

# Knowledge and attitudes about reproductive health and HIV/AIDS among family planning clients

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المعارف والمواقف المتعلقة بالصحة الإنجابية وبالإيدز وفيروساته بين المترددات على مراكز تنظيم الأسرة  
علي عبد العظيم عبد المجيد وسوسن الشيخ وميرفت الجندي ومحمد العربي

خلاصة : تم تقدير المعارف والمواقف المتعلقة بالصحة الإنجابية ، ولاسيما فيما يتعلق بالأمراض المنقولة جنسيا ومتلازمة العوز المناعي المكتسب ( الإيدز ) بين أربعة آلاف سيدة من المترددات على مراكز الرعاية الصحية الأولية وتنظيم الأسرة في الإسكندرية . ولقد تبين أن 66% من بينهن لا يعرفن مدلول اصطلاح الصحة الإنجابية ، وأن 50% يعتبرن أن ختان الإناث إجراء ضروري . كما ظهر أن 69% من السيدات يستعملن موانع الحمل ، ومن هؤلاء السيدات كانت 93% يستعملن الوسائل الرحمية . وكانت أغلبية من شملتهن الدراسة يعرفن الإيدز ، ولكنهن لا يعرفن أن العازل الذكري ( الرفال ) يمكن أن يقي من انتقال الأمراض المنقولة جنسيا ، ومن بينها عدوى فيروس الإيدز . وينبغي البدء بتنفيذ برنامج شامل لزيادة وعي الجماهير بكل ما يتصل بالصحة الإنجابية .

**ABSTRACT** The knowledge of and attitudes towards reproductive health, and in particular STDs and AIDS, were assessed in 4000 women attending primary health care/family planning facilities in Alexandria, Egypt. In all, 66% did not know the significance of the term reproductive health and 50% considered female circumcision necessary. Of the 69% of women using contraceptives, 93% were using intrauterine devices. The majority knew about AIDS but did not know that the use of condoms can prevent transmission of STDs, including HIV. A comprehensive programme should be initiated to increase public awareness of the issues of reproductive health.

## Connaissances et attitudes en matière de santé de la reproduction et relativement au VIH/ SIDA chez les utilisatrices des services de planification familiale

**RESUME** Les connaissances et attitudes en matière de santé de la reproduction, et concernant plus particulièrement les maladies sexuellement transmissibles (MST) et le SIDA, ont été évaluées chez 4000 femmes fréquentant les centres de soins de santé primaires/planification familiale à Alexandrie. Au total, 66% ne connaissaient pas la signification du terme «santé de la reproduction» et 50% estimaient que la circoncision féminine était nécessaire. Sur les 69% de femmes ayant recours à la contraception, 93% utilisaient des dispositifs intra-utérins. La majorité d'entre elles avaient certaines connaissances sur le SIDA mais ne savaient pas que l'utilisation de préservatifs pouvait empêcher la transmission des MST, y compris l'infection par le virus de l'immunodéficience acquise (VIH). Un programme complet doit être mis en place pour sensibiliser le public à l'égard des questions de santé de la reproduction.

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## Introduction

Although the acquired immunodeficiency syndrome (AIDS) pandemic started 15 years ago, very little AIDS-related research has been done in Egypt. As cases began to be diagnosed during the second half of the eighties, the initial denial response by the authorities changed. The national authorities have now become actively involved in the prevention and control of human immunodeficiency virus (HIV) infection. AIDS cases started being reported to the World Health Organization in 1986 and since then, there are increasing numbers of patients detected each year. The Egyptian AIDS Society (EAS) was founded in 1992 as the first nongovernmental organization in Egypt concerned with programmes to prevent HIV infection, and to support AIDS patients.

After the International Conference on Population and Development held in Cairo in 1994, the terms reproductive and sexual health were widely disseminated among all community sectors. Reproductive health was defined as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters related to the reproductive system and to its functions and processes [1,2]. The definition of reproductive health includes many components, among which are family planning, maternal and child health, prevention of harmful practices, reduction of the spread of reproductive tract infections and other sexually transmitted diseases (STDs), including HIV/AIDS, and provision of treatment for STDs and their complications [3].

Globally, it is estimated that over 300 million new cases of STDs occur every year. One in every 20 adolescents is affected by STDs. According to a WHO prediction, by the year 2000, up to 40 million

people could be infected with HIV. Adolescents, especially female adolescents, and women are particularly vulnerable because of lack of information and services, and sociocultural barriers that prevent them from taking measures to protect themselves [4,5].

Some critical issues should be considered while planning research involving AIDS/STDs such as homosexuality, migration, drugs, and unsafe abortion. Prostitution is forbidden by law in Egypt, but it is practised within private circles. However, there is no accurate information about its magnitude. In the Egyptian society, it is sometimes difficult to identify homosexual individuals and hence, this group should be considered at the highest risk [6]. There are no fewer than 3 million Egyptians living abroad. Most are temporary migrants to other prosperous neighbouring countries. Migrants are often exposed to various forms of high-risk behaviours. Illegal medical practices carry a high risk of infection; a study conducted at the High Institute of Nursing in Alexandria showed that among 1050 girls from 30 secondary schools, 80% of them had undergone female circumcision, mostly performed by unprofessional personnel. Without a medical reason to preserve the health of the mother, abortion is considered illegal in Egypt. Therefore, many women resort to unsafe abortions either performed by a poorly trained practitioner or by themselves. A review of the few Egyptian studies indicates that about 10% of all maternal deaths are directly caused by such unsafe abortions [7].

In view of these issues, it is essential to assess the knowledge and attitudes of the female population concerning different issues related to reproductive health. This will then enable us to implement appropriate programmes to improve the reproductive health of women and fight the spread of HIV infection.

## Goal and objectives

The overall aim of this study was to determine the critical elements in knowledge and attitude towards reproductive health and HIV/AIDS in Alexandria, Egypt, in order to design appropriate programmes for intervention in the relevant areas.

The specific objectives were:

1. To assess the knowledge and attitudes of women attending health facilities concerning HIV/AIDS.
2. To assess the knowledge and attitudes of women attending health facilities on different aspects of reproductive health.
3. To identify a set of fundamental indicators to be used to design programmes and activities for the improvement of reproductive health.

The Egyptian AIDS Society (EAS), in collaboration with the Clinical Service Improvement (CSI) Project, recognized the need to assess the knowledge and attitudes of women attending health facilities in Alexandria, Egypt, with regard to different aspects of reproductive health. Special attention was given to the issues related to HIV infection. Some of the questions dealt with the attitude of the women interviewed towards HIV-positive patients as well as harmful practices such as female genital mutilation.

This descriptive analytical study was designed as a cross-sectional (prevalence) survey among individuals in a well-defined population. Limitations of this kind of descriptive study are acknowledged.

## Material and methods

A questionnaire was designed for data collection and it was developed in three main sections: HIV/AIDS-related issues (14

questions); reproductive health-related issues (5 questions); and family planning-related issues (8 questions). In addition, there were four questions about the main characteristics of the women interviewed.

The sample size of this study was 4000 women drawn from all women who visited four Clinical Service Improvement centres in Alexandria over the three-month period from October to December 1994.

Four teams were assigned to collect data during the three-month study period. Each team consisted of two members, most of whom were social workers, and each was assigned to one of the centres. All teams received training and participated in the pre-testing of the questionnaire. The teams were supervised during the field work by the supervisor who had trained them.

Descriptive analysis of the results of the study was carried out using dbase IV and Lotus 123. Analysis was based on three specific indicators reflecting the main characteristics of the population studied. These indicators were: age, education, and occupational status. Each of the indicators was cross-tabulated with data collected on different issues of HIV/AIDS, reproductive health, and family planning.

## Results

### Women's profiles

Table 1 summarizes the total number of women surveyed in each centre by age, education, and occupational status. Schutz centre had the largest share in the study with 1772 women, (44% of the total), whereas Sporting centre had the least contribution with 543 women (14%). There were not many differences between the four centres regarding each indicator. As a result, analysis of the subsequent tables was based on the total population of the study.

**Table 1. Women's profile according to each centre**

Indicator	Schutz		Sporting		Sidi Bishr		Dekhela		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%
Education										
Illiterate	278	16	171	31	160	18	235	29	844	21
Literate	242	14	30	6	116	13	160	20	548	14
Educated	1252	71	342	63	597	68	417	51	2608	65
Occupation										
Housewife	1349	76	396	73	645	74	617	76	3007	75
Working	423	24	147	27	228	26	195	24	993	25
Age										
18-28	504	28	127	23	264	30	285	35	1180	30
29-39	970	55	322	59	451	52	389	48	2132	53
40-49	271	15	92	17	146	17	102	13	611	15
50+	27	2	2	0	12	1	36	4	77	2
Total	1772	44	543	14	873	22	812	20	4000	100

It was noted that 21% of the women were illiterate, much lower than the corresponding national level. It was also shown that 25% of them were working women while the national level is 18%. Thus, the level of education and the working status of the women in this study were greater than the national level.

### Age of marriage

Table 2 shows that the majority of the women (64%) considered the appropriate age for girls to marry is between 20-24 years and 19% considered it 25 years or more. Only 5% of women interviewed considered the appropriate age of marriage is between 16-18 years; 75% of this group were illiterate and 91% were housewives.

### Reproductive health issues

Table 3 shows that only 34% of the women had heard about reproductive health. The source of information included television (56%), radio (12%), other sources (32%). This indicates the importance of mass me-

dia as a source of information. Although 66% of women interviewed did not know the term reproductive health, virtually all of them knew much of the basic information that would improve their reproductive health such as spacing between pregnancies and the importance of prenatal care. In addition, 80% of the women said they would encourage their daughters to have premarital examinations. Twenty percent (20%) of the women still did not know the advantages of breast-feeding over bottle-feeding.

**Table 2 Women's opinion on the most appropriate age for girls to marry**

Age (years)	No.	%
16-17	218	5
18-19	473	12
20-24	2545	64
25 +	764	19
Total	4000	100

**Table 3 Women's knowledge about reproductive health. Number and percentage out of the total of 4000 women giving a positive answer.**

Question	Yes	
	No.	%
Have you ever heard about reproductive health?	1358	34
If the answer is yes, where did you hear about it?		
Television	765	56
Radio	163	12
Physician/nurse/counsellor/FP centre	137	10
Relatives/friends	43	3
Others	250	18
Is the period between consecutive pregnancies important?	3794	95
Is prenatal care essential?	3752	94
Does a pregnant woman need more iron?	3563	89
Does a pregnant woman need more protein?	3670	92
Is breast feeding the same as bottle-feeding?	802	20
Are you going to advise your daughter to have premarital examinations?	3190	80

### Family planning

Table 4 shows the results of the family planning section of the questionnaire. The majority of women had heard of the family planning service for many years, which could reflect the success of the health information and education campaign in Alexandria. It also shows that 91% of women believe that family planning is not forbidden which is borne out by their being in family planning centres to receive services.

Of the women interviewed, 41% were receiving their prenatal care from a private physician, 34% at a family planning centre and 12% at a child care centre. Only 6%

were having prenatal care with a traditional birth attendant.

It was found that 69% of the women surveyed were using family planning methods: 91% of them were using intrauterine devices (IUDs), 5% were using the Pill, 2% were using injectable contraceptives, and only 2% were using condoms and other methods. Advice on the particular family planning method used was given by the family planning centre in 57% of the users, by a private physician in 32%, and in 6% of users it was selected by the husband.

Among those not using any form of contraception, 60% wanted more children and 31% had not yet had their first baby. About 3% of women said they could not use a family planning method because of their husbands' objections. Contrary to the common belief in Egypt, the results indicate that the women's mothers and mothers-in-law were not a constraint on using a family planning method.

Seventy-five percent (75%) of the women interviewed had visited the family planning centre before; 86 % of them had gone for the services and 14 % had gone as a companion.

With regard to client satisfaction, the most important factor was how the service providers treated their clients (with courtesy and friendliness). The second factor was the technical competence of the service providers.

### Female genital mutilation

Table 5 shows the women's attitudes to what is called in Egypt "female circumcision". Half the women still believed in the importance of this procedure. Among these women, 54% attributed their belief to tradition, while 44% thought it controlled the sexual behaviour of girls. Only 2% believed it was obligatory for girls to be circumcised.

Table 4 Women's knowledge of and attitude to family planning

Question	No.	%	Question	No.	%
<i>When was the first time you heard about family planning? (years ago)</i>			Neighbour/friend	59	2
2	274	7	Nurse	19	1
3-5	552	14	Counsellor	13	0
6-8	919	23	Husband	159	6
9-11	1109	28	Mother-in-law/ mother	13	0
> 11	1146	29	Others/myself	31	1
Total	4000	100	Total	2755	100
<i>Do you think that family planning is forbidden?</i>			<i>Why aren't you using a family planning method?</i>		
Yes	235	6	Forbidden	6	0
No	3653	91	Haven't had a child before	382	31
Don't know	99	2	Husband objects	39	3
Others	13	0	Mother-in-law objects	2	0
Total	4000	100	Mother objects	3	0
<i>Where do you receive prenatal care?</i>			Want more children	748	60
Private physician	1631	41	Others/rumours	65	5
Family planning centre	1373	34	Total	1245	100
Child care centre	486	12	<i>I have you ever visited a family planning centre?</i>		
Health insurance	209	5	Yes	3004	75
Traditional birth attendant	257	6	No	996	25
Others/No pregnancy	44	1	<i>If yes, what was the purpose of your visit?</i>		
Total	4000	100	For a service	2587	86
<i>Are you using a family planning method?</i>			As a companion to a friend	417	14
Yes	2704	69	Total	3004	100
No	1245	31	<i>What do you like about in this centre?</i>		
<i>If yes, what method?</i>			Care and good treatment	2348	78
IUD	2502	91	Good physical examination	2209	73
Pill	143	5	Cleanliness of the centre	1570	52
Injectable contraceptive	46	2	Counselling	1336	44
Condom	13	0	Wide variety of contraceptive methods	1150	38
Other methods	51	2	Responding to your questions	1023	34
Total	2704	100			
<i>Who advised you to use this method?</i>					
Private physician	870	32			
Family planning centre	1544	56			
Pharmacist	47	2			

**Table 5 Opinion of 4000 women on female circumcision**

Question	Yes	
	No.	%
Is circumcision necessary?	1989	50
If yes, is it because:		
it is a tradition?	1073	54
it controls sexual behaviour?	883	44
it is obligatory?	33	2
Total	1989	100

Of the 50% of women who believed in the importance of the procedure, only 35% were illiterate and 46% were educated, compared to 21% and 65%, respectively in the total study group. On the other hand, 83% of these women were housewives and 17% were working women, compared to 75% and 25%, respectively in the total group (Table 6).

### HIV/AIDS

Table 7 identifies the women's knowledge of and attitudes towards some important issues related to HIV infection and AIDS. It was found that 96% of the women surveyed had heard about AIDS. The sources of in-

formation were television and radio (77%), and through general information (18%). Only 2% of the women had learned about AIDS from physicians and/or nurses.

The majority of the women who had heard about AIDS had clear and correct information about it which can be summarized as follows:

- 74% knew that it is caused by a virus.
- 88% knew that it is an infectious disease.
- 85% knew that it is transmitted through sexual intercourse with an infected person.
- 90% knew that they can avoid infection with HIV.
- 75% believed that there is no treatment for HIV infection at present.
- 84% knew that AIDS is a fatal disease.
- 92% believed in the importance of conducting national campaigns about HIV infection and prevention.

However, some important information was still not clear and the following misconceptions were common:

- 61% believed that infected persons should be avoided and segregated.

**Table 6 Distribution of women approving female circumcision according to educational level and occupational status**

Question	Educational level						Occupational status					
	Illiterate		Literate		Educated		Housewives		Working women		Total	
	No.	%	No.	%	No.	%	No.	%	No.	%		
Is female circumcision necessary?	688	35	381	19	920	46	1649	83	340	17	1989	
If yes, is it because:												
it is a tradition	435	63	194	51	444	48	913	55	160	47	1073	
it controls sexual behaviour	243	35	176	46	464	50	713	43	170	50	883	
it is obligatory?	10	1	11	3	12	1	23	1	10	3	33	
Total	688	100	381	100	920	100	1649	100	340	100	1989	

Table 7. Knowledge of and attitudes to HIV infection and AIDS

Question	No.	%	Question	No.	%
<i>Have you ever heard about AIDS?</i>			<i>Should we segregate AIDS patients from society?*</i>		
Yes	3821	96	Yes	2333	61
No	179	4	No	1488	39
<i>If yes, where from?</i>			<i>Do all HIV- infected persons die?</i>		
Television/radio	2931	77	Yes	3361	84
Neighbour/friend	76	2	No	460	12
Physician/nurse	69	2	Don't know	179	4
Family/newspapers	53	1	Total	4000	100
General information	692	18	<i>Do you think it is important to conduct a national health education and information campaign to increase awareness of AIDS?</i>		
Total	3821	100	Yes	3661	92
<i>What do you think is the cause of AIDS?</i>			No	160	4
Virus	2835	74	Don't know	179	4
Microbe	674	18	Total	4000	100
Fungus	42	1	<i>Do you think that there are diseases transmitted by sex between married couples?</i>		
Others	40	1	Yes	3510	88
Unknown	230	6	Don't know	490	12
Total	3821	100	<i>What are they?</i>		
<i>What is AIDS?</i>			Tuberculosis	46	1
Infectious disease	3372	88	Syphilis	104	3
Cancer	221	6	Gonorrhoea	104	3
Normal disease	228	6	AIDS	2184	55
Total	3821	100	Others	869	22
<i>How do people get infected with AIDS?</i>			Don't know	693	17
Having sex with an infected person	3262	85	Total	4000	100
Infected blood	2051	54	<i>Does the use of condoms prevent these diseases?</i>		
Using infected needles	1681	44	Yes	2574	64
From pregnant mother			No	1404	35
to fetus	980	26	Don't know	22	1
Insect bites	259	7	Total	4000	100
Normal daily contact	206	5	<i>What can we do to prevent infection by these diseases?</i>		
Swimming pools/ toilets	147	4	Health education and information campaign	2592	65
Others	54	1	Periodic medical examination	664	17
<i>Can we avoid AIDS infection?</i>			Premarital examination	158	4
Yes	3629	90	Early treatment of diseases	45	1
No	192	5	Facilitate accessibility of condoms	51	1
Don't know	179	4	Don't know	490	12
Total	4000	100	Total	4000	100
<i>Is there a treatment for AIDS?</i>					
Yes	820	21			
No	3001	75			
Don't know	179	4			
Total	4000	100			

\* Excluding 179 women who answered 'don't know'



- 12% did not know about STDs and another 30% only had superficial information about them.
- 35% did not know that using a condom can prevent transmitting diseases through sexual intercourse.

## Discussion

The survey was conducted among a specific target population by means of a questionnaire; this specific population are clients of health service centres which provide family planning and other reproductive health services.

The results showed the differences between the illiteracy rate (21%) and working status rate (25%) and those of the national level. Therefore, the results of this study cannot be generalized for the population of Alexandria. Nevertheless, the results indicate the considerable need for interventions to improve the reproductive health of less educated women and housewives in Egypt. For example, 66% of the women interviewed did not know the term reproductive health. This indicates the need to clarify the term and its concepts. This will necessitate dissemination of information through mass media as well as face-to-face communications.

The survey also shows that 20% of this specific population with a reasonably high education profile still did not know the advantages of breast-feeding over bottle-feeding. Therefore, all workers in the field of primary health care and family planning should initiate activities and programmes to promote breast-feeding.

Although 5% of the women interviewed considered the appropriate age for marriage was between 16–18 years, it was shown that most of those women were illiterate and housewives.

Female genital mutilation (female circumcision) is a deep-rooted traditional practice in Egypt, especially in rural areas. The results of this survey indicate an important positive attitude as 50% of the women believe that it is an unnecessary procedure for girls. It is also shown that among the other 50% who believe it is a necessary procedure, 54% of them attribute its importance to tradition, another 44% think it is important because it controls the sexual behaviour of girls. This suggests that if this problem is addressed in a well-designed programme, it is likely to have an extremely positive impact on attitudes to female genital mutilation.

As expected with this specific group of women, most of them had known about family planning for a long time and believed that family planning was not forbidden. They generally went to professionals for their prenatal care, and they had a 69% contraceptive prevalence rate.

The high percentage of women using IUDs (91%) raised the question about the client's freedom of choice regarding contraceptive method and whether this figure indicated a bias on the part of the service provider. Therefore, a short study was conducted among those clients using contraceptives to compare their intention of using a specific method with the method actually received. It was found that 95% of women received their intended method. A specific study should be conducted to assess the determinants and outcomes of this one-method programme [8,9]. The survey highlights an interesting finding in that mothers and mothers-in-law are not considered obstacles to women using contraceptives.

With regard to the health facility services, the women considered them of a good quality since the service providers treated them courteously and with respect, the service providers were technically competent,

and the health facility was clean. This result confirms again that the quality of care is crucial in order to attract women to use the services of health facilities [10].

Only 2% of the women interviewed had learnt about AIDS from service providers (physicians/nurses). The women generally obtained information about AIDS through the mass media. This figure draws attention to the importance of equipping medical staff with knowledge and skills in order to involve them in the efforts to increase public awareness about HIV/AIDS.

The majority of women interviewed had clear information about what is meant by AIDS. However, three important points were not well known. First, 35% of women did not know that the use of condoms can protect them from contracting HIV as well as other STDs. This is a fundamental fact that should be known by everybody, especially those users of health facilities. This lack of knowledge was confirmed by the almost zero per cent of condom usage amongst the women. Second, many of the women had no knowledge of STDs, or only superficial information, including the method of transmission. Third, 61% of women interviewed still believed it important to segregate persons infected with HIV and to avoid them. Serious efforts should be made to correct this lack of information and associated misconceptions.

## Recommendations

1. A complete programme should be set up to highlight the importance of breast-feeding for infants and mothers, and its advantages over bottle-feeding.
2. A health education campaign should be launched to fight misconceptions, improve knowledge, and change attitudes towards female genital mutilation practices in Egypt.
3. Operations research should be conducted to identify the determinants and assess the outcomes of the high prevalence of IUDs as the sole contraceptive method in the centres studied.
4. Activities to increase awareness about the disadvantages of early marriage should be included in primary health care/family planning centres.
5. The fact that the quality of care is the most critical factor which will enable the primary health care/family planning programmes to attract more clients and improve the reproductive health of women should be widely disseminated.
6. Many women in this group knew little about STDs/HIV and the importance of condoms as an effective method to prevent STDs. It is important to strengthen mass media involvement in AIDS prevention activities as it is the main channel of information for the majority of women in Egypt. Specific messages about condom use in relation to STD/HIV infections should be considered.
7. A comprehensive programme which includes updating training for service providers, extensive information and health education campaigns, and advocacy to support HIV-positive patients should be integrated into the primary health care/family planning system in order to target different population sectors to improve their knowledge and change their attitudes.
8. Other surveys and studies should be carried out which target other important groups of the population such as:
  - women who are not users of health facilities

- women in rural areas
- higher-risk groups such as prisoners, addicts, homosexuals and prostitutes.

These studies will give policy-makers, executing agents and health managers a complete picture about these sensitive issues, and will equip them with the necessary data to set up appropriate health programmes concerned with improving re-

productive health, which involves the prevention of STD/HIV infections.

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