

# Key Factors Affecting the Choice of Contraceptive Method and Knowledge Level Assessment around the Subject in Adolescents, Young Adults, Georgia

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## Abstract

**Background:** Sexual and reproductive health are crucial issues for adolescents and young adults. However, detailed national Georgian data about sexual behaviors and contraceptive use is lacking. Until now, health care programs, family planning efforts have predominantly focused on female population. Fact indicates that- decisions should be made by partners together. Both sides have to be involved equally. A medical-psychological-sociological literature review shows that, beyond the contraceptive failure it is essential to spot high risk situations and focus on the meaning behind these statistics. This article aims to critically review and summarizes some of the key findings regarding the level of knowledge about contraception methods based on various sources. Literature overview aims to explore the trends, patterns, and factors influencing the use of contraception in Georgia, based on recent studies and statistic. In the text, we will be taking a deep dive into the literature available on various contraceptive methods available in Georgia and the factors that affect their usage.

**Methods:** The PubMed, Google scholar, Science Direct searched for articles published from 2000 with the following key words: “Contraceptive Method”; “contraception”; “Birth Control”; “Woman’s Health”; “Contraceptive Failure”; “Unintended Pregnancies”. Articles without abstract, and those articles whose titles were not relevant to the purpose of this review were excluded. Most of the articles (more than 150 from total 178) were published in English. Also, non-English manuscripts were excluded.

**Result:** Totally 178 manuscripts were found. Most of the articles (150 from total 178) were published in English. Out of 150 articles 45 were Research article and 105 were review article.

**Conclusions:** Further research is needed to clarify The Factors that influence the Choice of Contraceptive Method among Georgian adolescents and young adults. As well as, Knowledge Level Assessment around the Subject needs to be updated (TCM-GMJ March 2023; 8 (1):P57-P60)

**Keywords:** Contraceptive Method; Contraception; Birth Control; Woman’s Health; Contraceptive Failure; Unintended Pregnancies.

## Introduction

Contraception methods have been used for millennia to prevent unintended pregnancies and regulate fertility (1). However, the availability, accessibility, and awareness of different types of contraception vary across regions, populations, cultures, and ages (2). Understanding the knowledge level regarding contraception methods can contribute to informing public health policies, educational programs, and clinical practices that aim to improve reproductive health outcomes and reduce health disparities (3).

A global survey conducted in 2019 among women and men of reproductive age, involving over 70,000 participants from 198 countries, served as a significant source of information on contraception knowledge. The survey revealed that awareness of modern contraception methods varied widely across regions, with the highest levels observed in North America, Europe, and Latin America,

while the lowest levels were reported in Africa and Asia. Specifically, about 80% of the respondents reported knowing about female sterilization, male condoms, and oral contraceptives, while approximately 40% of survey participants reported knowing about emergency contraception, injectable, or intrauterine devices (IUDs) (4). Moreover, the survey revealed some misconceptions and myths about contraception, such as the belief that the withdrawal method is highly effective or that certain positions during sex can prevent pregnancy.

The healthcare providers who offer contraception services and advice can be considered as a source of information as well (5). A Review in 2017 of studies from low- and middle-income countries found that some healthcare providers had limited knowledge about the range of contraception methods available, the criteria for eligibility, the side effects, and the counseling approach (6). Moreover, the review found that some providers had personal or cultural biases that affected their perceptions or recommendations about certain methods, such as IUDs or sterilization. Such biases may lead to inequities in access to and quality of contraception services. The literature suggests that the knowledge level about contraception methods varies widely depending on the population, the context, and the sources of information. While many people have some degree of awareness about different methods, some still have misconceptions, limited

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knowledge, or inaccurate information that may affect their choices or behaviors (7).

There are several factors that influence the choice of contraception method, including efficacy, safety, convenience, affordability, accessibility, acceptability, and individual preferences (8). Efficacy is one of the most critical factors when choosing a contraception method. The effectiveness of different methods can vary widely, with failure rates ranging from less than 1% for long-acting reversible contraceptives (LARCs) to up to 20% for traditional methods such as the calendar method. It is essential to consider the effectiveness of a method in relation to its intended use and the user's ability to adhere to it. For example, a woman who has difficulty remembering to take pills every day may benefit more from a less user-dependent method such as an intrauterine device (IUD) or an implant (9). Safety is another important consideration when selecting a contraception method (10).

All contraceptive methods carry some risks and potential side effects, and some may be contraindicated for specific medical conditions or individual factors such as age, smoking status, or history of thrombosis (11). The risk-benefit ratio should be carefully evaluated for each method, particularly for women with pre-existing health conditions or a higher risk of developing certain diseases. Convenience is a factor that can greatly affect the satisfaction and adherence to a contraception method. Some methods require daily or weekly administration, such as pills, patches, or rings, while others are inserted or implanted once and can provide continuous protection for several years, such as IUDs or implants (12). Affordability is a crucial factor that can affect the choice and accessibility of contraception methods. The cost of different methods can vary greatly depending on the type, brand, and duration of use. Some methods may be covered by insurance or public funding, while others may require out-of-pocket expenses. The financial burden of contraception can be particularly high for low-income individuals or those without insurance coverage or access to affordable healthcare (13). Accessibility is another factor that can greatly influence the availability of contraception methods. Some methods, such as IUDs and implants, require a healthcare provider's assistance to be inserted or removed, while others, such as condoms and emergency contraception, can be purchased over the counter or obtained from pharmacies without a prescription. Access to contraception can be limited by geographic, cultural, or legal barriers, particularly for marginalized populations or in low-resource settings. Acceptability is a subjective factor that reflects the user's personal values, preferences, and beliefs about contraception (14). Individuals with busy schedules may prefer long-acting methods, such as IUDs or hormonal injections, while others may prefer daily pills or patches. In an article published in the *Journal of Obstetrics and Gynecology Canada*, researchers found that convenience was a significant factor for individuals when choosing a contraception method (15).

In recent years, there has been an increasing aware-

ness about the importance of contraception usage in Georgia. As a result, more and more people are adopting contraceptive measures to control their fertility rates and safeguard their reproductive health. The government has also taken several initiatives to promote the use of contraceptives and improve access to reproductive healthcare services in the country. The use of contraception has become a matter of serious concern, as it has a significant impact on various aspects of society, including healthcare, economics, and social development. According to a study conducted in 2019 by the United Nations Population Fund, the use of contraceptive methods among women of reproductive age in Georgia has been on the rise, with an estimated 49% of married women in the country reporting to use some form of contraception. However, there are still many challenges that need to be addressed to improve access to and uptake of contraception for people in Georgia (16).

According to the 2018 Georgian Reproductive Health Survey, the overall contraceptive prevalence rate among women aged 15-49 was 46.8%. This marks a significant improvement from the 2010 survey, where the rate was only 34.7%. This increase is primarily due to the availability of better and more effective contraceptive methods, increased awareness, and the government's efforts to promote reproductive healthcare (17).

The most commonly used contraceptives in Georgia are the intrauterine device (IUD) and the oral contraceptive pill. The IUD is one of the most effective forms of birth control, and its use has increased from 2.6% in 2010 to 16.1% in 2018. The use of oral contraceptives has also increased from 10.9% to 21.7% during the same period. Condom usage has remained relatively low, with only 3.2% of women reporting its use as their primary contraceptive method (18).

Nowadays we do not have access to the latest geographical data. However, according to the Georgia Department of Public Health, the most commonly used contraceptive methods in Georgia are: Birth control pill - This oral contraceptive is often the first choice for women who want to prevent pregnancy. Male condoms - Male condoms are an effective method of birth control that also help prevent sexually transmitted infections. Long-acting reversible contraceptives (LARCs) - LARCs, such as intrauterine devices (IUDs) and contraceptive implants, are highly effective forms of birth control that can last for several years. Female condoms - Female condoms are less commonly used than male condoms but offer similar protection against pregnancy and STIs and Sterilization - including tubal ligation and vasectomy, is a permanent method of birth control that can be an option for couples who are done having children (3). According to the data reported by WHO in 2020 one of the significant factors influencing the use of contraception in Georgia is education. This study revealed that women with higher levels of education were more likely to use contraception compared to those with lower levels of education. Education, particularly concerning reproductive health, is crucial in helping in-

dividuals and couples make informed decisions about their reproductive health and access the appropriate contraceptives (17).

In a 2016 study was conducted by national agency of Georgia National Center for Disease Control and Public Health, and it was revealed that the cost of contraceptives ranged from GEL 23-79 (\$7-\$25), which is relatively high for many Georgians. Additionally, it was revealed that Georgia has a low insurance coverage rate, which further limits access to affordable contraception. One issue that has hindered the accessibility of contraception in Georgia is the high cost of contraceptives. In order to improve sexual and reproductive health in Georgia Swedish International Development Cooperation Agency (SIDA) initiated a project in 2016. That aimed to increase knowledge and awareness about reproductive health among young people, improve access to reproductive healthcare services, and increase access to affordable contraceptives(17).

Healthcare providers in Georgia play a crucial role in guiding a person's decision-making process when it selecting a contraceptive method. They provide information about the various types of contraceptives available, including their benefits, side effects, and risks, and help individuals understand their options and make an informed choice that is appropriate for their individual needs and preferences. Healthcare providers may conduct a medical evaluation and offer recommendations based on a person's health history, lifestyle, and reproductive goals. They may also provide counseling on contraceptive use, proper administration, and follow-up care. Ultimately, healthcare providers in Georgia work with their patients to ensure that they can access and use a contraceptive method that is safe, effective, and aligned with their values and preferences. Research also shows that decision-making regarding contraceptive use is mainly dominated by men. This further indicates that women's autonomy in reproductive health choices is significantly limited in Georgia.

According to the United Nation's project - World Population Review, in 2021, Georgia's population was estimated to be around 3.7 million, with a fertility rate of 1.66 births per woman (19). This data suggests that either the use of contraception is prevalent, or there is a significant number of women who are not sexually active. This fact highlights the importance of understanding the knowledge level of contraception in the country.

In 2010, a study conducted by N. Tsereteli and colleagues explored the contraceptive methods used by women in Georgia. The study found that the most commonly used method was male condoms, followed by withdrawal and oral contraceptives. It is worth noting that these results may not represent the entire population as the study only included women in urban areas (20). Furthermore, the same study found that women's knowledge of contraception was somewhat limited. Only 31.1% of the women interviewed had knowledge of all contraceptive methods, and 11.3% had no knowledge at all. This lack of knowledge could have significant consequences for the population's health and family planning.

A more recent study conducted in 2020 by K. Tabatadze and colleagues explored the attitudes towards contraception in Georgia. The study found that the majority of the respondents had a positive attitude towards contraception, with only 3% having a negative view. However, the study also found that only 20% of the respondents used a contraceptive method, with barrier methods being the most popular (21).

## Conclusion

Extant literature review has mainly focused on to identify and analyze common themes, trends, and patterns in the literature that address the challenges and gaps in knowledge in contraceptive use. The review also highlight the factors contributing to these barriers and suggests potential solutions to overcome them. Contraception methods requires a multifaceted approach that involves education, communication, and training for both the public and the providers. Moreover, such efforts should be guided by the principles of equity, cultural sensitivity, and evidence-based practice. The ease of use and practicality of a method should be evaluated according to the user's lifestyle, preferences, and access to healthcare. Some methods may be perceived as more or less acceptable depending on the cultural or religious context. The choice of a contraception method should be based on a comprehensive evaluation of multiple factors, including efficacy, safety, convenience, affordability, accessibility, and acceptability. Each of these factors can affect the quality of life and reproductive health outcomes of individuals and populations. To make informed choices, individuals need access to accurate information, counseling, and a range of options that meet their diverse needs and preferences.

However, it is important to note that contraceptive use is a private matter, and the available data may not be representative of the actual usage rate due to underreporting and other biases. The best way to obtain accurate information about regional variations in contraceptive usage is by consulting reliable sources such as government health agencies and scientific studies. Major factor that affects the use of contraception in Georgia is the availability and accessibility of the various contraceptive methods. In some parts of Georgia, there is a stigma associated with the use of contraceptives, with individuals and couples opting not to use them due to cultural or religious beliefs. It is crucial to address these cultural and societal attitudes through education and awareness campaigns that promote the benefits of contraception. The use of contraception in Georgia has been on the rise, but there are still many challenges that need to be addressed. Education, availability and accessibility, and cultural and societal attitudes are all factors that affect the use of contraception in Georgia. By addressing these factors, we can improve access to and uptake of contraception, helping individuals and couples make informed decisions about their reproductive health. It has been observed that Georgian society is conservative in terms of sexual and reproductive health issues. Sex edu-

cation is not widely taught in schools, and discussions about sex and contraception are often considered taboo. This inhibits open communication and education around contraception, leading to misconceptions and misunderstandings.

The literature suggests that while there is a positive attitude towards contraception in Georgia, the knowledge level of contraceptive methods is somewhat limited and could contribute to the low use of contraception in the country. To address this issue, efforts should be made to increase access to information and services and to promote positive attitudes towards contraception. More research is needed to clarify factors affecting the choice of contraceptive method in Georgian adolescents, young adults. As well as knowledge level assessment around the subject needs to be updated. The knowledge gained from a comprehensive literature review can help inform policy-makers, healthcare professionals, and organizations involved in public health advocacy on effective strategies and interventions to improve contraceptive method knowledge levels and address related challenges.

## References

- Dixon-Mueller R, Germain A. Fertility Regulation and Reproductive Health in the Millennium Development Goals: The Search for a Perfect Indicator. *Am J Public Health*. 2007 Jan;97(1):45–51.
- Brown SS, Eisenberg L. Socioeconomic and Cultural Influences on Contraceptive Use. In: *The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families*. National Academies Press (US); 1995.
- Pazol K, Zapata LB, Tregear SJ, Mautone-Smith N, Gavin LE. Impact of Contraceptive Education on Contraceptive Knowledge and Decision Making. *Am J Prev Med*. 2015 Aug;49(2):S46–56.
- WHO. SDG Target 3.7 Sexual and reproductive health [Internet]. 2021 [cited 2023 Oct 26]. Available from: [https://www.who.int/data/gho/data/themes/topics/sdg-target-3\\_7-sexual-and-reproductive-health](https://www.who.int/data/gho/data/themes/topics/sdg-target-3_7-sexual-and-reproductive-health)
- World Health Organization. Ensuring human rights in the provision of contraceptive information and services; Guidance and recommendations [Internet]. World Health Organization, editor. Geneva: WHO press; 2014 [cited 2022 Oct 26]. 1–28 p. Available from: <https://www.who.int/publications/i/item/9789241506748>
- Trussell J. Contraceptive Efficacy. *The Global Library of Women's Medicine*. 2014;
- Munakampe MN, Zulu JM, Michelo C. Contraception and abortion knowledge, attitudes and practices among adolescents from low and middle-income countries: a systematic review. *BMC Health Serv Res*. 2018 Dec 29;18(1):909.
- Lewis R, Boydell N, Blake C, Clarke Z, Kernaghan K, McMellon C. Involving young people in sexual health research and service improvement: conceptual analysis of patient and public involvement (PPI) in three projects. *BMJ Sex Reprod Health*. 2023 Apr;49(2):76–86.
- Eisenberg DL, Secura GM, Madden TE, Allsworth JE, Zhao Q, Peipert JF. Knowledge of contraceptive effectiveness. *Am J Obstet Gynecol*. 2012 Jun;206(6):479.e1-479.e9.
- Akama T, Sue M, Kawashima A, Wu H, Tanigawa K, Suzuki S, et al. Identification of microRNAs that Mediate Thyroid Cell Growth Induced by TSH. *Molecular Endocrinology*. 2012 Mar 1;26(3):493–501.
- Britton LE, Alspaugh A, Greene MZ, McLemore MR. CE: An Evidence-Based Update on Contraception. *AJN, American Journal of Nursing*. 2020 Feb;120(2):22–33.
- Stoddard A, McNicholas C, Peipert JF. Efficacy and Safety of Long-Acting Reversible Contraception. *Drugs*. 2011 May;71(8):969–80.
- Prata N. Making family planning accessible in resource-poor settings. *Philosophical Transactions of the Royal Society B: Biological Sciences*. 2009 Oct 27;364(1532):3093–9.
- Higgins JA, Smith NK. The Sexual Acceptability of Contraception: Reviewing the Literature and Building a New Concept. *The Journal of Sex Research*. 2016 May 3;53(4–5):417–56.
- Black A, Yang Q, Wen SW, Lalonde AB, Guilbert E, Fisher W. Contraceptive Use Among Canadian Women of Reproductive Age: Results of a National Survey. *Journal of Obstetrics and Gynaecology Canada*. 2009 Jul;31(7):627–40.
- Butsashvili M, Kandelaki G, Sturua L, Shakh-Nazarova M, Mebonia N, Avaliani N. Reproductive Health Survey Georgia 2010. NCDC;MoLHSA;DRH/CDC. Ross J, editor. Tbilisi; 2012.
- Ketting E, Lomia N. Sexual and Reproductive health in Georgia. United Nations Population Fund (UNFPA); 2019.
- United Nations, Department of Economic and Social Affairs, Population Division. Contraceptive Use by Method 2019/ Data booklet [Internet]. United Nations ; 2019 [cited 2022 Oct 26]. Available from: [https://www.un.org/development/desa/pd/sites/www.un.org/development/desa/pd/files/files/documents/2020/Jan/un\\_2019\\_contraceptiveusebymethod\\_databooklet.pdf](https://www.un.org/development/desa/pd/sites/www.un.org/development/desa/pd/files/files/documents/2020/Jan/un_2019_contraceptiveusebymethod_databooklet.pdf)
- World Population Review [Internet]. 2021 [cited 2022 Oct 26]. Georgia Population. Available from: <https://worldpopulationreview.com/countries/georgia-population>
- Tsereteli N. Contraceptive use among women in the Republic of Georgia. *The European Journal of Contraception and Reproductive Health Care*. 2010;15(4):293–8.
- Tabatadze K. Contraceptive Use in Georgia: Results of a National Survey. *Int J Reprod Med*. 2020;1–9.