



Mini Review

Volume 17 Issue 3- November 2019
DOI: 10.19080/JGWH.2019.17.555963

J Gynecol Women's Health

Copyright © All rights are reserved by Rubee Dev

Measures of Acceptability and Feasibility of Contraceptive Counseling Interventions: A Mini-Review



Rubee Dev^{1*}, Ujjwal Dev² and Shambhu Prasad Adhikari³

¹Sun Yat-sen University Global Health Institute (SGHI), Sun Yat-sen University, China

²New Green Cross Hospital, Nepal

³Kathmandu University School of Medical Sciences, Nepal

Submission: November 11, 2019; **Published:** November 21, 2019

***Corresponding author:** Rubee Dev, Sun Yat-sen Global Health Institute, Sun Yat-sen University, China

Abstract

Contraceptive counseling has little impact on contraceptive use and uptake if the intervention is not acceptable to the woman. The purpose of this mini-review is to summarize the methods used for measuring the acceptability and feasibility of counseling interventions, thus understanding what makes interventions more acceptable and feasible to the participants. Multiple online databases such as PubMed, Scopus, PsycINFO, and Web of Science were used for the comprehensive literature search that reported using counseling interventions and measured the feasibility and acceptability of the interventions. The most common methods of measuring acceptability and feasibility across the studies were to measure participant retention rate at the end of the study, intervention compliance or number of participants attending all counseling sessions, and satisfaction with the intervention. Studies with contraceptive counseling interventions have primarily focused on measuring "efficacy" of intervention in increasing contraceptive use rather than its acceptability and feasibility. Though acceptability and feasibility are indirect measures of efficacy, there is a need to assess the acceptability and feasibility of interventions separately to deliver effective contraceptive counseling services.

Keywords: Counseling; Acceptability; Feasibility; Measures

Abbreviations: AL: Attendance Log; CWD: Coping With Depression Course; DEC: Didactic Educational Counseling; FP: Family Planning; HHH-G: Helping Her Heal-Group; HTC: HIV Testing And Counseling; RCT: Randomized Controlled Trial; RRT: Recruitment And Retention Tracking; STI: Sexually Transmitted Infection; MET: Motivational Enhancement Therapy; OHDC: Oh Happy Day Class; SBCM: Strengths-Based Case Management; VHT: Village Health Teams

Introduction

Contraceptive counseling provides education on contraceptive methods, dispels misinformation, facilitates the selection of a method that is helpful for women to get involved in healthcare decisions [1]. Having information on the widest possible range of safe and effective family planning (FP) methods, and discussing them together with the health care provider assists women in creating a tailored care plan that meets the reproductive needs over a lifetime [2]. In selecting a contraceptive method, individuals weigh factors such as effectiveness, access, prevention of sexually transmitted infections (STIs), side-effects, and other non-contraceptive benefits making it a complex decision. Choosing a contraceptive is a more complex decision during the postpartum period, as a return to fertility is unpredictable and may occur before the onset of regular menstrual cycles. Also, during the immediate postpartum period, women are typically more focused on newborn care [1]. In general, the use of birth control

should begin before sexual activity is resumed; however, many postpartum women delay or end up not using any modern contraceptive methods, mainly due to lack of knowledge and limited availability of FP services [3,4]. A systematic review on assessing the effects of educational interventions for postpartum mothers about contraceptive use reported more contraceptive use and fewer unplanned pregnancies among women who were exposed to the interventions [5]. However, evidence also suggests that in spite of postpartum counseling, a high majority of women use traditional and less effective contraceptive methods [6].

There are discrepancies between the evidence due to different methods of assessment measures, and we have very little knowledge of what makes the intervention more feasible and acceptable to the clients. There are not enough data to suggest the best approach to provide information about contraception after delivery [7], which necessitates a need for effective postpar-

tum counseling intervention that results in sustainable knowledge and pregnancy prevention behaviors. Further, we also do not know the most appropriate content that is appropriate for the postpartum women, duration of counseling sessions, and their desired timing and method of counseling [8,9]. Hence, the purpose of this mini-review is to review the methods used for measuring the acceptability and feasibility of counseling interventions, thus understanding what makes interventions more acceptable and feasible to the participants.

Methods

A comprehensive literature search was undertaken using studies that reported using counseling interventions and measured the feasibility and acceptability of the interventions. The

key search terms (measure, acceptability, feasibility, counseling, and intervention) and their combinations were used as a search strategy to review studies specifically relevant to counseling interventions. Multiple online databases such as PubMed, Scopus, PsycINFO, and Web of Science were used as sources. Because of the paucity of published literature on measures of acceptability and feasibility of “contraceptive counseling interventions” specifically, the search was extended to counseling interventions in general. The searches resulted in 5 papers found on PubMed, 51 in Scopus, 39 in Web of Science, and 57 in PsycINFO sources (Figure 1). Articles with no counseling component in the intervention were excluded from the review. A manual search was performed to remove duplicates.

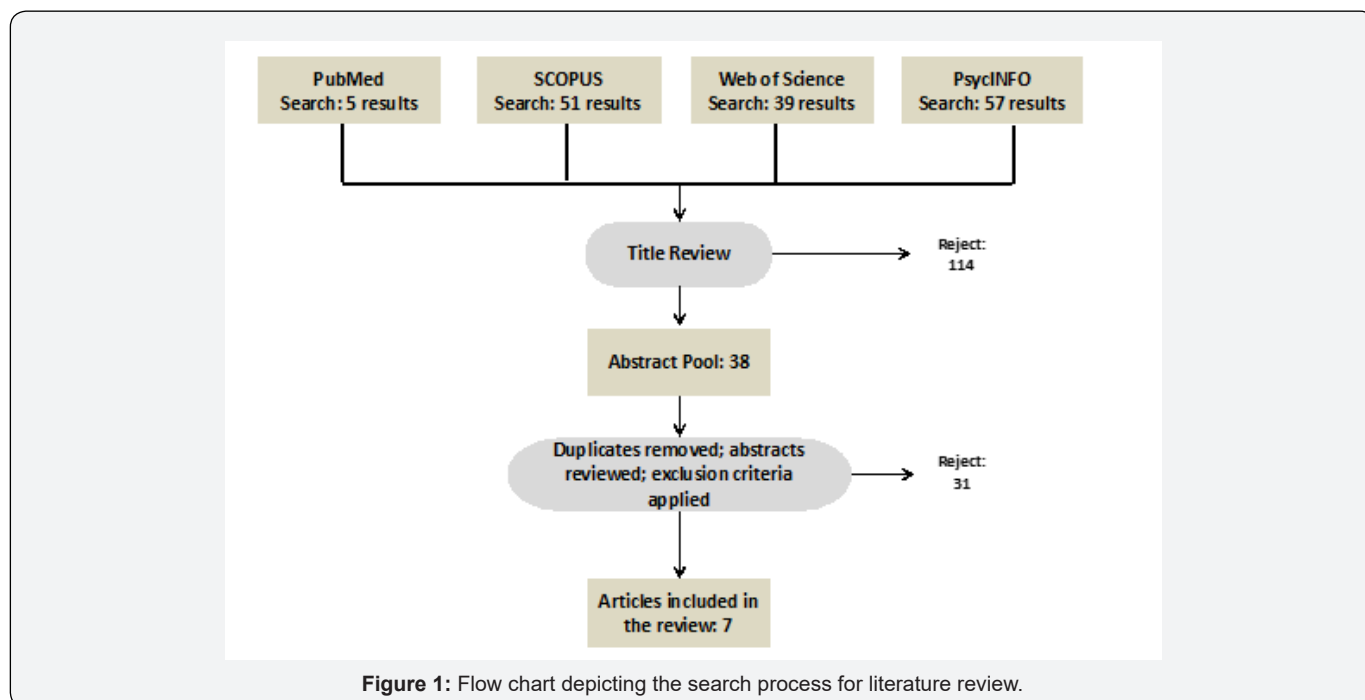


Figure 1: Flow chart depicting the search process for literature review.

Result

The seven reviewed papers are categorized in Table 1. The majority of studies had used one-on-one or, group educational counseling interventions, and one study used the low-cost telephone-delivered counseling intervention for inducing behavioral change in the study population. All studies were among adult male or female population, except the one by Gold et al. 2016 which targeted female adolescents at risk of pregnancy or sexually transmitted diseases. The most common methods of measuring acceptability and feasibility across the studies were to measure participant retention rate at the end of the study [10,11], intervention compliance or number of participants attending all counseling sessions [10,12], and satisfaction with the intervention [11-14]. Participants in almost all studies reported high satisfaction with the intervention and supported the feasibility and acceptability of the intervention tools used. In a few studies, participants suggested ways of making the intervention more effective, such as making the counseling session longer or

shorter [14,15] in duration, and provide counseling closer to the date of discharge [14]. In the studies reviewed, researchers did not highlight the importance of individual, social, and contextual factors in their intervention [16], which are very essential factors for contraceptive counseling. One critical information that came from the review is that high satisfaction from the intervention does not necessarily translate into the change in behavior [14], which is also supported by a Girl Talk intervention among adolescents [16]. Though adolescents were highly satisfied with the intervention, there was no significant reduction in subsequent pregnancies [16] mainly among those who were ≥18 years. Future studies are needed to assess factors such as the content of the counseling, frequency of counseling, and duration of the sessions [17] that might impact the change in behavior along with increased satisfaction with the interventions.

Researchers have used a range of counseling interventions for various purposes and have measured the “acceptability and feasibility” of the tools. However, studies with contraceptive

counseling interventions have primarily focused on measuring “efficacy” of intervention in increasing contraceptive use, not necessarily emphasizing its acceptability. Though acceptability and feasibility are indirect measures of efficacy, there is a need to assess the acceptability and feasibility of interventions separately to deliver effective contraceptive services.

Table 1: Measures of acceptability and feasibility of counseling interventions.

Author/Year	Study Summary	Type of Intervention and Its Description	Measures of Acceptability and Feasibility
Jones et al. [10]	<p>Design: One arm pre-post design</p> <p>Sample: Husbands of women and women with early-stage breast cancer (N = 108)</p> <p>Setting: Toronto</p>	<p>Intervention: Helping Her Heal-Group (HHH-G)</p> <p>Description:</p> <ul style="list-style-type: none"> • Five-session group educational counseling intervention • Groups had a minimum of 5 spouses • Each session included a short group presentation, skill-building, and efficacy-enhancing group exercises 	<ul style="list-style-type: none"> • Participant retention • Treatment compliance (i.e. proportion who attended ≥4/5 sessions)
Gold et al. [15]	<p>Design: Longitudinal RCT</p> <p>Sample:</p> <ul style="list-style-type: none"> • Female adolescents • 13-21 years • Who are at risk of pregnancy and sexually transmitted diseases • (N = 572) <p>Setting: Pittsburgh, Pennsylvania</p>	<p>Intervention: Computer-Assisted, Counselor Guided Motivational Intervention (CAMI) with Didactic Educational Counseling (DEC)</p> <p>Description: Three 30-45 minutes sessions of counseling at enrollment, and 3-6 months visit consisting of one-on-one brief counseling using MI with an interventionist who was guided by computer-generated feedback.</p>	<p>Self-reported rating scales:</p> <ul style="list-style-type: none"> • Experience using computer • Easy to understand • Length of the session • Lost to follow-up • Comfortable with the content
Moore et al. [12]	<p>Design: RCT</p> <p>Sample: Heavy drinking, male, Latino day laborers (N = 29)</p> <p>Setting: Los Angeles</p>	<p>Intervention: Motivational Enhancement Therapy (MET) and Strengths-Based Case Management (SBCM)</p> <p>Description: Three sessions manualized series to be delivered in 1-2-week intervals over a period of 6, 12 and 18 weeks by promotoras. The sessions were designed to last 45-55 minutes and structured to provide feedback to the participants.</p>	<ul style="list-style-type: none"> • Number of participants attending all counseling sessions • Number of participants that remained in the study at 18 weeks • Satisfaction with the treatment and study
Ward et al. [11]	<p>Design: Pre-test – post-test</p> <p>Sample: African American men and women</p> <p>Study I, N = 18 (≥60 years) Study II, N = 40 (30-60 years)</p> <p>Setting: USA</p>	<p>Intervention: Oh Happy Day Class (OHDC) that was culturally adapted from the Coping with Depression Course (CWD)</p> <p>Description: The weekly counseling sessions of 2.5 hours long, held over 12 weeks, and met once per week, followed by booster sessions at 24 weeks. In the first 30 minutes, a light meal was provided with light music. The next hour focused on the psycho-education component.</p>	<p>Feasibility</p> <p>Recruitment and Retention Tracking (RRT)</p> <ul style="list-style-type: none"> • Rate of recruitment • Retention in study • Drop-out <p>Attendance Log (AL)</p> <p>Acceptability</p> <ul style="list-style-type: none"> • Client Satisfaction Inventory (CSI) to assess client satisfaction with counseling
Brunie et al. [13]	<p>Design: Pair-matched cluster RCT</p> <p>Sample: Adult, female, revisit FP clients and Village Health Teams (VHT)</p> <p>VHTs, N = 36 Clients, N = 256</p> <p>Setting: Uganda</p>	<p>Intervention: Integrated FP/HIV Testing and Counseling (HTC) service delivery</p> <p>Description: HTC service provision included pre-test counseling, followed by rapid testing according to a serial algorithm, and post-test counseling including HIV prevention messages.</p>	<p>Among VHTs:</p> <ul style="list-style-type: none"> • Satisfaction with the HTC service • Waste management at home <p>Among Clients:</p> <ul style="list-style-type: none"> • Satisfaction with interpersonal relationships and with the information and services received • Trust VHT with private information • Intention to get tested again in the future

<p>Bonevski et al. [26]</p>	<p>Design: Pair-matched cluster RCT</p> <p>Sample: Client aged >18 years, English speaking, currently receiving accommodation support N (12)</p> <p>Setting: Australia</p>	<p>Intervention: A novel, low cost, telephone-delivered counseling program</p> <p>Description: Six sessions conducted once per week, provide participants with personalized counseling about smoking cessation or reduction, fruit and vegetable consumption, alcohol use, physical activity, and sun protection</p>	<ul style="list-style-type: none"> • Acceptability of phone for the use of health program • Self-reported health risk behavior changes
<p>Schulte et al. [14]</p>	<p>Design: RCT</p> <p>Sample: Current smokers (9 cigarettes per day on average for the last 6 months) N (39)</p> <p>Setting: Wisconsin</p>	<p>Intervention: Face to face tobacco cessation counseling intervention</p> <p>Description: Brief counseling session (lasting 15-20 min) by a trained research member introduced to the Wisconsin Quit Line</p>	<ul style="list-style-type: none"> • Participants engagement • Perception of satisfaction with study intervention content, length, and timing, the study team, physician, and family support using a 5-point Likert Scale

Note: AL= attendance log, CWD= Coping with Depression Course, DEC= Didactic Educational Counseling, HHH-G= Helping Her Heal-Group, HTC= HIV testing and counseling, RCT= randomized controlled trial, RRT= Recruitment and Retention Tracking, MET= Motivational Enhancement Therapy, N= sample size, OHDC= Oh Happy Day Class, SBCM= Strengths-Based Case Management, VHT= village health teams.

Discussion

In this review, the participant's engagement and retention, intervention compliance, and satisfaction with the intervention were found to be the main measures of assessing the feasibility and acceptability of the interventions. Despite the perceived usefulness of the program, limited engagement and retention of the participants were some of the major constraints that limited the ability of an intervention to influence health behavior change [18]. Engagement and retention are important because participants who are enrolled but do not complete an intervention can undermine the effectiveness of the overall outcome of the study. Greater engagement is associated with retention of participants and positive change in a key outcome of the intervention [19]. There are evidences, which have shown positive outcomes among participants who stayed longer in the program as compared to those with shorter lengths of stay [20,21]. A systematic review of patient engagement in healthcare research too supported the idea of focusing on participant's engagement. The study reported the best methods to identify patients for greater engagement, which is through convenience sampling and best methods to engage patients, which is through focus groups or interviews [22].

Satisfaction is at the core of the patient experience [23] and has gained wide recognition as an indicator of quality intervention in healthcare researches. Among the many factors that contribute to participant retention, one is the participant satisfaction with the study and intervention. Programs that can contribute positive experience for the participants must have greater engagement and retention. The majority of the study in the review had emphasized the importance of participant's satisfaction and reported high satisfaction with the content and the intervention among them [14,15]. The duration of the counseling was an issue in one of the studies [15], which was too long for

the participants and was also related to their attrition from the study. Moreover, technological interventions are effective only when users accept them. A meta-analysis of e-learning technology acceptance has reported that perceived usefulness and ease of use of the intervention contributes to an individual's motivation and help them continue using technological interventions [24]. One another study has also reported a significant influence of ease of use over user acceptance [25]. Ultimately, for effective counseling intervention participant's satisfaction with counseling will be an essential component of the intervention [26].

Conclusion

Deciding which contraceptive method to initiate following the delivery is a complex decision for most of the women. Counseling interventions, if acceptable and feasible can help them move from no intention of using contraceptives to the intention of using it immediately or in the future and can act as a key modifier in reducing the risk of subsequent or unintended pregnancies. Hence, understanding and utilizing the appropriate method of measuring the acceptability and feasibility of the intervention can have a greater impact on the effectiveness of the intervention.

Author's Contributions

RD developed the concept for the manuscript. RD conducted the review and drafted the manuscript. UD and SPA provided detailed comments on the draft. All authors contributed to reviewing and revising the manuscript and approved the final version.

References

1. Zapata LB, Murtaza S, Whiteman MK, Jamieson DJ, Robbins CL, et al. (2015) Contraceptive counseling and postpartum contraceptive use. *Am J Obstet Gynecol* 212(2): 171-e1-8.
2. Mbizvo MT, Phillips SJ (2014) Family planning: Choices and challenges for developing countries. *Best Pract Res Clin Obstet Gynaecol* 28(6): 931-943.

3. Sempeera H, Kabagenyi A, Anguzu R, Muhumuza C, Hassen K, et al. (2016) Family planning counseling during antenatal care and postpartum contraceptive uptake in Africa: a systematic review protocol. *JBIF Database System Rev Implement Rep*14(3): 17-25.
4. Ross JA, Winfrey WL (2001) Contraceptive use, intention to use and unmet need during the extended postpartum period. *International family planning perspectives* 27(1): 20-27.
5. Lopez LM, Hiller JE, Grimes DA (2010) Education for contraceptive use by women after childbirth. *Cochrane Database Syst Rev* 1: CD001863.
6. Engin-Üstün Y, Üstün Y, Çetin F, Meydanlı MM, Kafkaslı A, et al. (2007) Effect of postpartum counseling on postpartum contraceptive use. *Arch Gynecol Obstet* 275(6): 429-432.
7. Glazer AB, Wolf A, Gorby N (2011) Postpartum contraception: needs vs. reality. *Contraception* 83(3): 238-241.
8. Yee L, Simon M (2011) Urban minority women's perceptions of and preferences for postpartum contraceptive counseling. *J Midwifery Womens Health* 56(1): 54-60.
9. Jaccard J, Levitz N (2013) Counseling adolescents about contraception: towards the development of an evidence-based protocol for contraceptive counselors. *J Adolesc Health* 52(4 Suppl): S6-S13.
10. Jones JM, Lewis FM, Griffith K, Cheng T, Secord S, et al. (2013) Helping Her Heal-Group: a pilot study to evaluate a group delivered educational intervention for male spouses of women with breast cancer. *Psychology* 22(9): 2102-2109.
11. Ward EC, Brown RL (2015) A culturally adapted depression intervention for African American adults experiencing depression: Oh Happy Day. *Am J Orthopsychiatry* 85(1): 11-22.
12. Moore AA, Karno MP, Ray L, Ramirez K, Barenstein V, et al. (2016) Development and Preliminary Testing of a Promotora-Delivered, Spanish Language, Counseling Intervention for Heavy Drinking among Male, Latino Day Laborers. *J Subst Abuse Treat* 62: 96-101.
13. Brunie A, Wamala-Mucheri P, Akol A, Mercer S, Chen M, et al. (2016) Expanding HIV testing and counselling into communities: Feasibility, acceptability, and effects of an integrated family planning/HTC service delivery model by Village Health Teams in Uganda. *Health Policy Plan* 31(8): 1050-1057.
14. Schulte DM, Duster M, Warrack S, Valentine S, Jorenby D, et al. (2016) Feasibility and patient satisfaction with smoking cessation interventions for prevention of healthcare-associated infections in inpatients. *Subst Abuse Treat Prev Policy* 11(1): 15.
15. Gold MA, Tzilos GK, Stein LAR, Anderson BJ, Stein MD, et al. (2016) A Randomized Controlled Trial to Compare Computer-assisted Motivational Intervention with Didactic Educational Counseling to Reduce Unprotected Sex in Female Adolescents. *J Pediatr Adolesc Gynecol* 29(1): 26-32.
16. Katz KS, Rodan M, Milligan R, Tan S, Courtney L, et al. (2011) Efficacy of a randomized cell phone-based counseling intervention in postponing subsequent pregnancy among teen mothers. *Matern Child Health J* 15(1): S42-53.
17. Lee JK, Parisi SM, Akers AY, Borrerro S, Schwarz EB, et al. (2011) The impact of contraceptive counseling in primary care on contraceptive use. *J Gen Intern Med* 26(7): 731-736.
18. Leslie E, Marshall AL, Owen N, Bauman A (2005) Engagement and retention of participants in a physical activity website. *Prev Med* 40(1): 54-59.
19. Couper MP, Alexander GL, Maddy N, Zhang N, Nowak MA, et al. (2010) Engagement and retention: measuring breadth and depth of participant use of an online intervention. *J Med Internet Res* 12(4): e52.
20. Simpson DD, Joe GW, Brown BS (1997) Treatment retention and follow-up outcomes in the Drug Abuse Treatment Outcome Study (DATOS). *Psychology of Addictive behaviors* 11(4): 294-307.
21. Hser Y-I, Evans E, Huang D, Anglin DM (2004) Relationship between drug treatment services, retention, and outcomes. *Psychiatric Serv* 55(7): 767-774.
22. Domecq JP, Prutsky G, Elraiyah T, Wang Z, Nabhan M, et al. (2014) Patient engagement in research: a systematic review. *BMC health services research* 14(1): 89.
23. Smailes P, Reider C, Hallarn RK, Hafer L, Wallace L, et al. (2016) Implementation of a Research Participant Satisfaction Survey at an Academic Medical Center. *Clinical Researcher* 30(3): 42-47.
24. Šumak B, Heričko M, Pušnik M (2011) A meta-analysis of e-learning technology acceptance: The role of user types and e-learning technology types. *Computers in Human Behavior* 27(6): 2067-2077.
25. Venkatesh V, Davis FD (2000) A theoretical extension of the technology acceptance model: Four longitudinal field studies. *Management science* 46(2): 186-204.
26. Bonevski B, Baker A, Twyman L, Paul C, Bryant J, et al. (2012) Addressing smoking and other health risk behaviours using a novel telephone-delivered intervention for homeless people: A proof-of-concept study. *Drug Alcohol Rev* 31(5): 709-713.



This work is licensed under Creative Commons Attribution 4.0 License
DOI: [10.19080/JGWH.2019.17.555963](https://doi.org/10.19080/JGWH.2019.17.555963)

Your next submission with Juniper Publishers will reach you the below assets

- Quality Editorial service
- Swift Peer Review
- Reprints availability
- E-prints Service
- Manuscript Podcast for convenient understanding
- Global attainment for your research
- Manuscript accessibility in different formats
(Pdf, E-pub, Full Ttext, Audio)
- Unceasing customer service

Track the below URL for one-step submission
<https://juniperpublishers.com/online-submission.php>