The Method, Access and Services of Contraception During Pandemic Covid-19: A Literature Review

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ABSTRACT
The emergence of coronavirus disease (COVID-19) has now become an emergency and global health problem. Health services have been completely disrupted during the current COVID-19 pandemic and will continue even after they reach their peak. Contraceptive services, including sexual and reproductive health services, are currently an essential service. This study aims to identify models, access, and services for contraception during the COVID-19 pandemic. This is a literature review. Articles were obtained from PubMed, Scopus, Crossref Search, Garuda Portal during May and June 2021, with 360 articles obtained and 9 articles to be reviewed. The contraceptive methods used during the pandemic are mostly long-term contraception (6 studies), short-term contraception (3). Access: some feel that access is affordable (3 studies), and some access is not easy (4). The services are using telehealth (2 studies), a few face-to-face (2 studies), and a small number door-to-door. Application of contraceptive methods, access, and services can be adopted in any region during the pandemic, to improve women's health status.

Keywords: *Customize Access; Contraception; Covid-19; Methods; Sars-Cov-2; Services*

1. INTRODUCTION

The World Health Organization (WHO) declared the SARS-CoV-2 outbreak a public health emergency of international concern on January 31, 2020[1]. WHO has assessed this outbreak over time with an alarming level of spread and severity, therefore WHO has assessed that COVID-19 can be categorized as a pandemic [2]. During the COVID-19 pandemic, several essential health services were blocked, family planning services were one of these services [3]. The COVID-19 pandemic has also prompted contraceptive service centers to cease or scale back their operations [4]. In addition, the pandemic has also affected pregnancy planning behaviour with many women reporting pregnancy delays [5].

During the Covid-19 pandemic, methods, access, and services have changed, as, in Italy, women choose to use both long-term and short-term contraceptive methods, whereas during the pandemic there is a tendency to stop short-term contraception, but continue to have sexual activity and experience unwanted pregnancies planned while the younger population in the United Kingdom prefers to use condoms during the Covid-19 pandemic [9] [10]. In Sub-Saharan Africa, women prefer long-term methods during a pandemic [11], as well as in New York, but access is easier to reach with services mostly using telemedicine [12]. Mozambique has affordable access to long and short-term contraceptive services with a door-to-door system [13]. In Spain, women prefer the use of combined oral contraceptives even though access is not always easy to react [14].

Although there have been studies conducted on contraceptive methods during the Covid-19 pandemic, not all of them discuss what the main methods are recommended [3], how to access them and how services should be provided so that a review must be carried out to assist the selection of contraception during the pandemic. There have not been many reviews related to methods, access, and services during the pandemic, previous research only discussed one topic out of three things [15]. Thus, putting them together will facilitate information related to contraception during the Covid-19 pandemic.

2. METHOD

The literature review strategy was used in this study. This study covers the most important features of contraception during the Covid-19 epidemic. Articles that discussed contraceptive methods, access, and services during the Covid-19 pandemic, articles on research results with female or male childbearing age

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respondents who used contraceptives during the Covid-19 pandemic, articles from quantitative research results, qualitative and mixed-method, articles published in Indonesian and English from 2016 to 2021, articles available in full-text. The exclusion criteria for this article is that if there is a review study bias, the article is excluded, articles that do not explain contraception, access, and services during the Covid-19 pandemic are excluded. Article searches were carried out using the Publish or Perish tool from several database journals, namely PubMed, Scopus, Crossref, and Garuda Portal with a time between May to June 2021. Website searches were obtained using the keyword "Contraceptive Pandemic". Next, issue articles that are indicated to be duplicated to select by following per the research theme. The articles were then carefully examined to assess eligibility based on the title and, abstract, and determined which articles would be selected for further discussion in this study. Of the 360 articles obtained (PubMed: 42, Scopus: 118, Crossref: 200), 9 articles (PubMed: 4, Scopus: 3, Crossref: 2) met the inclusion criteria for review (figure 1).

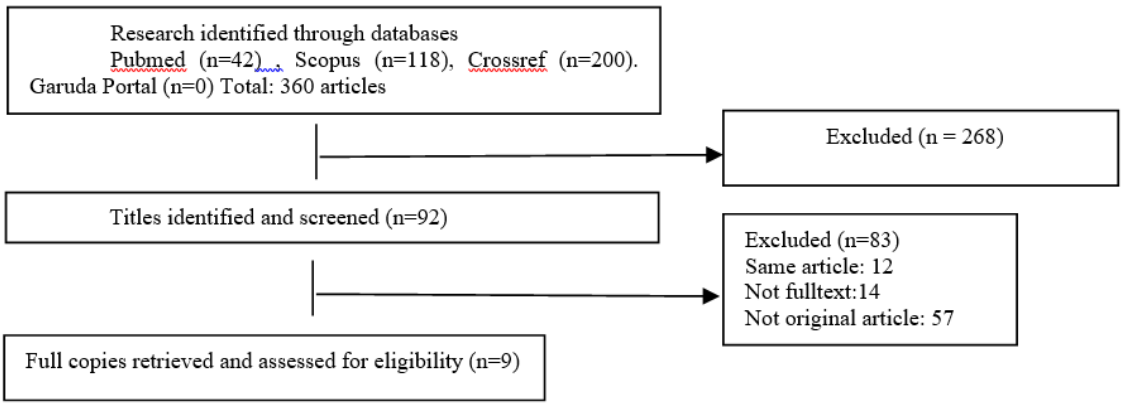

Figure 1 Prisma Diagram

3. RESULT AND DISCUSSION

3.1. Result

3.1.1. Study Characteristics

The study characteristics of the 9 articles reviewed as shown in Table 1 cover several countries, namely Italy, the United States, Countries in Sub-Saharan Africa (2 studies), Jamaica, Mozambique, the United Kingdom, Spain, and several European countries. The study is dominated by 2021 (7 studies) and 2020 (2 studies). The research design used was a cross-sectional study (5 studies) and mixed methods (4 studies).

Table 1 Study Characteristics

No	Country	Year	Settings	Research design
1	Italy	2020	Country	Cross-sectional study
2	USA	2021	City	Mixed Methods
3	Sub-Saharan Africa	2021	Country	Cross-sectional study
4	Jamaica	2021	Country	Cross-sectional study
5	Mozambique	2021	Country	Cross-sectional Observation
6	UK (Scotland)	2021	City	Mixed Methods
7	Spanish	2021	Country	Cross-sectional study
8	Sub Saharan Africa: Burkina Faso, Kenya, Nigeria, Congo	2021	Country	Mixed methods
9	Europe (n = 11), North America (n = 2), South America (n = 4), Africa (n = 4), Asia (n = 6), and Australia/Oceania (n = 2).	2020	Country	Mixed Methods

3.1.2. Characteristics of Respondents

Characteristics of respondents include gender, mostly women, age varies in the range of 15-49 years (7 studies). Specific characteristics of women who use short-term or long-term hormonal contraception, women who have a partner, whether married or not, and provide direct or indirect contraceptive services. There is one article where the respondents are both male and female, young aged 16-24 years, both using condoms or other types of contraception [10]. And one article with male and female respondents aged 18-59 years who used contraception during the Covid-19 pandemic [13]. Methods, Access, and Contraceptive Services During the Covid-19 Pandemic.

The contraceptive methods used during the pandemic are mostly long-term contraceptives (6 studies), a few use short-term contraceptives such as condoms (3 studies), access to contraception during the pandemic is partly affordable (3 studies), and some access is not easy to reach (4 studies). The services that are widely used are using telehealth (2 studies), a few face-to-face when changing contraceptive methods or other measures (2 studies), and a small number door to door (1 study) (Table can be seen in supplementary document)

3.2. Discussion

3.2.1. Contraceptive Methods During the COVID-19 Pandemic

The bulk of contraceptive techniques discovered to have been used during the Covid-19 epidemic were long-acting reversible contraception (LARC), with a tiny minority being short-acting reversible contraception (SARC) (SARC). Long-acting reversible contraceptives (LARCs), such as implants and hormonal and non-hormonal contraceptive devices (IUDs), are not only very efficient in preventing unplanned pregnancies and abortions, but they are also cost-effective solutions that benefit both the woman and the system. [20] Health care. Long-term contraceptives, such as the Intra-Uterine Device (IUD), are a very effective method of contraception with long-term effects to avoid or delay pregnancy, but the financial barriers are far beyond the reach of all women and children who belong to vulnerable social groups and are unable to use this method. Long-acting reversible contraception (LARC) is a type of contraception that is effective for an extended period of time without the need for user intervention. Injections, intrauterine devices (IUDs), and subdermal contraceptive implants are among them; this is because the drug's success is not dependent on patient compliance; LARC is the most effective reversible technique, with a normal usage and total failure rate of less than 1% per year [7]. However, when routine health-care services are disrupted, access to long-term and emergency contraception becomes even more critical [21]. During the pandemic can use long-term contraceptives such as long-term use of the following LARC devices: up to 12 years for the copper IUD, 7 years for the 52 mg levonorgestrel IUD, and 5 years for the levonorgestrel IUD, or etonogestrel implant [22].

Short-term contraception such as combined oral contraceptive use was used in one study [14]. In addition, there are 2 studies using condoms [13] [10]. This is because before the pandemic they used it so that during this pandemic it tends to continue because it feels right. Using of combined oral contraceptives is even recommended that women infected with COVID-19 who have used previously, should continue their use of contraception including combined hormonal contraceptives because there is no evidence showing contraceptive effects on the clinical course of COVID-19 infection [23]. Meanwhile, the use of condoms, in addition to preventing pregnancy, can also prevent sexually transmitted diseases that may occur and is often used in young people [24].

3.2.2. Access to Contraceptives During the COVID-19 Pandemic

A total of three studies stated that access to contraception was affordable and four of them said it was not affordable, the rest there was no discussion about access. The majority of users of affordable contraceptives come from developed countries such as the United States (USA), the United Kingdom, and other European countries [12] [10] [19]. Meanwhile, developing countries such as Sub-Saharan Africa, Jamaica, Mozambique tend to state that they are less accessible or less affordable [13] [14] [11].

People from various socioeconomic classes have been disproportionately affected by the epidemic. Concurrently with a drop in income, difficulties obtaining contraception, and a stronger desire to avoid conception. This combination of circumstances raises the likelihood of an undesired pregnancy [25]. The reorganization of the health system to deal with the pandemic has resulted in the forced closure of non-essential health services and the redirection of health personnel to fulfill other demands. Furthermore, physical and travel constraints limit access to and supply of contraceptive goods [21]. Border closures and travel restrictions also have an impact on the availability of contraception, pharmaceuticals, and medical gadgets. Another element influencing contraceptive supply is the availability of health workers for physical clinic personnel [26]. One of the main barriers to accessing contraceptive services is the shortage of drugs and contraceptives, as a result of supply chain disruptions. This is a worldwide problem but is more pronounced in developing countries [7].

Access to health treatments, particularly contraception, is facilitated by technology. If people take this strategy, they will have more privacy and comfort [27]. Efforts were made to increase access to patient-administered contraception, such as administering subcutaneous depot medroxyprogesterone acetate, as well as to lower barriers to accessing hormonal contraception by providing adequate refills, providing new, eligible patient prescriptions via telemedicine, and encouraging pharmacist-prescribed contraception [22].

To properly react to the issues raised by the Covid-19 crisis, it is vital to de-medicalize contraception and broaden the range of contraceptive techniques available to individuals worldwide. Support can take the form of complete contraceptive information and referrals, which are available via digital applications and telemedicine [26].

3.2.3. Contraceptive Services During the Covid-19 Pandemic

During the Covid-19 epidemic, contraceptive services will contain three components: telehealth in two studies, face-to-face, if necessary, two studies, and one door-to-door research. Due of the extraordinary Covid-19 outbreak, several regular and elective services have been postponed or halted by government and private agreements over much of the world [14]. Health-care systems across the world are under strain. Family planning and abortion services must continue to be provided to the public as part of critical health services in order to minimize problems from undesired pregnancies and an increase in sexually transmitted illnesses [25]. Because the virus is airborne, it is suggested that all family planning consultations be performed remotely until and until a visit is required [2]. Telemedicine can be used to initiate and maintain contraception in the majority of cases [12]. Individual pregnancy planning does not now propose discontinuing contraception and planning pregnancy because little is known about the virus's impact on embryonic development [3]. To avoid an increase in unintended pregnancies, sexually transmitted illnesses, and unsafe abortions, it is vital to transition from in-person to virtual consultations [28].

4. CONCLUSION

In conclusion, health care facilities must continue to provide family planning and reproductive services because they are components of essential health services. The method that can be used is long-term contraception, or short-term if you have used it before and if you have to, you can use emergency contraception. Access to contraception could be made easier by expanding the supply and service of medical workers, while routine contraceptive services can be delivered via telemedicine from direct consultations. There will be negative reproductive health consequences if these efforts are not made, including an increase in unwanted pregnancies, sexually transmitted illnesses, and unsafe abortions.

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REFERENCES

[1] TP Velavan and CG Meyer, “The COVID-19 epidemic,” *Trop. Med. int. heal.*, vol. 25, no. 3, pp. 278–280, 2020, doi:10.1111/tmi.13383.

[2] WHO, “Coronavirus Disease 2019 Situation Report 51 - 11th March 2020,” 2020. [Online]. Available: https://www.who.int/emergencies/diseases/novel-coronavirus-2019.

[3] KA Sharma, R. Zangmo, A. Kumari, KK Roy, and J. Bharti, “Family planning and abortion services in COVID 19 pandemic,” *Taiwan. J. Obstetrics. Gynecol.*, vol. 59, no. 6, pp. 808–811, 2020, doi: 10.1016/j.tjog.2020.09.005.

[4] Aassve, N. Cavalli, L. Carini, S. Plach, and ML Bacci, “The COVID-19 pandemic and human fertility,” *Science (80-.).*, vol. 369, no. 6502, pp. 370–371, 2020, doi:10.1126/science.abc9520.

[5] J. Aly, KO Haeger, AY Christy, and AM Johnson, “Contraception access during the COVID-19 pandemic,” *Contracept. Reprod. Med.*, vol. 5, no. 1, pp. 1–9, 2020, doi:10.1186/s40834-020-00114-9.

[6] M. Tracey A. Wilkinson, MD, MPHa, Melissa J. Kottke, MD, MPH, MBAb, Elise D. Berlan, MD, “Contraception for Adolescents During the Coronavirus Disease 2019 Pandemic,” *JAMA Pediatrics.*, vol. 175, no. 3, pp. 139–148, 2021, doi: 10.1001/jamapediatrics.2020.5091.Contraception.

[7] S. Caruso, AMC Rapisarda, and P. Minona, “Sexual activity and contraceptive use during social distancing and self-isolation in the COVID-19 pandemic,” *euros. J. Contracept. Reprod. heal. Care*, vol. 25, no. 6, pp. 445–448, 2020, doi:10.1080/13625187.2020.1830965.

[8] R. Lewis *et al.*, “Disrupted prevention: Condom and contraception access and use among young adults during the initial months of the COVID-19 pandemic. An online survey,” BMJ Sex. Reprod. Heal., pp. 1–8, 2021, doi:10.1136/bmjsrh-2020-200975.

[9] C. Karp *et al.*, “Contraceptive dynamics during COVID-19 in sub-Saharan Africa: longitudinal evidence from Burkina Faso and Kenya,” BMJ Sex. Reprod. Heal., p. bmjsrh-2020-200944, 2021, doi:10.1136/bmjsrh-2020-200944.

[10] BM Stifani *et al.*, “Telemedicine for contraceptive counseling: Patient experiences during the early phase of the COVID-19 pandemic in New York City,” Contraception, no. xxxx, 2021, doi: 10.1016/j.contraception.2021.04.006.

[11] PA Bourne *et al.*, “An examination of contraceptive used before and during the covid-19 pandemic and factors influencing condom usage among Jamaicans,” no. March, 2021.

[12] Lete *et al.*, “Impact of the Lockdown Due to COVID-19 Pandemic in the Use of Combined Hormonal Oral Contraception in Spain – Results of a National Survey: Encovid,” Open Access J. Contracept., vol. Volume 12, no. March, pp. 103–111, 2021, doi:10.2147/oajc. s306580.

[13] M. Asfaw, LB Tolu, T. Urgie, B. Nigatu, D. Bekele, and MA Shiferaw, “Guidelines and best practice recommendations on contraception and safe abortion care service provision amid the covid-19

pandemic: Scoping review," *ethiop. J. Reprod. heal.*, vol. 13, no. 1, pp. 11–20, 2021, doi:10.21203/rs.3.rs-25326/v1.

[14] S. Caruso, AMC Rapisarda, and P. Minona, "Sexual activity and contraceptive use during social distancing and self-isolation in the COVID-19 pandemic," *euros. J. Contracept. Reprod. heal. Care*, vol. 25, no. 6, pp. 445–448, 2020, doi:10.1080/13625187.2020.1830965.

[15] SN Wood *et al.*, "Need for and use of contraception by women before and during COVID-19 in four sub-Saharan African geographies: results from population-based national or regional cohort surveys," Lancet Glob. Heal., vol. 9, no. 6, pp. e793–e801, 2021, doi:10.1016/S2214-109X(21)00105-4.

[16] Leight, C. Hensly, M. Chissano, and L. Ali, "Short-term effects of the COVID-19 state of emergency on contraceptive access and utilization in Mozambique," *PLoS One*, vol. 16, no. March 3, pp. 1–16, 2021, doi: 10.1371/journal.pone.0249195.

[17] M. Endler *et al.*, "How the coronavirus disease 2019 pandemic is impacting sexual and reproductive health and rights and response: Results from a global survey of providers, researchers, and policy-makers," Acta Obstet. Gynecol. Scand., vol. 100, no. 4, pp. 571–578, 2021, doi:10.1111/aogs.14043.

[18] Gemzell-Danielsson, A. Kubba, C. Caetano, T. Faustmann, E. Lukkari-Lax, and O. Heikinheimo, "More than just contraception: The impact of the levonorgestrel-releasing intrauterine system on public health over 30 years, " *BMJ Sex. Reprod. heal.*, pp. 1–3, 2021, doi:10.1136/bmjsrh-2020-200962.

[19] S. Bellizzi *et al.*, "Access to modern methods of contraception in Italy: Will the COVID-19 pandemic be aggravating the issue?" J. Glob. Health, vol. 10, no. 2, pp. 1–4, 2020, doi: 10.7189/jogh.10.020320.

[20] MA Cohen, AM Powell, JS Coleman, JM Keller, A. Livingston, and JR Anderson, "Special ambulatory gynecologic considerations in the era of coronavirus disease 2019 (COVID-19) and implications for future practice," *Am. J. Obstetrics. Gynecol.*, vol. 223, no. 3, pp. 372–378, 2020, doi: 10.1016/j.ajog.2020.06.006.

[21] Cagnacci and F. Fruzzetti, "The use of combined hormonal contraceptives amid the COVID-19 pandemic. reply,"*euros. J.* Contracept. *Reprod. heal. Care*, vol. 26, no. 1, pp. 87–88, 2021, doi:10.1080/13625187.2020.1850678.

[22] MY Roth and JK Amory, "Beyond the Condom: Frontiers in Male Contraception," *Semin. Reprod. Med.*, vol. 34, no. 3, pp. 183–190, 2016, doi: 10.1055/s-0036-1571435.

[23] TK Lin, R. Law, J. Beaman, and DG Foster, "The impact of the COVID-19 pandemic on economic security and pregnancy intentions among people at risk of pregnancy," *Contraception*, vol. 103, no. 6, pp. 380–385, 2021, doi: 10.1016/j.contraception.2021.02.001.

[24] ML Evans, N. Qasba, and K. Shah Arora, "COVID-19 highlights the policy barriers and complexities of postpartum sterilization," *Contraception*, vol. 103, no. 1, pp. 3–5, 2021, doi: 10.1016/j.contraception.2020.10.006.

[25] LB Haddad, S. RamaRao, A. Hazra, H. Birungi, and J. Sailer, "Addressing contraceptive needs exacerbated by COVID-19: A call for increasing choice and access to self-managed methods," *Contraception*, vol. 103, no. 6, pp. 377–379, 2021, doi: 10.1016/j.contraception.2021.03.023.

[26] S. Sharma, KC Bhuvan, and A. Khatri, "Factors influencing male participation in reproductive health: A qualitative study," *J. Multidiscipline. Healthc.*, vol. 11, pp. 601–608, 2018, doi:10.2147/JMDH.S176267.

[27] C. McSpedon, "Reproductive Care During COVID-19," *Am. J. Nurs.*, vol. 120, no. 9, pp. 19–20, 2020, doi: 10.1097/01.NAJ.0000697600.29112.22.

[28] J. Beddows *et al.*, "'I'm just ringing to get a repeat prescription for my contraceptive pill, doctor': developing authentic simulated telephone consultations for medical students," Educ. Prim. Care, vol. 00, no. 00, pp. 1–5, 2021, doi:10.1080/14739879.2021.1915708.