

Sexual Life Pattern and Self-Care Practices Among Copper Intra Uterine Device (Iud) User At Assiut City

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Abstract

Background: Contraceptives as IUD method can enhance women's and public health, but may be terminated due to occurrence of some problems as sexual problems and genital infection **Aim:** To assess self-care practices and sexual life pattern among copper IUD user at Assiut city. **Methods:** Descriptive research design was used, **sample size convenience sample** involved 500 women IUD's users, study was conducted at family planning outpatient clinic, Woman's Health Hospital, and Qlta Maternal and Child Health Care center and Mabra Hospital, Eleman hospital Assiut, Egypt. Data was collected by using interview questionnaire. **Results:** Study shows that 67.6% of studied women have a satisfactory practices. Regarding sexual life pattern about 26% of women complain from differences in libido after using IUD, 24.4%, 21.2%, 23.6%, 20.0%, 26.8%, and 25.8 % of women have a difference in sexual desire, difficulty in vaginal wetting during cotius, difficultly reach orgasm, woman's don't satisfied at the end of sexual relationship, husband don't satisfied at the end of sexual relationship, and dysparenia respectively. **Conclusion:** IUD's users had insufficient self care practices and there have some form of sexual pattern affected by using IUD as a contraceptive method. **Recommendations:** Educational program about self care practices and sexual pattern for IUD users should be provided. Counselling from health care provider about self care practice

Keywords: *Self-Care, Practices ,Sexual Life & Copper IUDs.*

Introduction

Contraceptive can improve women's health, and so the health of the public, but there are some hinders that make the women to terminate their contraceptive method. From these hinders sexual problems and genital tract infection (Sanders et al., 2018) & (Kanakannavar & S, 2019).

Copper IUDs is one of the most widely used method in Egypt. It is reported about 52.9 % of family planning users use IUDs as a contraceptive method (Egypt FP2020 Commitment, 2020). method that placed in the uterus and have two thin threads hang from the cervix. It is very effective (99%), low cost, and long term reserviable contraceptive method that lasting from 5- 10 years (McNany, 2017).

IUDs works immediately after insertion, it release a small amount of copper. It make sperm inactive and not able to travel to fertilize egg. It also change cervical mucus to prevent sperm to reach egg.(Brown health services., 2019) IUDs is accompanied by some problems that may occur with it as heavier and longer periods, it may pushed out of the uterus, (Reproductive Heath Access, 2017).

Faulty self care practices performed during using IUDs can increase risk for vaginal infection (Baraia et al., 2017). Self care practices are individual activities performed to improve their health and well being. It can play a vital role in improving health

related outcomes (Igarria et al., 2019). Related self care practices of IUDs to avoid genital infection include personal, vaginal, menstrual and toilet hygiene (Baraia et al., 2017).

Other aspect should be taking into consideration while using IUDs as a contraceptive method, this include sexual life that should not be ignored (Umrans, 2016). Female sexual dysfunction (FSD) is deficiency in at least one component of the sexual response cycle that involve desire, arousal, ability to reach orgasm and pain during sexual intercourse (Banaei et al, 2020).

It is reported that using IUDs as a contraceptive method cause lower female sexual function index (FSFI) subscale scores of desire when compared with other methods (Umrans, 2016).

Women attention to the self care practices and problems which may occur while using IUDs is very important and the nurse carry the vital role to implement this action (Nurvita et al., 2018).

Significant of the study

According to WHO estimation, 160 million women use IUDs world wide ,Also IUD may be associated with lower genital tract infection (Kanakannavar & S., 2019) In Mansoura University in 2011 a study conducted about rate of

occurrence of vaginitis and cervicitis among IUDs users and have found 12, 6 % of them develop vaginitis and 8, 6 % have develop cervicitis (Ashraf, et al., 2011) and self care practices play a vital role to enhance health related outcomes (Igarria et al., 2019), so the researcher interested in assessing self care practices and sexual pattern among IUD users. Umran 2016, who carried out their study to evaluate the effect of contraceptive method on the function of female sex, and found that around one quarter of studied women had a dyspareunia and sexual problem in partener. also. Rezk et al., (2017) assess risk of genital infection among new users of COCS and LNG-IUS, and clarified that less than one quarter of studied women had bacterial vaginosis. This difference back to using of LNG-IUS instead of copper IUDs

Aim of the study

The present study aimed to

Assess self care practices and sexual pattern among IUDs users at Assiut city

Research questions

Does the use of IUDs have an effect in sexual function?

Are Self care practice had effect on sexual life pattern among copper Intra uterine device (IUDs) users at Assiut city

Subjects and methods

Research design: Descriptive exploratory research design was carried out in this study.

Study setting: The study was conducted at family planning outpatient clinic, Woman's Health Hospital (one of the great teaching hospitals in Upper Egypt), Assiut University, Egypt and Qlta Maternal and Child health Care center and Mabra Hospital, and Eleman hospital at Arabaen hospital. all of them serves all women from rural and urban areas.

Study sample

The sample was consist of a convenience sample 500 women attending at

a family planning method and attended to the family planning outpatient clinic of Woman's Health Hospital and Qlta Maternal and Child health Care center Mabra Hospital, and Eleman hospital at Arabaen for follow up. (a precision of 5%, =0,05 and power of 95%)

Sample size calculation

Sample size calculated through Open Epi-Info Statistical Package, Version 2.3.1 using the sample size equation. The total numbers of IUDs users were 500 women. With precision levels 5% where confidence level is 95% and $p < 0.05$.

Inclusion criteria

All women who used copper IUDs as a family planning method attended to the family planning outpatient clinic and Qlta Maternal and Child health Care center Mabra Hospital, Eleman hospital at

Arabaen for follow up and accepted to participate in the study.

Tool of the study

Structured interview questionnaire:

I: Interviewing Questionnaire It was divided into five parts:

Part 1 – sociodemographic data: patient's age, level of education, occupation and resident.

Part 2- Menstrual history includes: age of menarche, duration, regularity interval and any menstrual abnormalities.

Part 3- Obstetric history which includes: gravidity, parity, type of delivery (normal, caesarian section)

Part 4 - Feminine hygiene which include: vaginal douches; spray; suppository sanitary pads, kind of under wear, technique of vaginal cleaning.

Part 5- Family Planning history which include: IUD usage duration, indications and any discomfort or complications ;(metrorrhagia, spotting, infection, gastrointestinal infection, blood loss, sexual problems and unwanted pregnancy)

Tool II - Sexual Function Scale: Which include sexual orgasm, vaginal lubrication, frequency of sexual desire, enjoyment, arousal, 'tense' feelings, feeling 'close and comfortable with the husband and male husbands' experience of sexual problems, it consist of nine items ,the response will be yes (1) or no(2)

The scale include : 1 sexual orgasm, 2-vaginal lubrication, 3- frequency of sexual desire, 4-enjoyment, 5- arousal, 6-'tense' feelings, 7-feeling 'close 8- comfortable with the husband 9- male husbands' experience of sexual problems).

Tool Validity

content validity of the study tool was reviewed by jury group that involved three experts in maternity and newborn health nursing for comprehensiveness, accuracy and clarity of language.

Tool reliability

The internal consistency of the study tool was estimated by using Cronbach's Alpha; and it was 0.791

Practices scoring system

Each practice was scored as (1) for a correct performance and (zero) for an incorrect performance. While the total practices score was calculated as the following: <60% was unsatisfactory and if 60% and more was satisfactory.

Ethical consideration

To achieve this study, necessary approval was obtained from the responsible authorities of Woman's Health Hospital and Qlta Maternal and Child health Care center. oral consent was obtained from every woman participate in the study after explaining the

aim and nature of the study. Also, confidentiality was maintained during the research process.

Pilot study

A pilot study was done on 10% (50) of women, who used copper IUDs as a family planning method and attended to the family planning outpatient clinic of Woman's Health Hospital and Qlta Maternal and Child health Care center . to assess the tool for its applicability, clarity and to make it obvious to collect data. Data obtained from the pilot were involved to the study sample as no vital modification was done on the tool.

Fram work

Collecting of data took a time of 6 months from the beginning of 9/2019 to the end of 2/2020.

Procedure

Aims and nature of the study was explained to every woman involved in the study after taking all consents to collect data. The researchers met with women who attended to the family planning outpatient clinic of Woman's Health Hospital (200) and Qlta Maternal and Child health Care center(100) Mabra Hospital (100), and Eleman hospital at Arabeen (100) five

days a week from 9:00 AM to 1:00 PM. The researchers interviewed every woman separately to collect data as personal characteristics, obstetric data, current IUDs data, data related to self care practices and presence of infection and data regarding sexual life pattern. Every woman took from 20-30 minute to finish data collection. The researchers then gave the woman a bouchure that contained information regarding copper IUDs as (effectiveness, mechanism of action, advantages, disadvantages, side effects, care while using it)

Statistical design

Data entry and analysis were done using SPSS version 18 Program statistical software package for social sciences. Data were presented using descriptive statistics in the form of frequencies and percentages. Also, Mean was calculated. Correlation between variables (chi square) were used statistical significance difference was considered at P-value ≤ 0.05 and highly statistical significance was considered at P-value ≤ 0.01 .

Results

Table (1): distrubation of studied women according to Personal characteristics of the studied women:n==500

| Personal characteristics | No. | % |
|--------------------------------|------------------|------|
| Age: (years) | | |
| Mean \pm SD | 29.94 \pm 6.90 | |
| Less than 20 years | 36 | 7.2 |
| 20 - 35 years | 283 | 56.6 |
| More than 35 years | 181 | 36.2 |
| Residence: | | |
| Rural | 222 | 44.4 |
| Urban | 278 | 55.6 |
| Level of education: | | |
| Illiterate, read & write | 93 | 18.6 |
| Basic education | 56 | 11.2 |
| Secondary | 215 | 43 |
| University or higher education | 136 | 27.2 |
| Occupation: | | |
| Housewife | 331 | 66.2 |
| Employee | 169 | 33.8 |

Table (2): distrubation of studied women according to Obstetrical history of the studied women: n==500

| Obstetrical history | No. | % |
|---------------------|-----|------|
| Gravidity: | | |
| Primi gravida | 49 | 9.8 |
| Multi gravida | 288 | 57.6 |
| Grand multi gravida | 163 | 32.6 |
| Parity: | | |
| Primipara | 46 | 9.2 |
| Multipara | 317 | 63.4 |

| Obstetrical history | No. | % |
|--------------------------|-----|------|
| Grand-multipara | 137 | 27.4 |
| Mode of delivery: | | |
| Normal vaginal delivery | 328 | 65.6 |
| Caesarean section | 172 | 34.4 |

Table (3): distrubation of studied women according to current Copper IUD used:n=500

| Current Copper IUD data | No. | % |
|--|-----|------|
| Duration of use | | |
| Less than one year | 187 | 37.4 |
| 1-2 years | 231 | 46.2 |
| More than 2 years | 82 | 16.4 |
| Occurrence of problem while using | | |
| Yes | 354 | 70.8 |
| No | 146 | 29.2 |
| Type of problem | | |
| Bleeding between the cycle and the other | | |
| Yes | 86 | 24.3 |
| No | 268 | 75.7 |
| Infection of the reproductive system | | |
| Yes | 172 | 48.6 |
| No | 182 | 51.4 |
| Unexpected pregnancy | | |
| Yes | 22 | 6.2 |
| No | 332 | 93.8 |
| Sexual problems | | |
| Yes | 111 | 31.4 |
| No | 243 | 68.6 |
| Missed IUDs | | |
| Yes | 11 | 3.1 |
| No | 343 | 96.9 |
| Ulcer in uterus | | |
| Yes | 6 | 1.7 |
| No | 348 | 98.3 |
| Expulsion | | |
| Yes | 8 | 2.3 |
| No | 346 | 97.7 |
| Menorrhagia | | |
| Yes | 71 | 20.1 |
| No | 283 | 79.9 |

Table (4): Distribution of the studied women according to their self-care practices:n==500.

| Self-care practices items | No. | % |
|---|-----|------|
| Substances used in hygienic care | | |
| Clean vulva using hot water only | 234 | 46.8 |
| Clean vulva using ordinary water only | 113 | 22.6 |
| Clean vulva using water + disinfectant | 153 | 30.6 |
| Types of sanitary pads: | | |
| Cotton | 99 | 19.8 |
| Other type | 401 | 80.2 |

| Self-care practices items | No. | % |
|--|-----|------|
| Types of underwear: | | |
| Cotton | 238 | 47.6 |
| Other type | 262 | 52.4 |
| Method of cleaning the vulval area: | | |
| External by hand | 301 | 60.2 |
| External by gloved hand | 12 | 2.4 |
| By inserting fingers in to vagina | 187 | 37.4 |
| How to clean vulva: | | |
| From up to down | 351 | 70.2 |
| From down to up | 149 | 29.8 |

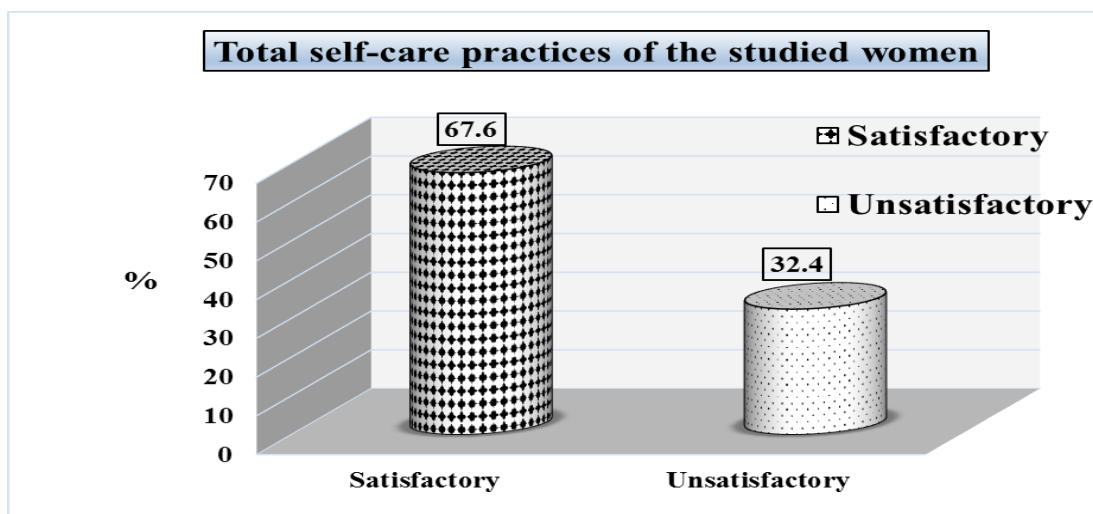


Figure (1): distribution of studied women according to Total self-care practices:n==500

Table (5): Distribution of the studied women according to current sexual life pattern:n=500

| Current sexual life pattern | No. | % |
|--|-----|------|
| Difference in libido after using IUDs: | | |
| Yes | 130 | 26.0 |
| No | 370 | 74.0 |
| Type: | | |
| Sexual promiscuity | 1 | 0.8 |
| Complaint from husband | 93 | 71.5 |
| Complaint from spouses | 36 | 27.7 |
| Difference in sexual desire of husband after using IUDs | | |
| Yes | 122 | 24.4 |
| No | 378 | 75.6 |
| Vagina easily become wet during sexual intercourse | | |
| Yes | 394 | 78.8 |
| No | 106 | 21.2 |
| Easily reach orgasm | | |
| Yes | 382 | 76.4 |
| No | 118 | 23.6 |
| Woman's satisfied at the end of sexual relationship | | |
| Yes | 400 | 80.0 |
| No | 100 | 20.0 |

| Current sexual life pattern | No. | % |
|--|-----|------|
| Husband satisfied at the end of sexual relationship | | |
| Yes | 366 | 73.2 |
| No | 134 | 26.8 |
| Feel uncomfortable or pain during a sexual relationship | | |
| Yes | 129 | 25.8 |
| No | 371 | 74.2 |

Table (6): Distrubation of studied women according to Relationship between total self-care practices and personal characteristics:n=500

| Personal characteristics | Total self-care practices | | | | Total | p-value |
|----------------------------|---------------------------|------|----------------|------|-------------|----------------|
| | Satisfactory | | Unsatisfactory | | | |
| | N | % | N | % | | |
| Age: (years) | | | | | | 0.310 |
| Less than 20 years | 23 | 63.9 | 13 | 36.1 | 36(100.0) | |
| 20 - 35 years | 185 | 65.4 | 98 | 34.6 | 283(100.0) | |
| More than 35 years | 130 | 71.8 | 51 | 28.2 | 181(100.0) | |
| Residence: | | | | | | 0.127 |
| Rural | 158 | 71.2 | 64 | 28.8 | 222(100.0) | |
| Urban | 180 | 64.7 | 98 | 35.3 | 278 (100.0) | |
| Level of education: | | | | | | 0.009** |
| Illiterate, read & write | 51 | 54.8 | 42 | 45.2 | 93(100.0) | |
| Basic education | 34 | 60.7 | 22 | 39.3 | 56(100.0) | |
| Secondary education | 153 | 71.2 | 62 | 28.8 | 215(100.0) | |
| University or higher | 100 | 73.5 | 36 | 26.5 | 136(100.0) | |
| Occupation: | | | | | | 0.650 |
| Housewife | 226 | 68.3 | 105 | 31.7 | 331 (100.0) | |
| Employee | 112 | 68.3 | 57 | 31.7 | 169 (100.0) | |

(**) highly statistically significant $p < 0.01$

Table (7): Distrubation of studied women according to Relationship between total self-care practices and obstetric history.

| Obstetric history | Total self-care practices | | | | Total | p-value |
|--------------------------|---------------------------|------|----------------|------|-------------|----------------|
| | Satisfactory | | Unsatisfactory | | | |
| | N | % | N | % | | |
| Gravidity: | | | | | | 0.986 |
| Primi gravida | 33 | 67.3 | 16 | 32.7 | 49(100.0) | |
| Multi gravida | 194 | 67.4 | 94 | 32.6 | 288(100.0) | |
| Grand multi gravida | 111 | 68.1 | 52 | 31.9 | 163(100.0) | |
| Parity: | | | | | | 0.598 |
| Primipara | 31 | 67.4 | 15 | 32.6 | 46(100.0) | |
| Multipara | 219 | 69.1 | 98 | 30.9 | 317(100.0) | |
| Grand-multipara | 88 | 64.2 | 49 | 35.8 | 137(100.0) | |
| Mode of delivery: | | | | | | 0.006** |
| Normal vaginal delivery | 208 | 63.4 | 120 | 36.6 | 328 (100.0) | |
| Caesarean section | 130 | 75.6 | 42 | 24.4 | 172 (100.0) | |

(**) highly statistically significant $p < 0.01$

Table (8): Distrubation of studied women according to the relationship between total self-care practices and presence of cervical or vaginal infection:

| presence of cervical or vaginal infection | Total self-care practices | | | | Total | p-value |
|---|---------------------------|------|----------------|------|-------------|----------------|
| | Satisfactory | | Unsatisfactory | | | |
| | N | % | N | % | | |
| Presence of vaginal infection | | | | | | |
| Yes | 89 | 37.4 | 149 | 62.6 | 238(100.0) | 0.001** |
| No | 249 | 95.0 | 13 | 5.0 | 262(100.0) | |
| Presence of cervical infection: | | | | | | |
| Yes | 51 | 34.2 | 97 | 65.8 | 148 (100.0) | 0.001** |
| No | 287 | 81.5 | 65 | 18.5 | 352 (100.0) | |

(**) highly statistically significant $p < 0.01$

Table (9): Distrubation of studied women according to the relationship between duration of current IUD used and presence of cervical or vaginal infection:

| presence of signs and symptoms of cervical or vaginal infection | Duration of IUD | | | | | | Total | p-value |
|---|------------------|-------------|------------|-------------|------------------|-------------|-------------------|----------------|
| | Less than 1 year | | 1-2year | | More than 2 year | | | |
| | N | % | N | % | N | % | | |
| Presence of S&S of vaginal infection | | | | | | | | |
| Yes | 54 | 22.7 | 124 | 52.1 | 60 | 25.2 | 238(100.0) | 0.003** |
| No | 133 | 50.8 | 107 | 40.8 | 22 | 8.4 | 262(100.0) | |
| Presence of signs and symptoms cervical infection: | | | | | | | | |
| Yes | 23 | 15.5 | 88 | 59.5 | 37 | 25.0 | 148 (100.0) | 0.001** |
| No | 164 | 46.6 | 143 | 40.6 | 45 | 12.8 | 352 (100.0) | |
| Total | 187 | 37.4 | 231 | 46.2 | 82 | 16.4 | 500(100.0) | |

(**) highly statistically significant $p < 0.01$

Table (1): Illustrates personal characteristics and reports that 56.6% of studied women in age group from (20-35) years old with a mean of 29.94 ± 6.9 , about 55.6% are from urban area, 43% of them have a secondary level of education, and 66.2% of them are housewives.

Table (2): Regarding obstetrics history, this table clarifies that 57.6% of studied women are multi gravida, 63.4% of them are multipara, and 65.6% have a normal vaginal delivery.

Table (3): According to current IUD data, this table reports that 46.2%, 70.8%, and 48.6% of studied women use IUD from 1-2 years, have a problem while using it, and suffer from infection as a side effect while using it respectively.

Table (4): Demonstrates self-care practices of studied women and confirms that 46.8% clean vulval area using hot warm only. About 80.2% of them don not use a cotton pad, 52.4% don not use a cotto underwear, 60.2% clean their vulval area externally by hand, 70.2% clean it from up to down.

Figure (1): Shows total self care practices of studied women and reports that 67.6% of them have a satisfactory practices.

Table (5): Applies distribution of studied women according to presence of cervical or vaginal infection and it is found that 47.6% of studied women have a vaginal infection, 66.4% of them complain from redness, secretion and itching. About 29.6% of them have a cervical infection, from them 54.1% complain from secretion and pain in pubic area and back.

Table (6): Illustrates the current sexual life pattern of studied women. It is reported that 26% of women complain from differences in libido after using IUDs, 71.5% of complaints are from husband, about 24.4%, 21.2%, 23.6%, 20.0%, 26.8%, and 25.8 % of studied women have a difference in sexual desire, Vagina difficult to become wet during sexual intercourse, difficultly reach orgasm, woman's do not satisfied at the end of sexual relationship, husband do not satisfied at the end of sexual relationship, and feel pain during sexual relationship respectively.

Table (7): Demonstrates that there is relation between self-care practices of studied women and educatoional level p- value 0.009 and there is no relation between self-care practices and age, residence, and occupation p-value are 0.310, 0.127, and 0.650 respectively.

Table (8): shows relationship between self-care practices and obstetric history and find that there is

relation between self-care practices and mode of delivery p- value 0.006, but there is no relation between self-care practices and gravidity and parity p-value are 0.986 and 0.598 respectively.

Table (9): Applies relationship between self-care practices and presence of vaginal or cervical infection, it is found that there is relation between self-care practices and presence of vaginal and cervical infection p- value are 0.001 for both.

Table (10): This table reveals that there is relation between duration of using IUD and presence of vaginal or cervical infection p- value are 0.003, and 0.001 respectively.

Table (11): shows relation between duration of using IUD and sexual life pattern, it is reported that there is no relation between duration of using IUD and all items of sexual life pattern, p- value > 0.05 for all.

Discussion

About 162 million women (23% of all contraceptive users) choose IUD as a family planning methods, but using of IUD may be associated by some problems as lack of sexual feeling (Sakinci et al., 2016) and exposure to vaginal infection due to incorrect technique of self care practices (Baraia et al., 2017). this study aimed at assess self care practices and sexual pattern among IUD users. This study aimed to assess self care practices and sexual pattern among IUD users.

The nurse should modify practices to prevent vaginal infection, and this require changes in self care practices that expose woman to risk of infection (Baraia et al., 2017).

Concerning total self care practices, the present study reported that more than two thirds of studied women have a satisfactory practices while using IUDs as a contraceptive method.

Near to previous results Wani et al., (2019) who applied their study in Kashmir on health care providers to assess their knowledge, attitudes and practices towards family planning, and found that three quarters of them had a satisfactory practices.

Rephrase in the contrary previous results Baraia et al., (2017) who performed their study in Ismailia city to evaluate the effect of educational program about self care practices on preventing vaginal infection, and illustrated that the great majority of women had insatisfactory practices regarding general hygienic care and personal hygienic care

Also Semachew Kasa et al., (2018) who implemented their study on reproductive age women in Ethiopia to identify knowledge, attitudes and practices towards family planning, and clarified that around one half of studied women had a satisfactory practices. This difference come from working on all family planning methods and not IUDs only.

As regard self care practices of studied women, the current study shows that less than one half of studied women had a correct way of vulval hygienic care and wear a cotton underwear, around two thirds perform the correct method to clean the vulval area, and near to one fifth of them wear a cotton sanitary pads.

Youssef et al., (2019) agreed with previous words, who performed their study on IUD users to assess their feminine hygiene and sexual function, and reported that around one half of studied women follow the correct way and method of vulval hygienic care and wear a cotton underwear and more than one fifth of them wear a cotton sanitary pads. this similarity come from working on the same country and on the same study sample (IUDs users) and under the same circumstances.

IUDs considered one of the most popular long term reserviable family planning methods. Genital infection related to using IUDs is generally low, but the rate of infection may expected to increase by the effect of imbalance in the bacterial flora due to prolonged IUDs using (Kanakannavar & S., 2019).

As regard presence of genital infection during IUDs using, present study revealed that less than one half of IUDs users complained from vaginal infection and less than one third had a cervical infection.

On the same line, Youssef et al., (2019) who clarified that less than one half of studied women had a vaginal infection and less than one third had a cervical infection. Also Martins et al., (2016) who implemented their study to identify the risk of genital infection in women using IUDs, and reported that around one third of IUDs users had vaginal infection.

On the other hand Aoun et al., (2014) who applied their study to assess relation between age, parity, and IUDs type and complication and discontinuation of IUDs, and showed that less than one quarter of studied women had vaginitis and only 6% complained from cervicitis.

Also Rezk et al., (2017) who performed their study to assess risk of genital infection among new users of COCS and LNG-IUS, and clarified that less than one quarter of studied women had bacterial vaginosis. This difference back to using of LNG-IUS instead of copper IUDs.

Contraceptive as IUD can improve women's and public health, but many women terminate this method due to dissatisfaction that caused by its effect on sexual life (Sanders et al., 2018).

According to sexual life pattern among IUD users, the actual study revealed that around one quarter of IUD users complained from problem in sexual pattern as (difference in libido, different in sexual desire, vaginal difficult to get wet, difficult reach orgasm and pain during sexual relation).

In agreement with previous words **Umran (2016)** who carried out their study to evaluate the effect of contraceptive method on the function of female sex, and found that around one quarter of studied women had a dyspareunia and sexual problem in partner.

Also near to previous word **Higgins & Smith (2016)** who applied their study to identify women's sexual function, satisfaction, and perception, after using long term reversible contraceptive method, and showed that around one fifth of studied women complained from change in sexual pattern.

Disagreement with previous **Turan et al., (2020)** who worked to assess the effect of levonorgestral-releasing IUDs on female sexual function, and reported that around one half of studied women had a dysfunction in lubrication, orgasm and sexual pain, and this occurred due to difference in type of IUD used.

As regard current IUD data, the present study revealed that less than one half of IUDs users, their duration of IUDs insertion from 1-2 years, more than two thirds have a problem while using it, and bleeding is the most occurring problem by around one quarter of all problems.

Also **Aoun et al., (2014)** had the same opinion, who implemented their study to assess effect of age, parity and device type on complication and termination of IUDs, and clarified that less than one quarter of IUDs users complained from bleeding as a complication.

On contrast, **Wright et al., (2014)** who performed their study on cervical ectropion and IUDs, and showed that only 6.5% of studied women complained from bleeding as a complication. This difference caused by difference in study's design as it was a retrospective study, and not follow all IUDs users, but deal with client sheet during follow up.

According to relation between self care practices and personal data and parity, the actual study shows that there is relation between self care practices and educational level and no relation between it and age, occupation and parity.

Semachew Kasa et al., (2018) illustrated that there are relation between practices and educational level, but **Wani et al., (2019)** found no relation between practices and educational level and there was relation between practices and age and parity. This dissimilarity caused by applying of their study on all types of family planning methods and not IUDs only.

Regarding self care practices and its relation with occurrence of genital infection, present study reported that there is relation between self care practices and occurrence of vaginitis and cervicitis. The same opinion had from **Youssef et al., (2019)** who illustrated that there was relation between self care practices and occurrence of genital infection.

The prolonged use of IUDs can make changes in the vaginal bacterial flora, enabling the spread of anaerobic microorganisms as *Gardnerella vaginalis*, predisposing to occurrence of bacterial vaginosis (**Martins et al., 2016**).

Current study revealed that there is relation between duration of IUDs and occurrence of vaginal and cervical infection. These words were agreed with **Kanakannavar & S., (2019)** who worked on clinicomicrobiological study of the removed IUD, and clarified that there was relation between duration of IUDs and positive culture for infection.

Also **Achilles et al., (2018)** who applied their study to assess the impact of contraceptive initiation on vaginal microbiota, and **Martins et al., 2016**, who performed their study to identify the risk of genital infection in women using IUDs, these two studies agreed with previous words.

But **Aoun et al., (2014)** had another opinion, who showed that no relation between vaginal and cervical infection and duration of IUDs.

Present study reported that there is no relation between duration of IUDs and sexual life pattern. On the same line **Nurvita et al., (2018)** who implemented their study to identify female sexual function in women using hormonal and non hormonal contraception, and clarified that there was relation between sexual function and IUD. Also **Aoun et al., (2014)** agreed with this.

Regarding personal data and parity, the actual study found that around one half of studied women in age group 20-35 years, from urban, have a secondary level of education, and are housewives

Also **Aoun et al., (2014) & Saidu et al., (2017)** who implemented their study in Nigeria to determine the type of IUDs that is less associated with genital infection, and clinical features seen among IUD users. Both of them agreed with previous words. But **Umran (2016) Kanakannavar & S., (2019)** had different opinion. And this difference back to working on other points differ from actual study.

Conclusion

This study revealed that women had insufficient self care practices regarding IUDs and there have some form of sexual pattern affected by using IUDs as a contraceptive method.

Recommendation

Educational program about self care practices and sexual pattern for IUD users should be provided to both health care providers and clients.

Counseling of women about Sexual acceptability should take more attention from health care provider .

Repeatability of this research on a large sample size and other professional hospitals for generalization of results.

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