Enhancing Knowledge and Practice Regarding the Right Application of Male Condom

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Abstract

Background:-Male condom considers effective in the field of male contraception as methods for family planning and protection against sexual transmitted disease This study aimed to enhance knowledge and practice regarding the right application of male condom Research design: A Quasi-experimental design was used in this study Setting:conductedin obstetrics and gynecology clinic Sample: Purposive sample was used (total number 70). Tool: Data collected through 2 tools, the first tool was a structured interviewing questionnaire was included socio demographic characteristics and knowledge regarding male condom. The second tool was male condom reported checklistResult: This study revealed that highly statistical significance improvement in the total level of knowledge and practice regarding the right application of male condom after implementing the study Conclusion: Studied sample were introduced agood participation in the current study and aim of the study were achieved which the results were reflected high improvement in the level of knowledge and practice regarding the right application of male condom. Recommendations: Encourage male nurse to participate in obstetrics and gynecology service to provide health care and education for husbands especially in right application of male condom.

Keywords: Knowledge, Practice, Right application of male condom

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I. Introduction

Family planning methods classified into methods specialized for male and the other method specialized for females. Females methods includes oral contraceptive pills, implants, injectables, patches, vaginal rings, Intra uterine devices, female condoms, female sterilization, lactational amenorrhea methods, withdrawal and fertility awareness based methods. These methods have different mechanisms of action and effectiveness in preventing unintended pregnancy. (1)

Nearly half of all pregnancies in the United States are unintended, and unplanned pregnancies are linked to poor health outcomes for women and their children. One strategy to reduce unintended pregnancy and promote better outcomes for women and children is to increase the use of effective contraceptive methods among women seeking to avoid pregnancy. Child Trends' examination of Title X clinics in Delaware suggests that increased use of highly effective contraception can reduce unintended pregnancy.(2)

Study conducted on randomly selected sample of 2304 males aged 15-49 years from 4 governorates in Lower Egypt to assess their condom use and knowledge and attitudes towards condom use. Condoms were considered an effective method of contraception and prevention of transmission of sexually transmitted infections (STIs) by 60.5% and 60.0% respectively. Only 23.9% had ever used condoms, mainly for contraception, but 26.8% would consider using them in the future. A quarter reported knowing how to use condoms properly. Obstacles to condom use included perceived lack of need (75.7%), rejection by wife (57.6%) and hazards of condoms (31.9%). The majority knew about HIV/AIDS (90.8%) but a few felt at risk of STIs (11.2%) or HIV infection (10.3%).(3)

Male contraceptive methods include condoms and vas occlusion. Vas occlusion very effective but intended to be non-reversible. Condoms have a relatively high failure rate, at least partially due to compliance problems and are not accepted by many couples. The only other male-oriented methods in clinical trials utilize the administration of testosterone alone or its combination with another gonadotropin-suppressing agent such as a progestin or a gonadotropin-releasing hormone antagonist. Other methods specialized for males as testicular heat supplementation and male birth control.(4)

Male condomare the only method of birth control that also help prevent the spread of sexually transmitted infections like HIV, chlamydia, and gonorrhea. Even already using a different kind of birth control to avoid pregnancy, it's a good idea to also use condoms every time you have sex to protect from STDs.

Condoms are super easy to get from many different stores, community healthcenters, pharmacy, Planned Parenthood health centers, and online. Condoms are a small, discreet, and portable way to get big protection from pregnancy and STDs.(5)

Male involvement in family planning positively affects contraceptive use and cause an overall decline in fertility rate in the developing world. Male's fertility preferences and attitudes towards family planning influence their wives attitude toward the use of modern family planning methods as couples have aright to choose and decide upon the number of children they desire. This means that both parents have the right to be involved in fertility matters and as such husbands play a crucial role in fertility decision-making in most of the world.(6)

Nursing role is very important to support the males with all needed knowledge which help for sexual life. Nurse have amany role as counselor, researcher, advocacy, greeting and good communicator with the males as supporting, nurses can play a key role in advising young males about sexual health issues and contraception methods. Males require contraception during their reproductive years, and many methods are available and should have access to all of these methods and be encouraged to take an active role in decision-making about their choice of contraceptive, within medical eligibility constraints. Mechanical barriers methods as condom more effective than othermethodsand should be offered to all males during contraceptive consultations. In primary care settings, nurses often provide much basic contraception care and advice(7)

Significance of the study

In Egypt, a study conducted on males to assess the knowledge, attitude of male condom used, the results of a study male condoms were male condom users were 7% only, about 60% were used as protection against STDs and about 40% were used as family planning methods but 26.8% would consider using them in the future. A quarter reported knowing how to use condoms properly. (8)

Worldwide 60% of all condoms are used outside marriage. The condom remains the most popularly used contraceptive method among teenagers. An increased proportion of sexually active adolescents report using a condom at last intercourse, according to surveys, condom use increased from 46.2% in 1991 to 60.2% in 2018. The prevalence of condom use was higher among male (68.6%) than female (53.9%) students and higher among white (63.3%) and African American (62.4%) than hispanic students (54.9%).3 In the National Survey of Family Growth, condom use at last intercourse increased among males from 53% to 75% (9)

Aim of the study:

The aim of current study is to enhance knowledge and practice regarding right application of male condom through the following objectives:

- 1) To assess males' knowledge regarding right application of condom.
- 2) To assess males' practice regarding right application of condom.
- 3) To evaluate their knowledge and practice regarding applying males condom.(pre and post)

Research hypothesis:

The males' knowledge and practice will be improved afterimplementing the current study.

II. Subjects And Methods

Research design:

A Quasi-experimental research design was used for the study for one group(pre and post)

Setting:

This study conducted at El-saff Hospital in Obstetrics and Gynecology Clinic.

sample type:

Purposive sample was used in the current study.

Sample size:

Total number of 70 malewho attend to obstetric and gynecological clinic at El-saff hospital with their wives for six months, according to the following inclusion criteria.

Data collection tools:

Two tools were used to collect the data as the following:-

First tool :a structured interviewing questionnaire.

The tool developed by the investigator in a simple Arabic language used to assess the following:-

Part(1): Socio demographic characteristics:

Part(2): This part was used to assess male's knowledge regarding right application of condom.

Level of knowledge (Scoring system):

Knowledge obtained from males was scored and calculated . According the answeres , their answeres were evaluated by using the model key answer sheet which prepared by the investigator . Each question ranged from

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1-2 grades ,where correct answers scored 2 grades and score 1 for incorrect answer. The items for assessing the knowledge 26 items that include the part 2 from the tool. So, the total level of knowledge scores ranged from 0 to 26 and the total score of each male classified into don't know when attained less than 50% of the total score (less than 10 points), know when achieved more than 50% of the total score (10- 18points) and know is considered when achieved more than 75% of the total score (more than 18 points).

Second tool: Male's practice regarding right application of male condom (male condom reported checklist). This tool was designed by (WHO 2018) and was adopted by the investigator. It consists of 6 steps includes 12 items. (pre and post) (10)

Level of practice (Scoring system):

Practice obtained from the studied male was scored and calculated. According the practice, their pratices were evaluated by the previously mentioned tool (male condom reported checklist). Each question ranged from 1-2 grades ,where correct practice scored 2 grades and score 1 for incorrect practice. The items for assessing the practice 12 items. So, the total level of practice scores ranged from 0 to 12 and the total score of each male was classified into (incorrect practice) when achieved less than 50% of the total score (less than 5points), correct practice when attained 50%-75% of the total score (5-8 points) and correct practice is considered when achieved more than 75% of the total score (more than 8 points) (pre and post)

Validity:

The validity of the tools done by using face and content validity. Face validity aimed at inspecting the items to determine whether the tools measure and what supposed to measure. Content validity was conducted to determine whether the tools cover aimes. Testing validity were required by apanel of three expertes in obstetrics and gynaecological nursing field to test the face and content validity. Each of the expertes was asked to examine tools for content coverage ,clarity, wording,length, format and overall appearance.

Reliability:

Reliability was estimated among participant males by used alpha cronbach test at first tool,then correlation coefficient was calculated between the two scores as know (2), don't know (1). Correlation coefficient was 0,87 which indicates that the questionnaire is reliable to detect the objectives of the study. At the second tool reliability was estimated among participant males, then correlation coefficient was calculated between the two scores as correct practice (2), in correct practice (1). Correlation coefficient was 0,81 which indicates that the condom reported checklist was reliable to detect the objectives of the study.

Pilot study:

Pilot study was carried out on 10% of the studied samples (7 males) in order to test and ensure the applicability, clarity and the efficiency of the tools.

Field work:

The study was started after all administrative letters were approved and the study was implemented in the following phases:-

1-Assesment phase: -

- The investigator detect baseline data for male's knowledge and practice regarding the right application of male condom pre application the study.
- -The investigator was reviewed of past, current, public and worldwide related writing and hypothetical information on different parts of the investigation utilizing books, articles, web, periodicals and magazines to foster tools for data coolection.
- The investigator assess the suitable place inside the hospital for interviewing with the studied sample which equipped with data show and lab top for powerpoint presentation.
- The investigator was prepared the tools which was used to data collection in the current study.

2- Planning phase:-

Based on the baseline data obtained from the studied samples before implementing the practical part 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 right practice regarding male condom.

3-Implementation phase: -

The investigator was attended to the clinic two days per week from 10 am to 12 pm for six month from July 2020 to the end of December 2020 with aratio of 3-4 males per week .

- The investigator apply this steps in the first time at the hospital, but during follow up was communicated through different methods of communications.
- -After explanation of the aim of the study to the studied sample, the investigator was distributed first tool (structured interviewing questionnaire) followed by second tool (male condom reported checklist).
- Application was covered by 3 sessions, 1 sessions for theoretical part and 2 sessions for practical part for every small group, which the total number of small group was about 25 groups.
- Sessions were given to small agroup of the studied sample, each of which consisted of (2-3) sample.
- Duration of each theoretical session ranged from 10-15 minutes and practical from 15-20 minutes including discussion periods based on feedback and achievement.
- -Regarding male condom practice the investigator firstly was discussed the procedure by presenting pictures, powerpoint presentation and videos to facilitate the learning.
- -Each studied sample was applied the procedure and was asked the studied males to apply the procedure at home. Through next visit, the investigator was asked the studied sample to demonstrate application of male condom to activate the memory also to ensure that the procedure was applied correctly.
- -All the previously mentioned steps were applied 4 times (pre assessment, immediately post assessment , after one week, follow up after 3 months).
- -During implementation stage all ethical consideration that were explained to the studied males were respected.

4-Evaluation phase:-

- The investigator was assessed the studied samples's knowledge, practice and satisfaction of the studied samples regarding to the right application of male condom, what liked, what did not like, and the most important proposals that must be improved regarding the study after follow-up test.
- The results of pre, post and follow-up implementing the study was used to evaluate the effect of the study for enhancing knowledge and practice regarding the right application of male condom.
- This phase was done after three months of the application.

Ethical considerations:

The research ethical considerations in the study was maintained through the following:-

- An official permission was obtained from the scientific research ethical committee Faculty of Nursing -Helwan University before conduction of the study.
- The investigator was clarified the aim of the study to the studied samples was included in the study.
- The investigator was assured maintaining anonymity and confidentiality of subjects data.
- Written approval letter should be sent to the director of EL-Saff hospital, including the aim of the study.
- Written consent was obtained from each studied samples.
- 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.
- The investigator was introduced himself to the studied samples before beginning the current study.
- Data was only used for study at any time and Ethics, values, culture and beliefs was respected.

III- Administrative items:

After explanation of the study aim and objectives, an official permission was obtained from the Dean of Faculty of Nursing and the general manager of El saffHospital asking for cooperation and permission to conduct the study.

IV-Statistical Items:

- The collected data was organized, analyzed and tabulated using appropriate statistical significant tests. This was done by using the statistical package for social science (SPSS). Data was entered and analyzed by using SPSS (Statistical Package for Social Science) statistical package version 22. Graphics were done using Excel program.
- uantitative data were presented by mean (X) and standard deviation (SD). It was analyzed using student t- test for comparison between two means, and ANOVA (F) test for comparison between more than two means.
- Qualitative data were presented in the form of frequency distribution tables , number and percentage. It was analyzed by chi-square (χ^2) test. However, if an expected value of any cell in the table was less than 5, Fisher Exact test was used(if the table was 4 cells), or Likelihood Ratio (LR) test (if the table was more than 4 cells). Level of significance was set as P value <0.05 for all significant.

III. Results

Figure(1) showed that more than one third of studied sample did not know the male condom (32.9%)(n=23), while 67.1%(n=47) know the male condom pre application the study.

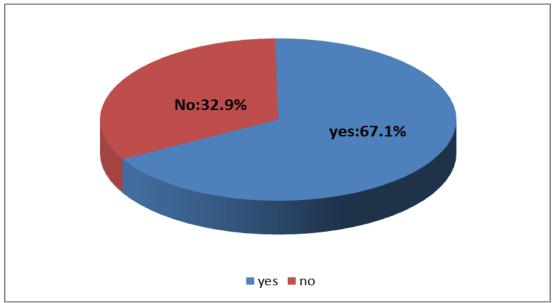
Table(1) showed that the main source of information regarding the male condom was relatives (36.2%), followed by media and friends (21.3%) for each. The lowest source was health services (6.4%) and coworkers (14.8%).

Figure(2) showed that the majority (more than 80%) (n=57) of studied sample didn't use condom previously before application the study but about less than (20%) (n=13) used male condom previously.

Table (2) highlights that, the majority of the studied sample used condom from beginning of marriage (84.6%), approximately one half used latex condom (46.2%), all of them were satisfy with using condom(100%), and all of them had wives that did not conceived while using condom as a contraceptive method, before right application of condom. However, only 23% of them considered condom was costly in its price.

Table (3)revealed that the efficacy of the current study in enhancement of knowledge of the studied samples regarding male condom. Post Immediate , after one week, and after 3 months application revealed a highly significant improvement (p<0.000) in the mean score of total knowledge aspects. The Immediate post application's total score ranged from 9 to 12, with a mean of 10.1 ± 0.8 . The follow up after week application' total knowledge score ranged from 8 to12 with a mean of 9.9 ± 0.9 The follow up after 3 months application' total knowledge score was slightly decreased to 9.7 ± 1.0 .

Table (4) revealed that the efficacy of the application study in enhancement of practice of studied samples regarding right application of male condom. Post Immediate , after one week, and after 3 months , right application revealed a highly significant improvement (p<0.0001) in the mean score of total practice aspects. The Immediate post application total score ranged from 13 to 16, with a mean of 13.2 ± 0.8 . The follow up after week application , total practice score ranged from 13 to 16 with a mean of 14.9 ± 0.9 The follow up after 3 months application ,total knowledge score was slightly decreased to 14.2 ± 0.8 .



Figure(1): Pre application knowledge regarding male condom among the studied sample.(N=70)(pre)

Table (1):Distribution of the Studied Samples According to Sources of Information Regarding The Male Condom. (N = 47)

Course	ces of information regarding male condom	Frequency		
Sourc	es of information regarding male condom	No	%	
a. b. c. d. e.	Relatives Friends Health services Co-workers Media	17 10 3 7 10	36.2 21.3 6.4 14.8 21.3	
	Total	47	100	

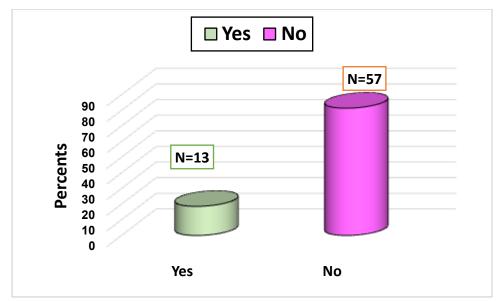


Figure.(2): Distribution of studied samples about using of condom previously before application study (N=70)

Table (2):Distribution of Studied Samples Practice About The Use of Condom Pre Application of The Study (N=13)(pre test)

Variable	Frequency		
variable	No	%	
start using condom: 1- From beginning of marriage 2- After born of first child	11 2	84.6 15.4	
2.The favorite condom type is:	2	15.4	
a. Rubber b. Latex	6	46.2	
c. Skin	2	15.4	
d. Very thin	3	23	
2. Satisfaction with using condom Yes	13	100	
3. The wife conceived while using condom No	13	100	
4. Condom expensive for you. Yes	3	23	
No	10	77	
5. Easy to get condoms from pharmacy. Yes	13	100	
6. Recommend condom for friends and relatives Yes	13	100	
Total	13	100	

Table (3): Asssess The Studied Sample Total Knowledge Score Regarding The Male Condom.(N=70)

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Application	N	Mean	± Std. Deviation	Minimum	Maximum	F test	P value
pre application	70	8.7	1.6	6	12		
Immediate after application	70	10.1	0.8	9	12	F=23.0	<0.0001
after week	70	9.9	0.9	8	12		
after 3 month	70	9.7	1.0	7	12		

^{**}Highly statistical significant p<0.0001F (ANOVA)

Table(4): Total practice Score of Studied Sample Regarding The Right Use of Male Condom.

**Highly statistical significant P<0,0001 F= (ANOVA)

Application	N*	Mean	± Std. Deviation	Minimum	Maximum	F test	P value
pre application	13	11.3	1.1	10	15	21.0	<0.0001
Immediately after application	13	13.2	0.8	13	16		
After1 week	20	14.9	0.9	13	16		
after 3 month	49	14.2	0.8	13	16		

IV. Discussion

Male condom athinelastic or latex sheath is unrolled on the erect penis before intercourse that keeps semen from entering the lady's vagina. The strategy is 98% viable whenever utilized accurately and reliably. Condom can be utilized by all age gatherings, securely, effectively accessible without remedy and fills in as the best strategy in giving insurance from STIs.. (Martiny, 2018)

According to Knowledge of the studied sample regarding male condom, the present studyshowed that more than one third of studied samples did not know the male condom, while about the two third know the male condom pre application the study. The result agree with (Kirsten, 2018) who reported that study conducted on 500 males in Colombia who had previously knowing the male condom, and their age ranges from 30 to 50 years, in order to measure the past knowing regarding male condom and the results of the study were that about two-thirds of the males was know the male condom.

The current study showed that most of studied sample feel an orgasm while applying condom, and more than two thirds replied that was used the same condom once time, the result agree dwith(Gembeck,2017) who conducted study about how to use the male condom in American, who reported that most of the studied sample in the study initially was described sexual desire in terms that offered support for "masculine sexual desire." Specifically, many males was said desire was "high and constant and about 87% of studied males included in the study was used the same condom once during sexual intercourse.

In relation to source of information ,the current study showed that relatives had the highest percentages, followed by friends and media was equaled , while the lowest source was friends and co workers and health services, this result at the same line with (**Davis and Beaty, 2018**) who reported that relatives play important role in formation male's knowledge and considered the source of information.

But present study finding in contrast with (**Zimmer,2017**) who conducted astudy consumed about three months to assess the level of information and source regarding male contraception mehod included male condom. This study conducted in British on 500 males aged between 20-50 years old and reported that about (68%) depended on general internet search as assource of information ,about (42%) depend on health services while about (35%) depen on books, journals and magazines as assource of information.

According to the previous used of male condom before beginning the study,the current study showed that approximately one half of the studied sample was used latex condom, all of them were satisfied with using condom, and all of wives that not conceived while using condom as a contraceptive method, the result at the same line with(Crittenden,2019) who conducted research about the types of condoms, and most of the results indicated that latex and thin type was the best types because they have less side effects and do not significantly affect sexual desire in males and had asatisfaction from wives due to prevention of pregnancy.

(Diclemente, Coyle and Gause,2019) whostudied male involvement in family planning methods in Uganda ,who reported that low percent of studied samale was used male condom from beginning of marriage which the majority of studied sample was used acondom early before the marriage which concept of using not related to marriage. This results not agreed with our study that the majority of studied sample was used condom from beginning of the marriage as acontraceptionmethod .

The present study revealed that all studied samples 100% who used condom previously before beginning of the study recommended the condom for friends and relatives, 100% of studied males was getten condom from pharmacy and majority of studied males reported that condom inexpensive. This results at the same line with (Yarber and Kaufman, 2017) who conducted astudy in German about types of male condom, which reported that all studied males was getten condom easily and not expensive and reported that the condom available in all pharmacy so was recommended to used by relatives and friends.

According to the total score of knowledge, this study revealed that efficiency of application the study in enhancement knowledge regarding of the male condom throughout post immediately, post one week and post 3months, which revealed that ahighly significant improvement in the mean score of total knowledge.

This finding was in contrast with (**Briggs,2018**) who conducted astudy in Athiopia to assess male's knowledge regarding male's contraception methods, which reported that amajor of studied sample had apoor knowledge level as total score after conducted the study. But this finding agreed with (**Kirby,2018**) who conducted are search consumed two months in Iran, which this research was aimed to assess the male's attitude, knowledge and practice regarding male condom .Who reported that the majority of studied samples had correct knowledge responses after conducted the research.

According to the total score of practice ,this study revealed that efficiency of application the current study in enhancement correct practice regarding right application of male condom during pre,postimmediately,post one week and post three months, which revealed that ahighly significant improvement in the mean score of total practice which total score of correct practice during pre application was low but compared to immediately post ,follow up one week and the follow up 3 months was reflect highly improvement.

This finding not compatible with (Nicole,2018) who conducted astudy in Argentin about male's attitude and practice regarding male's contraception methods, which reported that amajor of studied males had mal practice as total score after conducted the study regarding right application male condom. But this finding agreed with (Montoya,2018) who conducted are search in China, which this research was aimed to assess the male's attitude, knowledge and practice regarding male condom. Who reported that the majority of studied males had correct practice regarding right application of male condom.

V. Conclusion

Male involvement not limited to the use of family planning methods by itself rather to the supportive attitude that males have toward their wives to use family planning methods. Studied males were introduced agood participation in the present study and the results of study were achieved and were reflected agood improvement in the total level of knowledge and practice regarding the right application of male condom. The results of the present study supported the research hypothesis

VI. Recommendations

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

- Encourage male nurse to participate in obstetric and gynaecology service to provide health care and education for husbands especially in right application of male condom.
- Design a booklet regarding of family planning methods for awareness, knowledge and practice regarding male condom.

 males, especially the condom, in order to raise awareness, knowledge and practice regarding male condom.
- Encourage young men to practice family planning depend on male condom as asafe ,cheep and available method.
- Provide continuous seminars headed by a group of male specialists in order to raise awareness among young men in order to filfull their needs regarding reproductive health.

For further research

-Encourage excess research needed to male contraception methods especially male condom.

References

- [1]. **Boskey, E. (2018).** "When to choose lubricated or non-lubricated condoms. Available October 11, 2018.
- [2]. **Kirby.**(**2018**) ."Barrier Methods". Contraception for Adolescent and Young Adult Women Journal. USA. doi:10.1007/978-1-4614-6579-9_5. ISBN 978-1-4614-6578-2.pp. (63–76).
- [3]. Ismael.(2020) ." condom use, attitude, knowledge .research in Egypt
- [4]. Slabber.(2019). "Endocrinological, biophysical, and biochemical parameters of semen collected via masturbation versus sexual intercourse". Journal of Andrology. American14 (5):
- [5]. Adamsand Hillard, P. (2019). The patient's reactions to side effects of oral contraceptives. American Journal of Obstetrics and Gynecology, USA, p5.tb00402.x. PMID 8288490.pp(366-373).
- [6]. Nelson, Anita L.; Woodward and Jo Ann. (2017). "Sexually Transmitted Diseases: A Practical Guide for Primary Care. Thesis. Colombia. Springer Science & Business Media.. ISBN 9781597450409.p312.
- [7]. Laximi,(2019). "Factors associated with contraceptive use among sexually active Nepalese youths in the Kathmandu Valley, Contraception and Reproductive Medicinebook.Oxford book. 4th edition.Singhaphore.Pp(88-145).
- [8]. **Kristen.** (**2018**) ."Effect of condoms on reducing the transmission of herpes simplex virus type 2 from men to women.JAMA.American journal.2017 Jun 27;285(24):3100-6.p45.
- [9]. Martiny. (2018) "male condom used worldwide ,Rights, and Justice, International Handbook on prevalence male condoms, Colombia, 2ndedition.pp(123-145).
- [10]. **Gemback.**(2017). "The relationship between condom use and herpes simplex virus acquisition. Ann Intern Med 2020;143:707–13. Warner L, Clay.Clinical research.Spanish. P76.
- [11]. **Davis and Beaty.** (2018). " Update on adolescent condom use. Current Opinion in Obstetrics & Gynecology.Oxford book.2nd edition.German.doi:10.1097/GCO.0b013e32834a93bf 23(5), pp(350-354).

- [12]. Zimmer.(2017). "Size Does Matter, When It Comes to Condoms" Nursing research. USA. Huffington Post. Archived from the original on 6 October 2018.Retrieved 10 October 2018.P56.
- [13]. **Brigman.**(**2018**) ."National and state patterns of teen births in the United States, 1940-2013. National Vital Statistics Reports 63(4).
- [14]. Crittenden. (2019). "Can Condom Users Likely to Experience Condom Failure be Identified?". Family Planning study. England. Perspectives. 25 (5. doi:10.2307/2136075. JSTOR 2136075.): pp(220–226).
- [15]. Diclemente, Coyle and Gause. (2019). "Male condom. Embryo images nr 024. Journal. USA. P67.
- [16]. Nicole, Anita L.; Woodward and Jo Ann. (2017). "Sexually Transmitted Diseases: A Practical Guide for Primary Care. Thesis. Colombia. Springer Science & Business Media.. ISBN 9781597450409.p312.
- [17]. Yarber and Kaufman. (2017) "STD's Today National Prevention Network, Center for Disease
- [18]. **Briggs**, (2018)."Condom use promotes regression of human papillomavirus-associated penile lesions in male sexual partners, Physiology Male System; 107:804–10. Text book. Colombia. pp(657-878). Control, United States Government, retrieving 2017.
- [19]. Montoya.(2018) ."Contraceptive efficacy" (PDF).Ardent Media.Clinical research.Spanish. Archived(PDF) from the original on 2017-11-12. Retrieved 2018-03-13.p47.
- [20]. WHO,2016, Male condom checklist.

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