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Enhancing Knowledge of Married Couples Regarding Sexually Transmitted Diseases

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Abstract

Background: Sexually Transmitted Diseases (STDs) are a major health problem that affects mostly couples, not only in developing but also in developed countries. The study aimed to enhance knowledge of married couples regarding sexually transmitted disease and used a quasi-experimental design. **Setting:** at Al- Saff Central Hospital (Obstetrics and Gynecological Clinic) and Dermatological and Venereological Clinics. **Sample size:** 70 married couples and a purposive sample used in the study .**Tools:** one tool was used; **tool I: A structured interviewing questionnaire,** consists of two Parts **part I:** socio- demographic characteristics assessment sheet, **part II:** knowledge assessment sheet regarding sexually transmitted disease. **Results:** showed that most of the married couples pre the study have deficit knowledge regarding sexually transmitted diseases, which is improved post and after 3 months. **Recommendations:** design periodic workshop regarding premarital counseling for early detection of STDs.

Key words: Knowledge, Married couples, Sexually transmitted diseases.

I- Introduction

Sexually transmitted infections defined as infections spread by sexual activity, especially vaginal intercourse. Bacterial STIs include chlamydia, gonorrhea, and syphilis. Viral STIs include genital herpes, HIV/AIDS, and genital warts. Parasitic STIs include trichomoniasis. Symptoms and signs of STIs may include vaginal discharge, penile discharge, ulcers on or around the genitals, and pelvic pain. Some STIs can cause infertility some vaccinations may also decrease the risk of certain infections including hepatitis B and some types of HPV. Most STIs are treatable and curable; of the most common infections, syphilis, gonorrhea, chlamydia, and trichomoniasis are curable, while HIV/AIDS is not curable.(3)

Sexually transmitted infectious agents cause a wide array of complications in the short-, medium-, and long-term, especially among women. Specifically, infection with these agents can result in sterility, infertility, genital neoplasia, pre-term delivery, and foetal/neonatal pathologies, and the agents most commonly associated with these complications are: Neisseria gonorrhoeae, Chlamydia trachomatis, anaerobic bacteria, Ureaplasma urealyticum,

Gardnerella vaginalis and human papilloma virus (HPV), which is involved in the etiology of squamous genital carcinomas. This report describes several of the mechanisms involved in the damage to genital and reproductive organs, focussing on those mechanisms involved in the damage caused by delayed autoimmune response.(6)

Clearly, messages about safer intercourse as are currently delivered are either not reaching their target group or are not being understood and this is the cause for concern for nurses working with married couples, particularly in





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Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

areas such as sexual health and adolescent health, married couples have health care needs related to sexuality. The healthcare needs that are most obvious are the need for prevention and treatment of all types of infections regarding sexually transmitted diseases. Although provides may have questions related to sexual intercourse, sexual orientation, sexual practices, sexual satisfaction, so the nursing role is a very critical and important for support married couples needs and introducing the specific health education.(10)

Nursing role aimed to reduce transmission of STIs among married couples through educated the married couples all knowledge that prevent STDs as definition, causes, types, risk factors, incubation period, signs, symptoms, management and educated the married couples all procedures that prevent occurrence sexually transmitted infections as hygienic care and correct using male and female condom.(21)

II- Significance of the study

Worldwide In 2023, More than 1 million sexually transmitted infections (STIs) are acquired every day the majority of which are asymptomatic, Each year there are an estimated 374 million new infections with 1 of 4 curable STIs: chlamydia, gonorrhoea, syphilis and trichomoniasis. In Egypt remains a low HIV prevalence country with evidence of a concentrated epidemic among people who inject drugs in Cairo and Alexandria. HIV in Egypt remains relatively low (19,000 by the end of 2023) compared to the total population, Egypt is reported to have the fastest growing epidemic in the Middle East and North Africa Region (MENA) by a 76% increase in number of cases between 2012 and 2023.(20)

Aim of the study

The aim of current study was to enhance knowledge of the married couples regarding sexually transmitted diseases through the following objectives:-

- 1) Assess married couples' knowledge regarding sexually transmitted disease (pre and post)
- 2) Apply educational sessions of married couples' knowledge regarding STDs.
- 3) Evaluate effect of the educational sessions of married couples' knowledge regarding STDs.

Research Hypothesis:

The married couples' knowledge regarding sexually transmitted diseases will be improved after implementing of the educational sessions.

III- Subject and method

Research design:

A Quasi-experimental research design was used in the current study (selected one group) (pre and posttest).

Setting:

Conducted in Obstetrics and Gynecology Clinic and Dermatological and Venereological Clinic at Al - Saff Central Hospital.

Sampling:

Sample size and technique:

Seventy married couples who attend to Obstetrics and Gynecological clinic, Dermatological and Venereological Clinic at Al-saff Central Hospital for over a period of six months and purposive sample was used in this study.

Tools for data collection:

One tools were used to collect the data with inclusion criteria (Married couples or one of the couple who attend one of the previous clinics, both or one of the couple diagnosed or under treatment of any type of STDs).





Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Tool 1: A structured interviewing questionnaire

This tool was developed by the researcher in English language and translated into a simple Arabic language to assess knowledge of the married couples regarding sexually transmitted disease. It consists of two parts:

Part (1): Socio-demographic characteristics assessment sheet.

This part developed to cover the married couples' socio demographic characteristics as age, educational level, work status, residence, family income and contact methods.

Part (2): Knowledge assessment sheet.

This part is developed to assess married couples' knowledge regarding sexually transmitted diseases pre, immediately post and after 3 months. Questions was open ended and multiple choice and the assessment sheet includes 17 questions.

Level of knowledge (Scoring system)

Knowledge obtained from married couples (husbands and wives) was scored and calculated. According the answers, their answers were evaluated by using the model key answer sheet which prepared by the researcher. According to open ended questions, 13 questions ranged from 1-2 grades, where correct answers scored (2) and incorrect answers scored (1). According to multiple choice questions, were 4 questions, 3 questions related to married couples had past infection, scored (2) to married couples had past infection and scored (1) to married couples hadn't past infection and the fourth question scored (2) for married couples had a source of information regarding STDs and scored (1) for couples hadn't a source of information regarding STDs. The items for assessing the knowledge (17) items (questions) and the total knowledge scores (34) classified into:-

- "Poor knowledge" when achieved <50%
- "Fair knowledge" when achieved 50% <75%
- "Good knowledge" when achieved >75%

Validity:

Validity was conducted to determine whether the tools cover aims and testing validity was required by a panel of five experts in obstetrics and gynecological nursing field to test the face and content validity. Each of the experts was asked to examine tools for content coverage, wording, length, format and clarity.

Reliability:

Reliability was estimated among participant married couples by used alpha cronbach test, atfirst tool was 0.87.

Ethical considerations:

- The research ethical considerations in the study was maintained through an official permission was obtained from the scientific research ethical committee Faculty of Nursing -Helwan University before conduction of the study.
- Written approval letter was sent to the director of EL-Saff hospital, including the aim of the study.
- Written consent was obtained from each married couples (husbands and wives), all studied samples were informed about their rights as refusal of participation or withdraw at any time in the study without explanation and that information was treated confidentially.
- Data was only used for study and Ethics, values, culture and beliefs was respected.

Pilot study:

Pilot study was carried out on 10% of the studied married couples (7 husbands and wives) in order to test and ensure the applicability, clarity and the efficiency of the tool. Also to ensure simplicity, relevance and feasibility of conduction of the study tools. In addition, it used to estimate of the time needed to collect data and determine the obstacles for data collection and based on results of the pilot study.





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Field work:

The study was I mplemented in the following four phases:-

First: Assessment phase

- It was include reviewing of past, current, national and international related literature and theoretical knowledge of various aspects of the study using books, articles, internet, periodicals and magazines to develop tool for data collection.
- The researcher prepared the study tools and design booklet of knowledge regarding STDs and checked the suitable and comfortable place for conducting the study.
- Groups of married couples were asked to fill questionnaire for socio-demographic data that consumed time 5 minutes.

Second: Planning phase

- Design content of the educational sessions for married couples' knowledge regarding sexually transmitted disease.
- Based on the baseline data obtained from the married couples before implementing the educational sessions of the study and using the current literature, choosing the appropriate teaching methods in the form of demonstration and redemonstration and choose appropriate media in the form of videos, PowerPoint presentation for clarification the knowledge regarding STDs

Third: Implementation phase

The researcher went to the hospital two days a week for 4 hours from 10 am to 2 pm for six months to collect data.

Data collected from two clinics of Obstetrics and Gynecological Clinics and one clinic for Dermatological and Venereological Clinic from the first of April 2023 to the end of December 2023 to collect data.

- The researcher introduced himself to the staff of two clinics and to selected married couples and explained aim of the current study.
- ✤ At the beginning, the researcher selected married couples according to inclusion criteria after their diagnosis with any types of STDs, this step was done by the cooperation with a high qualified female nurse worked as a head nurse for outpatient clinics at Al-Saff hospital.
- The researcher interviewed with married couples and explained the aim of the study and obtained the consent regarding conducting the study.
- Groups of married couples were asked to fill questionnaire for socio-demographic data then knowledge sheet regarding STDs.
- According to knowledge, married couples attended 2 sessions including all knowledge regarding STDs as definition, causes, types, complication, risk factors and time of each session 15 minutes and each session include 1-2 groups of married couples.
- At the beginning of the first session, the researcher supported every groups of married couples with booklet contains on all knowledge regarding (STDs, male condom checklist, female condom checklist, care of the male genital area and its surroundings checklist and women perineal care checklist) and used power point presentation, video during sessions to help the married couples for quick retention of knowledge.
- The first session consumed time 30 minutes and included knowledge regarding STDs as(definition, causes, signs and symptoms, types, incubation period and modes of transmission) and followed by break for 5 minutes which researcher and assistant female nurse introduced water and juice for married couples, then started the second session
- The second session consumed time 30 minutes and included knowledge regarding STDs as (complications, investigations, prevention methods, immunization and treatment) and followed by break for 5 minutes, then starting the practice session.
- During the sessions, the researcher used group discussion as teaching strategies methods to exchange knowledge between the researcher and every group of married couples and assistant female nurse worked as facilitator for





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: <u>https://hijnrp.journals.ekb.eg/</u> collecting questions of the married couples, answering some wives questions, collecting questionnaire pre and post and manage any limitations.

- After end of the first and second sessions, the researcher was making a summary for essential points and feedback as well as makes a time for any special individual question.
- After end of the 2 sessions, married couples were asked to fill questionnaire as (post- test) to measure the level of knowledge regarding STDs.

Fourth: Evaluation phase

Immediately post intervention: It done for each married couples (husbands and wives) for assessing their acquisition of knowledge regarding sexually transmitted diseases (STDs).It contained the same questions as in the pre intervention.

Follow up: after 3 months another posttest done after post intervention to assess the retention of good knowledge regarding STDs

I- Statistical Items:

-The collected data was organized, analyzed and tabulated using appropriate statistical significant tests. Data was entered and analyzed by using SPSS (Statistical Package for Social Science) statistical package version 22. Graphics were done using Excel program.

Quantitative data were presented by mean and standard deviation (SD).

-Qualitative data were presented in the form of frequency distribution tables, number and percentage. It was analyzed by cochran test (Q) test and p value and used spearman coefficient(R) for total correlation between variables.

Significance of results:

- When p > 0.05, it is statistically insignificant difference.
- When p <0.05, it is statistically significant difference.
- When p <0.01 or p<0.001. it is high significant difference.

IV-Results

Table (1) illustrates that the mean age of the studied husbands are (30.2 ± 1.7) years for all age groups and about the two third aged between (20-40) years .Regarding educational level about one quarter were read & write (25.7%).As regard to work status, majority of the studied husbands are working (84.3%) and (15.7%) haven't work due to lack of work opportunities. According to the residence more than half (57.1%) live on rural area and less than half (42.9%) live on urban area.

Table (2) shows that half of studied wives aged between (20-30) years with mean of (27.2 ± 1.3) years for all age groups. Regarding educational level more than one quarter (28.6%) can't read and write. As regard to work status, more than two thirds (71.4%) are house wife. According to the residence more than half (57.1%) live on rural area and less than half (42.9%) live on urban area.

Table (3) reveals that less than half of the studied husbands (45.7%) have a candida as a current diagnosis regarding STDs and more than one third (37.1%) have chlamydia, while the others studied husbands have different diagnosis as Gonorrhea (8.5%), hepatitis B(4.2%), syphilis(1.4%) and herpes(2.8%).

Figure (1) shows that more than half of the studied husbands pre application have a correct definition regarding STDS and this knowledge due to the past infection with STDs and most of the studied husbands immediately post and after 3 months have correct definition regarding STDs.







Vol. 3, Issue 6, Month: June 2024, Available at: <u>https://hijnrp.journals.ekb.eg/</u>

Table (4) reveals that most of the studied husbands pre the study have deficit knowledge regarding STDs as cuses, types and modes of transmission which the mean total knowledge score was 4.1 ± 1.9 and most of the studied husbands immediately post and after 3 months have good knowledge, which the mean total knowledge score increased to 12.8 ± 2.2 immediately post and 11.9 ± 2.4 after 3 months and the difference was highly significant (p<0.0001).

Table (5) reveals that most of the studied husbands pre the study have deficit knowledge regarding STDS as symptoms, incubation period, investigation and complications of STDs which the mean total knowledge score was 4.8 ± 2.2 and most of the studied husbands immediately post and after 3 months have good knowledge which the mean total knowledge score increased to 14.8 ± 1.2 immediately post and 13.9 ± 4.3 after 3 months and the difference was highly significant (p<0.0001).

Table (6) shows that most of the studied husbands pre the study have deficit knowledge regarding management of STDs as medical treatment, prevention methods and management of STDs which the mean total knowledge score was 3.8 ± 2.1 and most of the studied husbands immediately post and after 3 months have good knowledge which the mean total knowledge score increased to 11.8 ± 1.2 immediately post and 10.9 ± 2.3 after 3 months and the difference was highly significant (p<0.0001)

Table (7) reveals that less than half of the studied wives (41.4%) have a candida and more than one third (35.7%) have chlamydia, while the others studied wives have different diagnosis as Gonorrhea(7.1%), hepatitis B(2.9%%), syphilis and herpes were(1.4%) and (10%) don't know their current diagnosis.

Figure (2) shows that more than two third of the studied wives pre the study have a correct definition regarding STDS and this knowledge due to the past infection with STDs and most of the studied wives immediately post and after 3 months have correct definition regarding STDs

Table (8) reveals that most of the studied wives pre the study have deficit knowledge regarding causes of STDs, types of STDs and modes of transmission of STDs which the mean total knowledge score was 4.8 ± 1.2 and most of the studied wives immediately post and after 3 months have good knowledge which the mean total knowledge score increased to 14.8 ± 2.3 immediately post and 13.7 ± 1.1 after 3 months and the difference was highly significant (p<0.0001).

Table (9) reveals that most of the studied wives pre the study have deficit knowledge regarding symptoms, incubation period, investigation and complications of STDs which the mean total knowledge score was 2.8 ± 1.9 and most of the studied wives immediately post and after 3 months have good knowledge which the mean total knowledge score increased to 11.8 ± 1.2 immediately post and 11.1 ± 1.6 after 3 months and the difference was highly significant (p<0.0001).

Table (10) shows that most of the studied wives pre the study have deficit knowledge regarding management of STDs as medical treatment, prevention methods and management of STDs which the mean total knowledge score was 3.6 ± 1.4 and most of the studied wives immediately post and after 3 months have good knowledge which the mean total knowledge score increased to 14.6 ± 3.4 immediately post and 13.9 ± 2.3 after 3 months and the difference was highly significant (p<0.0001).

Table (11) shows that, there are highly statistical significant differences between the socio-demographic characteristics of the studied husbands and the total score of knowledge regarding sexually transmitted diseases (STDs)(p < 0.0001 for each).

Table (12) shows that, there are highly statistical significant differences between the socio-demographic characteristics of the studied wives and the total score of knowledge regarding sexually transmitted diseases (STDs) (p < 0.0001 for each)





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Table(1) :- Distribution of the studied husbands according to socio-demographic characteristics(N=70)

Socio demographic characteristics	N0.	
		%
Age (Years):		
>20-30 Years	18	25.7
>30-40	30	42.9
>40-50	16	22.9
>50-55	6	8.5
Mean ± SD		30.2 ± 1.7
Educational Level :		
Can't read and write	12	17.2
Read and write	18	25.7
Basic education	11	15.7
Secondary level	8	11.4
University	14	20
Postgraduate	7	10
Residence:		
Rural	40	57.1
Urban	30	42.9
Work status:		
Work	59	84.3
Not work	11	15.7
Total	70	100

Table(2) :- Distribution of the studied wives according to socio- demographic characteristics(N=70

Socio demographic characteristics	N0.	%
Age (Years):		
>20 - 30 Years	35	50
>30-40	20	28.6
>40-50	12	17.1
>50-55	3	4.3
Mean ±SD		27.2 ± 1.3
Educational Level :		
Can't read and write	20	28.6
Read and write	10	
Basic education	15	21.4
Secondary level	13	18.6
University	10	14.3
Postgraduate	2	2.8
Residence:		
Rural	40	57.1
Urban	30	42.9
Work status:		
Work	20	28.6
House wife	50	71.4
Total	70	100





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Table(3) :- The current diagnosis of the studied husbands regarding STDs.(N=70)

Variables	Ν	%
Candida	30	42.9
Chlamydia	25	35.7
Syphilis	1	1.4
Gonorrhea	5	7.1
Hepatitis B	2	2.9
Herpes	1	1.4
Don`t know	6	8.6
Total	70	100



Figure (1): Distribution of the studied husbands regarding definition of STDs (N=70)





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Table (4): Distribution of the studied husbands knowledge regarding (N=70)

Variables																				٦	
	Pre	e appli	icatio	n	Im	nediatel	y pos	t		Af	fter 3 mo	onths					Co	chr	an		
		Yes	N	No	J	es		No			Yes	N	lo								
	N	%	N	%	N	%	N		%	N	%	N	%		Q		p- '	val	ue	_	
Causes of STDs		1		1																	
Bacterial	5	7.1	65	92.9	68	97.1	2	2.9		65	92.9	5	7.1								
Viral	6	8.6	64	91.4	69	98.6	1	1.4		66	94.3	4	5.7				0		0.1		
Fungal	3	4.3	67	95.7	69	98.6	1	1.4		63	90	7	10		3.6	,	<0	.00	01*	5	
Types of STDs	+															_	Т	3.4	<(0.0	001*
Candida	9	12.9	9611	12.87.16	61 678	87.95. 767	895	5.74.3	3	66	4.394.3	664	94.3 5.	4	5	.79	94.3	3	Ť	4	5
Chlamydia	6	8.6	664	8.691.46	4 689	91.947.168	3 2 97	7.12.9	2	67	2.995.7	673	95.7 4.	3	4	.39	95.7	7	+	3	4
Herpes	4	5.7	469:	5.794.36	9 669	94.94.366	5 4 94	1.35.7	4	65	5.792.9	655	92.9 7.	5	17	.19	126	200	01:	*5	7
Gonorrhea	5	7.1	565′	7.192.96	5 679	2. 9 5.767	7 395	5.74.3	3	66	4.394.3	664	94.3 5.	4	+.5	.79	<u><</u> 0 94.3	<u>.00</u> 3		4	5
Syphilis	5	7.1	565′	7.192.96	5 679	2.95.767	7 395	5.74.3	3	65	4.392.9	655	92.9 7.	5	7	19	12.9)	T	5	7
Hepatitis B	3	4.3	3674	4.395.76	7 689	5.9 7.168	3 2 97	7. 12.9	2	66	2.994.3	664	94.3 5.	4	5	79	4.3	3	\uparrow	4	5
Human papilloma virus	2	2.9	2682	2.997.16	8 669	97.94.366	5 4 94	1.35.7	4	65	5.792.9	655	92.9 7.	5	7.	19	12.9)	Т	5	7
AIDS	9	12.9	61	12897.16	1 698	37.98.669) 1	1.4	1	67	1.495.7	673	95.7 4.	3	4	39	15.7	7	П	3	4
Modes of transmission of STDs							<u></u>														
Sexual intercourse	6	8.6	64	91.4	66	94.3	4	5.7		65	92.9	5	7.1		2.7		<0	.00	01	*	
From mother to child during labour	7	10	63	90	67	95.7	3	4.3		65	92.9	5	7.1								
contact with skin and body secretions	3	4.3	67	95.7	66	94.3	4	5.7		63	90	7	10								
Contaminated blood transfusion	4	5.7	66	94.3	67	95.7	3	4.3		66	94.3	4	5.7								
Needle injection	4	5.7	66	94.3	68	97.1	2	2.9		65	92.9	5	7.1								
Using personal equipment	3	4.3	67	95.7	67	95.7	3	4.3	+	65	92.9	5	7.1	_							
Mean total knowledge score	4.	1±1.9			12.8	8±2.2				11.9	9±2.4	•									

Highly statistical significant P<0.0001

Q (Cochran)







Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Table (5): Distribution of the studied husband's knowledge regarding symptoms, incubation period, investigations and complications of STDs (N=70)

Variables														
	Pre application			ı	Im	nediatel	y pos	t	Afte	r 3 mo	onths		~ •	
	λ	es	N	lo	Y	es		No	Y	es	N	0	Coch	ıran
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Q	p-value
Symptoms of STDs								1	1			•		
Abnormal penis-vaginal	8	11.4	62	88.6	67	95.7	3	4.3	65	92.9	5	7.1		
odorous discharge														
Pain and burning sensation	6	8.6	64	91.4	68	97.1	2	2.9	66	94.3	4	5.7		
during intercourse														
Penile - vaginal sores	3	4.3	67	95.7	66	94.3	4	5.7	65	92.9	5	7.1	2.9	< 0.0001*
Pelvic pain	5	7.1	65	92.9	67	95.7	3	4.3	64	91.4	6	8.6		
Pain and burning sensation	5	7.1	65	92.9	68	97.1	2	2.9	64	91.4	6	8.6		
during urination														
Itching	7	10	63	90	66	94.3	4	5.7	65	92.9	5	7.1		
Mouth ulcers	4	5.7	66	94.3	67	95.7	3	4.3	66		4	5.7		
Fever and malaise	6	8.6	64	91.4	66	94.3	4	5.7	64	91.4	6	8.6		
Incubation period of STDs?			1					1						
Candida (4 -28d)	2	2.9	68	97.1	65	92.9	5	7.1	62	88.6	8	11.4		
Chlamydia (7-21d)	1	1.4	69	98.6	64	91.4	6	8.6	63	90	7	10		
Herpes (2-12d)	1	1.4	69	98.6	66	94.3	4	5.7	61	87.1	9	12.9		
Gonorrhea (1-14d)	2	2.9	68	97.1	63	90	7	10	62	88.6	8	11.4		0.0001#
Syphilis (3w-20y)	0	0	70	100	64	91.4	6	8.6	61	87.1	9	12.9	2.1	<0.0001*
Hepatitis B (8-22w)	1	1.4	69	98.6	63	90	7	10	62	88.6	8	11.4		
Human papilloma virus (1-10y)	1	1.4	69	98.6	63	90	7	10	61	87.1	9	12.9		
AIDS (6weeks- 10years)	2	2.9	68	97.1	64	91.4	6	8.6	63	90	7	10		
Investigations of STDs?														
Blood tests	6	8.6	64	91.4	69	98.6	1	1.4	66	94.3	4	5.7		
Swabs	3	4.3	67	95.7	69	98.6	1	1.4	63	90	7	10		
Culture	4	5.7	66	94.3	67	95.7	3	4.3	63	90	7	10	2.9	< 0.0001*
Urine tests	2	2.9	68	97.1	66	94.3	4	5.7	65	92.9	5	7.1		
Complications of STDs?			-		-	_			_			-		
Pelvic inflammatory disease	7	10	63	90	67	95.7	3	4.3	66	94.3	4	5.7		
Infertility	6	8.6	64	91.4	66	94.3	4	5.7	65	92.9	5	7.1		
Abnormal vaginal bleeding	4	5.7	66	94.3	64	91.4	6	8.6	64	91.4	6	8.6		
Ectopic pregnancy	5	7.1	65	92.9	69	98.6	1	1.4	67	95.7	3	4.3		
Infant blindness	4	5.7	66	94.3	67	95.7	3	4.3	66	94.3	4	5.7	1.9	< 0.0001*
Congenital infections for infant	3	4.3	67	95.7	68	97.1	2	2.9	66	94.3	4	5.7		
Mean total knowledge score	4.8	±2.2				14.8±	1.2	•	13.9	9±4.3	•			

Highly statistical significant P<0.0001

Q (Cochran)







Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Table (C). Vacual das	f the studied bush and		man a same and a f	CTD	$(\mathbf{N} \mathbf{I} 7 0)$
Table (6): Knowledge	of the studied husbands	s regarding the	management of	I SIDS ((N = /0)

Variables													C	ochran
	Pr	e appl	icatio	n	Im	nediatel	y pos	t	Afte	er3 moi	nths			
		Yes	No		Ŋ	es		No	Ŋ	les	N	0		
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Q	p-value
Medical treatment of STDs				1	1		1		1		1			
Stopping sexual intercourse	5	7.1	65	92.9	68	97.1	2	2.9	65	92.9	5	7.1		
Having drugs according to type of	6	8.6	64	91.4	69	98.6	1	1.4	66	94.3	4	5.7	3.1	< 0.0001*
infection														
Prevention methods of STDs														
Health education regarding STDs	6	8.6	64	91.4	67	95.7	3	4.3	64	91.4	6	8.6		
Using male and female condom	5	7.1	65	92.9	68	97.1	2	2.9	66	94.3	4	5.7		
Immunization	4	5.7	66	94.3	68	97.1	2	2.9	65	92.9	5	7.1		
Healthy life style	3	4.3	67	95.7	66	94.3	4	5.7	63	90	7	10	2.9	< 0.0001*
Hygienic care for genital area	5	7.1	65	92.9	67	95.7	3	4.3	62	88.6	8	11.4		
Avoidance modes of transmission	6	8.6	64	91.4	67	95.7	3	4.3	64	91.4	6	8.6		
Immunization of STDs														
Hepatitis B vaccine	4	5.7	66	94.3	68	97.1	2	2.9	62	88.6	8	11.4		
HPV vaccine	2	2.9	68	97.1	69	98.6	1	1.4	61	87.1	9	12.9	1.3	<0.0001*
Mean total knowledge score		3.8	±2.1			11.8±1.2				10.9	±2.3		-	

Highly statistical significant P<0.0001

Q (Cochran

Table(7) :- The current diagnosis of the studied wives regarding STDs.(N=70)

Variables	Ν	%
Candida	29	41.4
Chlamydia	25	35.7
Syphilis	1	1.4
Gonorrhea	5	7.1
Hepatitis B	2	2.9
Herpes	1	1.4
Don`t know	7	10
Total	70	100





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/



Figure (2): Distribution of the studied wives regarding definition of STDs (N=70)

Table (8):	Distribution	of the	studied	wives	knowledge	regardin	g STDs	(N=70)
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Variables														
	Pre	applica	tion		Im	nediate	ely pos	st	Pos	t 3 mon	ths		Coch	iran
	Y	es	1	No	J	es		No	Ŋ	les	No			
	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Ν	%	Q	p-value
Causes of STDs														
Bacterial	5	7.1	65	92.9	68	97.1	2	2.9	65	92.9	5	7.1		
Viral	6	8.6	64	91.4	69	98.6	1	1.4	66	94.3	4	5.7		
Fungal	3	4.3	67	95.7	69	98.6	1	1.4	63	90	7	10	2.4	<0.0001*
Types of STDs								•						
Candida	9	12.9	61	87.1	67	95.7	3	4.3	66	94.3	4	5.7		
Chlamydia	8	11.4	62	88.6	68	97.1	2	2.9	66	94.3	4	5.7	1	
Herpes	6	8.6	64	91.4	67	95.7	3	4.3	65	92.9	5	7.1	1.0	0.0001#
Gonorrhea	5	7.1	65	92.9	68	97.1	2	2.9	66	94.3	4	5.7	1.8	<0.0001*
Syphilis	5	7.1	65	92.9	66	94.3	4	5.7	64	91.4	6	8.6		
Hepatitis B	6	8.6	64	91.4	68	97.1	2	2.9	64	91.4	6	8.6		
Human papilloma	4	5.7	66	94.3	67	95.7	3	4.3	66	94.3	4	5.7		
AIDS	8	11.4	62	88.6	66	94.3	4	5.7	63	90	7	10		
Modes of transmission of														
Sexual intercourse	6	8.6	64	91.4	67	95.8	3	4.2	65	92.9	5	7.1		
From mother to child during	5	7.1	65	92.9	66	94.3	4	5.7	64	91.4	6	8.6		
labour														
contact with skin and body secretions	4	5.7	66	94.3	65	92.9	5	7.1	65	92.9	5	7.1	3.1	<0.0001*
Contaminated blood	5	7.1	65	92.9	68	97.1	2	2.9	66	94.3	4	5.7		
transfusion														
Needle injection	4	5.7	66	94.3	69	98.6	1	1.4	66	94.3	4	5.7	1	
Using infected personal equipment	4	5.7	66	94.3	68	97.1	2	2.9	65	92.9	5	7.1		
Mean total knowledge score	4.8	±1.2		1	14.	8±2.3			13.	7±1.1	1	1	1	

Highly statistical significant P<0.0001





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

Table (9): Distribution of the studied wives knowledge regarding symptoms, incubation period, investigations and complications of STDs (N=70

Variables	Du	o oppli	ootid			Imm	adiate	ly nog	4	A fto	n 3 m	ntl	20				
	PT	e appno Yes		л No		Y	es	iy pos	ı No	Y	r 5 mc Zes		is No	Cochr	an		
	Ν	%	N	%	6	N 9	6	N	%	N	%	N	%	Q	p-valı	1e	
Symptoms of STDs														-	2.3	<0	.0001*
Abnormal penis-vaginal odorou	us 71	isd10arge	63	0	9 6 3	90	955.18	9538	4.3	645.2	92.965	5	92.9.1 5	7.1			
Pain and burning sensation dur	ing	8.6	6 4 8	.6	9154	96 .4	9 46 6	9443	5.4	6 51 .7	91.454	- 6	91. 8 .6 6	8.6	5		
Penile - vaginal sores	8	11.4	62	1.4	8 8 Ø	\$8 .6	9768	9721	2.2	62.9	90 63	7	90 10 7	2.510	< 0.00)1*	
Pelvic pain	7	10	62	0	63	<u>90</u>	67	95.8	13	4.2	00 62		88.6 8	- 11.4	4		
Pain and burning sensation dur	ing 4	urination 5.7	05 166	.7	90 94.3	07 94.3 67	95.8 95.8	95.8 3	4.2 4.2	4.2 65	92.9	• 5	92.9 5 7.1	7.1			
Itching	6	86	648	6	964	68/	974	972.1	2.9	666.9	94 %	4	01571	57	7		
Mouth ulcers	8	11.4	62	.0 1.4	886.15	\$\$.6	946.6	9443	5.4	6 <u>4</u> .7	91.464	6	91. 8 .6 6	8.6	5		
Fever and malaise	7	10	63	0	9 6 3	90	946.6	9443	5.4	65.7	92.965	5	92.9.1 5	7.1			
Incubation period of STDs																<u> </u>	
Candida (2 -28d)	3	4.3	67		95.7	66	94.3	4	5.7	63	90	7	10				
Chlamydia (2-6w)	2	2.9	68		97.1	65	92.9	5	7.1	62	88.6	8	11.4				
Herpes (7-21d)	1	1.4	69		98.6	64	91.4	6	8.6	61	87.1	9	12.9	-			
Gonorrhea (2-12d)	1	1.4	69		98.6	64	91.4	6	8.6	61	87.1	9	12.9	2.7	< 0.0001		
Syphilis (3w-20y)	2	2.9	68		97.1	65	92.9	5	7.1	62	88.6	8	11.4				
Hepatitis B (8-22w)	1	1.4	69		98.6	63	90	7	10	61	87.1	9	12.9	-			
Human papilloma virus (8-22w)	2	2.9	68		97.1	64	91.4	6	8.6	62	88.6	8	11.4				
AIDS (6w- 10years)	1	1.4	69		98.6	65	92.9	5	7.1	63	90	7	10				
Investigations of STDs										1		1					
Blood tests	6	8.6	64		91.4	69	98.6	1	1.4	65	92.9	5	7.1				
Swabs	3	4.3	67		95.7	69	98.6	1	1.4	63	90	7	10				
Culture	5	7.1	65	9	2.9	67	95.7	3	4.3	65	92.9	5	7.1	3.2	< 0.00)1*	
Urine tests	4	5.7	66	9	4.3	68	97.1	2	2.9	66	94.3	4	5.7	-			
Complications of STDs																	
Pelvic inflammatory disease	6	8.6	64	9	1.4	67	95.7	3	4.3	65	92.9	5	7.1				
Infertility	6	8.6	64	9	1.4	66	94.3	4	5.7	64	91.4	6	8.6				
Abnormal vaginal bleeding	7	10	63	9	0	66	94.3	4	5.7	64	91.4	6	8.6	1			
Ectopic pregnancy	4	5.7	66	9	4.3	65	92.9	5	7.1	64	91.4	6	8.6	12	-0.00	Դ1⊮	
Cervical cancer	3	4.3	67	9	5.7	65	92.9	5	7.1	63	90	7	10	4.2	<0.00	J1*	
Brain damage	2	2.9	68	9	7.1	66	94.3	4	5.7	64	91.4	6	8.6	1			
Infant blindness	2	2.9	68	9	7.1	68	97.1	2	2.9	65	92.9	5	7.1	1			
Congenital infections for infant	2	2.9	68	9	7.1	67	95.7	3	4.3	64	91.4	6	8.6	1			
Mean total knowledge score		3.8 ±1	1.9	1			14.	4±1.2	1	1	13.9±	1.7	1	1			

Highly statistical significant P<0.0001

Q (Cochran)





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: <u>https://hijnrp.journals.ekb.eg/</u>

Table (10): Knowledge of the studied wives regarding the management of STDs (N=70)

Variables													C	ochran
	Pr	e appl	icatio	n	Im	nediatel	y pos	t	Post	t 3 mon	ths			
		Yes	N	lo	Y	es		No	Ŋ	es	N	0		
	N	% N % N % N % N %		%	Ν	%	Q	p-value						
Treatment of STDs?			1			1							1.7	< 0.0001*
Stopping sexual intercourse	5	7.1	65	92.9	68	91.4	2	8.6	65	92.9	5	7.1		
Having drugs according to type	6	8.6	64	91.4	69	98.6	1	1.4	66	94.3	4	5.7		
of infection														
Prevention methods of STDs?		•				•					•		2.9	< 0.0001*
Health education regarding STDs	6	8.6	64	91.4	66	94.3	4	5.7	64	91.4	6	8.6		
Stop intercourse during infection														
Using male and female condom	5	7.1	65	92.9	67	95.7	3	4.3	66	94.3	4	5.7		
Immunization	5	7.1	65	92.9	66	94.3	4	5.7	65	92.9	5	7.1		
Healthy life style	6	8.6	64	91.4	68	91.4	2	8.6	66	94.3	4	5.7		
Hygienic care for genital area	4	5.7	66	94.3	67	95.7	3	4.3	63	90	7	10		
Avoidance modes of	5	7.1	65	92.9	66	94.3	4	5.7	64	91.4	6	8.6		
transmission														
Immunization of STDs?													2.3	< 0.0001*
Hepatitis B vaccine	6	8.6	64	91.4	67	95.7	3	4.3	66	94.3	4			
HPV vaccine	2	2.9	68	97.1	67	95.7	3	4.3	64	91.4	6	8.6		
Mean total knowledge score	3.6	±1.4				14.6	±3.4		13.9	±2.3				

Highly statistical significant P<0.0001

Q (Cochraan)

Table (11): Relation between the socio-demographic characteristics of the studied husbands and total knowledge regarding sexually transmitted diseases (N=70).

		Total knowledge						
Socio-demographic characteristics		Incorrect	Incorrect know.		Correct know.		Chi-square	
		N	%	N	%	x ²	P-value	
Age (years)	>20 - 30years(N=18)	1	1.4	17	24.3	14.09		
	>30-40 years(N=30)	2	2.9	28	40		<0.0001*	
	>40-50 years(N=16	3	4.3	13	18.6	_		
	>50 - 55 years(N=6)	1	1.4	5	7.1			
Residence	Rural(N=40	5	7.1	35	50	13.0	<0.0001*	
	Urban(N=30)	2	2.9	28	40			
Education	Can't read and write (N=12)	2	2.9	10	14.3	12.8	<0.0001*	
	Read &write(N=18	2	2.9	16	22.9			
	Basic education(N=11)	1	1.4	10	14.3			
	2ry education(N=8	1	1.4	7	10			
	University(N=14)	1	1.4	13	18.6			
	Post-graduate(N=7)	0	0	7	10			
Total		7	10	63	90			

*Highly statistical significant





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: <u>https://hijnrp.journals.ekb.eg/</u> **Table (12):** Relation between the socio-demographic characteristics of the studied wives and total knowledge regarding sexually transmitted diseases (N= 70).

			Total knowle	edge			
Socio-demographic characteristics		Incorrect know.		Correct know.		Chi-square	
		N	%	N	%	x ²	P-value
	>20 - 30years(N=35)	2	2.6	33	47.1		
Age (years)						17.014	<0.0001*
		1	1.4	19	27.1		
	>30 - 40 years(N=20)						
	> 40.50 years (N-12)	2	1.2	0	12.6		
	>40-30 years(11-12	5	4.5	7	12.0		
	>50 - 55 years(N=3)	2	2.6	1	1.4		
Residence	Rural(N=45	5	7.1	40	57.1	10.7	< 0.0001*
	Urban(N=25)	3	4.3	22	31.4		
Education	Can't read and write (N=20)	2	2.6	18	25.7		
	Read& write(N=10)	2	2.6	8	11.4	13.6	<0.0001*
	Basic education(N=15)	1	1.4	14	20		
	2ry education(N=13	1	1.4	12	17.1		
	University(N=10)	2	2.6	8	11.4		
	Post-graduate(N=2)	0	0	2	2.6		
Total		8	11.4	62	88.6		

Highly statistical significant P<0.0001

VII- Discussion

According to socio demographic data of the husbands, the current study showed that about the two third aged between (20-40) years, regarding educational level, about one quarter were read & write. This finding agreed with (Melissa, 2021) who conducted a study, in France, entitled as "Assessment males' knowledge regarding to sexually transmitted diseases (STDs)" showed that more than half of studied husbands aged were ranged from 31-40 years old but dis agree with the current study in the level of education where less than one quarter of the studied husbands had received university education.

According to the residence of the studied husbands, more than half live on rural area and the other live on urban area. This finding dis agreed with (Greenow, 2021) who conducted a study, in Italy, entitled as "Attitude of the husbands regarding STDs" and reported that the most of studied samples lived at urban area and had enough knowledge compared with rural area which reflected on the result of the study.

According to socio demographic data of the wives, the current study showed that half of the studied wives aged between (20-30) years. Regarding educational level, more than one quarter can't read and write. This finding agreed with (Meller,2021) who conducted a study, in south Africa, entitled as "wives' practice regarding to sexually transmitted diseases(STDs)" and reported that more than half of studied wives aged were ranged from 20-35 years and about one quarter can't read and write.

From the researcher's point of view, the diversity in the study and the collection samples of married couples from rural and urban areas gives strength to the current study because enables the researcher to study diverse samples in cultures, customs, and educational level.

According to the current diagnosis of the studied husbands regarding STDs, the current study showed that less than half of the studied husbands have a candida and about one third have chlamydia, while the others studied husbands have different







Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

diagnosis as Gonorrhea(7.1%), hepatitis B(2.9%%), syphilis and herpes were(1.4%)and (8.6%) don't know the current diagnosis. This results agreed with (**Helmer, 2021**) who conducted a research, consumed time 3 months, in German ,entitled as "prevalence of sexually transmitted diseases among married couples" and reported that the major of the studied husbands infected with chlamydia and candida infections.

According to distribution of the studied husbands regarding definition of STDs, the present study showed that more than half of the studied husbands pre application have a correct definition regarding STDS and most of the studied husbands immediately post and after 3 months have correct definition regarding STDs. This results agreed with (**Dene, 2021**) who conducted a study, in USA, consumed time about 6 months, entitled as "Determination knowledge, attitudes and practices regarding sexually transmitted diseases " and showed that the most of studied husbands have satisfactory knowledge regarding STDs after implementing the study.

According to Knowledge of the studied husbands regarding sexually transmitted diseases, the present study revealed that majority of the studied husbands pre the study have deficit knowledge regarding causes, types and mode of transmission of STDs but most of the studied husbands immediately post and after 3 months have good knowledge. This results agreed with (**Bilanti, 2021**) who conducted a study, in Brazil, consumed time about 4 months, entitled as "Determination knowledge, attitudes and practices regarding prevention of sexually transmitted diseases among married couples" and showed that the most of studied married couples after conducted the study have satisfactory knowledge, attitude and practice regarding STDs.

According to Knowledge of the studied husbands regarding sexually transmitted diseases, the present study revealed that majority of the studied husbands pre the study have deficit knowledge regarding symptoms, incubation period complications and investigation of STDs but most of the studied husbands immediately post and after 3 months have good knowledge. This results agreed with (Smele, 2021) who conducted a research, in Athiopia, consumed time about 2 months, entitled as "How to diagnose venereal diseases between married couples" and showed that the most of studied husbands after implementing the research have correct knowledge regarding STDs.

According to Knowledge of the studied husbands regarding sexually transmitted diseases, the present study showed that most of the studied husbands pre the study have deficit knowledge regarding management of STDs as medical treatment, prevention methods and immunization regarding STDs. But most of the studied husbands immediately post and after 3 months have good knowledge. This results agreed with (Adera, 2020) who conducted a study, in Sudan, consumed time about 6 months, entitled as " prevention of sexually transmitted diseases among males" and showed that the most of studied husbands after implementing the study have a correct knowledge regarding STDs.

The past mentioned results incompatible with (Ademas, 2021) who conduct a study, in Australia, rural area, selected married males aged between 20-40 years, entitled as" Common prevention methods of sexually transmitted diseases" and reported that after implementing the study about the third of the studied married males had incorrect and inadequate knowledge regarding STDs.

According to the current diagnosis of the studied wives regarding STDs, the current study showed that less than half of the studied wives have a candida and about one third have chlamydia. This results agreed with (**Jack, 2021**) who conducted a study, consumed time 5 months, in Suid ,entitled as "prognosis of sexually transmitted diseases among married couples" and reported that the major of the studied wives infected with chlamydia and candida infections.

According to distribution of the studied wives regarding definition of STDs, the present study showed that two third of the studied wives pre the study have a correct definition regarding STDS and most of the studied wives immediately post and after 3 months have correct definition regarding STDs. This results agreed with (Herny, 2022) who conducted a study, in France, consumed time about 3 months, entitled as "Determination knowledge and practices among women regarding sexually transmitted diseases " which results published in UNICEF organization and showed that the most of studied wives have satisfactory knowledge regarding STDs after implementing the study.

According to Knowledge of the studied wives regarding sexually transmitted diseases, the present study revealed that majority of the studied wives pre the study have deficit knowledge regarding causes, types and mode of transmission of STDs. But most of the studied wives immediately post and after 3 months have good knowledge. This results agreed with (Workeneh, 2022) who conducted a study, in France, consumed time about 3 months, selected married women, aged between 20-50years, entitled as "Women's' awareness regarding STDs" and showed that the most of studied women after conducted the study have satisfactory knowledge, attitude and practice regarding STDs.





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: <u>https://hijnrp.journals.ekb.eg/</u>

According to Knowledge of the studied wives regarding sexually transmitted diseases, the present study revealed that majority of the studied wives pre the study have deficit knowledge regarding symptoms, incubation period complications and investigation of STDs. But most of the studied wives immediately post and after 3 months have good knowledge. This results agreed with (**Batanony, 2021**) who conducted a study, in Colombia, consumed time about 4 months, entitled as " Raising awareness among married women regarding STDs" and showed that the most of studied wives after implementing the study have correct knowledge regarding STDs.

According to Knowledge of the studied wives regarding sexually transmitted diseases, the present study showed that most of the studied wives pre the study have deficit knowledge regarding management of STDs as medical treatment, prevention methods and immunization regarding STDs. But most of the studied wives immediately post and after 3 months have good knowledge. This results agreed with (Alen, 2020) who conducted a study, in New York, consumed time about 3 months, entitled as " prognosis of sexually transmitted diseases " and showed that the most of studied wives after implementing the study have complete knowledge regarding STDs.

From the researcher's point of view, all results which was achieved regarding sexually transmitted diseases reflect the efficiency of the present study for enhancing knowledge of married couples which all results support for the married couples to use knowledge as a pathway for protection themselves against sexually transmitted disease.

According to the relation between the study husbands' socio-demographic characteristics and total knowledge regarding sexually transmitted diseases, the current study showed that highly statistical significant differences between them. This results compatible with (**Kikks,2022**) who conduct a study, in Nigeria, entitled as" Husband's knowledge and attitude regarding STDs" and reported the same results.

According to the relation between the study wives' socio-demographic characteristics and total knowledge regarding sexually transmitted diseases, the current study showed that highly statistical significant differences between them. This results compatible with (**Demis,2020**) who conduct a study, in Liberia, entitled as" Wive's knowledge and attitude regarding STDs" and reported that statistical significant differences between socio-demographic data and total knowledge.

From the researcher point of view, several studies have revealed that sexually transmitted diseases are the cause of the multiplicity of complications and result in poor sexual and reproductive health among married couples due to delays in treatment as a result of a lack of knowledge regarding STDs, so there is a need for more knowledge to increase public awareness regarding prevention of STDs and increase readiness of married couples for STIs screening.

VI- Conclusion

Based on the results of the current study, most of the married couples pre implementing the study have poor knowledge regarding sexually transmitted diseases, which is improved immediately post and after 3 months. The results of the current study supported the research hypothesis and aim of the current study is achieved.

VII- Recommendation

In the light of the current study finding, the following recommendations are:-

- Regular training of the healthcare personnel to become counselor at each health facility to discuss the STIs among married couples.
- Design periodic workshop regarding premarital counseling for early detection of STDs.

Further researches:

Encouraging education regarding STDs early in school for both gender students by including an educational program about all types of STDs into the secondary school curriculum.





Helwan International Journal for Nursing Research and Pratctice

Vol. 3, Issue 6, Month: June 2024, Available at: https://hijnrp.journals.ekb.eg/

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