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COMMENT

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From theories of contraceptive use to human rights principles: implications for indicators on the supply and demand side

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Abstract

In this commentary, we examine the evolution of theories and metrics regarding contraception. We contend that while human rights principles are now widely integrated into the "supply-side factors" of contraceptive provision, particularly through the concept of quality of care and its metrics, their role in relation to "demand-side factors" remains ambiguous. We propose that human rights represent one of several normative frameworks to which both users and non-users may adhere when shaping their fertility preferences and decisions regarding contraception. To gain a deeper understanding of persistent obstacles on the demand side of contraceptive utilization, comprehensive data on attitudes toward sexuality and motherhood at both individual and community levels, as well as nuanced indicators of knowledge and acceptance of contraception among all women, are essential. Such data could facilitate examination of how exposure to human rights-based sexual and reproductive health programs influences normative contexts, individual empowerment among women, and the demand for contraception. Additionally, further research is needed to explore the reciprocal relationship—how contraceptive use influences women's trajectories of empowerment—which requires longitudinal data covering the entire reproductive lifespan.

Introduction

Indicators tracking global progress in contraceptive use have seen minimal evolution since their inception almost six decades ago, despite significant paradigm shifts within the field. The 1994 International Conference on Population and Development in Cairo firmly established women's rights as the foundational principle guiding any efforts to promote contraception, marking a departure from the earlier "population control" paradigm [23]. However, despite this transformative shift, there has been ongoing debate regarding the adequacy of commonly used contraceptive indicators, with suggestions that they are incomplete or in need of revision [4, 5, 10]. It remains unclear whether the challenges lie in technical, theoretical, or ethical domains, and whether new indicators should be developed, or existing ones revised.

In this commentary, we begin by examining the historical development of theories and indicators related to contraception. We contend that while human rights principles are now widely integrated into the "supply-side factors" of contraceptive use, primarily through the concept of quality of care and its associated measures, their incorporation into "demand-side factors" remains ambiguous. Furthermore, there has been a notable lack of comprehensive study into the demand-side dimensions of contraceptive utilization. Apart from data on socioeconomic resources and female empowerment, there is a dearth of information in this area. We explore potential avenues for addressing these gaps in research and understanding.

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Five decades of theories on contraception

Pioneers in the 1960s, during an era primarily concerned with the population issue [22], emphasized fertility preferences as the primary determinant of contraceptive use (see Fig. 1, highlighted in red). Scholars studying fertility preferences and contraceptive utilization in developing countries were quick to identify a significant "unmet need" for contraception, arising when desires to avoid fertility were not matched by actual contraceptive use. This gap was initially quantified using data from Knowledge, Attitudes, and Practices surveys in the 1960s and from World Fertility Surveys in the 1970s. Family planning services were conceptualized from the outset as the primary means of addressing this unmet need for contraception (Fig. 1, highlighted in red).

As family planning programs expanded globally and contraceptive provision improved, the theories proposed by Easterlin [13] and Coale [11] became the dominant framework for understanding and researching the field, introducing the distinction between "supply" and "demand" barriers to contraceptive use (depicted in the blue box on Fig. 1). Supply-side factors include the geographical and financial accessibility of contraceptive methods and information, while demand-side factors encompass awareness and acceptance of methods, as well as socioeconomic resources and demographic characteristics. According to Easterlin and Coale, socioeconomic resources and life-course positioning influence both fertility preferences ("ready") and demand for contraception ("willing": awareness and acceptance of methods). These theories significantly influenced the content of the Demographic and Health Surveys implemented in the 1980s.

In the 1980s and early 1990s, women's empowerment emerged as a new factor on the demand side of contraceptive use [3, 21] (highlighted in yellow in Fig. 1). Measures included variables already encompassed under socioeconomic resources and demographic characteristics (such as level of education, earning capacity, spousal age difference, etc.). Additional dimensions included

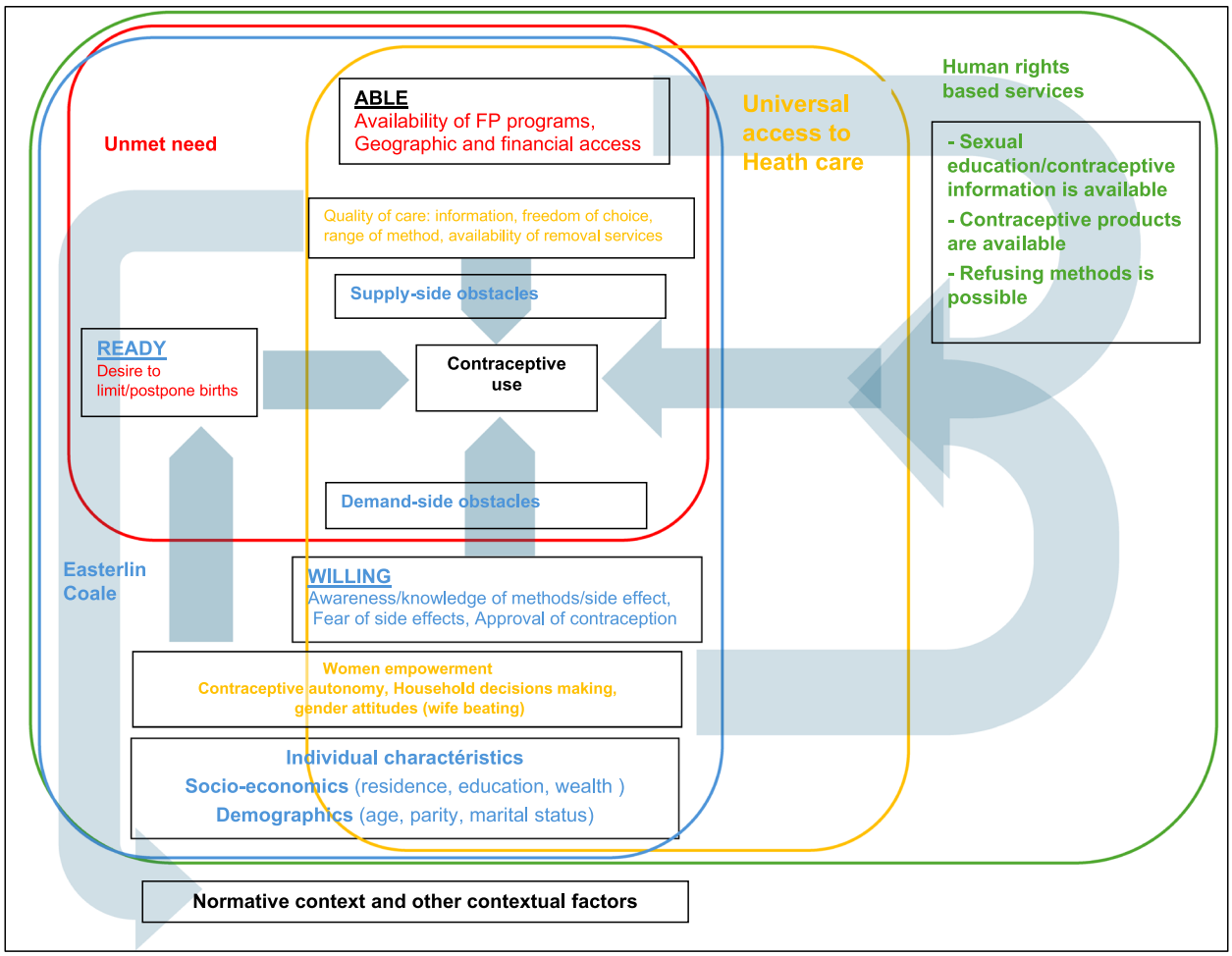

Fig. 1 Theories on contraceptive use, 1960s-2021

attitudes toward gender roles (evidenced by questions on the acceptability of wife beating), participation in household decisions (including decisions related to health matters and sexual intercourse), and exposure to domestic violence. These diverse indicators were integrated into the Demographic and Health Surveys in the late 1990s and have been widely utilized since then, alongside socioeconomic disparities, to encapsulate the demand-side determinants of contraceptive use. But, those survey measures of women empowerment remain weak and limited [26, 39].

In the mid-2000s, Cleland et al. [9] drew attention to the "unfinished family planning agenda," highlighting the diversion of international and national funds away from contraceptive services towards other reproductive health needs following the Cairo Conference. The subsequent resurgence of interest in contraceptive supply culminated in the launch of the FP2020 initiative by international donors and stakeholder countries in 2012. However, policymakers needed to ensure that the proposed expansion of services adhered to human rights principles. Early 2000s research on quality of care proved instrumental in this regard [18, 27]. Quality of care indicators were introduced in the PMA2020 surveys in the 2010s to monitor efforts in FP2020 countries. These surveys gather data on available contraceptive methods, staff training, and other aspects of service provision from health centers serving survey clusters. Data collected from contraceptive users include received contraceptive counseling, satisfaction with care, and provider pressure [43].

In the 2010s, researchers proposed integrating these various advancements under the umbrella theory of "universal access to healthcare" (highlighted in the yellow box in Fig. 1). Originally developed in the field of public health for healthcare provision in general, this theory categorizes the different barriers on both the supply and demand sides and was subsequently applied to contraceptive care [8]. However, fertility preferences were somewhat marginalized,this stands in contradiction with what was reaffirmed in 1994, that women's desire to avoid pregnancy remain the focal point of family planning programs.

Bringing human rights principles to programs

While researchers swiftly responded to the Cairo conference by developing women's empowerment indicators as outlined for demand (socioeconomic status, decision-making, attitudes on wife beating) and quality of care indicators for supply, it took nearly 20 years for women's rights principles to be formally incorporated into international protocols guiding family planning programs in the policy realm [6]. However, laws, policies, and family planning program strategies worldwide are now mandated to explicitly and systematically integrate the human rights framework [38].

On a programmatic level, three levels of contraceptive rights have been delineated [16] (depicted in the green box in Fig. 1: 1 public services must offer contraceptive information and sexual education; 2 public services must ensure universal access to contraceptive care, encompassing a variety of methods; 3 providers must safeguard their clients' right to refuse a modern method. Hardee et al. [16] demonstrate that the data required to monitor adherence to human rights principles on the supply side closely align with the "quality of care" data now routinely collected in surveys. Therefore, these data (including information provided during service delivery, available methods at health centers, and provider pressure), notably available in PMA2020 surveys, can be utilized to monitor the compliance of family planning services with human rights-based principles.

Renewed interest in demand-side factors

After the launch of the FP2020 initiative, significant efforts were directed towards enhancing consolidated (rights-based) contraceptive service provision and the availability of long-acting methods in participating countries. Additional programmatic strategies have been identified and implemented, particularly focusing on the postpartum period [30, 37]. Consequently, contraceptive prevalence has improved, often significantly, in these countries [42]. For instance, in Burkina Faso, while 15% of women in a union used a modern method in 2010, this proportion increased to 30.7% by 2021. An analysis of the 2010 and 2015 (modular) Demographic and Health Surveys in Burkina Faso reveals that disparities based on wealth, rural–urban residence, and age in the utilization of modern methods decreased during this period of service expansion. At the same time, disparities among women appeared to increase based on other factors. Specifically, the adjusted regression model revealed that the effects of certain categories were increasing (between 2010 and 2015) based on marital status, education level, specific age groups, discussions about family planning with partners and partner approval. Notably, non-married women, those in the early stages of family formation, less educated women, those who do not discuss family planning with their partners, and those whose partners do not approve of contraception tend to be more disadvantaged [41]. These findings align with results from other FP2020 countries [42]. As supply-side barriers are progressively addressed, demand-side obstacles (such as reluctance to use contraceptives among the unmarried, those in the early stages of family formation, uneducated women, and a lack of conjugal communication on the topic) are becoming more apparent [20].

In this context, Senderowicz [34] revisited the issue of demand. Building upon the three contraceptive rights that guide program design and implementation (right to information, right to care, right to decide on method), she proposed measuring the extent to which populations enjoy these rights. Regarding access to contraceptive information, she suggested a comprehensive measure including women's knowledge of method usage, awareness of side effects, and knowledge of removal procedures. This indicator revitalizes the earlier dimension of "knowledge of methods" introduced by Coale and Easterlin, albeit in much greater detail than the initial indicator used in the Demographic and Health Surveys (DHS) (depicted in black in Fig. 1). Secondly, she proposed assessing the extent to which each woman has access to various types of methods (long-acting and short-acting; whether removal is possible and affordable), a dimension already measured – and arguably more accurately – in the quality-of-care package in PMA2020 surveys, where the number of methods available is gauged in health centers serving the surveyed community. However, adding information on removal to this set of questions would be beneficial. Finally, women's right to decide about contraceptive use is captured through several questions regarding their freedom of choice in contraceptive use. This serves as a valuable addition to the existing DHS women's empowerment module, which includes questions on women's decision-making capacity albeit solely in relation to health and sexual activity, which is only directed towards cohabiting women and their experiences of spousal pressure (depicted in black in Fig. 1). Another measure has been proposed by the author based on the disaggregation of unmet need into demand-side and supply-side. This indicator reflects the share of unmet need justified by lack of demand defined by reasons of non-use documented in the DHS like "not having sex, infrequent sex, up to God/fatalistic, respondent opposed, and breastfeeding" [35]. The concept of contraceptive autonomy, defined as the ability to make informed, full, and free choices, has been further developed by Senderowicz [34]. According to Raj et al. [26], choice refers to the achievement of self-determined fertility goals, whether through the use or non-use of modern contraceptives. Raj and colleagues also constructed a framework to assess choice, agency, backlash, and goal achievement as part of the empowerment process. She recognized that agency operates at multiple levels—from individual to collective—shaped by internal attributes, social norms, and external contexts and resources that either facilitate or hinder the empowerment process [26].

Complex normative contexts and approval: the missing piece

However, even with these additions, do we truly grasp all the obstacles on the demand side? Why are non-married women, newly married women, women whose husbands oppose contraception, and women who do not discuss contraception with their husbands increasingly represented among non-users? One crucial aspect remains elusive. We posit that demand-side barriers fundamentally stem from overarching societal (or group-level) gender norms [2], rather than solely from women's limited empowerment or the absence of human rights-based programs (depicted in the black box at the bottom of Fig. 1. Specifically, these shared gender norms permeate entire societies, dictating ideals of womanhood even among empowered women or those benefiting from programs and enjoying contraceptive rights. However, gender norms are not deterministic; they are dynamic and diverse, shaped by individual actions on a daily basis [28] and influenced by external factors, particularly sexual and reproductive health programs. They take on various forms across different sub-groups within society. Ultimately, the spectrum of local gender norms encompasses, to varying extents, the universal human rights principles advocated in programmatic information [33]. Individuals choose from among these available meanings, selecting those that best align with their social circumstances and short-term interests [15].

In particular, norms that stigmatize premarital sexuality and encourage rapid family formation after marriage can foster widespread disapproval of contraception—not universally, but specifically when used during these particular life stages [12, 31]. Other conservative gender norms dictate that motherhood should always take precedence (resulting in disapproval of contraception regardless of life stage); such norms are prevalent in more insular communities, such as those led by religious figures [1]. Those norms entail attitudes towards gender roles and relationships that negatively affect women's freedom in family planning and contraceptive domains. In fact, in some setting, women may not have a say in reproductive matters. The idea is to measure to which extent the normative context affect women contraceptive behaviors. Studies show that positive gender-equitable attitudes when it comes to household decision-making and couples' family planning decisions, were associated with an increased likelihood of adoption and continuation of modern contraceptives [25]. Additionally, local biomedical visions, combined with limited exposure to sexual and reproductive information programs, can engender fears of side effects or a preference for natural methods [14, 32].

Sexual and reproductive health programs thus operate within the context of local gender norms and biomedical perceptions, as well as a moral environment of shared meanings that influence, at the individual level, the two dimensions of demand for contraception previously outlined by Coale and Easterlin: approval of and knowledge of methods. While approval was assessed in early Demographic and Health Surveys, Cleland et al. [9] demonstrated that nearly all women approve of contraception, even in countries with low prevalence. Interest in this indicator has diminished,currently, questions on approval are posed only to women with an unmet need [24]. However, these initial measurements were basic binary inquiries,more nuanced questions regarding the acceptability of contraception at different life stages are available [29] and should be posed to all women [7].

Building on these ideas, a comprehensive module to gauge contraceptive approval (by the respondent and their partner, for birth spacing or limiting), knowledge/awareness (of methods, side effects), fears of side effects and decision-making (about birth planning and contraceptive use) was developed and tested among all women in PMA2020 Burkina Faso 2018–19 [40]. Women were also queried about gender norms (premarital sex for women, importance of motherhood for women), both in terms of their personal beliefs and their perceptions of community norms. Findings indicate that contraceptive approval, knowledge, and decision-making partially account for the relationship between socioeconomic indicators and contraceptive use [40]. Moreover, community norms directly influence contraceptive use, findings that align with those based on more basic approval data collected in PMA2020 surveys [42].

Conclusion

In summary, we view human rights on the demand side as one of several normative frameworks that individuals may adhere to when shaping their fertility preferences and their demand for contraception. To better understand remaining demand-side obstacles, more detailed data on individuals' perceptions of sexuality and motherhood are required, along with precise indicators of knowledge and approval of contraception (to be obtained from all women). Exposure to human rights-based sexual and reproductive health programs (which should also be measured) is likely to alter the meanings available to women and encourage them—especially those already empowered and involved in their contraceptive decisions—to plan their fertility in alignment with their diverse life goals, on par with men.

Conversely, the practice of contraception and the prevention of unplanned births are believed to foster women's education, paid employment, socioeconomic advancement, and agency over the life course (for example: [17]). However, without long-term longitudinal follow-up data [36], these bi-directional processes—from women's empowerment to the acceptance of contraception and vice versa—remain to be fully explored. Life course data on reproductive and empowerment trajectories are also essential in high-income countries, where demand for modern contraception sometimes fluctuates [19], despite the prevalent discourse on human and sexual rights.

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