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The Education Prescription: Exploring the Potential of Patient Education to Reduce Mental Health Issues in Hormonal Contraceptive Users

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**The Education Prescription: Exploring the Potential of Patient Education to Reduce
Mental Health Issues in Hormonal Contraceptive Users**

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NURS 4500: Nursing Research and Thesis

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Abstract

The many birth control options available impact a woman's life, as hormonal contraceptives are commonly used but often misunderstood. These contraceptives, which contain progestin only, or estrogen and progestin combined, can come in various forms such as pills, implants, IUDs, injections, the vaginal ring, and skin patches. They offer benefits such as reduced menstrual cramps and ectopic pregnancy risk. However, they may lead to adverse side effects which can include increased blood pressure, nausea, headaches, breakthrough bleeding, and a higher risk of blood clots, with research indicating a potential link between oral contraceptive use and a decline in the user's mental health. Given how important the issue of depression is, especially in women, it is prevalent for healthcare providers, educators, and nurses to offer detailed education about the many birth control options there are as well as the potential side effects on one's mental health. This research aims to investigate whether educating adolescent women about hormonal contraception could impact the knowledge of women using it and how it connects to addressing gaps contributing to poor mental health. An educated nurse will provide a pre-education assessment, which will then be followed by education to the teenage girls about the difference between hormonal and non-hormonal contraceptives, the advantages and disadvantages of both, as well as potential side effects of using contraceptives. The means of the two differing variables will be compared using a t-test to ascertain if the education has an effect on the population that was sampled.

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Introduction

The options for birth control are complex and it has an impact on a woman's life. Hormonal contraceptives are available in countries across the world; however, a large proportion of women who may use these contraceptive methods only possess limited awareness regarding the nature of the medication they are ingesting. Hormonal contraceptives contain progestin only, or a combination of estrogen and progestin. Many methods of birth control contain hormones, which include birth control pills, implants, intrauterine devices (IUDs), injections, the vaginal ring, and skin patches (Lopez, 2013). There are benefits to using contraceptives that can include reducing menstrual cramps, lightening periods, and lowering risk of ectopic pregnancy. However, hormonal birth control options have risks that many women may not be attuned to. Side effects can consist of increased blood pressure, nausea, headaches, sore breasts, breakthrough bleeding, increased risk for blood clots, and a decrease in mental health such as an increase in depression (Beckermann, 2003). There are correlations found in women who use hormonal birth control and a decline in their mental health status (Skovlund, 2016). The decision to use the best available birth control is incredibly personal. Women should be well informed before making such an important decision.

Problem Statement

Depression is an immense burden on many people across the world, and it is about twice as high in women than in men (Kuehner, 2017). The hormones estrogen and progesterone play a role in that factor (Shors & Leuner, 2003). Many studies show that the use of combined oral contraceptives (OC) can add to adverse mood effects in women as well as changes in emotional brain reactivity (Gingell et al., 2013). Clinical studies have shown that changes in estrogen levels can trigger depressive episodes in women that may already be at risk for depression (Payne et al.,

2003). Additional factors that put women at risk for depression include genetic or biological, as well as psychological and personality (Payne et al., 2003). Hormone changes may add to this possibility, and many women are unaware of this risk they are imposing on themselves.

Many women do not have enough information about the different birth control methods, and most women are not aware of the mood changes that may be associated with hormonal contraceptive use. Many nurses and other healthcare providers do not thoroughly educate women about their options as well as the possible side effects. School nurses and teachers may provide information pertaining to birth control in health education classes but often teenagers who are able to access birth control without the knowledge of their parents, are not given complete information. Most often, sexual health curriculums do not include information on the side effects of hormonal birth control methods.

Women need more in depth appointments with healthcare providers or school nurses, during which information can be given about the benefits and risks of hormonal birth control, as well as the differences between hormonal and non-hormonal birth control options that are available to them (Yee & Simon, 2011). It is necessary to have more patient-centered counseling about birth control options. Prior research has shown that patients have reported being hesitant as well as embarrassed to discuss their concerns. They have also reported as not receiving adequate information to make a clear and informed decision about what method of birth control is best for them (Dehlendorf et al., 2013). In addition, it is crucial to implement regular check-ins with providers to ensure that a patient's preferred method of birth control is not negatively impacting their mental health in any way. If mental health is in fact an issue, the patient should be offered counseling sessions or referrals to mental health services that are accessible to them.

Purpose Statement

This research proposal will aim to investigate if patient education will change attitudes and knowledge level among adolescents in relation to birth control use. This study will also assess the need for follow up meetings to check in on the mental health of women on hormonal contraceptives. Little or no research has been done to this date on if educating women about hormonal birth control will result in an increase of non hormonal birth control methods. Identifying the gaps that contribute to poor mental health in women using hormonal contraceptives will provide better care and insight to women that need help before it is too late.

Problem Question

What is the potential impact of patient education regarding hormonal contraceptive use and how does it relate to addressing gaps contributing to poor mental health in women using hormonal birth control?

Hypothesis

An education program including a nurse-led class will increase the knowledge of hormonal birth control side effects among 14-18 year old girls in sexual education health classes in school.

Literature Review

Search Strategy

The following literature review explores the side effects of hormonal birth control among women and draws attention to the importance of post-prescription follow-ups. Additionally, it examines the need for education before being prescribed hormonal birth control. The research for this review draws from sources accessed through CINAHL, PubMed, and ScienceDirect, with search terms primarily focusing on "hormones", "hormonal birth control", "contraceptives", "education", "adolescents", "copper IUD", and "side effects". Inclusion criteria for these

articles required publication after 2013 and having a peer-reviewed status. Seven articles have been chosen for this comprehensive review, and is organized into three main themes: potential side effects of hormonal birth control, the necessity for follow-up care, and the significance of education for individuals considering hormonal medication. A Literature Review Table can be found in Appendix A.

Potential Side Effects of Hormonal Birth Control

In a quantitative study, Skovlund et al. (2016) conducted a prospective cohort study with women and adolescents aged 15 to 34 years living in Denmark. The purpose of this study was to explore if the use of hormonal birth control was positively associated with the following use of antidepressants and a diagnosis of depression at a psychiatric hospital. The women who use contraceptives were continuously monitored starting from their entry into the experiment in 2000, to the end of the follow-up period in 2013. The effects that were observed were compared to women who did not use contraceptives (Skovlund et al., 2016).

Researchers found that the use of hormonal birth control, chiefly among adolescents, was associated with subsequent use of antidepressants and a first diagnosis of depression. This suggested depression as a potential adverse effect of hormonal contraceptive use. Adolescent women were more unprotected against this risk than women 20 to 34 years old. One limitation of this study was that participants originated from Denmark, limiting diversity, making the results less generalizable. It is also not known if the patients made the choice to get mental health assistance if they felt the need. Another limitation was that if a woman who wanted to be prescribed hormonal contraceptives had onset depressive symptoms and a general physician were to take note of this, they could have detection bias (Skovlund et al., 2016).

Morch et al. (2017) conducted a national prospective cohort study to evaluate the correlative risk of suicide attempt and suicide in users of hormonal contraception. This study observed connections between hormonal birth control use and suicide attempt and suicide of all women in Denmark who turned 15 years old during the time of the research study. None of these women had any prior psychiatric diagnoses, or antidepressants prescribed in conjunction with hormonal contraceptive use. The participants independently updated information about their use of hormonal contraception, suicide attempts, and suicide in an open-ended questionnaire survey (Morch et al., 2017).

Researchers found that the use of hormonal contraception was positively linked with ensuing suicide attempt and suicide. Teenage women experienced the highest relative risk. Within 8 years, there were 71 suicides and 6,999 suicide attempts. The association between hormonal birth control use and a first suicide attempt peaked after 2 months of use. (Morch et al., 2017) One limitation of this study is that the possibility of other risk factors such as previous mental health issues that can lead to suicide to suicide attempts were not accounted for. Another limitation is that the girls are only 15 years old, and they can be at higher risk for adverse mood reactions unrelated to hormonal contraceptive use.

Johansson et al. (2023) conducted a population based cohort study using the information of 264,557 women in the UK Biobank. The aim of this study was to make an estimate of the risk of depression that is associated with the starting of oral contraceptives as well as the effect of oral contraceptives use on lifespan risk of depression. The sample consisted of women between the ages 37-71. The researchers collected questionnaires, interviews, physical health measures, biological samples, and imaging (Johansson et al., 2023).

Notable findings from this study showed that oral birth control use is causally connected with an escalated risk of depression in teenagers as well as in adults, specifically shortly after the initiation (hazard ratio [HR] = 1.71, 95% confidence interval [CI]: 1.55–1.88). Most women tolerated oral birth control well without experiencing negative mood effects, making oral contraceptives a good option for many women. However, educating oral contraceptives users, screening for depression, and informing primary healthcare practitioners regarding the oral contraceptive-depression relationship are needed to determine the cause of hormone birth control-provoked depression. A limitation of this study includes that it was done over a 4 year period, which is an insufficient timeframe to observe long term effects of OCs.

In a cross-sectional study that was anonymously conducted in an online RedCap survey, Martell et al. (2023) analyzed responses of 188 patients who had used hormonal contraceptives at some point in their lives. The motivation of this study was to better characterize patients' experiences with hormonal birth control, its side effects, and birth control counseling as existing research about the psychological side effects of hormonal contraceptives are limited (Martell et al., 2023).

Researchers' remarkable findings indicate that mood changes are among the most common recognized side effects of hormonal birth control (48.3%). This speaks to a lack of communication between patients and providers when it comes to discussing the possibility of mental side effects with hormonal contraceptives (83%) (Martell et al., 2023). A limitation of this study was that there were a wide range of ages, therefore some of the women may have taken hormonal birth control several years prior.

The Necessity for Follow-Up Care

Pasand et al. (2020) conducted a cross sectional study that sampled 300 married women aged 19-50 in Tehran, Iran. The study compared the sexual satisfaction and depression levels in women who use the two most effective contraceptives: the intrauterine device and depo-medroxyprogesterone acetate. There are few existing facts about the sexual mood changes of the two methods, and this study aimed to fill that gap (Pasand et al., 2020).

A standard questionnaire was used to assess the sexual satisfaction and depression of the women who had an IUD inserted or received the Depo injection. This study reconfirmed that an IUD was a preferable method in women who were eligible to use both methods. Depression levels increased in women who got the Depo injection in comparison to IUD users ($P < 0.001$). Sexual satisfaction increased in women who had the IUD inserted in comparison to the women who got the Depo injection ($P = 0.003$, $B = -6.4$) (Pasand et al., 2020). A limitation of this study was that the participants were of the same ethnicity, limiting diversity.

In a cross-sectional, descriptive research study conducted by Cooke-Jackson et al. (2021), 134 women aged 18-37 answered surveys that had open questions about contraceptives and decision making. The purpose of this study was to understand from where or whom women receive their information in regards to birth control. This is significant so that providers can help women with their decision making and provide the most needed information available to what they need to know. Seeking information among women is complex and at times political, so the study aimed to target what women would have wanted to know about their birth control options as well as their reasons for picking their current birth control choice (Cooke-Jackson et al., 2021).

Researchers' crucial findings showed that patients wished their providers informed them about the consequences of birth control as well as the wide variety of options. Some participants

described a series of concerns in relation to mental and emotional health associated with the use of birth control. Other participants identified specific forms of birth control, such as the pill, as causing mental health issues and other birth control options like the IUD as preventing mental health problems. Some participants identified panic attacks, general anxiety, mood swings, and depression as side effects of specific forms of contraception, which motivated them to use a different form to avoid the side effects once experienced (Cooke-Jackson et al., 2021). A limitation of this study was that there was a wide demographic of women who participated including women with higher education, potentially influencing the results. The questions used in the survey were also open-ended, which can lead to diverse interpretations.

The Significance of Education for Individuals Considering Hormonal Medication

In a quantitative, cluster-randomized trial, Holt et al. (2019) collected 70 audio recordings from counseling visits from 15 random providers. The purpose of this study was to compare if there were any difference in patient-provider communication among patients who had access to a decision support tool ("My Birth Control"), which had educational and interactive modules for patients. The support tool provided information to women about birth control options and took their personal preferences into consideration and how these factors might affect their contraceptive method of choice. Health care providers were randomized into two groups, one of which utilized the support tool, and the other continuing with conventional care. The population of this study consisted of 72 ethnically diverse women between the ages of 18-44 (Holt et al., 2019).

Researchers' significant findings showed that the support tool had a beneficial impact on patient centered care in regards to contraceptive counseling. Several of the participants stated that they had gained knowledge from the tool that they did not have prior. The support tool was

found to increase patient knowledge, as the participants showed satisfaction with the information about side effects as well as having informed decision making capabilities. Limitations included a lack of detailed demographic information about the participants such as educational levels and socioeconomic status. These details could have given more information about the participants since only age and ethnicity were known. The providers also could also have had different counseling approaches which may cause the participants to be affected differently in choosing how to use the support tool (Holt et al., 2019).

Literature Review Conclusion

These studies collectively underline the need for education, communication, and further research to better understand and address the psychological implications of hormonal contraception. The gap in research is that there is no information on how women would benefit from appointments with their healthcare providers or school nurses during which they would receive detailed information about the advantages as well as disadvantages of hormonal birth control, as well as the difference between hormonal and non-hormonal contraception options. Patient education, which includes the advantages, disadvantages as well as possible side effects of hormonal birth control can help women make an informed decision.

Research Proposal

Theoretical Framework

The theoretical framework used in this study is Nola Pender's Health Belief Model (HBM). The HBM consists of three key assumptions: individuals aim to manage their own behavior, individuals strive for self-improvement and the betterment of their environment, and that health professionals comprise the interpersonal environment which in turn influences

individual behaviors (Nursing Theory, 2020). This model suggests that minor adjustments in one's lifestyle can lead to significant enhancements in one's overall health potential.

Pender contends that the goal of nursing is for the optimal health of the person, with a focus on how people navigate healthcare decisions. Crucial factors influencing health-promoting actions comprise an individual's perception of the significance of health, their perceived advantages, and the perceived obstacles to engaging in those behaviors. The influence of an individual's demographic and biological characteristics, interpersonal influences, as well as situational and behavioral factors can impact the participation in health promoting behaviors.

Pender believes that counseling is one of the most effective interventions in changing health outcomes (Pender et al, 1990). Both doctors and nurses play a significant role in teaching patients about lifestyle changes and the advantages these adjustments may bring. Education to the patient, in this case providing women with information about the benefits, drawbacks, and potential side effects of hormonal birth control can support women in making an informed decision.

Research Design

This research proposal, utilizing a quasi-experimental study design, will investigate if an education program including a nurse-led class will increase the knowledge of hormonal birth control and its side effects among 14-18 year olds in sexual education health classes at school. The study will be split into three sections: pre-education questions, education about the benefits, drawbacks, and potential side effects of hormonal birth control, and a post-education assessment. The post-education assessment will measure how much the students learned after they were educated.

The participants will be chosen using convenience sampling. In their pre-education

questionnaire, they will be asked questions such as “What are common forms of birth control?”, “What is the difference between hormonal and non-hormonal contraceptives?”, “What are some side effects of hormonal contraceptives?”, “Where can you get comprehensive information about contraceptives?”. A valuable tool for assessing the impact of birth control education among high school students is the "Knowledge, Attitudes, and Practices (KAP) Survey.", a validated evidence-based tool. Widely employed in evaluating educational interventions, this survey measures knowledge, attitudes, and practices pertaining to specific health topics, including birth control.

Prior to the education intervention, the group will be given an initial questionnaire in order to check for their baseline knowledge about the information. The educational program will be implemented in the second phase. The teenagers will receive education about the difference between hormonal and non-hormonal contraceptives, the advantages and disadvantages of both, as well as potential side effects of using contraceptives. The post-education questionnaire, which is the last phase, will be given to the students 1 week after being given the education about the topic to test retention. The questionnaire will measure whether the educational program gave sufficient information to the students to increase their knowledge about contraceptives.

Sample Size

A convenient sample size of 35 school students aged 14-18 will be used. Inclusion criteria includes being female, ages 14-18, and attending the same school, and enrolled in a health class.

Data Analysis

In order to assess the efficacy of the educational program, we will examine both questionnaires using descriptive and inferential statistics. The independent variable will be the

educational intervention regarding benefits, drawbacks and potential side effects of hormonal birth control. The dependent variable is the student's knowledge on the topic. The researcher will control the content, delivery method, and the duration of the educational interventions.

The means of the two differing variables will be compared using a t-test to ascertain if the education has an effect on the population that was sampled. In this proposal, if the p-value is < 0.05, the results will be statistically significant, validating the hypothesis and rejecting the null hypothesis.

Limitations

Limitations of this study include having a small sample size, as well as only having students from one location rather than multiple schools. The generalizability of this study is constrained due to the use of convenience sampling for participant selection, potentially limiting its applicability to the wider population.

Ethical Considerations

This research will be submitted to the ethical review board of Dominican University of California and will obtain approval from the Institutional Review Board (IRB) and hospital management prior to gathering data. The purpose of the study and the methods that will be used will be made clear, and involvement will be completely voluntary. Before participation, all individuals will be given written consent. Participants have the right to withdraw from the study at any point in time. All and any data collected will be treated as confidential, using assigned IDs in the place of personal names.

Conclusion

According to current research findings, the current guidelines pertaining to contraceptives are found to be lacking in their comprehensive coverage of the potential side effects that could be

associated with their usage. Furthermore, there is a noticeable gap in the research literature concerning the effectiveness of educational programs as an added measure for women who are considering the commencement of birth control, especially in relation to hormonal methods. The main objective of this study is to determine the viability of implementing an educational program as an intervention strategy aimed at providing essential information to this vulnerable demographic. Additionally, this initiative is designed to aid nurses in enhancing their delivery of care by focusing on interventions that can effectively enhance the health literacy of their patients. Along with other interventions, the education should be made significant, and nurses should take an initiative to take on the role of an educator. Education in nursing is crucial as it provides aspiring nurses with the foundational knowledge and as well as skills that are necessary to deliver safe patient care. Ongoing learning opportunities empower nurses to remain current with healthcare advancements, promoting their professional growth and enabling them to adjust to evolving medical practices and technologies.

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Appendix A

Literature Review Table

Citation: [10.1001/jamapsychiatry.2016.2387](https://pubmed.ncbi.nlm.nih.gov/27680324/)

<https://pubmed.ncbi.nlm.nih.gov/27680324/>

Purpose/Objective of the study: To investigate whether the use of hormonal contraception is positively associated with subsequent use of antidepressants and a diagnosis of depression at a psychiatric hospital.

Sample:

Population of interest and sample size:

- This nationwide prospective cohort study combined data from the National Prescription Register and the Psychiatric Central Research Register in Denmark. All women and adolescents aged 15 to 34 years who were living in Denmark were followed up from January 1, 2000, to December 2013, if they had no prior depression diagnosis, redeemed prescription for antidepressants, other major psychiatric diagnosis, cancer, venous thrombosis, or infertility treatment. 1,061,997 women in total

Study Design:

- quantitative
- prospective cohort study

Study Methods:

- follow up with patient

Major Findings:

- Use of hormonal contraception, especially among adolescents, was associated with subsequent use of antidepressants and a first diagnosis of depression, suggesting depression as a potential adverse effect of hormonal contraceptive use.

Strengths:

- Had a very large sample population, got research from a large sample of ages
- Has a lot of quantitative data

Limitation:

- Only used in one country, not a lot of variety of types of women

- Could use more detail as to what questions they asked the patients and if the patients made the choice to get mental health help or if they were offered

Citation: 10.1176/appi.ajp.2017.17060616
<https://pubmed.ncbi.nlm.nih.gov/29145752/>

Purpose Objective of the study:

- The purpose of this study was to assess the relative risk of suicide attempt and suicide in users of hormonal contraception.

Sample:

- Population of interest and sample size: nearly half a million women age 15 or younger

Study Design:

- qualitative study
- national cohort study

Study Methods:

- Information was individually updated by the sample

Major Findings:

- Use of hormonal contraception was positively associated with subsequent suicide attempt and suicide. Adolescent women experienced the highest relative risk.
- 71 suicides and 6,999 suicide attempts within 8.3 years
- The association between hormonal contraceptive use and a first suicide attempt peaked after 2 months of use.

Strengths:

- Has a large population and so they are able to get a varying amount of information and can get different women that are using many different methods of birth control

Limitation:

- Only used in one country, not a lot of variety of types of women
- Does not speak if there were any interventions that occurred or if any mental health help was offered to the women before the attempt or even after
 - Did not state if women went off of the birth control pill after suicide attempt
 - Or if they were told it could be due to the birth control usage

Citation: [10.1016/j.pec.2019.09.003](https://doi.org/10.1016/j.pec.2019.09.003)

<https://www.sciencedirect-com.dominican.idm.oclc.org/science/article/pii/S0738399119303994?via%3Dihub>

Purpose/Objective of the study:

- To compare differences in patient-provider communication among patients who, prior to contraceptive counseling, used or did not use a decision support tool (“*My Birth Control*”) which has educational and interactive modules and produces a provider printout with the patient’s preference

Sample:

Population of interest and sample size:

- 72 women aged 18-44, of a variety of ethnicities,

Study Design:

- quantitative
- cluster-randomized trial

Study Methods:

- audio recordings
- Cluster randomized trial of a patient-centered contraceptive decision support tool, *my birth control*

Major Findings:

- Observed counseling differences suggest the tool may have a positive impact on patient-centeredness of contraceptive counseling, consistent with findings from the main study.
- Several participants explicitly noted they had gained knowledge from the tool.
- *My Birth Control* was found to increase patient knowledge and experience of patient-centered counseling, as indicated by quantitative measures of the interpersonal quality of counseling, satisfaction with information about side effects, and informed decision making

Strengths:

- shared decision making
- asking what the patient knew before the use of using the tool

Limitation:

- The audio was transcribed, could have been better if someone was sitting there listening firsthand and taking notes on what the subjects were saying

Citation: <https://doi.org/10.1017/S2045796023000525>

<https://www.cambridge.org/core/journals/epidemiology-and-psychiatric-sciences/article/population-based-cohort-study-of-oral-contraceptive-use-and-risk-of-depression/B3C611DD318D7DC536B4BD439343A5BD>

Purpose/Objective of the study:

- Aim to estimate the risk of depression that is associated with the initiation of OCs as well as the effect of OC use on lifetime risk of depression.

Sample:

Population of interest and sample size:

- UKB is a population-based cohort that recruited 500,000 participants, aged 37–71 years, from across the United Kingdom (UK) between 2006 and 2010. The study collected extensive data from questionnaires, interviews, physical health measures, biological samples, and imaging. Participants are also linked to health records, including hospital inpatient data, primary care data, cancer, and death registry data. In the present study, we included all female participants of UKB ($N = 264,557$).

Study Design:

- at first, they were given a questionnaire and then they also had a verbal interview

Study Methods:

- Incidence of depression was addressed via interviews, inpatient hospital or primary care data

Major Findings:

- The findings support that OC use is causally associated with an increased risk of depression in adolescents as well as in adults, especially shortly after the initiation. It is important to emphasize that most women tolerate OCs well without experiencing adverse mood effects, making them a great option for many. However, educating OC users, screening for depression, informing primary healthcare practitioners regarding the OC–depression relationship and conducting further research to determine the cause of hormone contraceptive-precipitated depression are warranted.

Strengths:

- Had a large sample population
- Used a variety of ways to get information about patients

Limitation:

- It was a 4 year study, how can you tell is there are any long term effects, if they are not followed up on constantly after being taken off of birth control to see how they fare mentally

Citation: [10.1186/s40834-022-00204-w](https://pubmed.ncbi.nlm.nih.gov/340834022/)

[https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9842494/#:~:text=Existing%20literature%20about%20psychological%20side,oral%20contraceptive%20pills%20\(OCPs\)](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9842494/#:~:text=Existing%20literature%20about%20psychological%20side,oral%20contraceptive%20pills%20(OCPs))

Purpose/Objective of the study:

- The goal of this study is to better characterize patients' subjective experiences with HC, its side effects, and contraception counseling.

Sample:

Population of interest and sample size:

- Adults (age > 18) who had ever used HC were eligible to participate in the study. The survey was voluntary and anonymous. Participants did not receive compensation for participation. The survey was distributed via social media, email, word of mouth, and through flyers hung in women's health clinics in New York City. The flyers contained a QR code so that subjects could access the survey on their smartphones. Investigators also asked their contacts to forward the survey link and post it in community forums such as sorority Facebook groups.

Study Design:

- A cross-sectional study was conducted anonymously via an online RedCap survey. Recruitment occurred from June 2021 through February 2022.

Study Methods:

- This is a cross-sectional, survey-based study using a convenience sample of patients who had used HC at some point in their lives. Recruitment occurred from June 2021-February 2022.

Major Findings:

- These findings suggest that mood changes may be among the most common perceived side effects of HC and speak to a disconnect between patients and providers when it comes to discussing the possibility of psychological side effects with HC.

Strengths:

- The study asked the participants the reason why they stopped using birth control which I have not seen documented by other studies.

Limitation:

- There needs to be a way to find way to describe moods in a more clinical sense

Citation:

<https://npt.tums.ac.ir/index.php/npt/article/view/736>

<https://doi.org/10.18502/npt.v7i1.2300>

Purpose/Objective of the study:

- Intrauterine device and depo-medroxyprogesterone acetate are among the most effective reversible contraception in the world, still few consensus exists about sexual and mood changes of these two conventional methods. The present study has compared the sexual satisfaction and depression level in these two methods.

Sample:

Population of interest and sample size:

- 300 married women aged 19-50 year, in Tehran, Iran

Study Design:

- standard questionnaires of Index of sexual satisfaction (ISS) and Patient Health Questionnaire (PHQ) were used for assessing sexual satisfaction and depression

Study Methods:

- A cross-sectional study
- Chi-square and independent t-test were used for the homogeneity of the two groups. The linear logistic regression analysis was conducted to estimate the strength of associations.

Major Findings:

- Both sexual satisfaction and mood level were higher among IUD users. This paper reconfirmed that IUD is a preferable method in women who are eligible to use both methods.

Strengths:

- Tested a non hormonal option → if it is better for mental health while other articles focus on hormonal ones

Limitation:

- Only one ethnicity was considered
 - Not that many women were tested

- Only a 6 month study → longer times would give more results about long term usage effects

Citation: [10.1080/10410236.2021.1980249](https://doi.org/10.1080/10410236.2021.1980249)

Purpose/Objective of the study:

- Previous scholarship shows that contraceptive information-seeking among women is complex, multilayered, and political. Thus, we designed the present study to address the following research questions: RQ1) What information would women have preferred to have been told about different contraceptives or birth control options? RQ2) What reasons do women provide for deciding on their current contraceptive method?
- Understanding from where or whom women receive their information regarding contraception and how they use that information is important, however, less is known regarding messages women wish they had received about contraceptives. This is important to learn so that health practitioners can better aid patients' decision-making and provide the most accurate sources of information. Further, recent evidence suggests value in assessing what types of messages women wish they had received about sexual and reproductive health in general

Sample:

Population of interest and sample size:

- Most participants ($n = 134$) were assigned female sex at birth; one participant identified as a transgender woman who was assigned male sex at birth. Participants were aged 18–37

Study Design:

- survey questions
- "A hundred and thirty-four female participants responded to an open-ended questionnaire about contraceptive messages and decision making in an online survey." They used a survey to get their data
- It is a cross sectional design (gathering data at one point in time)
- it is descriptive research (non experimental) because they don't have an intervention. just gathering data from a survey.

Study Method:

- The analysis of the data in this study is from survey questions on contraceptive use. The questions are from a larger study where the authors investigated how people who identify as women, or were assigned female at birth, negotiate sexual health as it relates to menstruation, sex acts, and reproductive health.

Major Findings:

- In addition to identifying current contraceptive choices or why they chose the contraceptives they currently used, participants described what they wish they had been told by parents or healthcare providers regarding contraceptives. Two themes emerged to address this research question: (1) the consequences of contraceptives, and (2) the variety of options. First, we describe the consequences of contraceptives, notably the risks of contraception.
- Participants identified a series of concerns related to mental and emotional health side effects associated with contraception: “When I first started taking the pill, I experienced heightened anxiety and increased mood swings” (#9, a 23-year-old, Hispanic, heterosexual, cisgender woman); “I suffered from depression before I realized it was my birth control. I quit it immediately after making the connection” (#72, a 29-year-old, white, lesbian, cisgender woman).
- Other participants identified specific forms of birth control that they attributed as either causing or preventing mental health problems: “When I was on the pill for a couple months I experienced mild depression. I was sad and cried a lot and as soon as I switched to an IUD this went away” (#93, a 20-year-old, white, heterosexual, cisgender woman); “On Orthotrocyclin I experienced extreme fatigue, dysthymia, mood swings, dizziness, and anhedonia. I have experienced increased panic attacks and suicidal ideation on all meds or birth control that contains progesterone” (#87, a 29-year-old, white, heterosexual, cisgender woman). Some participants identified panic attacks, general anxiety, mood swings, and depression as side effects of particular forms of contraception, which motivated them to use a different form to avoid that anticipated or experienced side effect.

Strengths:

- They asked the patients a LOT of questions and were able to gain a lot of information to further research on.
- They now know that patients need better education before making a decision such as their birth control.

Limitations:

- The study only used survey questions, but I feel like in person interviews would have gotten information a lot more fluidly, and maybe could have gotten more information, as there could have been follow up questions.
- Since there was a large demographic, there could have been a higher amount of educated participants which can influence the results.