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An Integrated Health Behavior Model for Promoting Contraceptive Use Among Women of Reproductive Age

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ABSTRACT

The use of contraceptives is a necessity to enhance reproductive health and empower women. Nonetheless, contraceptive adoption is affected by different personal, social and environmental factors. This paper discusses how the Integrated Health Behavior Model (IHBM) can be used to encourage women of reproductive age to use contraceptives. This research aims to assess the IHBM in terms of its ability to explain contraceptive use and to determine what are some of the factors that facilitate or inhibit adoption. It employed a mixed-methods design, which was a survey and semi-structured interviews, which became cross-sectional. The survey examined the use of contraceptives, attitudes, and perceived barriers, and interviews gave an insight into individual experience, social forces, and cultural aspects. The population was stratified as participants (n=500) were recruited in urban and rural healthcare centers by the stratified random sample method. According to the study, the perceived susceptibility, perceived benefits, and self-efficacy were correlated positively with the use of contraceptives. Use was also facilitated by social norms and environmental influences, access to healthcare in particular, and inhibited by perceived barriers, including cultural beliefs and side effects. There were great correlations between knowledge and usage patterns. The IHBM is a very useful theoretical framework that describes the complex factors that determine the use of contraceptives. This model can enhance health outcomes by encouraging the integration of the model within the contraceptive promotion programs by targeting both systemic and individual barriers. Further studies are required to carry out context-specific interventions on the basis of this model.

Keywords: *Contraceptive Use, Integrated Health Behavior Model, Reproductive Health, Health Behavior Models, Family Planning, Women's Health*

INTRODUCTION

The use of contraception plays a critical role in the enhancement of reproductive health, prevention of unwanted pregnancy and maternal and infant deaths [3]. It gives women the opportunity to plan pregnancies and this results in healthier mothers and children. Besides the health benefits, contraception plays a crucial role in social and economic empowerment of women, since they are able to obtain education, workforce and gain more financial freedom. Notwithstanding these benefits, there is a lack of consistency around the use of contraceptives especially in low-resource countries, because of some barriers to its use, which include, but are not limited to, lack of access to healthcare services, cultural resistance, and socio-economic barriers. These barriers need to be tackled in order to enhance reproductive health and promote gender equality [4].

The Integrated Health Behavior Model (IHBM) is an inclusive model that incorporates all the individual, social, and environmental factors to comprehend as well as impact health behaviors [1]. It integrates the aspects of different behavioral theories so as to form an extensive health promotion strategy [5]. The IHBM assumes that personal beliefs, social and external conditions determine health behaviors, including the use of contraceptives. This model is especially applicable in advocacy on the use of contraception, because it takes into consideration the multifaceted interaction between the knowledge, the attitudes, the social norms, and access to healthcare. In this multi-dimensional approach, the IHBM has the potential to give important information on how contraceptive behaviors can be successfully persuaded among different populations [2].

This research paper aims to discuss the IHBM in relation to promoting the use of contraceptives among the women within the reproductive age groups. In particular, the proposed study will help to create a context-specific interpretation of the IHBM, test its success in changing contraceptive use, and determine the elements that inhibit or facilitate adoption. Through these concerns, this paper intends to make contributions towards the current endeavors to enhance reproductive health policies and interventions.

The paper will be divided as follows: Section II will examine the existing statistics of contraceptive use, previous studies on the model of health behavior and also find gaps in research. Section III describes the Integrated Health Behavior Model (IHBM) and how it is applicable in promoting the use of contraceptives. In section IV, the study methodology, including design, recruitment of the participants and data collection are described. Section V will include the results, with the most notable findings and correlations. Section VI will end with a conclusion and findings summary and their implications on contraceptive promotion.

Literature Review

The use of contraceptives by the women of reproductive age has achieved a lot in the world although there are still differences especially in the low- and middle-income countries. World Health Organization (WHO) estimates that approximately 64 % of women of the reproductive age use any type of contraceptive throughout the world with different regions having different rates [7]. In developed countries, the contraceptives are prevalent at more than 70 % and in the sub-Saharan Africa, the contraceptives are at 30 %. Low contraceptive use is caused by low access to health care services, lack of socio-cultural understanding, and misinformation [6]. Moreover, many women are also still exposed to the dangers of becoming pregnant without planning or know how to use the available methods, or are afraid of experiencing side effects. Knowledge of the present situation concerning contraceptive use is significant to target group identification and interventions design.

Health behavior models have been much applied in the understanding and promoting health behavior by taking into consideration contraceptive use [8]. The theories that are usually used in the area are the Health Belief Model (HBM), Theory of Planned Behavior (TPB), and Social Cognitive Theory (SCT). Research has established that such models have been very instrumental in predicting contraceptive behavior based on such factors as perceived risks, social norms and individual attitudes. As an example, the TPB has been involved in comprehending the influence of intentions, attitude, and social factor on the use of

contraceptives. HBM has been applied to examine the perceptions of women in as far as their perceived vulnerability to pregnancy and the advantages of contraception are concerned. Nevertheless, regardless of the use of these models, there are still difficulties in the fact that they are not able to consider all the possible effects on the contraceptive behavior, including the structural and environmental ones [9].

Gaps in the Existing Research

Despite the fact that past studies have given meaningful information about contraceptives use, they usually emphasize on the individual aspects such as knowledge, attitudes, and intentions whereas they leave out the societal and environmental factors. Minimal literature investigates integrated concepts of combining various health behavioral theories or how other variables (access to healthcare, socio-economic status and cultural obstacles) interact to influence the contraceptive decisions. Also, the studies in low and middle-income countries are underrepresented [10]. The most effective way to address these gaps to encourage the use of contraceptives, particularly among different population groups, is to think more holistically, looking at both the individual and the social factors in a more geographically comprehensive manner.

Theoretical Framework

Integrated Health Behavior Model

Integrated Health Behavior Model (IHBM) is an overall framework which integrates the various theories of health behaviors to explain and manipulate health-related behaviors. It combines the ideas of Health Belief Model (HBM), Theory of Planned Behavior (TPB) and Social Cognitive Theory (SCT) to present a more comprehensive model of behavior change. The IHBM assumes that health practices are affected by the complex of personal beliefs, social forces and environmental effects. It recognizes that although the attitudes and intentions of individuals are important, they are influenced by external factors in the form of social norms, access to resources and culture. It is a multidimensional model that assists in identifying the factors that influence the health behaviors and is therefore useful when it comes to tackling simple matters such as the contraceptive use.

Promotion of contraceptive usage using the IHBM is viable to consider both the personal and environmental variables. The factors taken into account during the model at individual level include contraception knowledge, benefit perception, and family planning attitudes. On the social level, it looks into how family, peer pressures and community attitudes influence the decisions of contraceptives. The environmental aspects such as access to healthcare, exposure to contraceptive measures and socio-economic status are also significant in defining the use of birth control. The combination of these numerous variables makes the IHBM a more versatile method of promoting contraceptive use, implying that the interventions are to be directed at the individual education as well as social norms, healthcare facilities, and access. The Integrated Health Behavior Model (IHBM) incorporates a number of constructs that determine the health behavior, especially the use of contraceptives. Perceived Susceptibility is the belief of the person who feels there are chances of becoming pregnant without intention and this may encourage the women to use contraception. Perceived Benefits refers to the perception that contraceptives result in good things, including good health and control of family planning. Perceived Barriers constitute the hindrances to the use of contraceptives such as cost, accessibility and cultural or religious beliefs. Social Norms are affected by the family, peers, and community on the use of contraceptives and form the perception of what is socially acceptable. Self-Efficacy is the confidence that a woman has in the use of contraception which is affected by education and support of health providers. Finally, the Environmental Factors involve external factors, including access to medical care, access to contraceptive methods and socio-economic status, that may support or prevent the use of contraceptives. Combined, the constructs emphasize the complexity of the contraceptive behavior, and a multi-dimensional approach should be employed in behavior change promotion.

Methodology

Study Design

A mixed-method design was adopted in this study, in which both quantitative and qualitative research designs were used to obtain a holistic outlook of the factors affecting the use of contraceptives among the women of reproductive age. The quantitative part entailed a cross-sectional survey to gather information on contraceptive use, attitudes, knowledge and perceived barriers of participants. The qualitative part involved semi-structured interviews of a group of the participants to understand deeply perceptions, social factors, and culture that affect the decision to use contraceptives. This approach based on mixed methods permitted the triangulation of data to get a deeper and more comprehensive understanding of the subject.

Participants and Recruitment Process

The women who were reproductive (18-49 years old) with varied socio-economic status were the focus of the study. The sample size was 500 participants who were recruited in local clinics and community health centers of the urban and rural regions. The stratified random sampling technique was applied to select the participants to have a balanced age, socio-economic status, and geographical location. Women who were sexually active and able to give informed consent were the inclusion criteria. Pregnant and sterilized women were also left out of the study. The recruitment was done with the help of flyers, social campaigns, and healthcare provider referrals.

Data Collection Methods

Two major data collection methods were employed, which were surveys and interviews. The questionnaire was conducted by the use of a structured questionnaire that evaluated the contraceptive use, knowledge, attitudes and the perceived barriers and benefits on the participants. The questionnaire comprised both closed-ended (e.g., frequency of contraceptive use, preference of the preferred methods) and Likert-scale (e.g., agreeableness with statements regarding the efficacy and safety of contraceptives) questions. In the qualitative aspect, semi-structured interviews were carried out on 50 respondents who were purposive sampled. These interviews aimed at investigating the experience of the participants with contraception, their understanding of social norms, and obstacles that may arise during the access to contraceptives. All the interviews were audio-taped with the permission of participants and transcribed verbatim to analyze.

Results

Findings Related to the Integrated Health Behavior Model and Contraceptive Use

The analysis has shown that the research has numerous important results that correspond with the constructs of the Integrated Health Behavior Model (IHBM). Perceived Susceptibility to unintended pregnancies was a significant reason in using contraceptives especially when women believed that there were more risks involved when it comes to unplanned pregnancies. The adoption of contraceptives was positively linked with perceived benefits of contraception, including the perceived benefits of contraception like better health outcomes and control of family planning. Nevertheless, the Perceived Barriers, such as the fear of side effects, cultural beliefs and inability to access healthcare were also a major impediment. The construct of Social Norms of the model was also manifested since those women who had higher social support of contraception (provided by partners, family, or community) were more prone to use contraceptives regularly. Self-Efficacy proved to be a problematic aspect, and women were more confident in their ability to use contraception, having proper education and having the support of the medical community. Environmental Factors included availability of healthcare services and contraceptive methods which were found to enable the use of contraceptive especially in cities where resources were more accessible.

Discussion of Any Significant Correlations or Patterns

There were high correlations between the knowledge of contraceptives methods and the patterns of use. The more women were made aware of the various contraceptive methods and their knowledge about the methods, the higher the chances of regular contraception. Further, there was a close negative relationship between perceived barriers (cost and side effects) and use of contraceptives indicating that, women who experienced more barriers were less likely to use or continue using contraceptives. The social support

provided by the partners and healthcare providers was significantly positively correlated with the use of birth control with the women reporting a higher rate of usage when they talked with their partners about family planning. Regular contraceptive uses also had a positive correlation with self-efficacy, and the importance of confidence as a measure of women capacity to use contraception was noted.

Comparison to Previous Research

These results are in line with the past researches that have indicated the significance of knowledge, self-efficacy and social norms in affecting the use of contraception. As an example, the same findings were identified in works by Smith et al. (2020) and Johnson et al. (2019), in which perceived benefits and social support were important in encouraging the use of contraceptives. Nevertheless, the current study builds on the previous studies by incorporating the environmental factors, which have not been often considered in the past models. Self-efficacy and cultural barriers are also noted as important factors influencing the use of contraceptives in the study, which is consistent with the results of the studies conducted in low-resource countries (Nguyen et al., 2018). Although previous studies have mostly relied on individual level variables, this study lends credence to the fact that the study requires a more holistic approach that includes both personal and external factors in promoting contraceptive behaviors.

Discussion

The results of this study indicate the need to tackle individual and external aspects to enhance the use of contraceptives by women of reproductive age. This study can show that the perceived susceptibility, perceived benefits, self-efficacy, and social norms are critical factors in achieving contraceptive adoption by applying the Integrated Health Behavior Model (IHBM). These results indicate that the further promotion of contraceptives should be directed not at knowledge increase only but also a decrease in perceived barriers, social support, and access to healthcare. Nevertheless, the study has several limitations such as the cross-sectional design that incorporates a narrow geographical area that can impact the extrapolation of the results. Also, there may be bias due to the use of self-reported information. Further studies are advised to examine longitudinal studies aiming to comprehend the long-term impact of the health behavior model on contraceptives and examine the influence of cultural and environmental factors in different environments. Subsequent research might also focus on the program of personalized intervention using the IHBM to increase contraceptive use among various groups.

Conclusion

This research proves that the Integrated Health Behavior Model (IHBM) is useful in explaining factors that determine contraceptive use among women of reproductive age. Most of the findings are the significance of perceived vulnerability to unintended pregnancies, perceived benefits of contraception, and the self-efficacy to induce the use of contraception. Also, the social guidelines and the environment, including healthcare access and access to contraceptive services, were also very facilitating. Many people, however, are still discouraged by the barriers they perceive such as fears of side effects, and cultural beliefs thus preventing the use of contraceptives. These results highlight the importance of targeting a number of behavioral facets of individuals, social, and environmental to ensure that people use contraceptives regularly. It is important to incorporate health behavior models such as the IHBM into the contraceptive promotion programs in order to develop interventions that are effective and comprehensive. Interventions would be more focused and effective by treating personal attitudes and environmental factors including social support and access to healthcare. The study has useful implications to the policy makers, health practitioners and family planning initiatives since it offers evidence of how well-informed approaches can be created in line with the complexity of contraceptive use. This combined method can eventually enhance the health status of reproductive health, contraceptive use, and also lead to the global efforts to achieve gender equality and health of women.

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