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Household Survey of Knowledge, Attitudes and Practice of Housewives regarding HIV/AIDS Khartoum North, Sudan February 2009

Author:

Nuha Kamal Ali Ahmed

Medical student, University of Medical Sciences and Technology

Correspondence: E-mail: nuhakamal@hotmail.com

Tel: 0916908484

Staff Supervisors:

Dr. Salma M. M. Kanani

Assistant Professor of Community Medicine Community Medicine

INTRODUCTION

The belief that HIV is a form of punishment only to sexually promiscuous or unfaithful individuals may incline married women to believe themselves totally unsusceptible to its unbreakable clutches. Literature review, however, indicates that they may be very much mistaken.

Over 80% of women living with HIV in India are thought to have been infected by their husbands. A study of 400 women attending an STI clinic in Pune, India showed that: 25% were infected with STIs, 14% were HIV positive, 93% of these women were married and 91% of which had not had sex with anyone other than their husbands.[1] Another study in South India conducted on HIV infected females concluded that 81% were housewives; 95% were currently or previously married; 89% reported heterosexual sex as their only HIV risk factor; and 88% reported a history of monogamy.[2] In Morocco one third of women diagnosed with AIDS were married.[3] A study of HIV-positive women hospitalized in a public

maternity ward in Rio de Janeiro revealed that the majority were housewives.[4] People Living with HIV/AIDS (now known as SLWHA) is an organization for victims of HIV living in Sudan. From the many women that are members, the vast majority claim that they contracted HIV from their husbands.

To date, there are few, if any, published studies that explore the knowledge, attitude and practice of housewives regarding HIV, despite the fact that they are pivotal to the dynamics of HIV spread within any given society. Before targeting them with health awareness campaigns it is imperative that their current levels of knowledge are assessed.

OBJECTIVES

1. To assess knowledge, attitudes and practice of housewives in Al-Danagla North and Al-Amlak in Khartoum North, Sudan with regards to HIV/AIDS
2. To determine the prevalence of condom-use among housewives
3. To assess perceived ability of the housewife to negotiate HIV/AIDS testing and condom use with her husband

METHODS

Participants

Participants consisted of 200 housewives living in Al-Danagla North (n=111) and Al-Amlak (n=89) who met the following criteria and also gave their verbal consent:

Inclusion criteria	Exclusion criteria
<ul style="list-style-type: none"> • Between the ages of 15 – 49 • Married • Housewife • Subject is available in her home at the time of study 	<ul style="list-style-type: none"> • Divorced/widowed/separated women • Women with full/part time jobs outside their homes

Measures

The questionnaire included socio-demographic variables related to both the housewife and her husband such as age, socioeconomic status and level of education.

Knowledge



In order to assess the housewives knowledge, they were asked whether they have heard about HIV/AIDS, to differentiate between the modes that actually transmitted HIV from those that don't, to mention 3 preventive measures and to answer yes, no or don't know to a series of statements which were designed to cover the areas most associated with misconceptions.

Attitude

Attitude was assessed with the following questions: Do you think your knowledge on HIV/AIDS is sufficient? On a scale of 0 – 10, how much at risk are you of acquiring HIV? Do you want to test for HIV? Do HIV patients deserve the disease? How would you interact with an HIV positive neighbour? Can you discuss HIV testing and/or condom use with your husband?

Practice

Practice regarding HIV testing and condom use was assessed.

Procedure

The study is a complete coverage cross-sectional community-based study, completed between the 2nd and 14th of February 2009. The aforementioned provinces were chosen randomly from a list of all the provinces in Khartoum North. A semi-structured questionnaire was used by the researcher while interviewing the housewives who were assured anonymity. The data was thoroughly checked for mistakes and then analyzed using Statistical Package for Social Sciences (S.P.S.S) version 11.0 and presented with Microsoft Office Excel 2003.

RESULTS

A total of 200 housewives were involved in this study. Their ages ranged from 19 – 49 with a mean age of 36.39 years and SD 7.98. Regarding the housewives' level of education, the majority (53.5%) had studied up to secondary school. Just over a third of housewives (35.5%) were university graduates. 87.0% of housewives were identified as being of 'Lower' socioeconomic status.

Knowledge regarding HIV/AIDS

100% of the housewives have heard about HIV/AIDS.

Knowledge on the modes that transmit HIV was good with correct answers ranging from 100% (sex) to 86.5% (vertical transmission). However, 61.0% of the housewives did not think that breastfeeding could transmit HIV. Knowledge regarding the modes that do not transmit HIV was noticeably lower, as can be seen from Table 1.1

Mode	Yes	No	% correct
Shaking hands	13	187	93.5
Mosquitoes	53	147	73.5
Vertical transmission	173	27	86.5
Breastfeeding	78	122	39
Coughing	31	169	84.5
Contaminated Sharp Objects	193	7	96.5
Sharing food	17	183	91.5
Sex	200	0	100
Blood transfusion	199	1	99.5
Crowded area	22	178	89

Table 1: Knowledge on Modes of HIV Transmission

Statement	Yes	No	Don't Know	Missing entry	Total
Cure for AIDS	24	169	7	0	200
STI and HIV correlate	100	70	30	0	200
Healthy and HIV positive	176	22	2	0	200
Condoms protect against HIV	115	42	43	0	200
Contraceptives protect	3	188	9	0	200
Contract HIV from spouse	196	3	0	1	200
Understand concept of VCT	44	156	0	0	200
Location of VCT in Khartoum	54	146	0	0	200

Table 2: Knowledge on HIV/AIDS, response to statements

Only 57.5% however knew that condoms protect against HIV. The minority of them understood the





concept of VCT (22.0%) and knew the location of at least one centre in Khartoum State (27.0%).

When asked to mention 3 HIV preventive measures, 64.8% mentioned 3 correct answers while only 5 housewives couldn't mention any. There was one missing entry. 66.3% (n=132) mentioned avoiding contaminated sharp objects such as razors, 57.7% mentioned screening blood prior to transfusion, 40.7% mentioned that sex should only be within marriage ("Halal sex") but only 6.5% mentioned condom use ("Safe sex") as a preventive measure (n=13).

The housewives' overall scores for essential knowledge on HIV showed that 76.5% (n=153) scored 16 and above from a maximum score of 22. The scores had a mean of 16.98 and ranged from 10 - 22 (SD 2.39), only one housewife scored full marks.

As a source of information for HIV/AIDS the media contributed to the knowledge of 84.0% of the housewives, with the majority (64.0%) receiving most of their information from the television.

Attitudes regarding HIV/AIDS

64.0% of housewives (n=128) believed that their knowledge on HIV/AIDS is sufficient for them to be able to protect themselves and their families.

45.5% of housewives believed that HIV patients 'brought the disease upon themselves' and therefore they deserve the affliction.

81.5% of housewives declare that they would interact normally with a neighbour who has HIV/AIDS, 42.5% of which would exercise some caution for fear of transmission. Only 8.0% say that they would stop all communication and avoid their neighbour completely.

As is shown on Figure 1, 111 (56.6%) housewives believed that their level of risk is zero i.e. it is impossible for them to get HIV. There were four missing entries.

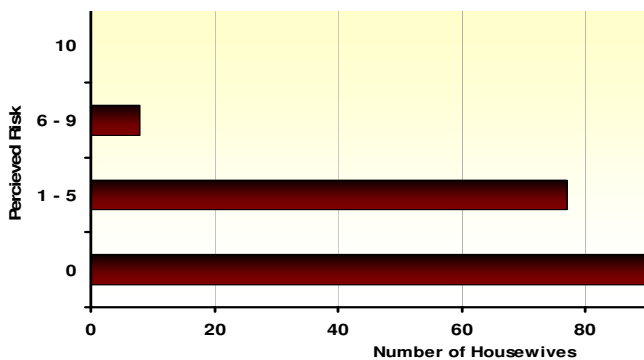


Figure 1: Perceived Risk of HIV Acquisition

89.1% of the women who chose zero, reasoned that they are married and that they avoid all the risk factors such as sharing needles and razors. Six housewives said that they have zero risk as they are confident that they are negative. 39.2% believed themselves to be at low risk (1 - 5) because of factors that they cannot control such as needing a blood transfusion in the future (n=76). Eight housewives believed themselves at high risk of acquiring HIV (6 - 9)

Practice regarding HIV/AIDS

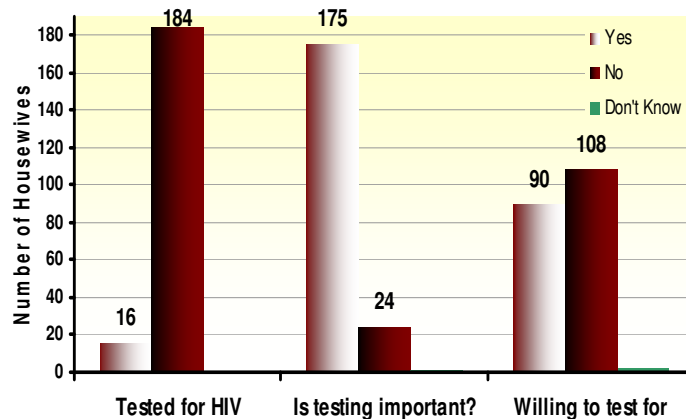


Figure 2: Voluntary Counseling and Testing for HIV

Figure 2 illustrates that only 16 housewives have been tested for HIV. 92% are therefore unaware of their HIV status. 88% agreed that voluntary testing is important for everyone, yet only half that figure (45%) said that they are willing to be tested for HIV. From the remaining 54% (n=108) 77% reason that they are fine and that there is no need for the hassle. 9% claimed that if they were to be HIV positive they would rather not know and 6% 'just don't want to do it'.

114 housewives (57.0%) are currently using contraceptives. The majority use natural methods (37.7%) followed closely by contraceptive pills with 32.4% of housewives using them now. Only four housewives are using condoms.

Only 22.5% of housewives have ever used condoms in the past. From the 63.5% (n=127) that have never used it, 50.3% said that it was because they prefer to use other methods, 10.2% said that it was because neither her nor her husband like condoms and 5.5% don't trust it as they believe it has high failure rates. There are seven missing entries.

Six housewives reported failure including rupture of the condom and pregnancy.



27.6% of housewives have discussed condom use with their husbands, and only 5.5% have ever discussed VCT; however 85.0% are willing to discuss these topics with them. The barriers that prevent the wives from discussing these topics with their husbands, in 63.2%, stem from the wife herself. 56.6% of them believe that there just isn't a need to open up such a topic, and 6.6% don't want to discuss it themselves, regardless of what their husbands might say. A third of the wives wouldn't initiate a discussion with their husbands for fear of the problems that might arise, especially if the husband believes that the wife is suspecting infidelity on his part.

A total of 169 women replied to the question: "If you were to discuss condom use with your husband, what will be his response?" The remaining 31 did not know what condoms were.

103 wives (60.9%) believed that their husbands will agree to using condoms if they ask them to, and a similar figure (n=106) believed that their husbands will agree to go and test for HIV, while 47.0% of them will refuse.

From the 85 wives who expected obstacles to occur during the discussion, 50.5% of them claim that the discussion in itself will not be a problem but the husband will just simply not agree. 45.8% of the women believe that their husbands will think that the topic was raised either because she believes he is being unfaithful or that she herself has done something wrong.

DISCUSSION

Knowledge of Housewives on HIV/AIDS

Contrary to the first hypothesis, the housewives' knowledge regarding HIV/AIDS was unexpectedly good. 100% of the housewives had heard about HIV/AIDS and 77% of them scored 75% and above when assessed for their information on this disease.

Inner-city women of reproductive age in Ohio, America were studied in 1990 and 85% of them were found to know that condoms offered protection against HIV.[5] However, only 58% of the housewives, in 2009, knew this information. This finding indicates that mass scale condom promotion in Sudan has not yet taken place. However, this figure is comparable to that of other studies done in developing countries where only 55%[6] and 59%[7] of females cited condom use as a protective measure. The housewives lack of knowledge in this area is also reflected by the fact that only 7% of them mentioned that safe sex is

protective against HIV, whereas 41% mentioned 'halal sex' (i.e. intra-marital sex) despite the fact that 98% of housewives said HIV can be transmitted between spouses. This supports the second hypothesis that they still perceive HIV/AIDS to be a disease of those 'gone astray' and not a disease of faithful housewives. The danger of this is that the housewives will develop a false sense of security that they are by no means susceptible to acquiring HIV, and indeed this is confirmed by the finding that 57% believe that it is impossible for them to acquire HIV since they are 'married and taking good care' of themselves. Knowledge was not found to correlate with age, however there was weak but nonetheless significant ($p=0.004$) positive correlation between knowledge and the level of education of the housewife, where higher levels of education were associated with higher knowledge scores.

84% of the housewives acquired their knowledge on HIV/AIDS from the media, with 64% via watching television. Television, therefore, is a direct connection to housewives as it is available in so many houses and is viewed frequently by them. However, a possible barrier which may hinder this is the finding that 64% of the housewives believe that their knowledge on HIV/AIDS is sufficient. This may lead them to disregard future health awareness programs targeted towards them as they believe that they already know enough. It is therefore important to realise the extent of their current knowledge to make sure that the information provided is both new and interesting to them.

Attitudes of Housewives with regards to HIV/AIDS It can be deduced that the housewives' knowledge on the actual modes of HIV transmission was better than their knowledge on the ways that HIV is not transmitted. Good knowledge on the ways that HIV is transmitted allows for better individual prevention, whereas knowledge on the ways that HIV is not transmitted is crucial to facilitate comfortable interaction with HIV victims. To illustrate this, it was found that housewives who knew that being in a crowd and coughing does not transmit HIV were 5 and 7 times more likely, respectively, to claim that they would interact normally with their HIV positive neighbour ($p=0.001$ and $p=0.000$ respectively).

Practice of Housewives with regards to HIV/AIDS Despite their high level of awareness, housewives are yet to implement this knowledge and progress from theory onto practice. The core reason for this





is perhaps the housewives' assumption that they are not at all at risk, and therefore 'practice', while being a necessity for other people, is an irrelevant hassle to them. With regards to HIV testing, both knowledge and practice among housewives were found to be very low. Four fifths of housewives did not know that VCT is a free and confidential blood test for HIV which involves pre and post-test counselling, and only 27% of housewives knew the location of at least one centre in Khartoum North. In terms of practice, as was hypothesised, only 8% of housewives have previously tested for HIV.

Although 88% of housewives agreed that VCT is important for everyone, the percentage of housewives willing to be tested is only 45%. 77% of the unwilling housewives explained that they are fine and hence there is no need to test for the disease, despite the fact that 84% of these same women stated that a person can be HIV positive and still remain perfectly healthy. Again these figures reflect on the housewives' mentality and their sense of individual detachment from the reality of HIV.

With regards to condom use, literature review revealed that in several low and middle-income countries condom use was only 5%.[8] This study reiterates this figure as 2% of all housewives and 4% of those currently using contraception are using condoms.

Very small minorities of the housewives have discussed condom use previously with their husbands and an even smaller percentage has discussed VCT. However 85% are willing to discuss these topics with them. The barriers that prevent 15% of the wives from discussing these topics with their husbands, in 64%, stem from the wife herself: 57% of them believe that there just isn't a need to open up such a topic, as they do not consider HIV to be an issue that affects their personal life. A third of the wives wouldn't initiate a discussion with their husbands for fear of the problems that might arise, especially if the husband believes that the wife is suspecting infidelity on his part or that she is trying to confess to unfaithfulness herself. A similar worry was also discovered in Brazilian women who admitted to not using condoms due to fear of being suspected of infidelity and because this might lead to separation of the couple.[9]

Determinants of perceived acceptance of the husband towards condom use were: housewife level of education ($r=0.3$ $p=0.000$), husband level of education ($r=0.3$ $p=0.001$) and more

significantly, if the housewife knows that condoms are protective against HIV ($r=0.6$ $p=0.000$). This suggests that if woman acquire sufficient information they are more likely to convince their husbands since they comprehend the importance of e.g. condom use. This is also supported by the fact that women who knew that condoms protect against HIV, were 3 times more likely to have discussed condom use with their husbands ($p=0.000$) than women who did not know this fact or were unsure.

CONCLUSION

This study indicates that for housewives in Khartoum North the transition from theoretical knowledge to applied practice is still not a reality. Although the housewives understand the magnitude and dangerousness of HIV, they fail to see themselves as vulnerable to it since to them the four walls of their homes and their monogamous relationship with their husbands are enough to keep them far away from the obstinate hold of HIV. Thus they lack the motivation to protect themselves more actively.

The importance and benefits of empowering women generally and housewives specifically in matters pertaining to their health must be realised. Housewives can assume an active role, examples of which include: educating their children about the disease and raising them to be tolerant, faithful and pious adults. Furthermore, motivated housewives can extend their knowledge beyond the boundaries of their immediate family onto their neighbours and friends during everyday interaction. The housewives can also facilitate HIV testing for all their family members and take the appropriate measures according to the results.

Currently, their knowledge is of a good standard but certain gaps must be filled and there are aspects to be stressed. Such areas include: the protective role of condoms, the different ways that HIV can be transmitted from a mother to her child, the concept and steps of VCT and the location of testing centres in Khartoum. Many women expressed a desire to test but were afraid of how society, and even their husbands, will view this matter. These barriers should be addressed with mass media campaigns designed to encourage people to test for HIV and to assure them that the test is free and confidential. As soon as HIV testing becomes commonplace, the true magnitude of





HIV/AIDS in Sudan will be revealed and only then can this plague be effectively combated.

Although it is physically exhausting to reach housewives in person, they can easily and effectively be targeted via television. Anti-HIV campaigns must, however, focus on different areas to those addressed in the past so as not to seem repetitive and dull to the housewives. Discussions on the role of housewives in combating HIV, how they can protect their children and family, the importance of HIV testing and discussion on the social barriers that prevent open testing will certainly attract the housewives' attention and empower them to take positive action to insure their, and their family's, wellbeing.

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