

HIV/AIDS knowledge and attitude assessment among women of child-bearing age in Iraq

Dr. Ashwaq Ridha Abdulsada*¹; Dr. Dalya Talal Fathi Al-Azzawi² Sally Saad Zaidan³;

Dr. Dunya Saad Zaidan⁴

¹ MBChB/FICMS - FM Family Physician specialist, Almustanseryia PHC Training;

² M.B.CH.B,F.I.C.M.S/(FM), Al-Idressi Primary Health care center

³ M.B.Ch.B / Ministry of Health and environment / Baghdad / Iraq

⁴M.B.Ch.B / Al-Sadder Sector / Rusafa Director / Ministry of Health and environment / Baghdad / Iraq

corresponding author: Dr. Ashwaq Ridha Abdulsada

MBChB/FICMS - FM Family Physician specialist, Almustanseryia PHC Training

Abstract:

The study was carried out in the outpatient clinics in Al-Yarmouk teaching hospital in Baghdad city for a period of 5 months extending from January 2020 to May 2021. A total of 400 women were included in the study sample. A systematic random sampling method was used. All married and unmarried women in reproductive age group (15 -50 years) consulting the clinics during the study were eligible for inclusion in study sample. The questionnaire was developed in three main sections: reproductive health related issues, family planning related issues and HIV related issues. The Knowledge regarding HIV/AIDS: (Having heard about AIDS & source of information, Cause of AIDS, Modes of transmission, Segregation of AIDS patients important or not. Results: A significant association between age, occupation and educational level of women with knowledge (hearing) about AIDS ($p < 0.001$). Marital status was not significantly associated with that hearing ($p > 0.005$). the sources of knowledge about AIDS were; 83.8% from mass media (TV/radio), 31.2% from magazine/newspaper, the distribution of women according to their knowledge about AIDS as follow: 58.8 % knew that AIDS is caused by a virus and 82.9% knew it as an infectious disease, as well as about 40.2% said that AIDS is a fatal disease, and 75.1% believed that infected persons should be avoided and segregated. so the modes of AIDS transmission, 90.8 % of women said by sexual intercourse, 59.2% by using contaminated needles. on the other hand, the percentages of women who had misconception about the mode of AIDS transmission were as follow: 24.3% by using toilet and swimming facilities, 21.7 % by eating with AIDS person and 15.6% by insect bite. About diseases classified as STDs: 56.8% said that AIDS is STDs, while 34.8% and 22.8 % of women said that gonorrhea and syphilis respectively are STDs. also, the opinion of these women about using of condom as a method for prevention of transmission of STDs, 58.8% of them didn't know what is the condom, 13.7 % had a negative attitude towards it, only 27.5% of them knew the benefit of using condom in preventing STDs transmission. the ways of prevention of STDs, 61% of women said by avoiding illegal (extramarital) sexual relation, 44.3 % by premarital examination. Conclusions: Sociodemographic variables significantly associated with knowledge towards RH and AIDS, although most of them had good knowledge about AIDS but some of them still had misconceptions about modes of transmission and some of them thought that AIDS persons should be segregated from the community. The majority of women surveyed had poor knowledge about the condom and its role in preventing STDs/AIDS.

keywords: HIV; AIDS; knowledge; attitude assessment; women; child-bearing age; Iraq

Introduction:

Sexually transmitted infections (STDs) and AIDS represent a major public health problem and are the most common causes of illness and even death in the world. The distribution of STDs, within a community is dependant on the sexual behavior of individual within that community as well as efficacy of transmission and duration of infection of STDs [1]. An estimated 340 millions new cases of sexually bacterial infection (most of which are treatable) occur annually. Many are untreated because they are difficult to diagnose and

because competent affordable services are lacking. The sexually transmitted infections are a leading cause of infertility often as a result of tubal blockage caused by an untreated or inadequately treated sexually transmitted infection [2]. A mother with syphilis exposes her children to the risk of pneumonia, prematurity, LBW, and blindness [3, 4]. Human papilloma virus infection is strongly linked to a risk of Cervical cancer. Among the STDs, HIV is a primary public health concern [3].

Twenty five years after the identification of AIDS and 20 years after the discovery of the HIV more is known

about the virus and the natural history of the disease and progress has been made toward control of HIV/AIDS. The incidence is declining in most developed countries and several developing countries including Thailand and Cambodia have been successful in slowing the spread of HIV. HIV can be transmitted only through exposure to infected blood or genital secretion and vertically from mother to infant. Blood transfusion and blood product were a major mode of transmission early in the epidemic but with implementation of blood donation screening and the treating of blood product in many countries blood donation is no longer account for a major portion of infection [1]. The essential to assess the knowledge and attitude of the Iraqi women population concerning different issues related to RH and AIDS. This will then enable us to implement appropriate programs to improve the RH of women and fight the spread of HIV infection. Therefore, the aim of current study was to determine and assess the knowledge and attitude towards reproductive health and HIV/AIDS among women at the reproductive age attending the outpatient clinics of Al-Yarmouk teaching hospital in Baghdad.

Subjects and methods

The study was carried out in the outpatient clinics in Al-Yarmouk teaching hospital for a period of 5 months extending from the first of January 2020 to the May 2021. A descriptive cross sectional study was used to assess the general knowledge of the women regarding different aspects of reproductive health, and assess the effect of certain demographic factors on this knowledge. A special attention was paid to the issues related to HIV infection, A total of 400 women were included in the study sample. A systematic random sampling method was used. All married and unmarried women in

reproductive age group (15 -50 years) consulting the clinics during the study were eligible for inclusion in study sample.

Data were collected through a direct interview after obtaining a consent from each woman for participation in the study. The interview was conducted by the investigator using an interview questionnaire form designed by the investigator, The questionnaire was developed in three main sections: reproductive health related issues, family planning related issues and HIV related issues. Variables regarding women character like age, marital status (married and unmarried), For married women data requested included age at marriage, number of pregnancies and number of live children.

The Knowledge regarding HIV/AIDS: (Having heard about AIDS & source of information, Cause of AIDS, Modes of transmission, Segregation of AIDS patients important or not.

Statistical analysis: was done using SPSS V13. Frequency distribution for selected variable was done first. The statistical significance of difference in mean of a quantitative variable assumes to be normally distributed between two groups was assist by independent sample t- test while between more than two groups ANOVA test was used. The statistical significance of association between two categorist variables was assisted by chi- square test (χ^2). P value <0.05 level of significant was considered statistically significant.

Results

A significant association between age, occupation and educational level of women with knowledge (hearing) about AIDS ($p < 0.001$). Marital status was not significantly associated with that hearing ($p > 0.005$). These finding are shown in table 1.

Sociodemographic variable	Total interviewed	Hearing about AIDS		P-Value
	No.	No.	%	
Age (years)				<0.001
<20	27	15	55.6	
20-29	114	104	91.2	
30-39	126	114	90.5	
40-49	133	113	85.0	
Marital status				0.65^[NS]
unmarried	91	80	87.9	
married	309	266	86.1	
Occupation				<0.001
Housewife	228	178	78.1	
student	23	22	95.7	
working	149	146	98.0	
Educational level				<0.001
Illiterate	45	25	56.8	
Read and writes /primary school	97	75	77.3	
Intermediate/secondary school	112	104	92.9	
Higher education (Institution /college)	146	142	96.6	

Table 2 shows that the sources of knowledge about AIDS were; 83.8% from mass media (TV/radio), 31.2% from magazine/newspaper, 18.5 %

from relatives or friends and only 9.5 % of women said that the PHCC was the source of knowledge and 6.4% from hospital.

Table 2: Distribution of women according to their source of knowledge about AIDS.

Source of knowledge about AIDS	No.	%
Mass media (TV and radio)	290	83.8
Magazine and newspaper	108	31.2
Relatives or friends	64	18.5
PHCC	33	9.5
Hospital	22	6.4
Others	5	1.4

Table 3 shows the distribution of women according to their knowledge about AIDS as follow: 58.8 % knew that AIDS is caused by a virus, 82.9% knew it as an infectious disease, 81.2% knew that they can protect themselves from infection with AIDS, 40.2%

said that AIDS is a fatal disease, and 75.1% believed that infected persons should be avoided and segregated.

Table 3: Distribution of women according to their general knowledge about AIDS.

Variable	No.	%
Cause of AIDS		
Virus	203	58.8
Bacteria	8	2.3
Fungus	6	1.7
Unknown	5	1.4
Don't know	123	35.6
Others	1	0.3
Total heard about AIDS	346	100
Classification of AIDS (what type of disease)		
Infectious disease	287	82.9
Cancer	11	3.2
Others	48	13.9
Total heard about AIDS	346	100
Opinion regarding the possibility of protection from AIDS		
Negative	13	3.8
Positive	281	81.2
Don't know	52	15.0
Total heard about AIDS	346	100
Is death from AIDS inevitable		
Negative	98	28.3
Positive	139	40.2
Don't know	109	31.5
Total heard about AIDS	346	100
Opinion regarding the need for isolating AIDS person from the community		
Negative	34	9.8
Positive	260	75.2
Don't know	52	15.0
Total heard about AIDS	346	100

Concerning the knowledge about the modes of AIDS transmission, 90.8 % of women said by sexual intercourse, 59.2% by using contaminated needles, 40.2 % from mother to fetus and only 16.8% of them said by breast feeding. Those all are correct answer. On the

other hand, the percentages of women who had misconception about the mode of AIDS transmission were as follow: 24.3% by using toilet and swimming facilities, 21.7 % by eating with AIDS person and 15.6% by insect bite. These finding are shown in Table 4.

Knowledge about modes of AIDS transmission	No.	%
Correct knowledge		
Sexual relation with AIDS infected person	314	90.8
Using contaminated needles	205	59.2
From mother to fetus (in utero)	139	40.2
From mother to child by breast feeding	58	16.8
Misconcepts		
Using toilets and swimming facilities	84	24.3
Eating with AIDS person	75	21.7
Insect bite	54	15.6
Total	340	

Table 5 demonstrates the distribution of women according to their knowledge about diseases classified

as STDs: 56.8% said that AIDS is STDs, while 34.8% and 22.8 %of women said that gonorrhoea and syphilis respectively are STDs.

Knowledge about diseases classified as STDs	No.	%
Syphilis	91	22.8
Gonorrhoea	139	34.8
AIDS	227	56.8
Others	61	15.3
Do not know	118	29.5
Total	400	

According to the opinion of these women about using of condom as a method for prevention of transmission of STDs, 58.8% of them didn't know what is the condom, 13.7 % had a negative attitude towards it, only 27.5% of them knew the benefit of using condom in preventing STDs transmission.

Regarding knowledge about the ways of prevention of STDs, 61% of women said by avoiding illegal (extramarital) sexual relation, 44.3 % by premarital examination, 34% by health educational programs, 29.5% by periodic medical examination, 19.8% by early treatment of the disease and only 10 % by using of condom. These findings are presented in table 6.

Using condoms can prevent STDs	No.	%
Negative	55	13.8
Positive	110	27.5
Don't know	235	58.8
Total	400	100
Knowledge about ways of preventing STDs		
Health education programs	136	34.0
Periodic medical examination	118	29.5
Pre-marital medical examination.	177	44.3
Early treatment of the disease	79	19.8
Condom use.	40	10.0
Avoiding extra marital relations	244	61.0

Discussion:

The current study demonstrates that the majority (86.5%) of interviewed women had heard about AIDS. In Morocco 90.6% in Tunisia 89.6%, in Syria 76.2%, in Algeria 68.1%, in Djibouti 78.6%, in Yemen 43.8 % [4], and in Egypt 96% of women had heard about AIDS[5].

The present study shows that there was a positive association between age of interviewed women and hearing about AIDS which indicate that the younger women had less knowledge about AIDS. This result is identical with that of similar study done in India [6]. Young people are at high risk of STDs and HIV for a variety of reasons such as lack of knowledge about STDs, including HIV[7]. The current study reveals that the

rate of hearing about AIDS was significantly associated with education level and employment status. School – based sexuality education programs that have appropriate curricula, adequate time, and trained supportive instructors can help prevent HIV/AIDS and STIs [7]. The higher rate of hearing about AIDS among working women in comparison to housewives may be due to more chances of hearing and discussion of such subjects with other people in the work place.

The interviewed women generally obtained their information about AIDS through TV/Radio. This finding corresponds to the finding of other studies in Egypt [5] and Al-Yemen [8], So this indicates that TV/Radio were the best channels for education about AIDS and other related issues. The minimum role played by PHCC and hospital in this regard draws attention to the importance of equipping medical staff to increase public awareness about HIV/AIDS.

The present study showed that more than half of surveyed women knew that the cause of AIDS was virus and more than 80% of them knew that AIDS is an infectious disease. These results are compatible with the study done in Egypt [5].

More than 80% had a positive opinion regarding the possibility of protection from AIDS.

In general, these findings indicate that the majority of women had a clear knowledge about the cause and the meaning of AIDS. However, 3/4 of women believed that there is a need to segregate infected persons and to avoid them. This result is similar to that of the study carried out in Egypt [5]. These negative attitudes towards HIV/AIDS infected people can lead to an unsafe atmosphere with grave consequences for patients living with AIDS, therefore, there is a need to develop positive attitude in term of provision care and support of these patients.

In the present study, the majority of women (90%) knew that AIDS transmission occurs by sexual intercourse, 59% by using contaminated needles and 40% by transmission from mother to fetus (in utero) and only 16.8% knew that the BF is one of the modes of transmission. However, 24.3% of women considered using toilets and swimming pools as a mode of transmission, 21.7% by eating with AIDS person and 15.6% by insect bite, which are misconceptions regarding transmissions of HIV virus.

A similar study, done in Iran showed that there were misconceptions also regarding modes of transmission; 35% by insect bite, 21% by public swimming pools, and 20% by public toilets [9].

The women's knowledge about types (causes) of STDs in this study was very poor. This is comparable with the finding of the study in Egypt which showed that the majority of women had no knowledge about STDs or only superficial information [5].

In South Africa the knowledge level was high regarding causes and spread of STDs and about protection against it [10].

Women's knowledge about the use of condom as an important protective measure against STDs and AIDS was very poor and only 27.5% of them agreed with the

fact that condom is very effective method in prevention from STDs and AIDS [11], about 13.7 % had negative ideas about it and they thought that it even increases women's infection with STDs and it harms the man.

More than half of the interviewed women knew that avoiding extramarital relations can prevent transmission of STDs and more than one third of them said, premarital examination and health education protect against it. These women lack information about the effect of using condom as a method for prevention of STDs.

The limitations encountered during the work were: some of women refused the interview, others didn't complete the answers; the security condition in Baghdad limited attending the outpatient clinics, library, internet, and the college in the correct time.

Conclusions

- 1- Age of women, educational level, employment status and marital status of women were the sociodemographic variables significantly associated with knowledge towards RH and AIDS.
- 2- The majority of interviewed women had heard about AIDS and most of them had good knowledge about the cause of it and knew that the AIDS is an infectious disease which can be prevented.
- 3- Although most of them had good knowledge about AIDS but some of them still had misconceptions about modes of transmission and some of them thought that AIDS persons should be segregated from the community.
- 4- The majority of women surveyed had poor knowledge about the condom and its role in preventing STDs/AIDS.

References:

1. A M, C. F. sexual transmitted infection .In: Detels R, Mcerwe J, Beaglehole R, and Heizo T. Oxford Text book of Public Health . 4th edition. United States. Oxford university press. pp.1440-1480. . 2002.
2. Programme UNP, Fund UNP, Bank W, et al. Long-term reversible contraception: twelve years of experience with the TCU380A and TCU220C. *Contraception*. 1997;56(6):341-52. [https://doi.org/10.1016/S0010-7824\(97\)00186-8](https://doi.org/10.1016/S0010-7824(97)00186-8).
3. Pawar D, Shaiju B, Khan F. A Study to Assess the Psychological Status, Social and Health System Support to the Women who are Undergoing Infertility Treatment. *International Journal of Nursing & Midwifery Research (E-ISSN: 2455-9318)*. 2020;7(2):11-5. <https://doi.org/10.24321/2455.9318.202012>.
4. Bhatia B, Kavar M, Shahin M. Women's Survey: The Impact of the Gulf Crisis on the Women in Iraq'. *International Study Team, Health and Welfare (October 1991)*. 1991.
5. Mageid A, S E, M. EGMaEA. Knowledge and attitude about RH and HIV/AIDS among family planning clients. *Eastern Mediterranean Health Journal*, 1996. 2 (3). 459 -469 1996. <https://doi.org/10.26719/1996.2.3.459>.
6. Gupta N, Mathur AK, Singh MP, et al. Reproductive health awareness of school-going, unmarried, rural adolescents. *The Indian Journal of Pediatrics*. 2004;71(9):797-801. <https://doi.org/10.1007/BF02730716>.

7. Goel M, Seth U. Reproductive health education for adolescents: Parents' outlook. *IJAR*. 2021;7(1):422-7. <https://doi.org/10.22271/allresearch.2021.v7.i1f.8223>.
8. Al-Serouri AW, Takioldin M, Oshish H, et al. Knowledge, attitudes and beliefs about HIV/AIDS in Sana'a, Yemen. *Eastern Mediterranean Health Journal= La Revue de Sante de la Mediterranee Orientale= Al-majallah Al-sihhiyah Li-sharq Al-mutawassit*. 2002;8(6):706-15. <https://doi.org/10.26719/2002.8.6.706>.
9. Tavoosi A, Zaferani A, Enzevaei A, et al. Knowledge and attitude towards HIV/AIDS among Iranian students. *BMC public health*. 2004;4(1):1-6. <https://doi.org/10.1186/1471-2458-4-17>.
10. James S, Reddy SP, Taylor M, et al. Young people, HIV/AIDS/STIs and sexuality in South Africa: the gap between awareness and behaviour. *Acta Paediatrica*. 2004;93(2):264-9. <https://doi.org/10.1111/j.1651-2227.2004.tb00718.x>.
11. Zenilman JM, Weisman CS, Rompalo AM, et al. Condom use to prevent incident STDs: the validity of self-reported condom use. *Sexually transmitted diseases*. 1995;15-21. <https://doi.org/10.1097/00007435-199501000-00003>.