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Other options do exist:
A review of access to long acting reversible contraceptives

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Abstract

One of the most effective methods for preventing pregnancy is use of long-acting reversible contraceptives (LARCs), however this form of contraception is not the most commonly used among women. The low prevalence of LARCs can be explained by limited access due to women's and physicians' misconceptions about the efficacy of and eligibility for the method. These misconceptions regarding LARCs likely originate from physicians not having adequate and updated training. Physicians can spread inaccurate information to patients during the patient-physician interaction which can persuade women against LARCs. Additionally, physicians might even refrain from offering LARCs. This results in women making an uninformed decision regarding their health. A shared-decision making (SDM) model, which incorporates patient preferences with medical knowledge, is currently being tested to reduce physician bias during the decision-making process of contraceptive counseling. However, because misconceptions appear to originate primarily with physicians, further research into physician education programs should be done to truly solve this problem.

Keywords: long-acting reversible contraceptives, intrauterine devices, women's health, misconceptions, shared-decision making

Introduction

Women have a multitude of options when it comes to selecting a contraceptive method, each one having unique benefits and drawbacks. While some women seek contraception for reasons other than to prevent pregnancy, for those who do wish to prevent pregnancy, efficacy of the method is a primary concern. Interestingly enough, current research reveals that the current most effective methods, long-acting reversible contraceptives (LARCs), which include intrauterine devices (IUDs) and other intrauterine contraceptives (IUCs), are not the most commonly used method around the world.^{1,2,3,4} This review of literature will explore the origins of preconceptions about LARCs held by both women and physicians and discuss how these beliefs might contribute to their low use. It will also examine current methods aimed at reducing the role of physician bias in the contraceptive decision-making process and will suggest where research should next go.

Discussion

Medical Influences on Use and Prescription

Women's beliefs about LARCs at the time of the decision-making process have been shown to influence the frequency of use in various countries. Surveys in France and the United States show that some women believe that LARCs are ineffective, that LARCs have too many adverse side effects, or that they are ineligible for LARCs for a variety of reasons.^{2,3} These beliefs often prove to be misconceptions; for example, LARCs are one of the most effective contraceptive options today, yet many women believe other methods are more effective at preventing pregnancy.² These incorrect beliefs become a sort of mental barrier which, during the decision-making process, causes some women to avoid asking about LARCs or to refuse consideration of them as a contraceptive option.

In order to reduce the stigmas surrounding LARCs so that they might be better utilized, it is important to consider the origin of these misconceptions. According to a recent study by Khurana and Bleakley, women received contraceptive information from parents, the media, and friends, but the most frequent source of contraceptive information was health care professionals.⁵ A Turkish study supports that physicians can influence women's knowledge about contraceptives, as a statistically significant number of women in the study changed their contraceptive choice after consulting with their physician.⁶ Considering the extent to which women have misconceptions about LARCs, as indicated in the previous paragraph, it is plausible that this misinformation stems from physicians themselves.

Current scholarship confirms that some physicians do in fact have misconceptions about the efficacy and side effects of LARCs. This likely influences the information they give to patients and plays a role in their choice to prescribe LARCs. One study conducted in Latin America by Bahamondes et al. uncovers widely held beliefs by physicians about intrauterine contraceptives (IUCs) which are not medically accurate.¹ Other research provides further evidence that physicians are misinformed. It has been noted that physicians in countries such as France and the United States still believe that IUCs contribute to pelvic inflammatory disease, despite this having been disproven.^{3,4} Even though the information is not medically supported, some physicians use it to make their decisions on which forms of contraception to suggest and many physicians have admitted that they do not offer LARCs, even to eligible patients.^{1,4}

These different research findings show that physicians not only contribute to women's mental barriers to LARCs by controlling the accuracy of information regarding contraception, but that physicians also contribute to physical barriers to LARCs by refusing to prescribe them.

Because women are dependent on their physician to utilize prescribed contraceptive methods, it is important that research be aimed at eliminating the propagation by physicians of these mental and physical barriers.

Because physicians are at the center of these barriers, understanding the source of their biases against LARCs is key. Surprisingly, certain groups of physicians demonstrate increased selectiveness against LARCs. Two studies by Moreau et al. and Philliber et al. agree that recently trained physicians are actually more likely to suggest LARCs to their patients compared to their more experienced, older counterparts.^{3,4} This discrepancy could be a result of issues in the 1970s surrounding the Dalkon Shield, an IUD, which may have contributed to the perceptions that older physicians hold about these contraceptive methods.^{3,4} The Dalkon Shield caused multiple complications, some leading to death and many resulting in lawsuits.⁴ Fears, rooted in prior negative experiences, likely persuade older physicians away from suggesting LARCs, despite the advances in medical technology. An education regarding these changes might alter this biased view.

The study by Philliber et al., also claims that physicians might hesitate to prescribe LARCs due to a lack of training regarding their insertion; older physicians did not have access to this training in their education and therefore report feeling uncomfortable with prescribing the methods.⁴ A research article by Bartz et al. provides support by noting that more recently trained physicians have had greater training opportunities for the insertion of IUDs, such as simulations with models.⁷ The inconsistency in training between time periods suggests the need for continual re-education of techniques for physicians after their primary medical education.

Because medicine constantly changes, increased and continuous education regarding both procedures and medical technology might eradicate certain misconceptions and fears held by physicians. Not only would this improve the correctness of information that physicians provide to their patients, but physicians which previously rejected LARCs as contraception might increase their suggestion of the method. As a result, access to one of the current most effective forms of contraception would be much easier.

Patient-Physician Interactions

The patient-physician interaction facilitates the dissemination of contraceptive misconceptions to women by providing an occasion for physicians to share anecdotal evidence and by allowing physicians to selectively give information to their patients. These moments of self-disclosure include language which can persuade women towards or against a certain form of contraception. According to a study by McLean et al., physician self-disclosure can be a positive experience in women's decision-making process because it establishes an intimate setting with trust.⁸ By sharing biased information, however, physicians risk not giving their patients the tools necessary to make a fully informed decision. Research from other groups suggests that this type of biased information can counter any positive feelings established by self-disclosure. For example, one woman reported that her physician repeatedly prescribed oral contraceptives despite her preference for an IUD because the physician believed, based on their experience, that IUDs should be a "last resort."⁹ Although current scholarship suggests that self-disclosure can be both positive and negative, the opportunity exists for physicians' self-disclosure to influence a woman and cause her to make an uninformed decision about her health.

Research shown in the "Medical Influences on Use and Prescription" section of this review reveals the prevalence of misconceptions about LARCs among physicians in the world. These misconceptions, when communicated to women and combined with physicians' self-

disclosure about their personal experiences, may contribute to women's mental and physical barriers to LARCs and to the relatively low use of this highly effective form of contraception.

While self-disclosure involves revealing more information than medically necessary, not providing enough information also proves to be problematic. In both the United States and Australia, research has revealed that women do not feel as though they have had enough information regarding their available contraceptive options.^{9,10} Statistics from a United States study about current contraceptive methods show that 52% of the women involved changed to a different form of contraception than their first method and that the most common switch was to an IUD.¹⁰ Although this could be due to changes in preferences over time, such a high percentage of women that changed their method could easily indicate that a lack of information surrounding the IUD (and potentially other forms of contraception) existed in their first decision-making process.

Provision of a more comprehensive list of options during the contraceptive counseling visit, combined with abstinence from self-disclosure on the physician's end, might allow women to choose a method of contraception with fewer barriers.

Potential Solutions

As mentioned in the previous sections, in order to decrease women's barriers to LARCs, physicians should have continuous, updated contraceptive training and provide comprehensive and accurate contraceptive counseling.

One promising method to increase the quality of contraceptive counseling during the decision-making process employs a shared decision making (SDM) model, which utilizes the patient-physician interaction. Each member of this interaction plays a given role. Physicians provide up-to-date medical knowledge while their patients express their personal preferences for their contraceptive method, and together they choose the best option for the patient.¹¹ Both preliminary studies and experimental testing of SDM have reported that women experience greater satisfaction with the counseling session and with their contraceptive choice when SDM is used.^{11,12} One limitation for this method is that there is nothing set in place to prevent physicians from unconsciously inserting their personal opinions through self-disclosure, or from providing inaccurate medical information. However, in spite of this, the development and implementation of this method shows that the right steps are being taken in order to improve the quality of decision-making process for contraceptives.

Current electronic tools exist which help women determine their contraception preferences and also educate women about the various forms of contraception in a user-friendly manner.^{12,13} Because these tools are used by the women prior to seeing the physician for contraceptive counseling, the tools allow women to learn about all of the contraceptive options without physician bias, thus reducing some of the mental barriers to LARCs. However, researchers who tested a specific SDM tool, My Birth Control, have noted that this objective discussion of options might actually be detrimental because it could encourage women to choose a less effective method.¹² For this reason, the role of the physician is still important. Provided that the physician has accurate knowledge, they can educate patients regarding efficacy while still respecting patient preferences in order to assist the woman in her decision-making process.

A currently active research group recently published a protocol to study SDM based on the SDM studies discussed in this review of literature. They hope to ascertain whether or not SDM is most effective as a tool when it is patient-centered only, physician-centered only, or patient- and physician-centered.¹⁴ Although the study is not yet complete, it is likely, based on

current SDM scholarship, that SDM will be most effective when used by both the patient and the physician because it will guide women towards a method which is both effective and tailored to their lifestyle.^{11,12}

Many of the issues surrounding low LARC usage might be solved if physicians were continually educated on contraceptive options and were able to properly pass this information on to their patients. Current scholarship does not appear to discuss any programs which might increase physicians' education, suggesting that research for improving LARC access should continue to promote SDM tools, but shift in the direction of physician education.

Conclusion

Long-acting reversible contraceptives (LARCs) are one of the most effective contraceptive options, yet they are also one of the most underutilized options among women at risk for unintended pregnancies. A few problems exist which likely contribute to the low use of LARCs around the world. Some women are discouraged from LARCs because of inaccurate perceptions which likely originate from their physicians. Research suggests that physicians' misconceptions primarily originate from incomplete or outdated education. The interaction between a physician and their patient during the decision-making process transfers these medically inaccurate beliefs about LARCs to women. In order to encourage use of LARCs, it is necessary to dispel misconceptions held by women and their physicians. Because physicians appear to influence women, it might be most efficient to focus on educating physicians, who can then educate women.

Current scholarship does not seem to discuss methods for this education, however, a shared decision making (SDM) model, which integrates medical knowledge with patients' preferences, is currently being investigated as a way to improve the comprehensiveness and quality of contraceptive counseling. While this model attempts to reduce physician bias in contraceptive counseling, it does not fully eliminate the problem. In order to maximize the benefits of SDM, further research should be done about how to best to address physician bias about LARCs. By focusing research on physician education, researchers can attempt to solve the problem at its root, and hopefully eliminate the barriers to one of the most effective contraceptive methods.

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