

State of the Field Analysis: Contraceptive Methods and Research

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Contraceptive medicine is used by millions of women each year, making it one of the most expansive areas of healthcare in the United States. These drugs and devices provide an enormous service to patients, but women using contraceptives deserve to also be well informed about the potential side effects that may come with use of contraception. At this time, insufficient research has been conducted regarding the impact of the most common form of contraceptives, hormonal birth control, on mental health. As I describe in my literature review analyzing the current state of the field of contraceptive research and medicine, there is insufficient research regarding the impact of hormonal birth control on patient mental health, as well as insufficient education regarding other non-hormonal options for contraception.

To compose this literature review, I utilized the University of California, Davis online database to access PubMed articles written on contraceptives. To provide background information and a basis for why the field of contraceptive medicine is important to study, I first established the prevalence of contraceptive methods used by women in the United States. I accomplished this by utilizing credible, peer-reviewed articles that describe the prevalence of contraceptive medicines. Focusing on how widespread they are, the different types available, and how many patients use them each year was key for the start of my literature review because it established how important this field is to study.

Contraceptive medications have a variety of contraindications, but I chose to focus my search on their impact on mental health, namely anxiety and depression.

To do this, I narrowed my searches on PubMed by using the keywords

'contraceptive,' 'depression,' 'mental health,' and 'anxiety' to search for articles. Because I did not want to skew the data I was compiling, I also searched simply for 'contraceptives' and 'side effects,' as well as 'study.' For the articles I found particularly interesting from this search, I continued research by pursuing articles the authors had cited in their bibliography. I also looked online on government published websites to gather census information about how many people use contraceptives each year in the United States.

Furthermore, to research the different pharmaceuticals and medical devices available for contraception, I utilized the Food and Drug Administration (FDA) online databases. These databases have information outlining each product's safety and efficacy, summaries of clinical trials conducted by the company, as well as complaint reports submitted about the product either by patients or physicians. This was a particularly useful source because these medical device and pharmaceutical companies are lawfully obliged to report all of this information to the FDA.

While choosing sources, I only considered articles that were published by credible researchers from universities and hospitals, peer reviewed and published in a scientific journal or government website. Additionally, apart from in my introductory section describing background information about contraceptives, I aimed to use current, up to date articles as much as possible.

I noticed while conducting research that the majority of studies deduced that a correlation between use of hormonal contraceptives is likely to exist, but that they could not yet make a causal claim until more prospective studies were conducted.

When analyzing the first few studies, I thought this was interesting, but mostly just chance that the researchers chose to only look at retrospective data. However, while doing more and more research, I found that of the many studies conducted on the topic, only a small minority are prospective studies. This discovery fueled my desire to call for more prospective research in the field of hormonal contraceptives.

It is time for the academic and industry-driven research communities to realize this need for more prospective research to be conducted on the impact of hormonal birth control on mental health. Furthermore, especially in a university setting, we need to push for further education regarding contraceptive methods available to women. Optimally, the current insufficiency of research and education should be viewed as a great opportunity for researchers looking to impact the medical field.