

Awareness and Knowledge of Libyan Women about Endometriosis

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ABSTRACT

Endometriosis is a long-lasting state in which endometrial-like tissue is found outside the uterus often on the reproductive organs, bowel, and bladder. Aimed to: To find out the extent to which Libyan women know about endometriosis. *Material & Methods:* During the one-year study period [2021 to 2022], answer the questions of questionnaire and interview. *Result:* Most of the ages were between (16 - 25 Years) 1353(73.5 %), most Education Levels (University) 1357(73.8 %), and Marital Situation the most were (Single) 1467(79.7 %). frequency and percent of Knowledge Questions Most of the answers were "I don't know" and the answer was "No." This indicates a lack of information about endometriosis, who suffer from endometrioses were the highest percent 75.5 %, I Don't know 21.2 %. Percent of education the answer I don't know 19.4 %, and by no 26.1 %. The Correlations between Knowledge and Education Levels, the p-value > 0.05 means there is no relationship between education level and knowledge of endometriosis. *Conclusion:* that the educational level has nothing to do with the extent of awareness among women about endometriosis, and therefore we find that the percentage of those suffering from endometriosis is very high, and that women need a lot of awareness and knowledge about the endometriosis disease.

INTRODUCTION

Endometriosis is a chronic inflammatory disease that has only recently been more thoroughly characterized but affects about 10% of women of childbearing age (Roullier et al., 2021), World endometriosis society reports more than 176 million women suffer from endometriosis across the world. (Ramani Devi et al., 2021) Endometriosis exists when endometrium-like tissue (the lining of the womb) develops outside the uterus. (Abd Elrahim et al., 2022), Bearing in mind that gender is a major social determinant of health, many women experience sexual and reproduction health issues which account for a third of all health challenges experienced in the reproductive years of women (Adewunmi & Sasah, 2022.), Women of childbearing age are disproportionately affected by endometriosis, a chronic inflammatory condition linked to estrogen (Alasser et al., 2022), The association between endometriosis and infertility is well supported throughout the literature, the prevalence of endometriosis increases to as high as 25%-50% in women with infertility and 30%-50% of women with endometriosis have infertility (Ali et al., 2022), the real risk of endometriosis recurrence in oestrogen-only hormone replacement therapy (EO-HRT) users after pelvic clearance for endometriosis. (Amer & Bazmi, 2023), Women suffering from endometriosis have always been misdiagnosed. The misdiagnosis leads to years of suffering and pain before their illness is truly detected (Arab et al., 2022), Endometriosis (END) and adenomyosis (AD) are benign, estrogen-dependent, chronic gynecological disorders which co-exist in approximately 35% of the patients' sharing mechanisms of etiopathogenesis, The management of patients with END and/or AD includes both surgical and medical treatments. The pharmacological approach aims to suppress ovulation and menstruation through hormonal treatments, with combined oral contraceptives (COCs) with low dose estrogen being considered as a first-line therapy, among other treatments. (Carrillo Torres et al., 2023), Many women with endometriosis experience delay between the onset of symptoms and initial diagnosis, which is mainly due to lack of awareness, which in turn affects progress of the disease and the prognosis of the condition. (Ramani Devi et al., 2021), Endometriosis surgery worsens the phenomenon induced by endometriosis itself as the disease is associated with infertility through various mechanisms, such as chronic inflammation, increased oxidative stress, impaired angiogenesis and cell cycle dysregulation (Henry et al., 2022). Evidence on women's fundamental knowledge of endometriosis and its consequences among college, medical and nursing students, is insufficient. (Khan et al., 2022). Since the search for a non-invasive diagnostic endometriosis marker has been conducted for many years without success so far, it seems that awareness of the clinical presentation and reported symptoms may help to provide earlier diagnoses. (Kotowska et al., 2021).

The outcome is important, given that stronger awareness, acknowledgement, and education about endometriosis among the general public have been coined the "bedrock of an improved response" (Le Busque & Mellish, 2023). Although endometriosis affects an estimated 176 million women worldwide, it has been wrongly reported that endometriosis is a rare condition among African women, mainly due to lack of awareness among healthcare providers and historical bias (Mecha et al., 2022), Adoption of Positive coping strategies had a significant effect on

women's knowledge, practices related to endometriosis.(S. Mohamed El Sayed et al., 2022), Knowledge and attitudes to counsel endometriosis patients on fertility issues and fertility preservation options should be included in the training curricula of gynecologists.(Navarria-Forney et al., 2020), Women with endometriosis experience that they are treated with ignorance regarding endometriosis in nonspecialized care. They experience delays in both their diagnosis and treatment (Pettersson & Berterö, 2020), It is evident from the present study outcome, the general population has limited knowledge on the signs and symptoms of endometriosis, which inhibited them from turning towards medical treatment on right time, which contributes to the delay in diagnosis and proper management of endometriosis. (Ramani Devi et al., 2021), secondary school girls report dysmenorrhea. Although most reporting atypical periods had seen a doctor, over a quarter did not know whether their period was typical or regular. The majority do not have knowledge of endometriosis, contrasting with adolescents' familiarity with other common chronic conditions such as diabetes and epilepsy.(Randhawa et al., 2021), The creation of dedicated networks also helps to improve the management of patients with endometriosis.(Roullier et al., 2021), Strategies to lessen diagnostic delay of endometriosis in adolescents must include integrated actions by educators and healthcare providers to improve health literacy and awareness of common causes of pelvic pain in this age group.(Simpson et al., 2021), the awareness level of endometriosis among the respondents was also poor and they were not familiar with content on endometriosis in the mass media..(Sodeinde & Konu, 2022). Insufficient knowledge about endometriosis among women is one of the causes of its delayed diagnoses. Due to the elusiveness of symptoms, the most important component of early detection is proper and exhaustive knowledge. (Szymańska & Dąbrowska-Galas, 2021). Awareness of the possibility of developing the disease in a particular patient, combined with appropriate use of ultrasound examination, can contribute to the decrease in diagnostic delay.(Wróbel et al., 2022).

THEORETICAL REVIEW

This study agree with many previous study as (Kotowska et al., 2021), (Adewunmi & Sasah, 2022.), (Arab et al., 2022), (Henry et al., 2022), (Kotowska et al., 2021), (Le Busque & Mellish, 2023), (S. L. Mohamed El Sayed et al., 2022), (Ramani Devi et al., 2021), (Roullier et al., 2021), (Szymańska & Dąbrowska-Galas, 2021), (Wróbel et al., 2022), (Khan et al., 2022), (Sodeinde & Konu, 2022), (Randhawa et al., 2021), (Henry et al., 2022), (Navarria-Forney et al., 2020), (Mohamed & Hassan, 2020.), (Mecha et al., 2022), (Eldardery et al., 2022), (Abd Elrahim et al., 2022), (Adewunmi & Sasah, 2022.), (Ali et al., 2022), (Amer & Bazmi, 2023), (Arab et al., 2022), (Henry et al., 2022).

MATERIAL AND METHODS

SAMPLE COLLECTION

- Samples were collected during the awareness campaign about endometriosis, through personal interviews, and questionnaires were distributed about the extent of women's knowledge of endometriosis from most Libyan cities, from east to west and south.

- The questionnaire included sociodemographic data such as, age, , marital status, educational level and place of residence.

SAMPLE SIZE

During the one-year study period [January 1, 2021 to December 31, 2022], 1840 women were answer the questions of questionnaire..

STATISTICAL ANALYSIS

The distribution of categorical variables was compared with the frequency and percent test, and quantitative variables with correlation (R) test. Statistical significance was set at $p < 0.05$. The statistical analyses were performed with the Statistical Package for the Social Sciences software, release 26.0 for Windows.

RESULT AND DISCUSSION

Table 1, Number of participants (%) of Demographic Characteristics, Most of the ages were between (16 - 25 Years) 1353(73.5 %), most Education Levels (University) 1357(73.8 %), and Marital Situation the most were (Single) 1467(79.7 %).

Demographic Characteristics		Number of participants (%)		
		N (%)	Mean	S.D
Gender	Female	1840(100)	-	-
Age (Year)	10 - 15 Years	45(2.4)	-	-
	16 - 25 Years	1353(73.5)		
	26 - 35 Years	243(13.2)		
	36 - 45 Years	141(7.7)		
	46 - 55 Years	47(2.6)		
	More than 56	11(0.6)		
Education Levels	Middle Diploma	102(5.5)	3.47	0.958
	High Diploma	116(6.3)		
	Secondary School	133(7.2)		
	University	1357(73.8)		
	High Graduated	84(4.6)		
	Primary School	43(2.3)		
	Uneducated	5(0.3)		
Marital Situation	Single	1467(79.7)	1.23	0.438
	Marriage	343(18.6)		
	Divorced	18(1.0)		
	Widow	12(0.7)		
Total		1840(100)		

Table 2, shown that the frequency and percent of Knowledge Questions Most of the answers were “I don’t know” and the answer was “No.” This indicates a lack of information about endometriosis

Questions	Answers		
	I Don't Know N (%)	No N (%)	Yes N (%)
Do you have knowledge of endometriosis?	357(19.4)	1003(54.5)	480(26.1)
Do you have knowledge that endometriosis may be of unknown cause?	611(33.2)	674(36.6)	555(30.2)
Do you have any symptoms or more than previously	271(14.7)	1141(62.0)	428(23.3)

mentioned?			
Do you know that cases infected with endometriosis do not have a symptom of approximately 10%?	691(37.6)	828(45.0)	321(17.4)
Do you have the knowledge that the initial early diagnosis of endometriosis through (vaginal system) in experienced people?	680(37.0)	636(34.0)	524(28.5)
Do you have the knowledge that the (golden) and accurate diagnosis is laparoscopy?	809(44.0)	605(32.0)	426(23.2)
Do you have the knowledge that there are complications of endometriosis in the event that it is not diagnosed and the situation worsens?	706(38.4)	453(24.6)	681(37.0)
Do you have the knowledge that pain is the result of bleeding from cells and tissues inside the uterus, as well as from cells and tissues outside the uterus?	674(36.6)	630(34.2)	536(29.1)
Do you have the knowledge to present multiple endometriosis [pain before the onset of menstruation]	553(30.1)	463(25.2)	824(44.8)
Do you have the knowledge that surgeries such as cesarean section have an unintentional implantation of the endometrium (uterine lining) in the abdominal incision, causing the migratory lining to become scar from the surgery?	709(38.5)	679(36.9)	452(24.6)
Total	1840(100)		

Figure (1) illustrated that who suffer from endometrioses were the highest percent 75.5 %, I Don't know 21.2 %.

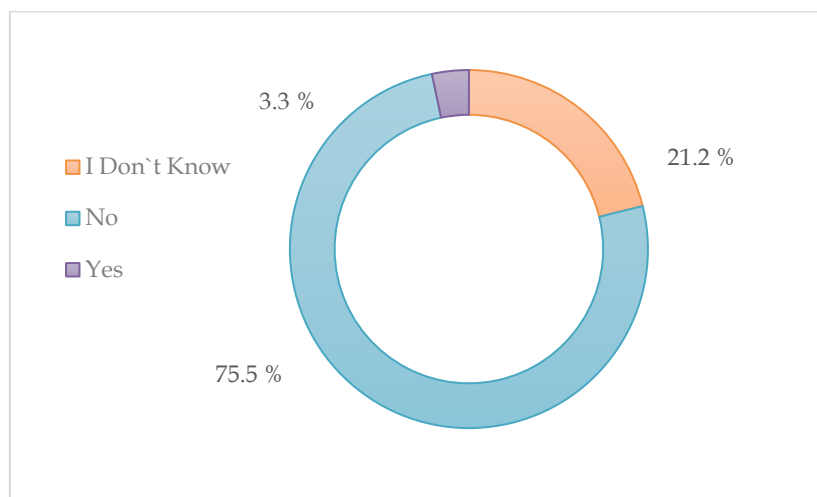


Figure (1) the frequency and percent of who infested by endometrioses

Figure (2) Illustrated that the percent of education the answer I don't know 19.4 %, and by no 26.1 %

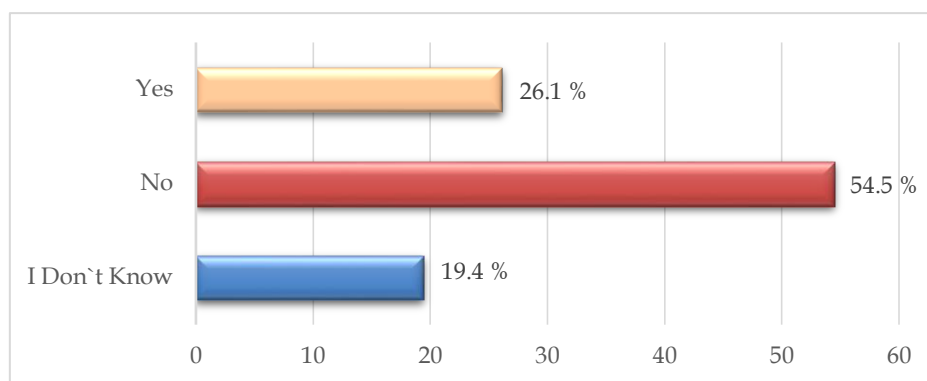


Figure (2) Percentage and frequency of awareness of endometriosis

Table 3, The Correlations between Knowledge and Education Levels, the p-value > 0.05 means there is no relationship between education level and knowledge of endometriosis

Correlations		Education Level
Knowledge	R	0.000
	P-Value	0.999
	N	1840

From the data and results show that the Number of participants (%) of Demographic Characteristics, Most of the ages were between (16 - 25 Years) 1353(73.5 %), most Education Levels (University) 1357(73.8 %), and Marital Situation the most were (Single) 1467(79.7 %).in table 1, in Table 2, shown that the frequency and percent of Knowledge Questions Most of the answers were “I don’t know” and the answer was “No.” This indicates a lack of information about endometriosis, Figure (1) illustrated that who suffer from endometrioses were the highest percent 75.5 %, I Don’t know 21.2 %. Figure (2) Illustrated that the percent of education the answer I don’t know 19.4 %, and by no 26.1 %. In Table 3, The Correlations between Knowledge and Education Levels, the p-value > 0.05 means there is no relationship between education level and knowledge of endometriosis, This study agree with many previous study as (Kotowska et al., 2021), (Adewunmi & Sasah, 2022.), (Arab et al., 2022), (Henry et al., 2022), (Kotowska et al., 2021), (Le Busque & Mellish, 2023), (S. L. Mohamed El Sayed et al., 2022), (Ramani Devi et al., 2021), (Roullier et al., 2021), (Szymańska & Dąbrowska-Galas, 2021), (Wróbel et al., 2022), (Khan et al., 2022), (Sodeinde & Konu, 2022), (Randhawa et al., 2021), (Henry et al., 2022), (Navarria-Forney et al., 2020), (Mohamed & Hassan, 2020.), (Mecha et al., 2022), (Eldardery et al., 2022), (Abd Elrahim et al., 2022), (Adewunmi & Sasah, 2022.), (Ali et al., 2022), (Amer & Bazmi, 2023), (Arab et al., 2022), (Henry et al., 2022).

CONCLUSION

From these results, we conclude that the educational level has nothing to do with the extent of awareness among women about endometriosis, and therefore we find that the percentage of those suffering from endometriosis is very high and that women need a lot of understanding and knowledge about the endometriosis disease

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