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EVALUATION OF THE CONTRACEPTIVE-INDUCED MENSTRUAL CHANGES (CIMC) AND ITS AWARENESS AMONG WOMEN OF THE REPRODUCTIVE AGE

Introduction

Contraception and contraceptive methods are primarily used for the prevention of pregnancy and childbirth by women of the reproductive age. However hormonal or combined oral contraceptives are commonly used by women diagnosed with conditions such as endometriosis, polycystic ovarian syndrome (PCOS), in order to regulate menstrual cycles and to manage various conditions related to menstruation [1]. Contraceptive-induced menstrual changes (CIMCs) are the shifts that can occur in menstruation such as the changes in the bleeding volume, regularity, duration and frequency of the menstrual cycle. Even though these changes and effects are generally safe, it can impact on the satisfaction, continuation or the discontinuation of the usage of contraception by most women [2]. Most of the CIMCs reportedly occurs in women who uses oral hormonal contraception for the first time. Usually, these changes reduce or completely disappear within the first three months of use. [4] Bleeding irregularities usually depends on the type of the oral contraceptive, and other factors such as high body mass index (BMI) and smoking [4]. Spotting, withdrawal bleeding, unscheduled bleeding or amenorrhea are common changes that could occur during the use of contraception. The gold standard in hormonal emergency contraception around the world is known to be Levonorgestrel [5]. The safest administration of Levonorgestrel is a single dose of 1.5 mg. The most common change in menstruation that is induced in women due to this drug is usually a seven-day delay in menses and ovulation [5]. The most frequent and common side effects that can arise during and after the use of contraception are; decrease in libido, mood swings, mood depression, irritability, gaining of weight, increase in appetite, vaginal infections and headaches [6]. Provision of information, building up awareness on CMICs are carried through global research initiatives by the World Health Organization especially focusing the middle- and low-income families in order to prevent unplanned pregnancies and other menstrual related conditions in women across the world [7].

Goal

The main goal of this article is to evaluate the knowledge, understanding and the awareness about the common contraceptive-induced menstrual changes in women of reproductive age, by the current or past usage of different methods of contraception.

Material and methods of research

A cross sectional electronic anonymous survey-based study was conducted through a google form on 88 women in their reproductive age, majority living in Belarus and Sri Lanka. Statistical data was collected based on their knowledge, awareness and experience of the use of contraception, contraceptive-induced menstrual changes, most common side effects and primary sources of information regarding CIMCs. Definitions, information and other related data were collected from PubMed and other scientific articles as mentioned in the literature below.

The results of the research and their discussion

A total of 88 women between the ages of 15 and 50 years, in their reproductive age, were enrolled in this survey to collect data on awareness and their knowledge about contraceptive-induced menstrual changes. Among them, a majority of 46 (52.3%) women living in Belarus,

36 (40.9%) living in Sri Lanka and 6 (6.8%) living in India, Australia, Morocco, United Kingdom and Canada were recorded and descriptively analyzed. Out of the women that participated in the survey 67 (76.1%) has never used any contraceptive methods in their lives and 27 (23.9%) of them have used or is currently using contraceptive methods that include oral contraceptive pills, emergency contraception or an intrauterine device (IUD/Hormonal coil). The primary reason of the total number of women that use or have used contraceptive methods were recorded as; for prevention of pregnancy – 9.1%, PCOS/Endometriosis – 10.2% and for regulation of menstrual cycles, treatment of pain and cramps – 6.8%.

From the total number of women (88) who participated in the survey, percentage values were calculated individually based on their past experience of CIMCs. The percentage results for every category out of the total of 88 are summarized in Figure 1 as follows.

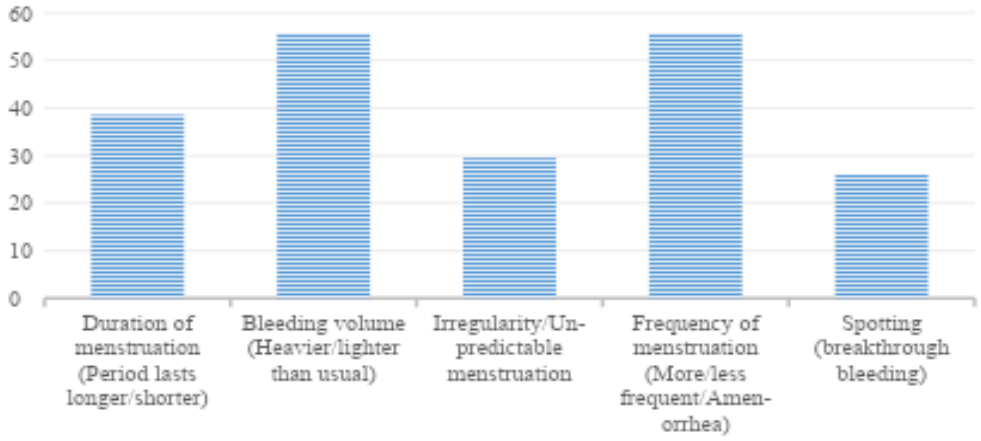


Figure 1 – Percentages of awareness, knowledge and experience of CIMCs based on factors of menstruation in the sample group of 88 women of the reproductive age

Apart from the primary changes in menstruation as mentioned and analyzed above, the secondary symptoms recorded in the sample group of women after using contraceptive methods were as follows; Increased or decreased uterine cramping/pain – 37.8%, Mood swings or depression – 77.8%, Headaches or migraines – 42.2% and Weight changes – 44.4%.

Out of the 88 women who participated in this survey, 65 of them were aware of CIMCs but 23 of them were unaware that changes in menstruation could be induced with the usage of different types of contraceptive methods.

The primary source of information regarding Contraceptive-induced menstrual changes in the sample group of this survey was obtained in percentage values as shown in Figure 2 below.

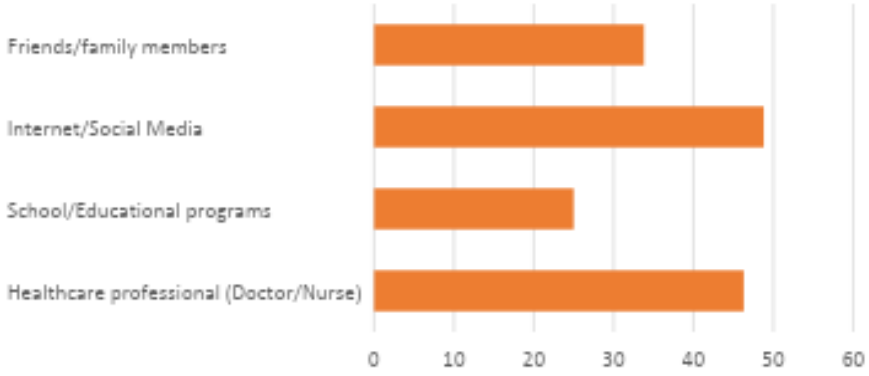


Figure 2 – Percentages of the primary source of information about CIMCs in the sample group

Conclusions

With the results obtained in this study, it shows that even though the majority of women do not use contraceptive methods, they are aware of the contraceptive-induced menstrual changes that could occur. In accordance to the women who have used or is currently using contraception, it is clear that almost all of them have experienced one or more changes in their menstruation and overall health. The level of education is a need of concern within the sample group of women, so accurate guidance should be provided by healthcare professionals, in educational institutions, through social media and other modes of publications. In conclusion, this study reveals the importance of educating the women of the reproductive age about contraceptive methods, CIMCs and side effects, for the overall betterment and wellbeing of the reproductive health in women.

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PREVALENCE OF POLYCYSTIC OVARY SYNDROME (PCOS) AMONG A COHORT OF UNIVERSITY STUDENTS

Introduction

Polycystic ovary syndrome (PCOS) is the most common hormonal disorder in women of reproductive age. The name comes from the observation of small follicles (or "cysts") that often appear on the ovaries.

However, not everyone with PCOS has these follicles, and they are not the cause of the condition [1].

In women of reproductive age, with a global estimated prevalence of 4–20%. It is characterized by a constellation of symptoms, including menstrual irregularity, Hyperandrogenism (clinical or biochemical), and polycystic ovarian morphology [2]. The condition is associated with significant long-term health risks, including metabolic syndrome, type 2 diabetes, and cardiovascular disease.