

Dual Contraception Use among Women with Human Immunodeficiency Virus (HIV): A Scoping Review

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Abstract

The dual contraception method is a contraceptive protection for all people at risk for STIs and HIV. The use of dual contraception is a necessary way in an effort to improve the PMTCT program. Integrated services can help people living with HIV / AIDS to access family planning services that make it easier to determine whether or not to get pregnant. The purpose of this scoping review is to explore experiences in access to dual contraception and the factors that influence the use of dual contraception in HIV positive women. This scoping review used the five steps framework of Arksey and O'Malley. The article search strategy was developed using PubMed, EBSCOhost and ScienceDirect based on the period 2009 to 2019, all design study result. Critical Appraisal used was Critical Appraisal by Hawker 2002. Ten articles were selected and had grade A. Two themes emerged as a result of scoping review, describing experiences in accessing multiple methods of contraception and factors influencing the use of dual methods of contraception in HIV positive women. They were lack access to dual contraception and were afraid of stigma. Age, partner involvement, openness to HIV status, involvement of health workers affected the use of multiple contraceptive methods

Keywords: dual contraception, double protection, women with HIV

1. Introduction

Multiple methods of contraception can be done by using condoms combined with other methods of contraception simultaneously or by using condoms alone consistently and correctly [1]. According to [2], using dual contraception method is the key to increase the effectiveness of prevention programs for HIV transmission from mother to child (PMTCT). According to [3], contraception in HIV positive women with dual protection methods can be used as a step to delay and stop reproduction and also safe and effective means of contraception for the prevention of unplanned pregnancies.

Research in South Africa showed the prevalence of unplanned pregnancy was 71% in women who had recently been diagnosed with HIV. The most common reason for not using contraceptive methods was the assumption that they had a low risk of pregnancy. Lack of communication and discussion with health workers can lead to meeting unmet needs [4]. In Ethiopia, contraceptive needs that have not been met in women with HIV positive overall were 25.1%. Women with HIV had even more limited access to reproductive health services than women in general [4], [5]. Choosing the number, time and distance of having children is a basic right of all women and partners, no matter their HIV status. This scoping review explored the experiences of women with HIV in gaining access to dual contraception and the factors that influenced the use of dual contraception methods in women with HIV.

2. Methodology

The method in scoping review used the framework suggested by Arksey and O'Malley, which consisted of five steps to explain and facilitate each stage of the

framework. The step consisted of identifying the research questions, identifying the relevant studies in scoping review, study selection, the data chart, collate, summarize and report the results [6].

2.1 Identify the Research Question

The identification of research questions was created with the help of PEOS research work. The PEOS consist of (Population, Exposure / Event, Outcomes, Study Design) framework to assist in designing the overall research objective questions [7]. The framework for scoping review is presented in Table 1.

Table 1. PEOS Framework

Population and Problems	Exposure	Outcomes or Themes	Study Design
HIV women Women with HIV HIV positive	Dual contraception use Double protection	Experience Perception Factors	All research studies/study design related to the aim of this study

2.2 Identify the Relevant Studies

Identification of relevant articles was developed using the PubMed, EBSCOhost and ScienceDirect databases. The websites used to search for gray literature are WHO, USAID and Google Scholar. The keywords used were (((dual contraception) OR double contraception) OR contraception use) AND HIV women), after getting keywords then search for papers in a database that has been determined by meeting the inclusion criteria 1) Articles published from 2009 to 2019. 2) Articles published in English and Indonesian. 3) Original article. 4) WHO documents/reports/draft policies/guidelines/formal organizations. Exclusion Criteria 1) Articles of opinion or comment. 2) Letters and book reviews. 3) Article review 4) Articles that discuss contraception among female sex workers.

2.3 Articles Selection

A total of 4769 articles were identified based on a predetermined database. A total of 725 articles in PubMed, 2470 articles in Science Direct, 674 articles in EBSCO and 900 articles in gray literature. The entire article was filtered using the help of Covidence software. The Covidence helped in the ongoing review process including direct data extraction which will appear at each stage of the evidence. Each stage of Covidence helped the reviewer determine whether the paper fits the objectives or not. The Covidence produced an output in the form of a PRISMA diagram to produce a report [8]. The process of identifying articles from initial search, filtering to final results is explained in Figure 1.

2.4 The Data Chart

There are ten articles that fit the topic of dual contraception in HIV positive women. The whole article was assessed for its quality using the critical appraisal tool. The tool chosen to assess the quality of articles in this scoping review was the Criteria for Quality of The Paper Appraisal by [9]. The selection of critical appraisal tools based on the studies included in this scoping includes four different types of design studies, the quality of qualitative research can be assessed using the concepts used for quantitative research.

This scoping review adapted the article quality assessment division based on research conducted by [10] with the Hawker critical appraisal which converts numerical assessment scores to high (A) 30–36 points; medium (B) 24-29 points and low (C). The charting data are presented in Table 2.

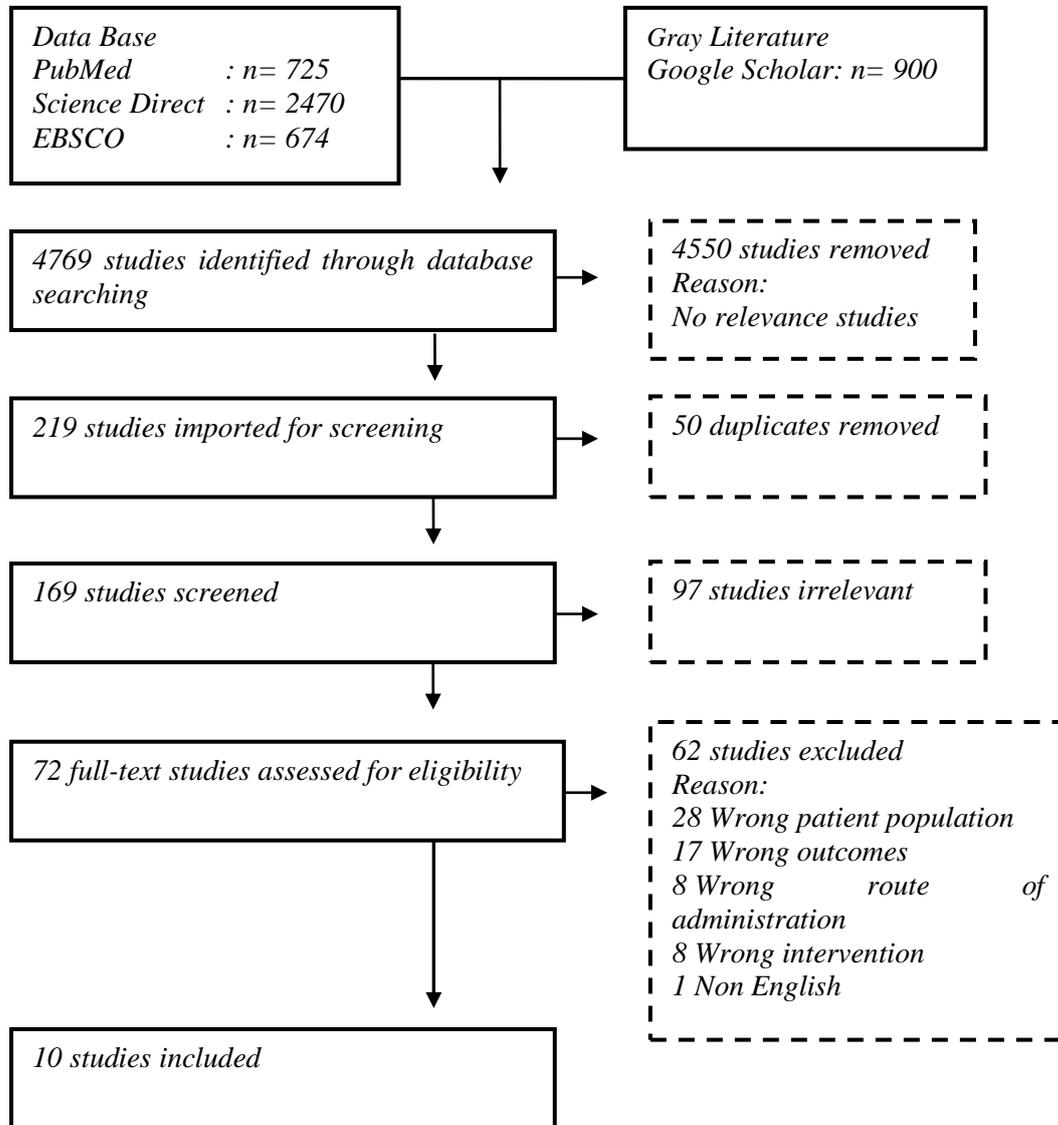


Figure 1. PRISMA Flowchart

Table 2. Data Charting

No	Author / Year / Country	Study Design/Data Collection	Aim	Results
1.	Antelman et al.,/ 2015/ Sub Sahara Africa	Quantitative/Cluster randomized trial	Describing factors related to the desire to become pregnant and how people with HIV use contraception	Age, willingness to ask partners to use condoms, and communication with health care providers about

				family planning are the factors that influence people with HIV in determining the use of various contraceptive methods
2.	Chakrapani et al./ 2011/ India	Mixed-methods design/a total of 25 in-depth interviews, divided into 7 groups, and 5 key informants	Describe the prevalence and conversion of the use of various contraceptive methods (condoms and effective methods to prevent pregnancy) as well as the challenges in using contraception in partners with HIV in India	The prevalence of using multiple methods of contraception increases after HIV diagnosis, condoms are the most common method of contraception, barriers to using contraception other than condoms are the lack of conversation about contraception other than condoms by health worker, the lack of acceptance of contraception other than condoms among PLWHA, and the lack of husband involvement in family planning counseling.
3.	Chibwasha et al./ 2011/ Zambia	Quantitative/Cohort	Describing the implementation of reproductive health counseling	Comprehensive reproductive health counseling needed to be included in HIV care. Nearly 60% of HIV-infected women reported using modern methods of contraception. However, only 27% used hormonal methods or long-term contraception methods that were more effective, and even fewer women reported using dual methods of

				<p>contraception. Further efforts are needed to increase the promotion of the use of various types of contraception, especially among older women, who were not married and those with advanced HIV disease.</p>
4.	Kaida et al.,/2017/ Canada	Quantitative/Cohort	<p>Measuring the prevalence and correlation of effective contraception use in women who are sexually active and have a history of HIV and assess the various methods used, as well as satisfaction with use and reasons for not using multiple contraception methods.</p>	<p>Young age and pregnancy perception are positively related to the definition of dual protection, besides that women who obtain images from health workers will use the vasectomy or tubectomy method, while those who have difficulty accessing services will tend to use female condom or injection methods.</p>
5.	Lawani et al./ 2014/ Nigeria Tenggara	Quantitative/Cross-sectional	<p>Assessing the awareness, patterns and practices of multiple contraceptive methods in women with HIV, and the factors that influence their use</p>	<p>Most respondents were lack of awareness about multiple contraceptive methods. The main reason for the lack of interest in using the dual method is lack of awareness and openness.</p>
6.	Mariam Erashi et al./ 2015/ Southwest Ethiopia	Mixed-methods design/Cross-sectional, face-to-face interview using pre-tested structured questionnaire and in-depth interview	<p>Assessing the use of multiple contraceptive methods and related factors in HIV positive women</p>	<p>Age over 30 years prefer to use dual contraception from women in the age range of 15 to 24 years. In addition, when viewed from marital status,</p>

				widowed women also use multiple contraception more. Discussions with partners in deciding the contraceptive methods are more might use a multiple contraceptive method than those who don't have open discussions.
7.	Mulongo et al./ 2017/ Kenya	Quantitative/Cross-sectional	Identifying factors related to the use of dual contraception in HIV positive women	Knowledge of dual contraception, use of non-barrier contraception and HIV recognition status of partner are the key factors associated with the use of multiple contraceptive methods.
8.	Reta et al./ 2019/ Northwest Ethiopia	Quantitative/Cross-sectional	Investigating the prevalence and factors related to the the use of dual contraception in HIV positive women	Only a small number of HIV-positive women used dual contraception. Involvement of couples in post counseling tests, partner discussions about dual contraception, age and women's work were positively related to the use of dual contraception.
9.	Saeieh et al./ 2015/ Iran	Qualitative/In-depth, semi-structured interviews	Exploring the experiences of HIV-positive women in relation to contraception	Health workers play a role in the fulfillment of health services, their lack of knowledge and cooperation contribute to the burden of diseases that claim the rights of patients.

10.	Tsuyuki et al./ 2013/ Brazil	Quantitative/Cross-sectional	Searching multiple coverage and multiple methods as a risk reduction strategy for HIV women	Condoms are more widely used as an alternative to additional contraception in women. They preferred over other contraceptives and women who are on antiretroviral therapy and their partners are HIV positive are also more consistent in the use of condoms.
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2.5 Collate, Summarize and Report the Results

Data extracted from the scoping review article are organized into several themes. Themes included in the review of this article include: The experience of women with HIV in accessing multiple methods of contraception, namely health care and social stigma. Factors affecting the use of dual contraceptive methods in HIV positive women are age, partner involvement, partner HIV status and communication with health workers.

3. Results and Discussion

3.1 Characteristics of Articles

The results of charting and critical appraisal data showed 10 articles using a research design consisting of two articles using cohort design, two articles using mix method study design, one article using qualitative design, one article cluster randomized trial and four articles using cross sectional design (see Figure 2).

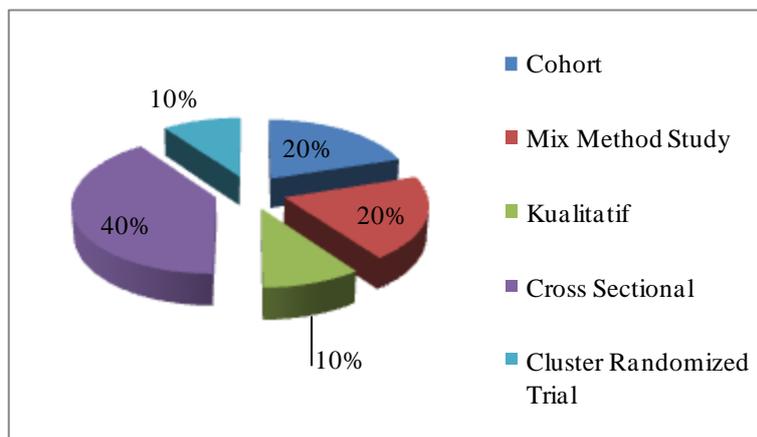


Figure 2. Characteristics of Research Design

Four articles were from lower middle income countries (India, Kenya, Zambia and Nigeria), three articles were from low income countries (Sub Sahara Africa, Western Ethiopia and Northwest Ethiopia), two articles from middle to upper income countries (Iran and Brazil), and one article from high income countries namely Canada (see Figure 3).

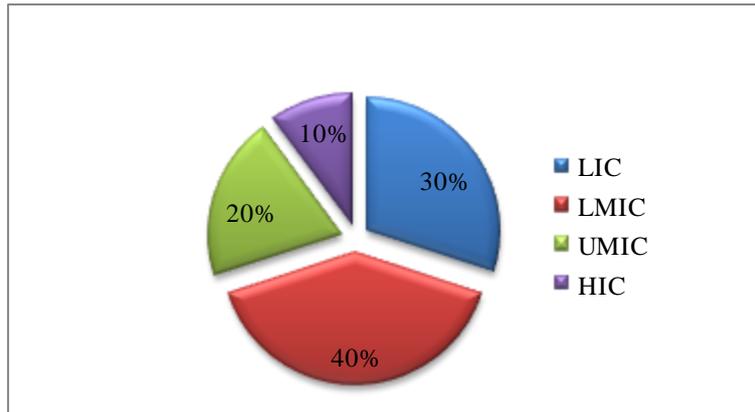


Figure 3. Country Characteristics

The whole article shows grade A with the highest value of 36 in article A07 and the lowest value of 31 in article A10 (see Figure 4).

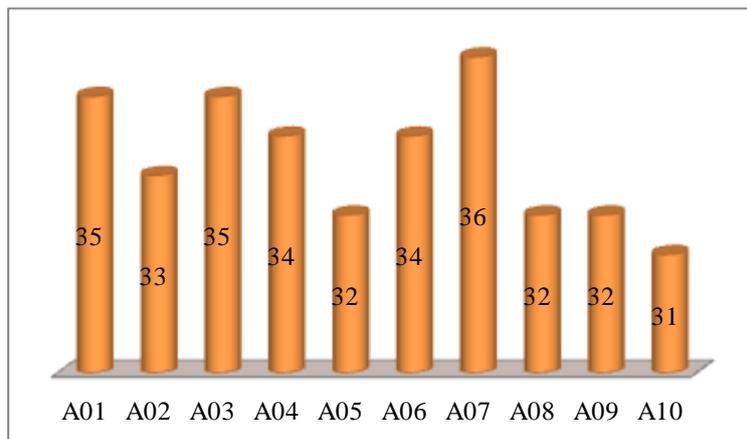


Figure 4. Characteristics of Article Grade

3.2 The Experiences of Women with HIV in Accessing Multiple Contraception

3.2.1 Health services

Health care providers limited their discussion of contraception especially to condoms. Limited discussion caused patients to lack adequate information about the use of multiple contraceptive [12], [18]. Most of the discussions were initiated by patients and open discussions with health workers were not sufficient [20]. Results of the research conducted [12] showed that health care providers limit their discussion about contraception. They only focused on condoms and contraception in addition to condoms tended to be less acceptable. The main reason is about the lack of understanding of how to use and excessive concern about the effects of other contraceptives.

Two doctors as key informants described that their colleagues also provide simple assistance and contraception only on condoms and putting aside other contraceptives. Some doctors may not discuss condoms or any contraception because they do not want to convey the idea to PLWHA that they can be sexually active [18]. Lack of knowledge among several health service providers made it difficult for women to obtain information about HIV. These constraints caused women not to play an active role in decision-making related to their reproductive life [21].

3.2.2 Stigma

Result of the research [16] showed that HIV positive women were afraid of stigma that affected the use of multiple contraceptive methods. Qualitative study results stated that women refuse to visit the Anti Retro Viral Treatment Clinic Hospital, on the grounds there were many people there, for their fear of meeting people who might recognize them.

As many as 35 respondents (15.6%) were afraid of stigma, which affected the use of multiple contraceptive methods. They were afraid to meet other people when visiting HIV clinics, which will create a bad stigma about their HIV condition [16]. Stigma and discrimination in people with HIV caused problems where patients became unwilling to visit and prevented them from accessing health services [22].

3.3 Factors that Influence the Use of Dual Contraception

3.3.1 Age

The finding suggests that age is one of the factors that influence the ability to use of dual contraception in HIV positive women. According to [14], older women tend not to use effective methods and multiple protections. Older women tend to have no desire to reproduce and thus have less need for contraception. While older women tend not to use effective methods and multiple protections. Older women tend to have no desire to reproduce so they have less need for contraception. Younger women have a better understanding of the importance of dual contraception, so they tend to use it more. Another reason is that younger women tend not to want to get pregnant and do not want to have children in that age range, thereby increasing the prevalence of dual cotraseption use [2].

However, these findings are not the same as the findings of research conducted by [11] in Sub Saharan Africa and mix method studies by [16] in Southwest Ethiopia which shows that older age is more likely to use dual contraception than the 15-24 years age group. According to [2], there is a gap in the age factor due to variations in the research design and sample study.

3.3.2 Partner involvement

As reported by [16], partner participation in counseling and open discussion with women about dual contraception is a factor influencing the use of dual contraception. This study is strengthened by the findings of [2] in which a cross-sectional study of 619 HIV positive women showed that those who had open discussions with partners about the use of dual contraception were nearly 8 times more likely to use multiple contraception than those who had never discussed or conducted any discussion with partners.

According to [12], many pregnant women lived in their parents' homes so the husband did not accompany them during antenatal visits. Whereas during the antenatal visit, health workers provided information about contraception, so the husband did not get information about family planning. On the other hand, many men living with HIV say that the vasectomy method is not discussed with them in advance. They assumed that vasectomy can cause loss of virility that might interfere with their capacity to reproduce and work.

In addition, there was an assumption that men are the main decision makers in the selection of contraception and the use of condoms in couples. This is a form of subordination of the role of women in the use of condoms and contraception. Equal communication and gender-based communication are very important to promote safer sexual relationships practices [23].

3.3.3 Partner's HIV status

The partner's HIV status influenced decisions in the use of double contraception in women with HIV. Open disclosure of one's HIV status to sexual partners is associated with dual contraception. Openness to HIV status allows open communication of contraception on both sides. Sharing the secrets of HIV status with a partner is a form of accountability that needs to be done to people with AIDs as one of the most effective ways of dealing with transmission. Couples who know their HIV status tend to have open communication between the two parties, especially in relation to contraception [17]-[18].

Research in Brazil showed that double protection is determined by how HIV status a partner has. A woman who has a partner with serodiscordant HIV status (a partner with HIV negative) reports the most consistent use of condoms. Underneath are women who do not know their partner's HIV status, then women and partners who both suffer from HIV (HIV serokonordan). If the partner's HIV status is known, they feel they have an obligation to commit to their relationship so that it will be more consistent in the use of condoms as double protection [24].

3.3.4 Communication with health workers

Result of research by [15] showed that those who were aware of the importance of using multiple methods of contraception as part of a form of safe sex activities, get information during a visit to a health care clinic. Unconsciousness in using this method of contraception is still high which causes failure, despite the fact, no less than 70% of women have an HIV status of not less than one year.

Respondents in a study conducted with in-depth interviews stated that they knew the benefits of using a multiple contraceptive method and they had the desire to use it. However often their partners do not want to voluntarily participate using condoms. To improve the practice of using various contraceptive methods, joint counseling for couples with HIV is one important point that needs to be underlined [16]. The results of other studies indicated that health care providers do not describe or do not offer contraceptive methods or methods that are difficult to access. Women who obtained an overview of health workers will use the vasectomy or tubectomy method, while those who had difficulty getting access to services will tend to use the female condom or injection method [14].

To increase the prevalence of dual contraceptive use in women with HIV, health care providers needs to provision of counseling and they should be encouraged. Counseling for HIV positive women can increase the use of dual contraception to prevent unintended pregnancy and sexually transmitted infections. It also shows that health care providers need to pay more attention to counseling about dual contraception and its benefits for HIV-positive women attending treatment at Anti Retro Viral clinics or hospital [2].

One of the successful forms of counseling is done by [13] in which standardized and comprehensive implementation of counseling can be accepted by health care providers and patients. The peer educator model is used with people who have previously received training. Training based on family planning curriculum and two class courses and get certified. The demonstration showed that the method could include a large number of HIV-infected women present at ART clinics to gain dual contraception access.

4. Conclusion

Scoping review results showed that HIV positive women had less access to dual contraception where health care providers only limit their discussion of contraception especially to condoms. Contraception other than condoms tended to be less acceptable and excessive concern about side effects of contraception. HIV positive women were fear of the stigma of influencing the use of multiple contraceptive methods.

The older women had a greater chance of using dual contraception than younger women. In addition, openness to HIV status enabled contraception communication on both sides. Women who had discussions with partners about the use of dual contraception had more opportunities to use multiple contraceptions than those who had never discussed with a partner. The involvement of health workers increased the practice of using multiple contraception methods; joint counseling for HIV-infected partners is one important point that needed to be underlined by health care provider to increase the prevalence of dual contraceptive use in HIV positive women.

The main limitation of this scoping review was that this study only focuses on peer-reviewed literature. It was likely that many similar studies had been carried out but not published or disseminated elsewhere. Including limitations in accessing articles published in other languages.

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