

## **Family Planning Services in Covid-19 Pandemic: A Scoping Review**

**Riska Dwi Pramita Sari\*, Mohammad Hakimi, Mufdlilah, Anjarwati**

*Universitas Aisyiyah Yogyakarta, Indonesia*

\* Correspondent Author: [riska.dp.sari@gmail.com](mailto:riska.dp.sari@gmail.com)

### **ABSTRACT**

The spread of the Covid-19 virus, which has been stated as a global pandemic by WHO in March 2020, has given impacts on various sectors such as health, economy, social, and environment. One of the impacts on maternal health is the change and disturbance in family planning (FP) services. This scoping review (ScR) aim to identify the theme mapping of the literature regarding FP services during the Covid-19 pandemic. The drafting of the ScR adopted Preferred Reporting Items for Systematic Reviews and Meta-Analyzes Protocols for Scoping Reviews (PRISMA-ScR). There were 8 articles reviewed and 3 mapping themes obtained, namely the impact of the Covid-19 pandemic towards FP services, the influencing factors of FP services during the Covid-19 pandemic, and the recommendations for FP services during the Covid-19 pandemic. The covid-19 pandemic causes many challenges in health services, especially FP services. Therefore, a lot of research is needed, especially those related to the practice of effective FP services and the quality of FP services to provide useful information to develop strategies for the improvement of FP services in the upcoming new normal era.

**Keywords:** Family Planning (FP) Services, Covid-19 Pandemic, Scoping Review

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**BACKGROUND**

In December 2019 in Wuhan, China, the SARS-CoV-2 outbreak or the coronavirus 2019 called Covid-19 began to spread widely and since March 2020, the World Health Organization (WHO) has declared a global pandemic (Lauxmann et al., 2020). On December 7, 2020, the number of positive cases of Covid-19 worldwide reached 66 million and there were already more than 1.5 million people died (WHO, 2020). The challenges in the health, environmental, economic, and social sectors were felt by the entire world population as a result of the fast and massive spread of Covid-19 (Chakraborty & Maity, 2020).

Research in India revealed that outpatient services for maternal and child health were severely disturbed amid the pandemic due to inadequate prevention and control of Covid-19 (Garg et al., 2020). In addition, the impact of Covid-19 has changed and disturbed FP services due to a lack of access, attention, and support for fulfilling FP needs as a consequence of the pandemic. Research from the *Guttmacher Institute* estimated a 10% reduction in contraceptive use in 132 low and middle-income countries during the Covid-19 pandemic (Riley et al., 2020). If FP needs are not met, then the number of unwanted pregnancies will definitely increase and have a lifelong impact on women and their families (Dasgupta et al., 2020).

Currently, health services are focused on overcoming and preventing the transmission of Covid-19. Therefore, it results in the unfulfilled quality of FP services due to increased patient waiting-time, lack or diversion of medical personnel, limited personal protective equipment (PPE), disturbance in contraceptive distribution, and the limitation or closure of health care facilities (UNFPA, 2020). In the pandemic condition, health services must pay attention to the aspects of the Standard Operating Procedure (SOP) for handling Covid-19 (Bakri, 2020). Services must be carried out comprehensively as well as maintaining the quality and success of FP services so that they will lead to maternal and child health improvement and mortality reduction (Nanda et al., 2020). The ScR question is "How is the family planning services during the Covid-19 pandemic?" and the objective is to identify the findings of the theme mapping from the literature regarding family planning services during the Covid-19 pandemic.

**METHODS**

**Protocol:** The drafting and reporting of this ScR use the framework referred Reporting Items for Systematic Reviews and Meta-Analyzes Protocols for Scoping Reviews (PRISMA-ScR) with 22 checklist items as the guideline for authors in preparing good ScR research that will be published (Tricco et al., 2018) and will improve the quality of research results that are presented in a more concise manner so that they are easy to read (Lockwood et al., 2019).

**Eligibility Criteria:** The articles that are reviewed must meet the inclusion criteria, namely articles that discuss FP services during the Covid-19 pandemic meaning that articles that do not contain Covid-19 pandemic content will be eliminated. The population included in the articles is FP acceptors, patients or clients, women of reproductive age (WUS), and health workers (midwives and doctors). English and Indonesian articles are included in the review because it makes it easier for researchers to understand and analyze the content of the article. The articles that will be published are articles written from March 2020, when WHO began to establish Covid-19 as a global pandemic until December 2020. Only full-text articles and original research are included. Irrelevant articles containing commentary articles, reviews, recommendations, or policies will be excluded.

**Information Sources:** Literature search uses a database because it is more reliable in searching for literature and is faster than manual library search (Fry dan Attawet, 2018). These databases used were EBSCO, Proquest, PubMed, ScienceDirect, and Wiley as well as grey literature namely Google Scholar.

**Search Strategies:** The literature search was conducted by identifying relevant keywords and use of boolean operators (AND, OR, and NOT) aims to optimize the search for relevant articles (Bramer et al., 2018) by using keywords as follows: Akseptor KB OR wanita usia subur OR pasien OR tenaga kesehatan OR \*family planning acceptors\* OR patient\* OR \*women of reproductive age\* OR \*health provider\* OR midwife\* OR \*health care\* AND Pelayanan Keluarga Berencana OR \*family planning\* OR contraception\* OR \*reproductive care\* OR \*contraception care\* OR \*contraception service\* AND Pandemi Covid-19 OR \*Covid-19 pandemic\* OR SARS-Cov-2 OR \*coronavirus 2019\* OR Outbreak.

**Selecting of Sources of Evidence:** The selection process of articles was conducted by including the collected articles into reference management named Mendeley. Furthermore, the data were included into covidence, namely a web-based software that helps researchers in the process of filtering references and reflecting the multiphase review process (Kellermeyer et al., 2018). The selection process of articles begins with the screening of titles and abstracts conducted by the first researcher independently. Furthermore, complete text selection was carried out by the first and second researchers to see the suitability of the articles one by one. The third researcher rechecked the suitability of the article with the eligibility criteria.

**Data Charting Process and Data Items:** The identification of specific and general information about the author, research location, year of publication, research methodology, population, type of intervention, and research results were carried out in the data charting process (Arksey & O'Malley, 2005).

**Critical Appraisal Tools:** The critical appraisal tool used MMAT (Mixed Methods Appraisal Tool), which is an efficient appraisal tool functions to assess the quality of research methodologies with various designs including mixed methods (Pluye, 2015). The latest version of MMAT (2018) focuses more on the quality of research methods rather than the article reports. Appraisal tools for mixed methods articles were not widely found in other critical appraisal tools. However, in the appraisal, there was no provision for value limits yet, so it was the authority of researchers to determine the limits of their appraisal (Hong et al., 2019).

**Syntesis of Result:** The synthesis of the results was presented with tables, pictures, diagrams displaying the characteristics of the article in the form of the year of publication, intervention area, country of origin, and research method, or in a description format explaining the objectives and scope of the review (Tricco et al., 2018).

**Table 1. Charting Data**

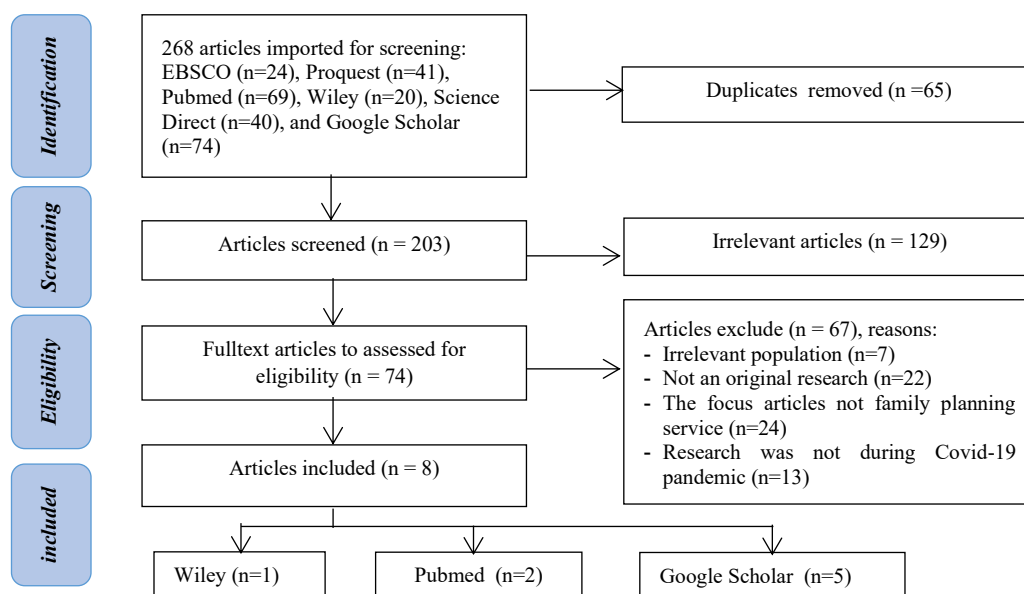
No	Authors, Year, Country	Aims	Study Setting	Results
1	Adelekan et al., 2020 South Africa	To know the impact of Covid-19 on FP and the termination of the use of health services during the initial lockdown in Gauteng Province	<i>Cross-sectional</i> secondary data (health care facilities in 5 districts in Gauteng Province)	The demand pattern of FP services for 2 months before the pandemic was decreasing until the lockdown was applied. There was a decrease in the choice of implant, IUD, and injection contraceptive methods during the lockdown period, while the contraceptive pill increased.
2	Belay et al., 2020 Ethiopia	To know the impact of Covid-19 on contraception and safe abortion care services in tertiary facilities in Ethiopia	<i>Comparative case study</i> (the data of March-May 2019 were compared to the data of March-May 2020)	There has been a decrease in postpartum FP, a decrease in FP visit, and a decrease in the use of FP services for safe abortion and post-abortion patients
3	Endler et al., 2020 29 negara	To provide global illustration regarding trends in access to sexual and reproductive health during Covid-19 and strategies to reduce its impact	<i>Mix methods</i> through <i>online</i> surveys conducted on doctors, researchers, and organizations (51 respondents from 29 countries)	The access to contraceptive services has decreased due to Covid-19. Contraceptive service facilities were implementing changes
4	Shikuku et al., 2020 Kenya	To know the initial impact of the Covid-19 pandemic on health services for reproduction, newborns, children, and adolescents in Kenya	<i>Cross-sectional</i> , by comparing national data before and during the pandemic in Kenya	There was no difference in the number of the visit from March to June 2019 compared to March-June 2020 in antenatal care, hospital births, and FP. There was a significant increase in the use of injectable contraceptives among adolescents but a decrease in implant contraception.
5	Herawati et al., 2020 Indonesia	To analyze the FP service visit to private practice midwives in Yogyakarta Province.	Quantitative research (descriptive observational). The research sample was 50 midwives (3 <i>dropouts</i> ) in DIY Province. The data collection was conducted online.	The health protocols in FP services have been implemented, namely online registration and the use of personal protective equipment. There was a decline in FP services during the Covid-19 pandemic (February-April 2020)
6	Aprillia et al., 2020 Indonesia	To analyze the use of contraceptives before and during the Covid-19 pandemic	Quantitative research with <i>online</i> surveys. The data collection was conducted online. The respondents were 290 women of reproductive age (19-50 years old)	There was no difference between the use of contraceptive tools, drugs, and contraceptive methods before and during the pandemic. The IUD method is a contraceptive recommended by experts during the Covid-19 pandemic.
7	Aolymat, 2020 Jordan	To review the impact of the Covid-19 pandemic on domestic violence, genital tract health, menstruation, and contraceptive use in Jordan	Quantitative research with <i>cross-sectional</i> design through <i>online</i> platform (Google form). The research samples were 200 women.	The number of clinic visits has decreased since before the Covid-19 pandemic, the use of telephone consultations has increased rapidly, the number of contraceptive users has decreased compared to before the Covid-19 pandemic.
8	Siedner et al., 2020 South Africa	To identify the implementation of national lockdown regulation in South Africa affecting outpatient clinic visit	Quantitative research with prospective and longitudinal cohort design using secondary data.	There was no difference in-clinic visit for non-communicable diseases, perinatal care, and FP during the pandemic

## RESULTS

**Selecting of Evidence:** PRISMA flowchart was used as a guide in ScR reporting consisting of 4 stages, namely identification, screening, eligibility, and included articles (inclusion) (Selçuk, 2019). According to the article search from 5 databases and grey literature (Google Scholar), there were found 268 articles. Based on 268 articles that were identified by their titles and abstracts, 65 duplicate articles were removed, bringing it to only 203 articles. A total of 129 irrelevant articles were eliminated and 74 articles were read in full text. After

reading in full text, 67 articles must be excluded because they were not based on original research (22 articles), research with a focus other than the Covid-19 pandemic (13 articles), the discussion did not focus on FP services (24 articles), and the population was not suitable (8 articles). Thus, there were only the remaining 8 articles were passed and included for analysis according to the inclusion criteria (Figure 1).

**Characteristics Articles:** The characteristics of the 8 articles reviewed see Figure 2. Classification of country types based on economic income categories (The World Bank, 2021).



**Figure 1. PRISMA flowchart**

**Critical Appraisal:** The critical appraisal with MMTA obtained the average score is 63,75% (good quality articles) from 8 articles reviewed. From the appraisal, there were 2 excellent quality articles, 5 good quality articles, and 1 fairly good article, see Figure 2.

**Results of Evidence and Syntesis of Results:** Analysis of the 8 articles reviewed found important information that was displayed through charting data (see Table 1) and was found that 3 themes and 17 sub-themes as shown in Figure 3.

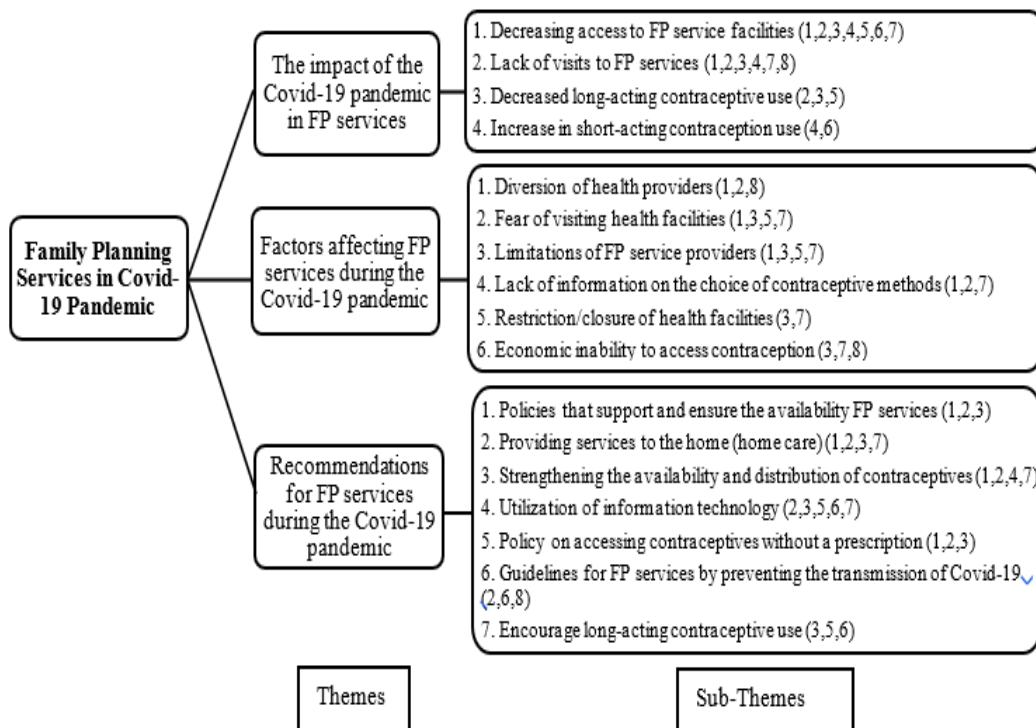
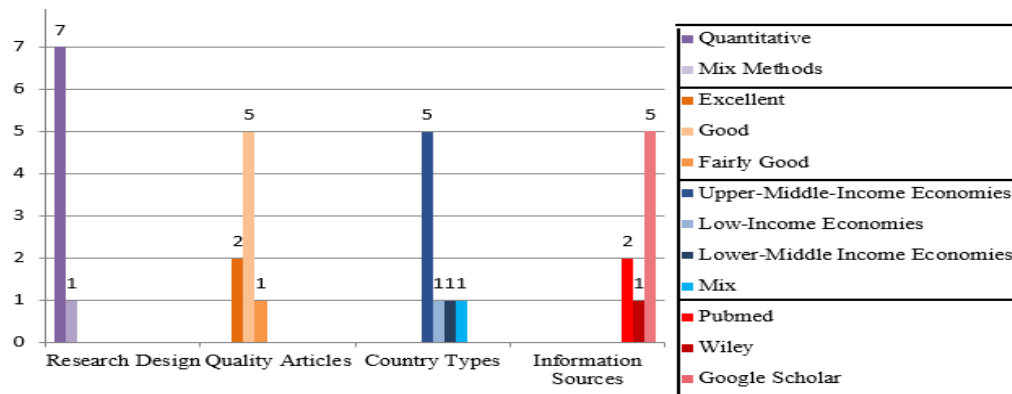


Figure 2. Article Characteristics

Figure 3. Results of Theme Mapping

DISCUSSION

Based on the ScR theme mapping, three themes have been determined as follows:

**Theme 1: The impact of the Covid-19 pandemic in FP services**

The results of research that have been conducted in 29 countries in 2020 state that access to contraceptive services was reduced by 60% due to the Covid-19 pandemic (Endler et al., 2020). The limitation on curfew during the pandemic made it difficult for people to find sources of contraception as well as to get medical care to manage and treat complications that occurred related to the birth control method used (Aprillia et al., 2020). Research conducted in South Africa, Jordan, and Indonesia indicate a decrease in FP methods that depend on health providers when the lockdown started in February 2020 (Adelekan et al., 2020; Aolymat, 2020; Herawati et al., 2020). A significant decrease from 47% to 43.3% in new FP acceptors seeking FP services from 47% to 43.3% (Shikuku et al., 2020). The different result of the research shows that there was no change in clinical visit to infectious diseases care, perinatal care, FP care (Siedner et al., 2020), antenatal care, post-abortion



care, as well as the delivery in the hospital, and immunization for 4 months before to during the Covid-19 pandemic (Shikuku et al., 2020).

There has been a decline in the long-acting use of implants and IUD in various countries such as South Africa, Kenya, Indonesia, and Ethiopia during the initial lockdown period of the Covid-19 pandemic (Adelekan et al., 2020; Belay et al., 2020; Herawati et al., 2020; Shikuku et al., 2020). The decrease in long-acting use of contraceptives was higher than the decrease in short-acting use of contraceptives during the Covid-19 pandemic. Different research has suggested that it occurred during the Covid-19 pandemic (Belay et al., 2020). While other different research suggests that there has been an increase in the use of IUD contraceptives before and after the Covid-19 pandemic occurred followed by the male condom method (Aolymat, 2020). In contrast to long-acting contraception, there was a significant increase in the use of injection methods (58.3% to 62.3%) and combination pills (13.6% to 14%) during the Covid-19 pandemic in Kenya (Shikuku et al., 2020). The use of simple contraceptives such as condoms is preferable during the pandemic due to expired IUDs or implantable contraceptives used by some women. Therefore, the use of condoms is chosen for pregnancy prevention (Aolymat, 2020).

### **Theme 2: Factors affecting FP services during the Covid-19 pandemic**

One of the causes of the decrease in the use of contraceptives during the lockdown was the diversion of health providers (Adelekan et al., 2020; Endler et al., 2020). People's fear of visiting health facilities influenced by Covid-19 transmission was the factor affecting the decrease in the use of FP services (Adelekan et al., 2020; Aolymat, 2020; Endler et al., 2020). In addition, the use of provider-dependent contraceptives also decreased throughout April 2020 that can be seen before the lockdown in February 2020 (Adelekan et al., 2020). This could occur due to the limitations of FP service providers during the Covid-19 pandemic (Endler et al., 2020).

The inadequacy of FP services was caused by the lack of information regarding the importance of the availability and continuity of contraceptive services during the pandemic (Belay et al., 2020). The inability of FP acceptors to renew IUD/ injection contraceptives due to *lockdown* led to the closure of clinics that are responsible for the continuation of contraception (Aolymat, 2020). The limitation on health services caused people, especially women, cannot to access FP services because these services were considered unimportant (Sharma et al., 2020). Another obstacle to FP services was the lack of finance to access abortion and FP services (Endler et al., 2020). However, other research suggested that financial reasons were not responsible for the discontinuation of IUD contraceptives (Aolymat, 2020).

### **Theme 3: Recommendations for FP services during the Covid-19 pandemic**

The government must redirect that abortion and FP health service providers are essential, important, and priority so that they would be easily accessed by people during the pandemic (Aolymat, 2020; Belay et al., 2020; Shikuku et al., 2020; Siedner et al., 2020). Besides, the government also must involve health workers to contribute to the making of government policies related to contraceptive service provision (Adelekan et al., 2020). Providing free FP services to attract people's desire to use contraceptives during the pandemic is a good strategy (Herawati et al., 2020). The government is encouraged to increase its responsiveness, capacity, accountability to ease access to FP and abortion services (Endler et al., 2020).

The effort to provide essential services by health personnel namely providing services at home would be one of many ways to increase access to contraceptive services (Adelekan et al., 2020; Aolymat, 2020). The reduction in supply or distribution of contraceptives due to

limitation has led to a decrease in contraceptive users (Aolymat, 2020) so that the supports of government, public sector, private sector, and partners are needed for the availability of contraceptive services and strengthen the supply chain for drugs and contraceptives both nationally and regionally (Adelekan et al., 2020; Belay et al., 2020). In addition, community-based cooperation is also needed in promoting and distributing these medical drugs (condoms/pills) (Sharma et al., 2020).

The use of innovative telehealth/ telemedicine services aims to maintain essential services for low-risk clients in reducing the risk of Covid-19 spread (Aolymat, 2020; Belay et al., 2020; Endler et al., 2020). The use of social media platforms is necessary to help eliminate the fear of Covid-19 transmission in the community and in seeking services in hospitals that will help people make the right decisions regarding when to seek treatment, how to protect themselves, and avoid panic about the disease and its effects (Shikuku et al., 2020). There need to be policies from the government to support the endorsement of regulations that allow to access contraceptives without a prescription and issue the guidelines for FP services in pandemic to prevent the spread of Covid-19 (Adelekan et al., 2020). Health protocol is very important in the setting of FP service providers (Belay et al., 2020). It is also necessary to conduct screening when entering the clinic door and referring if there are patients who meet the criteria for those who are exposed to Covid-19 and should be investigated (Siedner et al., 2020). Also, additional efforts are needed to limit the interaction of health workers and clients by encouraging the long-acting use of contraceptives in the community as a strategy to prevent the transmission of Covid-19 (Aprillia et al., 2020; Herawati et al., 2020).

## CONCLUSION

A number of impacts and factors affecting FP services during the Covid-19 pandemic become the challenge in the midst of changes and disturbance in FP services experienced by many countries as a consequence of the pandemic that occurred. This ScR has identified theme mapping from various literature regarding FP services during the Covid-19 pandemic. However, the results still show limited theme findings in this research. Further research on FP services during a pandemic such as effective FP service practices or measuring the quality of FP services in various countries is needed so that a broad illustration of FP services will be known. That is useful in providing information to develop strategies or programs to improve quality FP services in the upcoming new normal era.

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