are the likely side-effects they might stop contraception for symptoms that are actually

unrelated to the contraception. Or they may fail to seek help when they have a side-effect that could be dealt with by a simple change in the method.

Factors related to knowledge of side-effects of contraception

Gender

Among respondents less than 50 years old, male respondents are less likely to know of a valid side-effect of contraception than female respondents¹⁰. This may be because women have more personal experience of the side-effects.

Use of contraception

Respondents who have ever used contraception, including traditional methods, are more likely to be aware of a valid side-effect compared with those who have never used any method of contraception¹¹.

Marital status

Currently married respondents are nearly 3 times more likely to be aware of at least one valid side-effect of contraceptives compared with never married, divorced or widowed respondents¹².

Respondents who have never been married are less likely to know of any valid side-effect of contraception, compared with respondents who are, or have been, married¹³. This reflects low awareness among young, unmarried people (in this sample these are mainly girls aged 15-20 years who are not yet married).

Age

Respondents more than 30 years of age are slightly more likely to be aware of at least one valid side-effect of contraception compared with respondents up to 30 years of age. Again, this reflects low knowledge in the young females in the sample¹⁴. Young women in focus groups showed more knowledge, however (see later).

Education

There is no clear relationship between level of education and awareness of side-effects of contraception. Respondents who have only informal education (adult literacy) are at least as likely to know of side-effects as people who have had formal education (Table 21).

¹⁰ 42% (117/278) of male respondents know at least one valid side-effect, compared with 55% (1675/3054) of female respondents. Odds Ratio 0.60 (95% CI 0.46-0.77)

¹¹ 70% (994/1428) of respondents who have ever used contraception know of at least one valid side-effect, compared with 47% (625/1334) of respondents who have never used contraception. Odds Ratio 2.60 (95% CI 2.21-3.05)

¹² 59% (1504/2550) of currently married respondents know at least one valid side-effect, compared with 34% (334/977) of respondents not currently married. Odds Ratio 2.77 (95% CI 2.36-3.24)

¹³ 27% (194/713) of respondents who have never been married know of at least one valid side-effect of contraception, compared with 58% (1644/2814) of respondents who are or have been married. Odds Ratio 0.27 (95% CI 0.22-0.32)

¹⁴ 55% (898/1626) of respondents over 30 years old know of at least one valid side-effect, compared with 50% (938/1895) of respondents up to 30 years old. Odds Ratio 1.26 (95% CI 1.10-1.44)

Table 21. Knowledge of side-effects of contraception by level of education

Education level	Number (%) aware of at least one valid side-effect
None	8 (42)
Adult literacy	837 (56)
Local certificate	83 (62)
Primary	755 (49)
Low secondary	120 (47)
High secondary	15 (43)
Higher education	10 (50)

Knowledge of most fertile period during the menstrual cycle

Respondents were asked when during the menstrual cycle a woman is most likely to conceive, in an open question (see Annex 3). A third (34%; 1215/3611) of respondents could not give any answer. More than half (53%) of the respondents think a woman is most likely to conceive a few days after the purity bath. Only 11% of the respondents know the correct answer for when a woman is most likely to conceive: in the middle time between two periods. The beliefs of respondents about when a woman is most likely to conceive are shown in Table 22.

Table 22. Views about when during the menstrual cycle a woman is most likely to conceive

Time most likely to conceive	Number (%) responses
A few days after purity bath	1899 (53)
Just before the next cycle	128 (4)
In the middle between two cycles	349 (10)
All the time	20 (1)
Don't know	1215 (34)

This lack of accurate knowledge about when a woman is most fertile is important for those couples who are relying on the rhythm method of contraception.

Among respondents under 50 years of age, women are more than twice as likely to know the most fertile period, compared with men¹⁵.

Respondents who have had formal schooling are slightly more likely to know when during the menstrual cycle a woman is most likely to conceive, compared with respondents who have had no education or only non-formal education¹⁶.

Respondents less than 30 years of age are more likely to know the correct time during menstrual cycle when a woman is most likely to conceive, compared with respondents more than 30 years of age¹⁷.

¹⁵ Among respondents under 50 years old, 10% (327/3199) of women know the correct most fertile period, compared with 4% (22/514) men. Odds Ratio 2.55 (95% CI 1.60-4.09)

¹⁶ 11% (207/1940) of respondents with formal education know the correct most fertile period, compared with 8% (141/1743) of respondents without formal education. Odds Ratio 1.36 (95% CI 1.08-1.72)

¹⁷ 11% (217/1991) of respondents up to 30 years old know the correct most fertile period, compared with 8% (132/1718) of respondents over 30 years old. Odds Ratio 1.47 (95% CI 1.16-1.86)

3. Knowledge of Sexually Transmitted Diseases and AIDS

Health workers' perceptions of sexually transmitted diseases (STDs) as a problem

This survey did not attempt to estimate the incidence of STDs. That would require a different sort of investigation. However, information was collected from health workers about their perceptions of STDs as a problem.

During the institutional reviews of health facilities, the health worker in charge was asked how much of a problem STDs are in the communities they serve. Generally, the health workers interviewed do *not* think STDs are a problem in the communities they serve. Two thirds of them (13; 68%) think STDs are “very rare”; 3 (16%) of them think STDs are a problem “for some people”; and 3 (16%) think STDs are a “frequent” problem.

The majority (68%) of health workers interviewed think STDs are “very rare” in the communities they serve.

The health workers were asked their views about the main reproductive health problems in the communities they serve. Their answers are summarised in Table 23.

Table 23. Health workers' views about the main RH problems in communities

Problems	No (%) respondents
No problem	6 (35%)
Discharges	2 (18%)
Genital itching	2 (12%)
Pain/irritation during urination	2 (12%)
Genital ulcers	1 (6%)
Low awareness of how STDs are transmitted	2 (12%)
Lack of awareness of AIDS	1 (6%)
Spotting/bleeding	2 (12%)
Menstrual disorders	1 (6%)
Anaemia	3 (18%)
Swelling	1 (6%)
Infertility	1 (6%)

Quite a few of the reproductive health problems mentioned are, or could be, related to STDs, from discharges to ‘low awareness of how STDs are transmitted’. More than a third of the health workers interviewed think there is ‘no problem’ with reproductive health’ in the communities they serve.

Knowledge of signs of STDs

Household respondents were asked what signs of STDs they knew of, about ways of catching STDs, and about what action would they take if they developed any of the signs of STDs they had mentioned. These were all open questions, in order to explore the knowledge of the respondents.

Only a third of households respondents (35%; 1282/3551) are able to mention any sign of STDs. The signs of STDs mentioned by household respondents are shown in Table 24.

Two thirds (65%) of household respondents do not know of any signs of STD.

Table 24. Signs of STDs reported by respondents

Signs of STD	No. (%) respondents
Don't know	2272 (65)
Itching and soreness	297 (8)
Urination problem	291 (8)
Discharge	285 (7)
Fever	241 (7)
Poor immunity / prone to infection	217 (6)
Rashes	173 (5)
Weakness/tiredness	148 (4)
Loss of appetite/weight loss	139 (4)
Back and stomach pain	129 (4)
Bleeding	101 (3)
Swollen glands	30 (2)
Miscellaneous	259 (7)

Up to 3 answers were recorded

Not all the signs mentioned by respondents are actually signs of STDs. If the invalid signs are excluded, only 31% (1132/3551) of respondents are able to mention any sign of STDs.

There is quite a prevalent belief, expressed in some focus groups, that genital signs of STDs can lead to HIV/AIDS.

“None of the people of this island are aware of the fact that a prolonged genital problem like itching, mucus discharge and irritation during urination could lead to killer diseases like HIV and AIDS. There are a number of such reproductive tract infection cases in this island but fortunately no HIV and AIDS reported so far.”

School teacher

This direct link between local symptoms of STDs and the development of AIDS is a misconception. While it is true that transmission of HIV is more likely in the presence of genital ulceration, the ulceration itself does not progress to HIV/AIDS.

During the institutional review, the health worker in charge of each health facility was asked what features would make them suspect that someone was suffering from a reproductive tract infection/STD. Their answers are given in Table 25.

Table 25. Signs suspicious of STDs (reported by health workers)

Signs of STD	No. (%) health workers
Discharge	14 (78%)
Back pain/stomach pain/Hip pain	9 (50%)
Pain/irritation on urination	7 (38%)
Swelling	4 (22%)
Menstrual disorder	4 (22%)
Genital ulcer/pain	3 (17%)
Scarring/roughness	2 (11%)
Anaemia	1 (6%)

Health workers seem to have quite good knowledge of the likely signs of STDs. This information needs to be passed to the communities they serve, in order to improve the present low level of public knowledge of the signs of STDs.

Actions taken if developing signs of STDs

Respondents who were aware of any signs of STDs were asked what actions they would take if they developed any of these signs. The majority (86%; 1112/1300) of respondents say they would go to a health center or hospital to seek health care (Table 26).

Table 26. Actions that would be taken if signs of STD developed

Actions	No. (%) of respondents
Go to Health center or hospital	1112 (86)
Go to traditional healer	43 (3)
Go to pharmacy	40 (3)
Avoid sexual contact	34 (3)
Report it	6 (1)
Nothing	4 (0)
Ask friends	3 (0)
Don't know	58 (5)

Factors related to knowledge of signs of STDs

Gender and age of respondents

Among respondents between 15-49 years of age, there is no difference in the proportion of male and female respondents of knowing any valid signs of STDs.

There is also no significant difference between respondents up to 30 years and more than 30 years of age in their knowledge of any valid signs of STDs.

Marital status

Currently married respondents are more likely to know at least one valid sign of STDs compared with respondents not currently married¹⁸.

Respondents who have never been married are less likely to know of any valid signs of STDs, compared with respondents who are, or have been, married¹⁹. This probably

¹⁸ 34% (878/2572) currently married respondents know at least one valid sign of STDs, compared with 26% (254/979) respondents not currently married. Odds Ratio 1.48 (95% CI 1.25-1.75)

¹⁹ 24% (173/714) respondents who have never been married know at least one valid sign of STDs, compared with 34% (959/2837) respondents who are, or have been, married. Odds Ratio 0.63 (95% CI 0.52-0.76)

reflects particularly lack of knowledge among young women aged 15-20, who have not yet been married. These young people could be an important focus for education about sexually transmitted diseases.

Occupation of respondents

Respondents, either male or female, with any occupation are more likely to know at least one valid sign of STDs, compared with respondents without any occupation²⁰. This probably reflects more exposure to information sources among people with an occupation.

Health facilities available on island

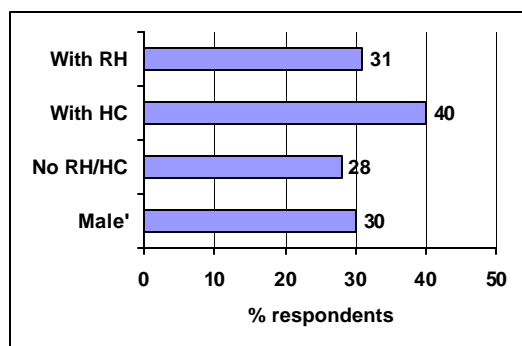


Figure 166. % respondents who know any sign of STDs, by health facilities present on island

A higher proportion of respondents from islands with a health centre know any valid signs of STDs than respondents from islands with a regional hospital, without any health facilities and Male'. This is shown in Figure 16. This may be because there is better access to information through Family Health Workers and Community Health Workers on islands with a health centre.

Visits from FHW

Respondents from households that report having ever been visited by the FHW are slightly more likely to know any valid sign of STDs, compared with households who have never been visited by the FHW²¹. The difference could be due to chance.

Regional variation

There is geographic difference in the proportion of respondents knowing any valid signs of STDs. Male' economic region has the highest (53%), and south central has the lowest proportion of respondents (33%) that know any valid signs of STDs.

Knowledge of ways of catching STDs

Table 27 shows the knowledge of household respondents about ways of catching STDs. Nearly half (43%) of respondents do not know any ways of catching STDs. The three most common answers given are: from infected spouse or partner; through needles/blood; and from having multiple partners.

²⁰ 36% (528/1480) respondents with any occupation know at least one valid sign of STDs, compared with 29% (604/2071) respondents without any occupation. Odds Ratio 1.35 (95% CI 1.16-1.56)

²¹ 34% (384/1138) respondents who have been visited by the FHW know a valid sign of STDs, compared with 31% (403/1308) who have never been visited. Odds Ratio 1.14 (95% CI 0.96-1.36)

Table 27. Awareness of household respondents of ways of catching STDs

Ways of catching STDs	No. (%) respondents
Don't know	1489 (43)
Infected spouse or partner	1118 (32)
Needles/blood	591 (17)
Multiple partners	484 (14)
<i>Interpersonal contact</i>	98 (3)
Frequent sexual intercourse	62 (2)
Sharing razors/toothbrushes	23 (1)
Sexual etiquette /position/	21 (1)
Homosexuality	19 (1)
<i>Poor hygiene/cleanliness</i>	15 (0)
Unprotected sex	9 (0)
<i>Sex during menstruation</i>	5 (0)
Sharing condoms/sex toys	2 (0)
<i>Toilet seat etc</i>	2 (0)
Others	52 (2)

Up to 3 answers were recorded

Some of the answers given are not valid ways of catching STDs (those shown in *italics* in Table 27). If only the valid answers are included, 54% (1910/3496) of respondents know any valid way of catching STDs.

About half (54%) of household respondents know a valid way of catching STDs.

Factors related to knowledge of ways of catching STDs

Gender and age of respondents

There is no significant difference in the proportion knowing any valid signs of STDs between male and female respondents, and respondents younger or older than 30 years of age.

Marital status

There is no significant difference in the proportion knowing any valid ways of catching STDs between respondents who are currently married, divorced, never married or widowed.

Education

Respondents who received education from formal schooling are more likely to know a valid way of catching STDs, compared with respondents with no education or non-formal education only²².

Occupation

Respondents with any occupation are more likely to know a valid way of catching STDs, compared with respondents without any occupation²³.

²² 58% (1064/1829) respondents with formal education know a valid way of catching STDs, compared with 51% (837/1638) respondents with no formal education. Odds Ratio 1.33 (95% CI 1.16-1.53)

²³ 58% (847/1467) respondents with an occupation know a valid way of catching STDs, compared with 53% (1063/2029) respondents without any occupation. Odds Ratio 1.24 (95% CI 1.08-1.43)

Regional variation

The regional variation in proportion of respondents knowing any valid ways of catching STDs is shown in Annex 6.

Knowledge of AIDS and ways of catching AIDS

Public awareness of AIDS is high. Nearly all (99%; 3606/3657) household respondents have heard of AIDS.

When asked how AIDS is transmitted, almost all (93%; 3340/3568) of respondents gave some answer (Table 28). The most commonly cited ways of catching AIDS are: through sexual contact, through blood transfusions and through infected needles.

Table 28. Awareness of household respondents of ways of catching AIDS

Suggested ways	No. (%) respondents
Sexually	3002 (84)
Blood transfusion	1613 (45)
Needles	976 (27)
<i>Interpersonal contact</i>	182 (5)
Infected mother to child	51 (1)
Razors, <i>toothbrushes, towels</i>	52 (1)
Homosexuality	41 (1)
Breast feeding	15 (0)
<i>Kissing</i>	6 (0)
<i>Mosquitoes</i>	4 (0)
Others	98 (3)
Don't know	228 (6)

Up to 3 answers were recorded

A few of the suggested ways of catching AIDS are not valid (shown in *italics*). Nevertheless, 92% of respondents know at least one valid way of catching AIDS.

Nearly all (92%) household respondents know a valid way of catching AIDS.

The better knowledge about AIDS than about other STDs probably reflects the impact of the intensive education programme on AIDS in the Maldives in recent years, from the Government, NGOs, and UN agencies such as WHO and UNICEF.

Factors related to knowledge of ways of catching AIDS

Knowledge is generally high in all groups. There is no difference in the proportions of male and female respondents knowing any valid ways of catching AIDS; neither does marital status makes any difference. There is also no difference between respondents with or without any occupation, and respondents of different age groups.

Regional variation

Male' economic region has the highest proportion of respondents knowing at least one valid way of catching AIDS, although awareness is high in all regions. Regional levels of knowledge of ways of catching AIDS are shown in Figure 17.

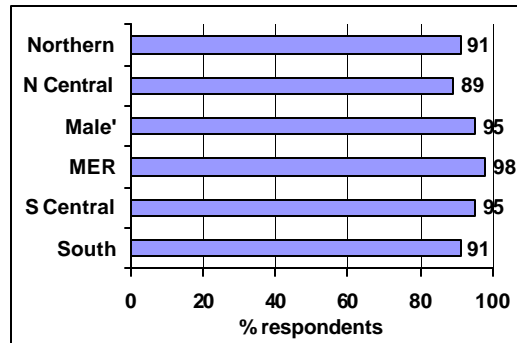


Figure 17. % respondents aware of valid way of catching AIDS, by region

Education

Respondents with formal education are more likely to be aware of at least one valid way of catching AIDS, compared with respondents without formal education²⁴.

²⁴ 95% (1796/1885) respondents with formal education know a valid way of catching AIDS, compared with 90% (1491/1655) respondents without formal education. Odds Ratio 2.22 (95% CI 1.68-2.93)

4. Antenatal Care

Antenatal care coverage

The policy of the Government in the Maldives is to encourage women to have four or more antenatal visits in each pregnancy. Estimated antenatal care coverage is high in this survey. Most (88%; 1988/2222) women aged 15-49 years with any pregnancies report at least one antenatal care visit in their last pregnancy (Figure 18). Two-thirds (62%; 1446/2222) of women had at least four visits for antenatal care in their last pregnancy.

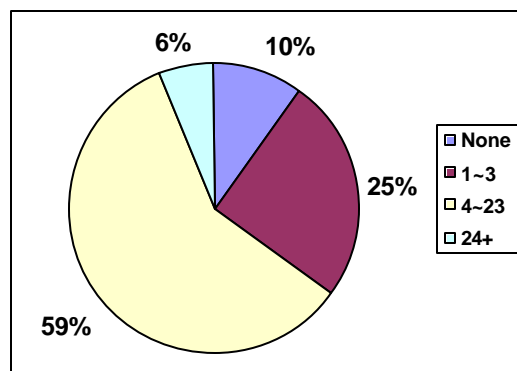


Figure 18. Number of antenatal care visits in last pregnancy

Two thirds (62%) of women had four or more antenatal care visits in their last pregnancy.

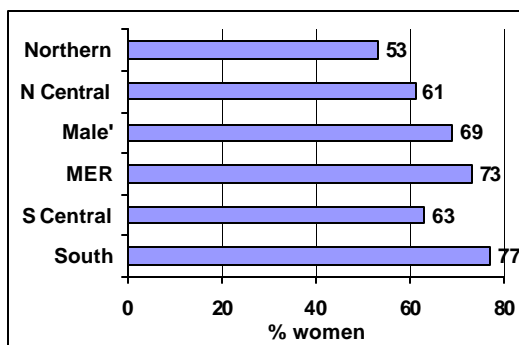


Figure 19. % women with 4 or more antenatal visits in last pregnancy, by region

The proportion of women receiving at least the recommended four visits in their last pregnancy varies between regions. This is shown in Figure 19. The lowest coverage is in the northern and north central regions.

In order to increase the proportion of pregnant women who have four or more antenatal visits during pregnancy, it is useful to consider the factors that are related to having the recommended number of antenatal visits.

Factors related to antenatal care coverage

Distribution of home based mother cards

Most (95%; 18/19) of the health facilities reviewed in the survey distribute home based mother cards to mothers. This may be an indicator of quality of local reproductive health care and, in particular, antenatal care.

Women from communities where the health facility distributes home based mother cards are more likely to have had four or more antenatal care visits in their last pregnancy, compared with women from the community where the health facility does

not distribute the cards²⁵. This analysis excludes Male', where health facilities were not visited. Note that distribution of home based mother cards only began shortly before the survey, so cannot have affected earlier pregnancies.

Women's education

Women with formal education are more likely to have had four or more antenatal care visits in their last pregnancy, compared with women with no education or only non-formal education²⁶.

Age of women

Women up to 30 years of age are more likely to have had four or more antenatal care visits in their last pregnancy, compared with women more than 30 years of age²⁷. This relationship is still found when level of education and the number of existing children are taken into account. It may be partly because some of the older women had their last pregnancy up to ten or more years ago, when antenatal care was less popular. The date of the last pregnancy was not recorded in this survey.

It seems that efforts to increase coverage with antenatal care should pay attention to older, less educated women. More encouragement from health facilities might be expected to increase the uptake of antenatal care.

Iron supplementation in pregnancy

Anaemia is a common problem in Maldivian women. According to the 1993/94 National Nutrition Survey(5), nearly 62% of non-pregnant and 68% of pregnant Maldivian women are anaemic. Therefore iron supplementation during pregnancy is important.

Despite the high coverage with antenatal care, only half (46%; 1080/2176) of women aged 15-49 years in this survey report that they took any iron supplements during their last pregnancy.

Half (46%) of women took any iron supplements during their last pregnancy.

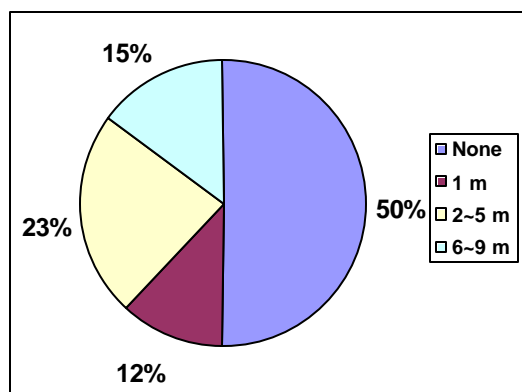
Iron should be taken for most of pregnancy, but only a third (35%; 823/2176) of women respondents took iron for two months or more during their last pregnancy.

Among women who took any iron in their last pregnancy, the mean period of iron supplementation is 4 months (median 3 months).

²⁵ 65% (1054/1633) women in communities where the health facility distributes home based mother cards had four or more ANC visits in their last pregnancy, compared with 53% (43/81) women in the community where the facility does not distribute the cards. Odds Ratio 1.61 (95% CI 1.00-2.59)

²⁶ 73% (678/930) women with formal education had 4 or more ANC visits in their last pregnancy, compared with 59% (753/1271) women without formal education. Odds Ratio 1.85 (95% CI 1.53-2.24)

²⁷ 73% (751/1028) women up to 30 years old had 4 or more ANC visits in their last pregnancy, compared with 58% (691/1187) women over 30 years old. Odds Ratio 1.95 (95% CI 1.62-2.34)



The proportions of women taking iron supplements for different periods during their last pregnancy are shown in Figure 20.

Only 15% of women took iron for six months or more during the pregnancy.

Figure 20. Length of iron supplementation during last pregnancy

Factors related to iron supplementation during last pregnancy

Antenatal care

Women who had any antenatal care visits in their last pregnancy are more than 20 times more likely to have taken iron supplements in the pregnancy²⁸. The few women who did not have any antenatal care are unlikely to have taken any iron - only 5% of them took iron supplements.

The number of antenatal care visits makes a difference. Women who had at least four antenatal care visits (as recommended) are three times as likely to have taken iron during the pregnancy, compared with women who had no visits or less than four visits²⁹. Among women who had at least four visits, the proportion who took iron is 60%.

Education of women

Women with formal education are more likely to have received any iron supplementation during their last pregnancy, compared with women with no education or only non-formal education³⁰. This relationship is still present when the effect of antenatal care visits is taken into account by stratification.

Age of women

Women up to 30 years of age are more likely to have taken any iron in their last pregnancy, compared with women more than 30 years of age³¹. This relationship is still found when the effects of level of education and number of antenatal care visits are taken into account by stratification.

²⁸ 55% (1066/1938) women who had any antenatal visits took any iron supplements in the last pregnancy, compared with 5% (12/218) women who had no antenatal visits. Odds Ratio 22.21 (95% CI 11.95-42.24)

²⁹ 60% (849/566) women who had 4 or more ANC visits took iron supplements, compared with 30% (229/753) women who had less or no visits. Odds Ratio 3.43 (95% CI 2.83-4.17)

³⁰ 58% (520/898) women with formal education took iron supplements in their last pregnancy, compared with 44% (549/1258) women without formal education. Odds Ratio 1.78 (95% CI 1.49-2.12)

³¹ 56% (574/1017) women up to 30 years old took iron supplements in their last pregnancy, compared with 44% (504/649) women over 30 years old. Odds Ratio 1.67 (95% CI 1.40-1.99)

Availability of iron in health facilities

In 17 out of the 19 health facilities visited a stock of iron supplements was present at the time of the visit.

Women from communities served by health facilities with iron in stock at the time of the survey are more likely to have taken any iron in their last pregnancy, compared with women from communities whose health facilities did not have iron in stock³². This analysis excludes the five sites in Male', where health facilities were not visited in the survey.

It is encouraging that antenatal care visits increase the proportion of women taking iron in pregnancy. Nevertheless, by no means all women who attend for antenatal care actually take iron. The reasons for this could be explored in more detail in further studies. Perhaps women are not always offered iron at antenatal visits. Or perhaps some women are given iron by the facility but do not take it. They might be discouraged or frightened by side-effects, especially if they are not told about these and asked to report if they have side-effects. The programme might do well to pay particular attention to older women and women without formal education.

³² 50%(781/1567) women in communities whose health facilities have a stock of iron took iron in their last pregnancy, compared with 37%(49/134) women in communities whose health facilities do not have a stock of iron. Odds Ratio 1.72 (95% CI 1.17-2.53)

5. Visits of Family Health Workers (FHWs)

It is currently official policy that FHWs should visit all households in their area regularly, once a month. This is not the case in Male'. Household respondents in the survey were asked when they last had a visit from the FHW.

Only 48% (740/1617) of households report that they have ever had a visit from the FHW. The proportions of households with their last FHW visit at different intervals are shown in Figure 21.

A third (33%) of households report a visit of the FHW within the last two months, some 15% report a visit more than two months ago, and over half (52%) say they have never been visited by the FHW.

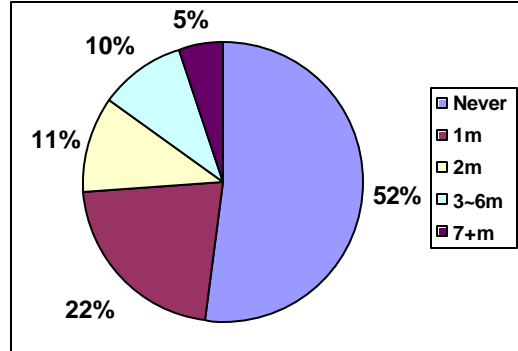


Figure 21. Time since last visit of FHW to households

Only half (48%) of households report having ever been visited by the FHW.

Regional variation

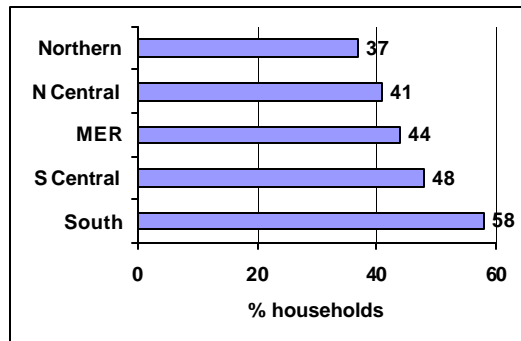


Figure 22. % households ever visited by FHW, by region

There is regional variation in the proportion of households that have ever been visited by the FHW (Figure 22). The south region has the highest proportion and the northern region has the lowest proportion of households that have ever been visited by the FHW.

Type of health facility available

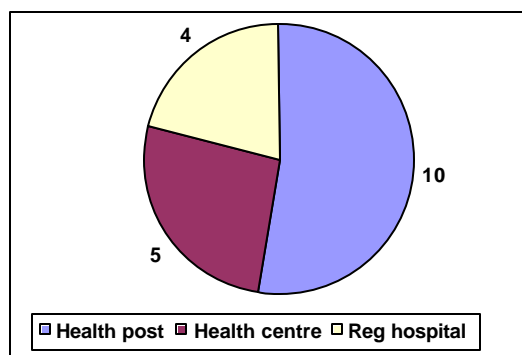
Some 54% of households in islands with a health centre have been ever visited by the FHW. In islands with a family health post, 49% of households have ever been visited by the FHW. In islands with the regional hospital, only 30% of households have ever been visited by the FHW. The low proportion of visited households in islands with a regional hospital may be because most of the FHWs in these islands are attached to the regional hospital or help the regional hospital in different activities.

The policy of FHWs visiting households on a regular basis was set up some years ago. The results from this survey suggest that the policy is not being fully implemented at present. They present an opportunity to review the policy. There is some evidence from this survey that households visited by the FHW are more likely to use modern contraception and have better knowledge about STDs. It is hard to be certain whether these benefits are directly due to the visits of the FHW. A policy of visiting only certain households might be one way forward. The survey suggests that those households with lower levels of education are more likely to need support and advice.

6. Reproductive health services available to communities

As part of the survey process, the health facilities serving the sample communities were visited and reviewed. The review schedule is shown in Annex 3 and the full findings of the reviews are shown in Annex 5. The main findings are summarised in the following section.

Type of health facility



The number of health facilities of different types reviewed are shown in Figure 23. Just over half are health posts.

Figure 23. Numbers of health facilities visited

Availability of staff, medicines, equipment

There is apparent understaffing of the health facilities, with more posts allocated than filled. This is shown in Table 29. There seems to be a particular shortage of nurses.

Table 29. Allocated and filled posts in health facilities

Post	Regional hospital (4)		Health centre (5)		Health post (10)	
	Allocated	Filled	Allocated	Filled	Allocated	Filled
Doctors	10	9	4	3	-	-
Nurses	44	29	15	7	-	-
Ast nurses	15	14	-	-	-	-
Midwives	2	2	21	20	9	7
FHW	7	5	8	6	11	11
CHW	3	2	10	6	2	1

Most facilities have the appropriate medicines and equipment available (see Annex 5). However, there are some gaps. For example, antibiotics were only in stock in 6 of the 10 health posts. Urine testing kits were only found in 2 of the 10 health posts. A height scale was only found in 2 health posts, although the health worker in 6 health posts claimed to measure the height of women during pregnancy.

Services provided and not provided

The facilities provide a range of services related to reproductive health, including counselling, most commonly about family planning methods (84%), antenatal care (42%), nutrition (26%), personal hygiene (16%), and environmental sanitation (16%). Over half the facilities (10; 53%) say they have provided 3 or more IEC sessions in the community during the last 3 months.

When asked what services they are not providing but they think are needed, the most common services mentioned are: a pharmacy/medical shop (26%), service from more qualified staff (26%), laboratory services (26%), an upgraded institution with beds (26%) and more logistic support (21%).

Complaints about service and suggested improvements

Most (14; 74%) of the facilities say they hear complaints about their service from the local community. The most common complaints they mention are: lack of medicines/no pharmacy (30%), the long process to reach a doctor (30%), and bad behaviour of health staff (20%).

Table 30 shows the suggestions from health workers for improving their services. Suggestions are for more staffing, more facilities and equipment, and new services.

Table 30. Healthworker suggestions for improvements to their services

Suggested improvements	No. (%) health workers
Provide more qualified health staff	11 (58)
Assign more doctors	5 (26)
Assign more nurses	3 (16)
Provide health workers fluent in Dhivehi	1 (5%)
Upgrade the institution	8 (42)
Provide emergency transport	1 (5)
Provide laboratory	1 (5%)
Provide pharmacy	4 (21%)
Provide new medical equipment	2 (11%)
Supply new condoms	1 (5%)
Motivation on family planning methods	1 (5%)
Provide treatment of infertility	1 (5%)

7. Opinions of reproductive health services

Seeking medical care after miscarriage

As one way of examining appropriate use of emergency reproductive health care services, respondents were asked whether they think it is necessary to seek medical care after a miscarriage. Most (90%; 3260/3630) respondents think it is necessary to seek help (Figure 24). The few male household respondents are a little less likely to think it necessary to seek medical help – 87% think it is necessary.

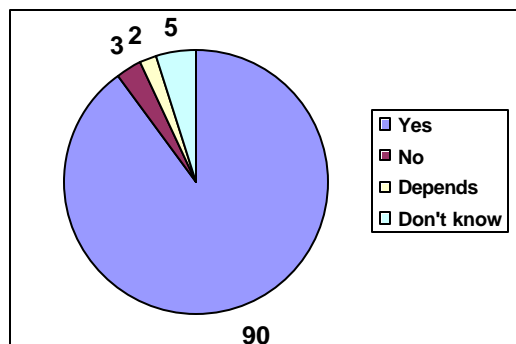
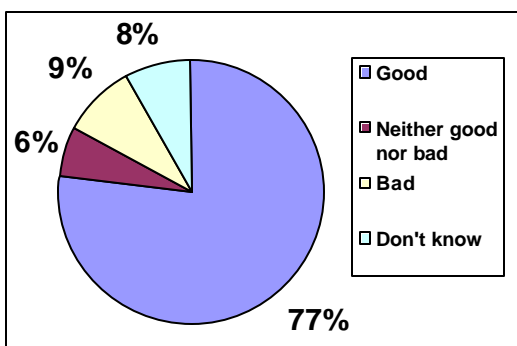


Figure 24. % households with views on necessity of seeking medical help after

Opinions of reproductive health services available



The majority (77%; 2835/3607) of household respondents rate the reproductive health services in their area as 'good'. The proportions of respondents giving different ratings for reproductive health services are shown in Figure 25.

Figure 25. Household respondents' ratings of reproductive health services

Most (77%) household respondents rate reproductive health services available to them as 'good'.

Factors related to rating of reproductive health services

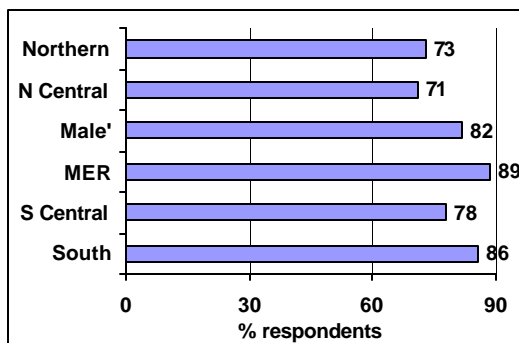
Ratings of reproductive health services are not different between respondents of different ages or with different levels of education.

Female respondents between 15-49 years of age are more likely to rate the quality of reproductive health services as 'good', compared with male respondents below 50 years old³³. Female respondents may be less critical than male respondents, or the

³³ 80% (2493/3106) female respondents rate reproductive health services as 'good', compared with 68% (203/297) male respondents. Odds Ratio 1.88 (95% CI 1.44 – 2.47)

reproductive health services may in fact be more welcoming and more tailored to the needs of women.

Respondents from households that have ever been visited by the FHW are slightly more likely to rate reproductive health services as 'good', compared with respondents from households that have not been visited by the FHW³⁴. This suggests that for at least some households visits from the FHW are positively appreciated. This analysis excludes Male'.



There is regional variation in the rating of reproductive health services (Figure 26). The lowest ratings are in the northern and north central regions and the highest are in Male' economic region and the southern region.

Figure 26. % household respondents rating RH services as 'good', by region

Perceived problems with reproductive health services

Household respondents were asked what problems they perceive with reproductive health services, in an open question. Their perceived problems are summarised in Table 31. Up to three responses were recorded.

Table 31. Perceived problems with reproductive health services, from household respondents

Problems	No. (%) respondents
<i>Problems with staff</i>	
Bad attitude of staff	149 (13)
Staff absent/lack of staff	54 (5)
Lack of specialist/doctors	22 (2)
No female doctor	51 (4)
<i>Problems with waiting time etc</i>	
Long waiting time	7 (1)
Opening hrs/holiday service	5 (0)
Problem with token system	7 (1)
<i>Problems with service quality</i>	
Lack medicine & equipment	106 (9)
Lack of counselling and health education	109 (9)
Poor quality care	30 (3)
Poor physical condition	16 (1)
<i>Problems with access</i>	
No facility on the island	94 (8)
Health centre too far away	90 (8)
Others	2 (0)

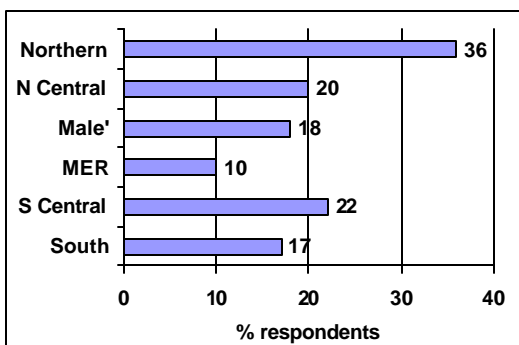
³⁴ 79%(913/1154) respondents in households visited by the FHW rate reproductive health services as 'good', compared with 76%(1005/1321) respondents in households not visited. Odds Ratio 1.19 (0.98-1.45)

The perceived problems listed in Table 31 accord with the complaints about the service reported by health workers (see section 6.4 and Annex 5).

However, perceived problems with the service are relatively rare. Most (77%; 2303/2921) household respondents do not cite any problems with reproductive health services available to them.

Most (77%) household respondents do not cite any problems with reproductive health services.

Among household respondents less than 50 years old, male respondents are more likely to perceive a problem with reproductive health services, compared with female respondents³⁵.



The proportion of respondents who perceive any problems with reproductive health services varies by region, as shown in Figure 27. The northern region has the highest and Male' economic region has the lowest proportion of respondents who perceive any problems.

Figure 27. % household respondents who cite any problems with RH services, by region

More household respondents from islands without a health centre or regional hospital cite problems with reproductive health services. From these islands, nearly a third (31%) cite problems with the services. This is shown in Figure 28. In other situations, less than 20% of respondents cite problems with the services.

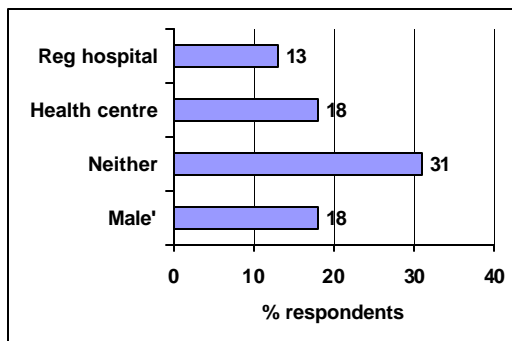


Figure 28. % respondents citing any problem with RH services, by type of facility available

³⁵ 38% (96/252) male respondents under 50 years old perceive a problem with reproductive health services, compared with 19% (486/2036) female respondents. Odds Ratio 2.58 (95% CI 1.94-3.43)

Suggestions for improvements to reproductive health services

Household respondents were asked for suggestions for improvements to reproductive health services, in an open question. Their suggestions are summarised in table 32.

Table 32. Household respondents' suggestions for improving reproductive health services

Suggestions	No. (%) respondents
<i>Staff</i>	
Provide more doctors and specialists	392 (13)
Better attitude of health workers	68 (2)
More training of health workers	56 (2)
<i>Time</i>	
More time with each patient	7 (0)
<i>Service, quality</i>	
Provide more information	600 (20)
Improve quality of care	228 (8)
Provide medicine and equipment	99 (3)
Improve physical condition of facility	278 (10)
<i>Access</i>	
Near by health center	202 (7)
More community support	93 (3)
No suggestion	483 (14)
Don't know	1305 (44)

Up to three responses were recorded

The suggestions shown in Table 32 reflect the problems cited in Table 31. More than half the respondents either specifically have no suggestion or are unable to formulate a suggestion.

8. Use and experience of health services

Use of health services

Female respondents aged 15-49 years were asked if they had visited any health facility (government, NGO or private) in the last 3 months. Over a third (37%;1154/3090) of these respondents have made at least one visit to a health facility in the three months before the survey. Further details were sought about the most recent visit to a health facility in the last three months.

Purpose of visiting health facility

Table 33 shows the purposes of visiting the health facilities. Many (78%) of the reported visits are for illness of the woman or her children; these illnesses may not be directly related to reproductive health. The remainder of the visits are specifically related to reproductive health. Among reproductive health related visits, antenatal and postnatal care, period/uterus problems and delivery are the three most common conditions.

Table 33. Purpose of visiting health facilities (women aged 15-49)

Purpose	No. (%) respondents
Illness of mother or child	913 (78)
Antenatal/post natal care	81 (7)
Period/uterus problem	41 (4)
Delivery	34 (3)
Abdominal or stomach pain	30 (3)
Get contraceptives	13 (1)
Urinary track infection	12 (1)
Side effects of contraceptives	6 (1)
Growth monitoring	5 (0)
Operation/surgery	4 (0)
Infertility	4 (0)
Immunisation	4 (0)
Other RH related problems	4 (0)
Miscarriage	3 (0)

Type of facility visited

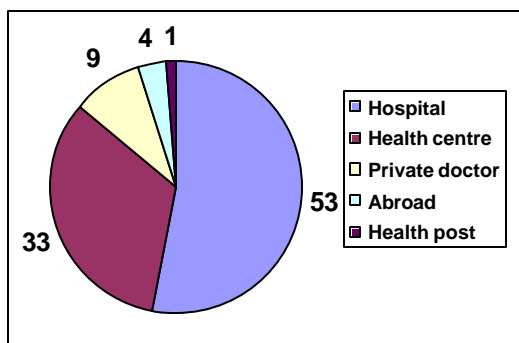


Figure 29. % of visits to different health facilities

Figure 29 shows types of health facilities visited by respondents. More than half (53%) the reported visits are to hospitals and a third (33%) are to health centres.

The high proportion of visits made abroad may be seasonal. The fieldwork was conducted right at the beginning of the new school term. It is possible that many families had gone abroad to seek medical care during the previous school holidays, or sought medical care while abroad.

Experience of health services

Availability of required medicines

Nearly all (93%; 1053/1141) respondents reported that all the medicines and materials needed were available in the health facilities they visited.

Figure 30 shows availability of all required medicines by type of facility. The availability is over 90% except for health posts where, understandably, some medicines are not available.

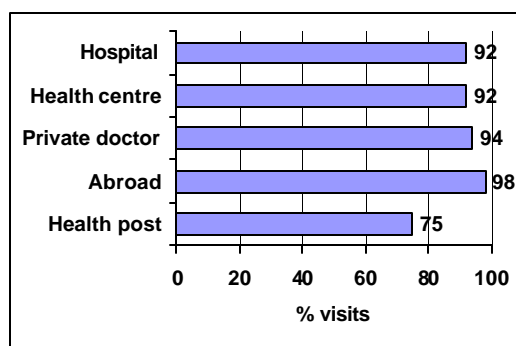


Figure 30. % visits with all medicines available, by type of facility

All required medicines are available in 93% of reported visits of women to health services.

In the few cases when not all required medicines are available in the health facility, respondents report getting them from a variety of sources. The single most common source is pharmacies (50%). Nearly a quarter (23%) get them from unspecified 'other places'. And a fifth (19%) report getting them from Male'.

Costs of visits to health facilities

Information about costs of the visit is available for 1067 of the 1154 reported visits to services by women aged 15-49 years. In many cases respondents could only recall the total cost and could not give details of the individual elements of transport, medicines and other costs. Analysis is therefore restricted to the total cost of the visit.

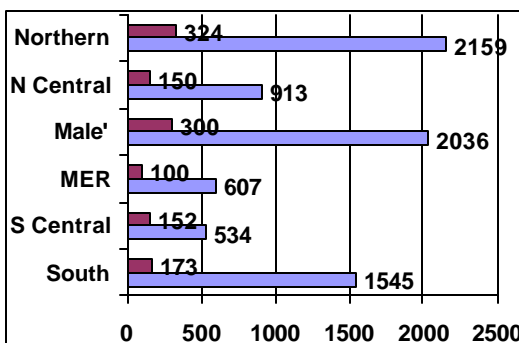


Figure 31. Mean (blue) and median costs (Rf) of visits to health facilities, by region

The amount paid is highest in the northern region and in Male'. This probably reflects high transport costs in the northern region and high private costs in Male'.

Nearly all respondents with information available (95%; 1015/1067) paid something for the visit to a health facility. The mean amount paid is 1316 Rf (median 200 Rf).

The proportion paying varies little by region. It is highest in the northern region (99%) and lowest in the south central region (92%). Among respondents who paid anything, the amount paid varies by region (Figure 31). The amount paid is highest in the northern region and in Male'.

The proportion paying does not vary much by type of facility visited, except that it is much lower for visits to health posts, where only 14% paid anything. The mean costs (among those who paid anything) by type of facility are shown in Figure 32. The amount paid by those who went abroad for treatment is, not surprisingly, very much higher than local costs. The median cost for a health post visit (among the few who paid anything) is just 4 Rf. The variation in costs is even more extreme if mean costs are examined. The mean costs of a visit for treatment abroad is 10642 Rf, and 992 Rf for a visit to a private doctor.

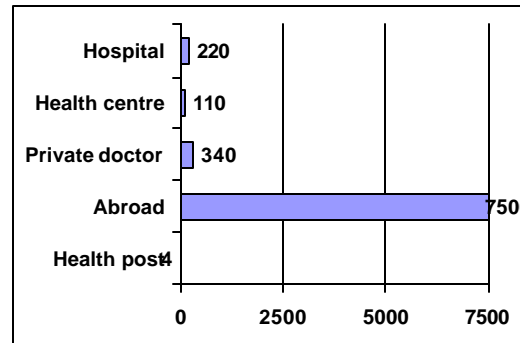


Figure 32. Median costs (Rf) of visits to different facilities

Satisfaction with service received

Respondents were asked how satisfied they were with the service they received on their last visit to a health facility during the last three months. Nearly all (94%; 1064/1134) respondents are satisfied with the service they received, 3% are neutral and 3% are not satisfied.

Nearly all (94%) women aged 15-49 years are satisfied with the service they received on their last visit to a health facility.

Satisfaction with the service is 90% or more for all facilities visited. There is no significant difference in the proportion satisfied with the services received between respondents from different age groups and educational background, different types of health facilities visited, and whether the visit was related directly to reproductive health or not.

Satisfaction with privacy of services

The concept of privacy may be different among the Maldivian population to that in many western societies. In the survey health service users were asked about their satisfaction with privacy of the service they received. Adequate privacy is generally considered to be an important aspect of good reproductive health services.

Nearly all (96%; 1087/1134) respondents who used health services in the last three months say they are satisfied with the privacy and confidentiality of the service. Some 2% are neutral about the privacy and just 2% express dissatisfaction with privacy of the service. There is limited privacy in local health facilities according to 'western' standards. Although privacy is not generally perceived as a problem by service users at present, their expectations of privacy may change in the future.

Satisfaction with privacy is high in all regions and irrespective of the type of health facility visited.

The high satisfaction with privacy among service users may mask concerns about privacy among people who do not use the services. Indeed, concerns about privacy and confidentiality might be reasons for some people not making use of reproductive health services. Some concerns about confidentiality were expressed in focus groups.

“The doctors and nurses of our hospital leak out confidential information about who is currently using what method of contraception. So I am hesitating whether they would leak out my information too if I go there for some condoms.”

45 year old carpenter

On the other hand, some men believe that women and hospitals can take confidentiality too far.

“Sometimes the hospital staff should be transparent about who is using what method of contraception, otherwise we could be using two methods at a time, unnecessarily. The women of our community are very serious about maintaining secrecy about their contraceptive use. Some of them did not even let their husbands know about the injectable they received at the hospital. So we sometimes used two methods simultaneously. It is only the hospital staff who usually advise us to stop using condoms unnecessarily.”

40 year old man

9. Adolescents and reproductive health

Eight focus group discussions with adolescent boys and eight with adolescent girls were held in different regions. The participants were aged 15 and 18 years. The purpose was to seek some insights into the needs and current practices of adolescents in the area of reproductive health. In general, the adolescents were open and enthusiastic about the subject during discussions. The boys were perhaps more open than the girls. In some groups, especially of boys, the researchers had to continue informal discussions and answer questions about contraception, sexually transmitted diseases and other reproductive health issues for some time after the group ‘officially’ ended.



Figure 33. A focus group discussion

Details of the discussions are shown in Annex 5. The main findings are summarised in this section.

Knowledge of contraceptive methods

Adolescent boys know about modern methods of contraception. All groups mentioned the pill and condoms as methods of contraception. All mentioned male sterilisation, although this is a rare event in the Maldives. Most mentioned female sterilisation, which is a much more common method of contraception than male sterilisation in the Maldives. Only a minority of groups mentioned traditional methods such as withdrawal and rhythm methods.

Adolescent girls also know about modern methods of contraception although only condoms were mentioned by all the groups of girls. Like the boys, the girls mention traditional methods less often than they mention modern methods.

Both boys and girls get their information about contraception from the media (especially radio) and from friends, more than from formal sources such as health workers and teachers. In order to increase their use of contraception after marriage, they feel they need to know more about the methods and their side-effects and to know about methods that are effective but do not ‘spoil romance’.

“We are interested in knowing about the contraceptives with most and least side effects. And also about contraceptives which do not spoil our fun and romance.”

17 year old boy

When asked who they would trust to give them information about contraception methods, both boys and girls rate the advice of an experienced doctor highly. Boys groups favour information from teachers and friends, while girls would trust friends, the radio and (in one group) film stars.

Attitudes about family planning

Adolescent girls generally support the idea of planned family size. In particular, 3 groups mentioned it is good for children's health, 2 groups noted it is good for the mother's health. One group of girls did not approve of the idea of limiting family size. The response about plans by girls of their age for using contraception after marriage was mixed; apparently by no means all adolescent girls plan to use contraception after they marry.

Adolescent boys also support the idea of planned family size in general. Four groups mentioned it is better for children's health, 3 groups said it is good for children's education, and one group mentioned it is good for the economic condition of the family. Most groups said that boys of their age do plan to use contraception after they marry.

When to use contraception

Adolescent boys say people of their age plan to use contraception 'sometime after marriage', rather than after a specific number of children. One group mentioned using contraception before marriage. Adolescent girls gave similar responses to the boys. Two groups said girls plan to use contraception after having 1 or 2 children, 5 groups said 'sometime after marriage' and one group mentioned using contraception before marriage.

The issue of contraception use before marriage was not an explicit topic for discussion in the groups but some groups nevertheless mentioned the issue. One girl commented about the reluctance of young men to use condoms.

"Males prefer to have sexual intercourse without using a condom. They want it for fun and romance."

15 year old girl, unmarried but 4 months pregnant

Knowledge about sexually transmitted diseases and HIV/AIDS

When discussing what they knew about STDs, the groups of boys and girls mentioned names of STDs they are aware of, the sort of symptoms they might expect (such as discharge and soreness) and possible consequences. Several groups mentioned their belief that STDs "can lead to AIDS". This perhaps reflects the high-profile education programme about AIDS, which seems to have made nearly everyone aware of AIDS (see above about household knowledge of STDs and AIDS). The knowledge of boys and girls seems similar.

Most groups of boys and girls know how STDs are transmitted. Again some specifically mention contaminated needles and instruments, which can transmit HIV and hepatitis B but are not prominent methods of transmission for other STDs such as syphilis, gonorrhoea and others. Two groups of boys and two of girls were not able to say how STDs are transmitted. This is not surprising, given the low knowledge about this among adult household respondents. More than half the groups of boys and girls think that STDs are a serious health risk.

Knowledge of HIV/AIDS is high among both boys and girls. Nearly all the groups of boys and half the groups of girls consider that HIV/AIDS is a 'killer disease'. They are aware of how HIV/AIDS is transmitted and their knowledge is generally accurate.

10. Views of opinion leaders

The views of opinion leaders are important in reproductive health as in other areas. They play an important role in local decision making about services and also influence public opinion about many issues. In this survey three types of opinion leaders were interviewed as key informants on each island in the sample: the island chief, the magistrate and the head teacher/supervisor of the local school with the highest grade. Also the presidents of women's committees were interviewed about the activities of these committees.



Figure 34. Interview with a key informant

In total, 21 island chiefs, 16 magistrates and 18 head teachers or supervisors were interviewed. There were four key areas of discussion: their opinion on the use of contraceptives, their views on the provision of waiting homes and emergency transportation for pregnant women and deliveries, and their views about the use of health volunteers.

In addition, 19 presidents of women's committees were interviewed.

Use of contraception

Nearly all (19/21) island chiefs are in favour of couples on the island using contraception. Their main reason is that a small family size makes it easier to look after, provide for and educate the children. Only one island chief expressed the view that contraception was unnatural or not acceptable on religious grounds.

Most magistrates (14/16) are also in favour of the use of contraception, for the same reasons as the island chiefs. Just two said contraception is not acceptable on religious grounds.

All the 18 head teachers/supervisors interviewed are in favour of the use of contraception.

Provision of waiting homes for pregnant women

UNFPA and MOH have been debating the provision of waiting homes in islands with a regional hospital for pregnant women from far away islands. The purpose is to house women with high-risk pregnancies from far away islands before their delivery, in order to reduce the risk of maternal death, through better access to emergency obstetric care facilities.

Nearly all (19/21) island chiefs are in favour of the provision of waiting homes. They say that it will be a good way to provide shelter for women who need to be near the regional hospital but who do not have friends or relatives there.

Magistrates are less positive about the idea. The majority (11/16) are in favour, but others are neutral and one is opposed to the idea. Reasons given against the idea include the expense for the women and the fact that they may feel isolated away from home. One suggested that women might not use the homes.

Among head teachers/supervisors, the majority (13/18) are in favour of waiting homes. Those against express the same reservations as the magistrates.

Emergency transport for delivery

About half the island chiefs interviewed (11/21) are against the emergency transportation scheme for women who develop complications in pregnancy or during delivery. Only a third (7/21) are positively in favour of the scheme. The main objections to the scheme are doubts about its proper functioning; if it does not operate properly women in a dangerous situation could be kept waiting. Those in favour say it is an appropriate and easy way to ensure access to emergency care for all women who need it.

Magistrates are evenly split on the issue of the emergency transportation scheme: out of 16 interviewed, 7 are in favour, 7 are opposed and 2 are neutral. The reasons are similar to those given by the island chiefs. One magistrate opposed to the scheme felt it would reduce the chance of upgrading the health facility on the island.

Half (9/18) the head teachers/supervisors are against the scheme, and only 5/18 are positively in favour of it. They give the same reasons as the island chiefs and magistrates.

Use of volunteers in the reproductive health programme

Nearly all (19/21) island chiefs support the use of volunteers in the reproductive health programme. They consider the volunteers are likely to be reliable and available all the time locally. Volunteers could educate the public. And the arrangement could save time and money.

Among the 16 magistrates interviewed, 12 are in favour of using volunteers, 2 are neutral and 2 are opposed to the idea. Those in favour mention reliability and availability and also their experience of field work (rather than desk work). Those against have concerns that they may not have sufficient knowledge and could put women at risk, and that they may not be reliably available when needed.

Nearly all (16/18) head teachers/supervisors are in favour of the use of volunteers in the reproductive health programme. They give the same reasons as island chiefs.

Activities of women's committees

The full responses of the women's committee presidents are shown in Annex 5.

Over a third (7/19) of presidents reported that the women's committee had no activities in the area of reproductive health and family planning. The most common reported committee activity is giving information and counselling (10/19).

Asked about ways in which the committee supports reproductive health and family planning, 9/19 presidents reported no support activities. Nearly half (9/19) reported giving counselling and making things more understandable for women. A few (3/19) report the committee acting as mediator between doctors and patients.

More than half (10/19) of the presidents reported no committee activities to promote gender equity. Reported activities include attending workshops (5/19), setting up committee owned businesses (4/19), and helping women to set up their own businesses (2/19).

COMMENTARY

As intended, this survey has produced data on a number of key indicators, which can serve as a baseline against which to measure the impact of the Reproductive Health programme. Indeed, the indicators included in the survey were chosen specifically with the programme in mind and are concentrated in areas that the programme is addressing. The survey has also provided insights into attitudes and behaviours related to reproductive health that can help in the design and targeting of areas of the programme.

1. Indicators

Contraception

- ✍ CPR 32% for modern methods among married women aged 15-49 years
- ✍ Unmet need for modern contraception 42% among married women aged 15-49 years
- ✍ 86% of women (15-49 years) and men know of a modern method of contraception
- ✍ 53% of women (15-49 years) and men know of at least one side effect of contraception

Most of the findings regarding contraception are encouraging. The Contraceptive Prevalence Rate has risen steadily over the decade of the 1990s, although there still remains a significant unmet need for contraception.

Knowledge about STDs and HIV/AIDS

- ✍ 31% of adult respondents know at least one valid sign of STDs
- ✍ 54% of adult respondents know at least one valid way of catching STDs
- ✍ 98% of adult respondents have heard of AIDS
- ✍ 92% of adult respondents know at least one valid way of catching AIDS

Awareness of AIDS is almost universal and knowledge about how it is transmitted is also high. This indicates success of the national programme of informing people about HIV/AIDS. Awareness and knowledge about other STDs is much less complete.

Antenatal care

- ✍ 62% of women aged 15-49 years had four or more antenatal care visits in their last pregnancy
- ✍ 46% of women aged 15-49 years took iron during their last pregnancy

The proportion of women who receive the recommended four or more antenatal care visits is already high, but could be improved even further. The low proportion of women taking iron supplements during pregnancy is a concern, especially in view of the high prevalence of anaemia in Maldivian women.

Visits of the FHW

- ✍ 48% of households (excluding Male') have ever been visited by the FHW
- ✍ 33% of households had a visit by the FHW during the last two months

Visits of the FHW are clearly much less frequent than intended in the official policy. The survey indicates some benefit of visits for use of contraception and knowledge about STDs.

Experience and perceptions of reproductive health services

- ✍ 77% of household respondents rate available reproductive health services as 'good'
- ✍ 23% of household respondents cite problems with available reproductive health services
- ✍ 93% of female service users report all required medicines available on their last visit
- ✍ 94% of female service users are satisfied with the health service they received
- ✍ 96% of female service users are satisfied with the privacy of the service they received

The high satisfaction with health services is encouraging, although this must be viewed in the light of level of expectations; even people who do not mention problems with the services still have suggestions for improvements they would like to see.

2. Behind the indicators: pointers for action

Contraception

Attitudes about contraception in focus groups of male and female adults and adolescents are generally positive, as are the attitudes of island chiefs and other opinion leaders. There is a need for more information about contraception, especially for older women without formal education and for adolescents. But objections to contraception on religious or other grounds do not seem to be common. The issue of availability of contraception to young unmarried men and women might become more prominent during the next few years. One disincentive to the use of contraception – the desire to increase the population of small islands so as to increase government support for health and other services – might need to be considered.

Knowledge of STDs and HIV/AIDS

The apparent success of the public information programme about AIDS is striking. The contrast with knowledge about other STDs is marked. A stronger programme to inform people about STDs is needed. This could build on the already good knowledge of health workers. Health workers are also trusted by many people as reliable sources of information about these issues.

Antenatal care

The high proportion of women attending for the recommended four or more antenatal care visits is encouraging. However, even though women who have antenatal care are more likely to take iron during pregnancy, the proportion who take iron is still much too low. The reasons for women not taking iron need to be investigated further, including holding further discussions with women. It may be that women do not take iron even when they are given it, perhaps because of side effects. If this is the case, further education and support is necessary and perhaps provision of alternative iron preparations. If iron supplements are not always being offered to pregnant women as part of antenatal care, this needs to be corrected.

Visits of the FHW

The reasons why FHWs are not visiting households routinely need to be investigated in more detail. The policy of routine visiting needs to be reviewed. It could be argued that in the present conditions, routine visits no longer serve a useful purpose and the FHWs can be more usefully occupied with other duties. On the other hand, there is some evidence from this survey that visited households have a higher rate of contraceptive use and better knowledge about STDs. In reviewing the policy of FHW visits, it would be a good idea to involve the FHWs and the public in the discussion and seek their views about possible changes in the policy.

Experience and perceptions of reproductive health services

The high rating of reproductive health services by household respondents compares favourably with the ratings of health services in similar surveys in other countries in South Asia (6,7). Nevertheless, there is room for improvement and service workers as well as household respondents have suggestions for improvements they would like to see. Some of the suggestions will not be possible to implement immediately but those concerned with staff behaviour and training could be addressed relatively quickly.

The relatively highly educated population of the Maldives may well have increasing expectations of their health services over the next few years. This is a good thing for building pressure for continuous service improvements, but the provision of services will need to keep pace with expectations. A good way to make sure there is not a mismatch between expectations and the actual service will be to ensure that the public are involved in the planning and monitoring of service provision. This baseline survey is a useful beginning in involving the public in the future development of reproductive health services.

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