

# Contraceptive usage in women requesting emergency contraception in Swaziland

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**Background:** The Kingdom of Swaziland, following the introduction of the National Family Planning Programme in 1973, has witnessed insufficient scientific publications on the contraceptive practices in the country despite documented high fertility rates and low contraceptive prevalence rates. This study was conducted to understand the practices and potential determinants of contraception among Swazi women who requested emergency contraception.

**Methods:** The data were collected over a period of one month and analysed using simple descriptive analysis to summarise the data and bivariate analysis to determine relevant factors associated with the use of contraception.

**Results:** The majority of participants (79%) use contraceptives. Reasons given for not using contraception previously ranged from medical conditions to not being sexually active. Widely used contraceptives are male condoms, injectable hormones and combined oral contraceptives while the least popular are implants, and post-coital pills. Knowledge of contraceptives came mainly from the health facilities, peers and mass media while parents are the least consulted sources. A high percentage (97%) are aware of sexually transmitted diseases (STDs) and that male and female condoms are the best forms of protection against STDs. Demographic and socio-economic variables are not significantly related to the use of contraceptives.

**Conclusion:** The study established that the majority of the participants used some form of contraception and they also delayed their sexual debut up to the age of 18–20 years. The observed changes of increased contraceptive use and later age of sexual debut could be associated with increased levels of education of the participants and the predominant relaxed approach by Protestants and Zionists who are usually tolerant of contraception. The recommendations, based on the findings of this study, would assist with the planning and implementation of future family planning programmes for which this study serves as a foundation.

**Keywords:** birth control, contraception, prevention of pregnancy, sexually transmitted diseases

## Introduction

Contraception as a process refers to the deliberate prevention of conception through either natural or artificial means. Barrier methods of contraception have also assisted in controlling sexually transmitted infections (STIs). Hormonal contraception can also be used in the regulation of menstrual periods. Contraception has economic and environmental ramifications based on its effects on family spacing and population growth (may limit or increase growth).<sup>1,2</sup>

Good contraceptive practices help in alleviating poverty and hunger, maternal death<sup>3</sup> and child death.<sup>3,4</sup> Contraception also reduces the chances of unintended pregnancy and helps in child spacing. Despite the benefits of contraceptives, developing countries (African and Asian) still observe minimal changes in contraceptive use in women between the ages of 15 and 49 years<sup>3</sup> despite high rates of maternal mortality.<sup>5</sup> Of the global regions, sub-Saharan Africa has the lowest contraceptive prevalence rate (CPR) of 22%. This is ironic, as half of global maternal deaths occur in this region.<sup>5</sup> However, Swaziland has a CPR of 49%,<sup>6</sup> while in the developed countries it ranges between 48% and 84%.<sup>7</sup>

This study hinges on the anecdotal perception of high usage of post-coital contraceptive pills based on their high sale in pharmacies in the Kingdom, which has the highest global HIV seroprevalence rate of 25.9%.<sup>8</sup> The authors wished to establish the knowledge and contraceptive usage in those requesting emergency contraception in four selected health facilities in Swaziland.

## Background and setting

Swaziland is a small, landlocked, mountainous country situated in the southern part of Africa. Bordered by South Africa and Mozambique, it obtained its independence from the British colonies in September 1968. With a very homogenous ethnic group that is Swazi, the country is administered under a monarchical system, one of the last three in Africa, the others being Lesotho and Morocco. Swaziland occupies a land area of 17 000 km.<sup>2,9</sup> With a population of 1 186 000, it has a GDP per capita of US\$3 073,<sup>10</sup> a ranking of 140 on the human development index<sup>11</sup> and, as at 2010, 62.9% of the people were living on less than \$2 per day.<sup>10</sup> The country is divided into four regions: Lubombo, Shiselweni, Hhohho and Manzini. There are 55 constituencies, each led by an elected leader. Swaziland is considered a low- to middle-income country and the life expectancy at birth is 48 years.<sup>11</sup> Total adult literacy rate is 87%<sup>11</sup> Swaziland has an unemployment rate of 22.5%, as at 1997 and a contraceptive prevalence rate, as at 2010, of 49%.<sup>6</sup>

Health care services in the Kingdom are achieved through six government hospitals, five government health centres and two mission hospitals, supported by eight clinics/hospitals on the private front and a couple of not-for-profit health organisations. Sexual and reproductive health care is offered at all the health care facilities.

## Methods

The study was a cross-sectional survey and descriptive study done at the time of contact with the participants at the study sites. The sample size of 97 women estimated the prevalence

with 95% confidence to an accuracy of within 10% (nQuery Advisor® Version 7.0). However, in order to distribute the sample size equally amongst the four selected sites, the sample size was increased to 100.

The inclusion criteria were sexually active women between the ages of 14 and 49 years, in stable heterosexual relationships, stable premarital, marital and cohabiting relationships, and giving informed consent. Why, then, was one reason for not using contraception 'not sexually active'?

The women were recruited from four different, randomly selected government health facilities/pharmacies representing each of the four regions in Swaziland. These hospitals were Lubombo region — Good Shepherd Hospital (GS), Hhohho region — Pigg's Peak Government Hospital (PP), Shiselweni region — Nhlanguano Health Centre (NHL) and Manzini region — Raleigh Fitkin Memorial Hospital (RFM).

Reliability was assured by the use of Siswati-speaking sub-investigators to avoid study errors from inaccurate measurement by the observer and the questionnaire was pretested in a pilot study approved by the ethics committee of the Faculty of Health Sciences, University of Pretoria.

The sample was selected on the basis of being the first 100 female patients requesting emergency contraception at the selected four sites in Swaziland.

#### Ethical considerations

Ethics approval was obtained from the Research Ethics Committee, Faculty of Health Sciences, University of Pretoria. The local research committee within the Ministry of Health Swaziland and managers of the involved health facilities gave permission to conduct the study.

#### Confidentiality

Confidentiality was assured by distribution of coded questionnaires without participants' names. The data obtained were kept in a safe and inaccessible place and results are being published without any form of link to individual participants.

Of the 100 study participants initially recruited, there were two missing data items. Simple descriptive and bivariate analysis of the data was achieved using EPI INFO 6.0® statistical software package.

### Results and discussion

The authors acknowledge that the small sample size does not allow for generalisation or comparison to or with national/regional surveys. Furthermore, studies of the same scale could not be found in the literature; the discussion that follows is done with the circumspection this implies. References to other publications are made purely to encourage the discourse on contraception and

**Table 2:** Contraceptive use among the respondents

	n	%
Yes	77	78.57
No	21	21.43
Total	98	100.00

hopefully to stimulate more research on the topic in this part of the African continent.

#### Socio-economic profile of the participants in the study

The profile of the 98 participants showed that they were mostly in the age range of 21 to 40 years, predominantly black, more or less equal numbers of married and single women, with 67% earning between emalangeni 1 000 and 5 000 (emalangeni is the plural of lilangeni, the currency of Swaziland. The currency has the same value as the South African rand; 1 lilangeni equals 1 rand).

The majority (91%) of the participants had advanced beyond primary education, although 61% of them were unemployed. An analysis of their religious affiliation showed that 43% were Protestants, 26% Zionists and 16% Catholics. About 8% of the participants had never engaged in smoking, alcohol or recreational drugs.

#### Age and contraception

As reflected in Table 1, the predominant age group in this study across the four hospitals in Swaziland was the age band 21–30 years.

#### Contraception usage among the respondents

Contraceptive use in Swaziland from this study (79%) is illustrated in Table 2. Neighbouring South Africa is documented to have a prevalence rate of 65%.<sup>12,13</sup>

#### Age at first sexual encounter

Age at sexual debut in this study was between the ages of 18 and 20 years (Table 3). South African studies reported findings in the same ranges.<sup>14,15</sup> A previous Swaziland study found that amongst Swazi adolescent girls the debut of sexual activities was at 15 years.<sup>9</sup>

#### Usage of contraceptives at first sexual encounter

The existing body of knowledge indicates a generally low rate of contraception at sexual debut.<sup>16</sup> This is of particular importance as early sexual experiences might have associations with high susceptibility to unwanted pregnancies and sexually transmitted diseases (STIs).<sup>16,17</sup> In this study, 58% of the participants reported not having used contraception during the first sexual encounter (Table 4).

#### Other important findings

Table 5 gives other pertinent findings that are discussed as follows. The contraceptives most frequently used by the respondents

**Table 1:** Age distribution of respondents per hospital

Age interval (years)	RFM	PP	NHL	GS	Total
11–20	2	3	3	1	9
21–30	14	13	12	14	53
31–40	8	8	9	5	30
41–50	1	1	1	3	6
Total	25	25	25	23	98

Note: GS: Good Shepherd Hospital, NHL: Nhlanguano, PP: Pigg's Peak Government Hospital, RFM: Raleigh Fitkin Memorial Hospital

**Table 3:** Age at first sexual encounter

	<b>n</b>	<b>%</b>
15–17 years	19	19.4
18–20 years	35	35.7
21–25 years	18	18.4
26–30 years	2	2
> 30 years	1	1
Unsure	23	23.5
Total	98	100

**Table 4:** Usage of contraceptives at first sexual encounter

	<b>Frequency</b>	<b>%</b>
Yes	36	36.73
No	57	58.16
N/A	4	4.09
No response	1	1.02
Total	98	100.00

**Table 5:** Other important findings

<b>Variable</b>	<b>Likelihood ratio <math>\chi^2</math></b>	<b>Probability (Fisher's exact test)</b>	<b>Significance</b>
<b>Demographics:</b>			
Age group	2.5293(3)	0.472	Non-significant
Race	0.8110(1)	0.384	Non-significant
Marital status	1.2443(2)	0.763	Non-significant
Income	0.3822(3)	0.950	Non-significant
Education	2.1330(2)	0.407	Non-significant
Employment	0.3383 (1)	0.377	Non-significant
Religion	2.5906 (5)	0.783	Non-significant
Facility	15.4341(3)	0.004	Significant
Print/media	3.8008(1)	0.044	Significant
Use of tobacco	0.2345(1)	0.519	Non-significant
Use of alcohol	1.1802(1)	0.363	Non-significant
Recreational drugs	0.4851(1)	1.000	Non-significant
<b>Knowledge regarding contraception:</b>			
Mass media	1.3445(1)	0.230	Non-significant
Health facility	0.5070(1)	0.617	Non-significant
Peer groups	1.3639(1)	0.386	Non-significant
Parents	0.6851(1)	0.470	Non-significant
School	16.6988(1)	0.000	Significant
Health care	1.7871(1)	0.146	Non-significant
Contraception sources	57.4780(1)	0.000	Significant
Readily available	0.9570(1)	1.000	Non-significant
Awareness of disease	1.4726(1)	1.000	Non-significant
<b>Best source of protection:</b>			
Injectable hormones	0.4851(1)	1.000	Non-significant
Female condom	0.6743(1)	0.456	Non-significant
Post-coital pills	0.4851(1)	1.000	Non-significant
Male condom	0.4861(1)	0.606	Non-significant
Implants	N/A		
Combined oral contraceptives	N/A		

over the last six sexual encounters were male condoms (43%), followed by injectable hormones (29%) and then combined oral contraceptives (17%). The least popular contraceptives in that time span were female condoms (5%), post-coital pills (5%) and then implants (7%). The dual role of prevention of HIV and STIs was given by most of the respondents as a reason for condom use, given the 85% risk reduction of HIV transmission. The latter was also reported by other authors.<sup>18–21</sup>

About 55% reported having their first sexual encounter between the ages of 15 and 20. Knowledge of contraceptives came mainly from the health facilities, peers and the mass media while parents were the least noted source. A significant association was established between contraceptive use and electronic and print media.<sup>22</sup> Television in comparison with radio was found to have a greater impact on usage of contraception in developing countries.<sup>22</sup>

Contraceptives were provided mainly by the clinic/health centres and 95% believe they are readily accessible.

A very high percentage (97%) were aware of sexually transmitted diseases (STDs) and that male and female condoms were the best forms of protection. A high percentage (74%) claimed that they

were aware of close relatives having HIV/AIDS, but only 44% said that knowledge influenced them to use contraceptives. The most pertinent reason for choice of contraception (20%) was for the prevention of HIV and sexually transmitted infections.

A significant 84% of participants did not use emergency contraceptives before this study and those who had previously used these did so in order to prevent pregnancy in stable relationships. Emergency contraception, often used as a backup for other modern contraceptives, which became available over the counter in South Africa in the year 2000, is widely considered to be underutilised and awareness of it to be low, as was found in this study as well as in South Africa.<sup>23</sup>

## Conclusion

The study was conducted to establish the usage pattern of contraceptive methods in women presenting for post-coital contraception at clinics and hospitals in Swaziland. The majority of the participants used some form of contraception during or prior to their participation in the study. Condoms were the most used method followed by injectable hormones and combined oral contraceptives. The survey has been able to establish that neither post-coital pills nor emergency contraception were popular among the participants. The study also established that the participants delayed their sexual debut up to the age of 18–20 years. However, this finding cannot be generalised until large-scale studies are conducted in the country. Another finding was the significant correlates of contraceptive use in the mass media, schools and clinics. Lastly, the demographic and socioeconomic variables were not significantly related to the use of contraceptives.

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