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EDUCATION AND EXCLUSION: AN ANALYSIS OF ACCESS TO INFORMATION ON EMERGENCY CONTRACEPTION

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Abstract: Emergency contraception (EC) is an effective method for preventing unplanned pregnancies after unprotected sex and is recognized by the World Health Organization as a non-abortive measure. However, access to and use of EC are still marked by informational, cultural, economic, and regional inequalities, especially in developing countries. This integrative review aimed to synthesize evidence on the factors that limit knowledge and appropriate use of EC, identifying the most vulnerable populations and effective interventions. Studies published up to February 2025 with quantitative and qualitative data were included, selected from PubMed, SciE-LO, WHO, PAHO, UNFPA, and other institutional sources. The results show that most people obtain information about EC through informal social networks and that religious barriers, social stigma, low educational attainment, and geographic location hinder access to quality information. Adolescents, poor women, rural residents, and victims of sexual violence are among the most affected groups. Structured educational campaigns, training for health professionals, and accessibility strategies such as free distribution and call centers have proven effective in reducing these barriers. We conclude that intersectoral actions and health education are essential to promote the conscious and equitable use of EC, contributing to the reduction of unplanned pregnancies and the strengthening of reproductive autonomy.

Keywords: emergency contraception; information inequality; reproductive health; access to information; integrative review.

INTRODUCTION

Emergency contraception (EC) is defined as a contraceptive method used to prevent pregnancy after unprotected sexual intercourse or failure of conventional contraceptive methods, such as condom breakage or forgetting to take oral contraceptives regularly. It is an intervention that can act by inhibiting or delaying ovulation, interfering with fertilization, or preventing the implantation of the fertilized egg in the endometrium. According to the World Health Organization (WHO), EC is not considered an abortive method, but an effective preventive measure when used with ity within a short period, usually up to 72 or 120 hours after sexual intercourse, depending on the type of emergency contraceptive.

In this sense, emergency contraception (EC) is an essential tool for preventing unplanned pregnancies and is widely recommended as part of reproductive health strategies. Despite its importance, access to EC remains unequal in many parts of the world, especially in developing countries, where economic, cultural, and informational barriers limit its use (WHO, 2021). Among these barriers, access to information plays a central role, directly influencing knowledge, acceptance, and effective use of this resource.

Isolated studies have shown that structural inequalities, such as low educational attainment, poverty, and the absence of robust public policies, contribute to gaps in knowledge about EC. However, the available evidence is scattered and often presents conflicting results, making it difficult to understand the overall picture. For example, while some research suggests that educational campaigns can mitigate these inequalities, others highlight the persistence of social stigmas as a significant obstacle (Silva et al., 2020; Gupta et al., 2019).

In this context, integrative review emerges as a valuable methodological approach to

synthesize and critically analyze available findings, identifying patterns, trends, and gaps in the literature. This study aims to evaluate, through a review, inequalities in access to information on emergency contraception, seeking to answer the following questions: What factors are most associated with limited knowledge about EC? Which populations are most affected by these inequalities?; and Which interventions have been most effective in reducing these barriers?

These questions aim to expand medical-patient care beyond the limits of the doctor's office, with impacts that go beyond simply providing information about emergency contraception. The goal is to promote health equity, contributing to the reduction of unplanned pregnancies and the empowerment of women. To this end, it is essential to understand whether knowledge limitations are predominantly influenced by cultural, economic, gender, or regional barriers.

In addition, identifying the most vulnerable populations, such as adolescents, women living in rural areas, or people with low levels of education, allows specific efforts to be targeted to meet their needs. The systematization and careful interpretation of available data provide a basis for effective interventions, contributing both to the advancement of public policies and to the strengthening of educational actions. These measures aim to promote health and ensure qualified and equitable access to health services, respecting the particularities and demands of each individual or group.

METHOD

This integrative review was conducted following the methodological guidelines for literature reviews, with the aim of synthesizing the available evidence on inequalities in access to information on emergency contraception in different population contexts.

The inclusion criteria covered original studies published in English and Portugue-se until February 2025 that investigated factors associated with access to information on emergency contraception, including cultural, economic, gender, and regional barriers. Observational and experimental studies that presented quantitative or qualitative data relevant to the topic were considered. Narrative review articles, editorial comments, and publications without empirical data were excluded.

The search was conducted in the PubMed, WHO, PAHO, UNFPA SciELO, and Amnesty International databases. The search strategy combined controlled descriptors and free terms, such as "emergency contraception," "access inequality," "information barriers," "emergency contraception," and "informational inequality," using Boolean operators (AND, OR) to improve study retrieval.

The articles identified were imported into the Ryyan reference manager, where duplicates were removed. Initial screening was performed by two independent reviewers, who analyzed titles and abstracts, followed by a full reading of the selected studies. Disagreements were resolved by consensus or with the participation of a third reviewer, when necessary.

Data were extracted using a standardized instrument, including information such as study characteristics (authors, year of publication, country, study design), population characteristics (age, gender, education level, geographic location), variables related to access to information on emergency contraception, and main findings (level of knowledge, barriers identified, and proposed interventions). The extraction was performed independently by two reviewers, ensuring methodological rigor.

The results were presented in a descriptive and analytical manner, allowing for the integration of the different methodological approaches of the included studies. The conclusions were drawn based on the synthesis of

the evidence, highlighting gaps in knowledge and implications for future research and public policies to address the issue.

RESULTS AND DISCUSSION

Limited knowledge about emergency contraception (EC) is a factor that can directly impact its appropriate and effective use. Although EC is an essential strategy for preventing unplanned pregnancies, studies indicate that many people have insufficient or inaccurate information about its use, mechanism of action, and availability. This knowledge gap may be associated with several factors, including lack of access to reliable sources of information, cultural barriers, widespread myths, and the predominance of learning through informal social networks.

In this discussion, we conclude that limited knowledge about EC is associated with several factors, the most relevant being lack of access to reliable sources of information and learning predominantly through informal social networks. Studies indicate that many people turn to non-specialized sources, such as friends and acquaintances, for information about CE, rather than seeking formal guidance. (GBAGBO, 2024) For example, a study conducted at the University of Ghana revealed that 96% of information about CE was acquired through interactions with friends and colleagues, highlighting the prevalence of informal sources of knowledge. Similarly, reinforcing this idea, (SHIZUKA et al., 2024) in Hong Kong, research has shown that resistance to formal sources of information, such as face-to-face consultations and medical advice, also limits access to knowledge about CE. The same research showed that 91.8% of respondents demonstrated knowledge about EC, with about two-thirds (approximately 66%) reporting the internet as their main source of information.

In addition, cultural and religious resistance plays an important role. (ABDULLAH et al., 2024) In Pakistan, 33.9% of people believed that emergency contraception methods were contrary to their religious and moral values. (AMIR KABUNGA et al., 2024) In Uganda, although attitudes toward EC are generally positive, stigmatization of health professionals and social judgments still pose significant challenges in disseminating information about the method.

Another important factor is socioeconomic and educational conditions. Women in rural areas, with lower levels of education and restricted access to the media, demonstrate greater ignorance about EC. (ARA et al., 2024) In Bangladesh, Ara et al. (2024) report that a significant proportion of women were unaware of the emergency contraceptive pill, even after receiving prenatal care or home visits from family welfare workers. The missed opportunity to provide family planning counseling during prenatal care reached 80.4%, especially among women with lower educational levels and belonging to more vulnerable socioeconomic strata.

In identifying affected populations, lack of access to emergency contraception is a public health problem that disproportionately affects vulnerable populations around the world. According to the United Nations Population Fund (UNFPA), approximately 214 million women in developing countries want to avoid pregnancy but do not have access to modern contraceptive methods (UNFPA, 2017). This situation particularly affects low-income women, rural women, adolescents, and victims of sexual violence.

Furthermore, adolescents and young people are also among the most affected groups. According to the World Health Organization, this population faces significant barriers, including social stigma and a lack of adequate information on reproductive health (WHO,

2020). Chandra-Mouli et al. (2014) point out that many young people do not have the autonomy to seek contraceptives, whether due t or family pressure or legal restrictions, and thus one of the contraceptives commonly used by young people over the years is emergency contraception, which is widely considered the most effective method of preventing pregnancy after unprotected sex.

It is important to highlight that victims of sexual violence also suffer greatly from the lack of immediate access to emergency contraception. Reports from Amnesty International indicate that, in several regions, there is no adequate support for these women to receive the necessary medical and psychological care, increasing the risk of forced pregnancies and additional trauma (Amnesty International, 2019).

(Guttmacher Institute, 2021). In this context, the Guttmacher Institute emphasizes that low-income women and those living in rural areas are the most affected, as they face financial and logistical barriers that make it difficult to obtain emergency contraception. These difficulties increase the risk of unplanned pregnancies, negatively impacting their economic and social conditions.

Finally, in the Brazilian context, (FERNAN-DA GONTIJO ARAÚJO; ABREU; MARIA-NA SANTOS FELISBINO-MENDES, 2023) it is observed that women with higher levels of education, health insurance, who have given birth, and who have participated in reproductive planning groups were more likely to use long-acting contraceptives, such as implants and intrauterine devices (IUDs). On the other hand, people with greater socioeconomic vulnerability, estimated at 72%, use short-acting reversible contraceptives - barrier methods, hormonal injections, mini-pills, combined contraceptive pills, patches, and vaginal rings – as well as permanent contraceptive methods. This fact, which is not so different from the global context, explains the greater need for EC, given that the combination of the short duration of the contraceptive method and the fragile educational and socioeconomic context leads to a need for emergency pills. Thus, the scenario in Brazil is similar to that in other places, as shown in Table 1.

Contraceptive methods	Prevalence	95% CI
Short-acting reversible contraception (SARC)	72	70.8
Pill	4	39.4
Male condom	20	19.2; 21.5
Injectables	9	8.9
Other modern contraceptive methods	0	0.3; 0.6
Long-acting reversible contraception (LARC)	4	4.3; 5.4
IUD	4	3.9
Implant	0	0.3; 0.6
Permanent methods	2	22.2; 24.2
Tubal ligation	17	16.4
Vasectomy	5	5.0; 6.2
Traditional methods	1	0.9; 1.58

95% CI: 95% confidence interval; LARC: long-acting reversible contraceptives; SARC: short-acting reversible contraceptives.

Note: the total for SARC, LARC, and permanent methods does not correspond to the total for each type of method, as all users of contraceptive methods were counted for this estimate. The classification of contraceptive methods according to duration of action did not include users of traditional contraceptive methods.

Table 1: Prevalence of contraceptive types used by Brazilian women of reproductive age, according to the 2019 *National Health Survey* (PNS 2019).

CONCLUSION

The results of this review allow us to conclude that the consolidation of structural inequalities significantly affects the general population. Therefore, health professionals, together with their multidisciplinary teams, should develop ways to incorporate medical-patient education in order to achieve better results in unplanned pregnancy rates. In the example of the Ghanaian population, approximately 14% of women between the ages of 15

and 19 became pregnant for the first time, and these pregnancies were unplanned. The repercussions of unwanted pregnancy, particularly among young people, require that contraceptives be used efficiently and effectively as a mitigation strategy.

Studies agree that young people who received this timely and effective educational intervention showed significant increases in knowledge about different EC methods, as well as critically important facts such as EC time sensitivity, effectiveness, and prescription requirements. With many states passing abortion bans even for sexual assault, young people need to be aware of emergency contraceptives, as well as how to access and use them.

T herefore, to resolve this issue, it is essential to adopt doctor-patient action plans that promote education, accessibility, and support for emergency contraception (EC). Strategies such as informational sessions, structured doctor-patient consultations, and educational materials increase knowledge about effectiveness, timing, and prescribing. Facilitating access through free distribution, simplified protocols, and telemedicine reduces bureaucratic barriers. In addition, training professionals and post-use follow-up of EC encourage the adoption of regular contraceptive methods. Given the restrictions on abortion, such measures are essential to ensure access and informed decision-making about reproductive health.

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