Abortion rather than contraception: the pathway to fertility transition in Pakistan

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Introduction: Induced abortion and contraception are two alternative means for regulating fertility. Therefore, it is expected that a high level of use of effective contraception would reduce the incidence of unintended pregnancy and abortion. Conversely, high incidence of abortion may indicate low contraceptive use and high levels of unmet need for contraception. However, evidence shows that high abortion and contraceptive use can co-exist in the early stage of fertility transition when family planning services are unable to meet the growing demand for fertility regulation (Marston and Cleland, 2002; Cleland, 2020). The transition to low fertility is, however, generally achieved primarily with high and sustained use of effective methods of contraception.

While some studies have examined the role of abortion in fertility transition and the relationship between trends in contraception and abortion, few studies have considered the extent of use of abortion in contexts such as Pakistan, where family size and demand for children remain relatively high and have hardly changed over the past two decades. At the same time there were 4.2 million unwanted pregnancies in 2012 ending in 2.3 million abortions and 1.4 million unwanted births (Sathar et al, 2013). The Pakistan Demographic and Health Survey (PDHS) 2017-18 shows that total wanted fertility was 2.9 children per woman compared to the total fertility rate of 3.6 (National Institute of Population Studies and ICF, 2019). Fertility and the mean ideal number of children of four in Pakistan remain relatively high in comparison to regional averages and use of modern methods has stagnated at a low level (25%) while the unmet need for modern contraceptives is high (18.4%). Furthermore, abortion is highly legally restricted and permitted only to save the life of the woman and to provide "necessary treatment" during early pregnancy.

The current study which shows an unusually high rate of induced abortion in Pakistan in 2023—substantially higher than the rate in 2012—presents a quandary. With stagnation in the level of fertility and contraceptive use (Bongaarts and Sathar, 2023) in a context of highly restricted access to abortion, the rise in induced abortion is unusual. While the impact of effective contraception on fertility levels is well established, abortion plays a limited role given that a woman become exposed to the risk of pregnancy soon after having an abortion, unless other preventive steps are taken. In this paper, we examine how reliance on abortion evolved in Pakistan where fertility has essentially

stabilized at a relatively high level, and we explore the underlying factors. Study findings allow us to assess whether Pakistan with its low contraceptive use and very high abortion rate is exhibiting a unique pathway to fertility transition in South Asia.

To understand the role that induced abortion now has as a response to unintended pregnancy in Pakistan, we first present data on the observed trends in pregnancy and unintended pregnancy, and their outcomes, and we then interpret available data on related factors to better understand these trends. We assess changes in key characteristics of how women in Pakistan resort to abortion—providers and methods used and the differential health consequences. We also examine the increased availability of misoprostol as a crucial factor that has expanded access to abortion and made them safer. Finally, we discuss the greater involvement of the private sector in abortion service provision, especially pharmacies, which are an accessible source of misoprostol, facilitating access to safer abortion. In addition, we also assess factors that contribute to unintended pregnancy, particularly the low uptake of modern contraception, nationally and even among urban and educated couples in Pakistan.

Data: We use comparable data from nationally representative health facility surveys (HFS) conducted using a similar methodology and in the same geographic areas of Pakistan in 2012 and 2023. We limit our analysis to comparable samples and indicators from these two surveys. In addition, we draw on nation-wide surveys of knowledgeable health professionals (HPS) conducted in 2012 and 2023 that provide estimates of changing patterns in type of provider, and rates of complications, among women obtaining abortion. We complement these sources with data from the Pakistan Demographic and Health Surveys (PDHS) and the 2017 Population Census.

Research Methods: We compare data from two similar studies conducted a decade apart, in 2012 and 2023, to assess trends in the rates of unintended pregnancies, abortion and unplanned births and in the composition according to pregnancy outcomes. A widely applied indirect methodology is used to estimate the incidence of abortion and unintended pregnancy (Singh et al, 2019). The availability and use of misoprostol and its potential role in reducing abortion complications is also considered. We supplement this by analyzing the PDHS data on reasons for non-use, method mix, discontinuation and switching of methods to assess the antecedents to unintended pregnancy. Together, the analysis aims to provide the key contours of the changing landscape of pregnancy and fertility in Pakistan, with special attention to the role of abortion.

Findings: The extended analysis is in progress. Preliminary results show that between 2012 and 2023, the abortion rate increased by 25%; unintended pregnancies ending in abortion increased by 17.6 % (from 54% in 2012 to 63.5% in 2023); and unplanned births declined by 26.2% (from 34% to 25.1%). The widespread availability of misoprostol and the increasing role of pharmacies facilitated access to abortion and have made it safer. Misoprostol was already well known in 2012, and by 2023 all health professionals were aware of its use for induced abortion. Pharmacies and drug stores were the second most often reported source for information and supply of misoprostol in 2023. The rate of treatment for induced abortion complications per 1,000 women 15-49 has

decreased by 16%, from 13.9 in 2012 to 11.7 in 2023. PDHS data analysis showed that 9% of all married women rely on traditional methods with high failure rate and 30.2% discontinue use within 12 months. Side-effects and health concerns are major reasons both for not using modern methods and for discontinuing their use.

Conclusions: We conclude that use of abortion may increase even in a high fertility context when there are other changes such as wider availability of misoprostol and a responsive private sector, combined with ongoing concerns about side effects of modern methods that continue to deter their use. Policy implications will be drawn upon completion of the analysis. The results obtained so far indicate that abortion restrictions have little effect in resolving an unintended pregnancy by abortion in Pakistan. The high unmet need for contraception is contributing to a high rate of abortion though with little impact on fertility levels. Growing awareness and use of misoprostol may have contributed to the increase in the abortion rate (Chahal and Mumtaz, 2017), and to improved safety of abortion. Because of the high unmet need for family planning and low use of modern methods, abortion is likely being increasingly used as a reproductive strategy for fertility regulation in Pakistan.

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