Postabortion Care in Pakistan: 2023 Assessment of the Health System's Capacity to Provide Care

Octavia Mulhern, Rehan Niazi, Tahira Parveen and Susheela Singh

KEY POINTS

- Postabortion care is widely available in Pakistan: 80% of public and private health facilities across the country's four provinces and three regions provide these services.
- To treat abortion complications, 77% of facilities offer misoprostol; 34% offer dilation and evacuation, a recommended method for complications in the second trimester or later; and 24% offer vacuum aspiration. Fifty percent of facilities offer dilation and curettage, a procedure not recommended for postabortion treatment.
- Comprehensive care for abortion complications is more widely available in urban areas than in rural areas, and at more referral and higher-level facilities than primary-level facilities.
- Provision of a range of modern, reversible contraceptive methods—four or more methods—as part of postabortion care is higher at primary-level facilities in the public sector than those in the private sector (53% vs. 44%). Provision of at least one permanent contraceptive method is low nationally among higher-level facilities in both sectors (35%).
- Several components necessary for postabortion care are low among facilities at the primary level: 54% have means of communicating with referral facilities, 34% have staff trained in vacuum aspiration and 27% have transportation available for patients needing referral.

Introduction

Care for postabortion complications has been a long-standing concern for women's health and survival in Pakistan. In 2002, women in Pakistan experienced an estimated 2.4 million unintended pregnancies, 890,000 of which ended in abortion.[1] Following an increase in the number of women of reproductive age and no concurrently substantial increase in contraceptive use, and also with more comprehensive coverage of private-sector facilities, a national study conducted in 2012 found that these figures had increased to an estimated 4.2 million unintended pregnancies, 2.2 million of which ended in abortion.[2] Furthermore, a recent global study estimated the annual rate of unintended pregnancy in Pakistan in 2015–2019 as 71 per 1,000 women aged 15–49.[3] These findings suggest that abortion incidence remains high and the need for quality postabortion care (PAC) likely remains widespread.

The 2012 national study estimated that the rate of abortion complications treated in Pakistan across the public and private sectors was 14 per 1,000 women aged 15–49 in 2012, almost double the rates in Nepal and Bangladesh (8 and 6 per 1,000 women aged 15–49 in 2014, respectively).[4,5] The study found that between 2002 and 2012, Pakistan saw a marked increase in the use of two methods recommended by the World Health Organization (WHO) to treat incomplete abortion: misoprostol pills and vacuum aspiration. The 2012 study also found that women were increasingly using misoprostol to induce abortions, likely reducing the severity of complications and potentially reducing the rate of treatment needed for complications. Nevertheless, this study identified important gaps in PAC service provision and access. In 2012, 52% and 62% of women treated for PAC in public and private health facilities, respectively, were treated using dilation and evacuation (D&E) or dilation and curettage (D&C).[4] WHO guidance recommends against using D&E except for second-trimester abortions and against using D&C for any abortion care.[6]

Since adopting the International Conference on Population and Development's Program of Action[7] in 1994 (that included the consensus statement: "in all cases, women should have access to quality services for the management of complications arising from abortion"), the government of Pakistan has prioritized achieving the goal of providing high-quality and timely services for postabortion complications. Notably, in 2009, the Pakistan Ministries of Health and of Population Welfare signed the Karachi Declaration, which pledged to improve best practices for maternal, newborn and child health and family planning through the "inclusion of the practice of postabortion care in policies, guidelines, protocols and standards for health facilities at [the] national level."[8] In 2018, the Ministry of National Health Services, Regulations and Coordination (MoNHSRC) published national standards and guidelines for the delivery of high-quality PAC.[9] Most recently, the MoNHSRC published the Essential Package of Health Services in 2020, which includes the management of miscarriage or incomplete abortion and PAC in the list of essential services that should be provided at the primary health care level.[10]

The introduction of the 2018 and 2020 materials, along with other efforts the government has made to increase accessibility of PAC, offers reason to believe there have been substantial improvements in the postabortion care landscape in the past decade. Given the importance of quality PAC services for women's health and survival, current evidence on the provision of these services in Pakistan is highly relevant for policymakers and program planners. The Population Council and the Guttmacher Institute conducted the Women's Health Study in 2023 to assess those changes in the landscape.[11] A Health Facility Survey, covering a nationally representative sample of public and private health facilities in Pakistan, was designed to assess the adequacy of current PAC service provision and gaps that remain. This report highlights some findings from this survey on the capacity of primary- and referral-level health facilities in Pakistan to provide basic and comprehensive PAC in the public and private sectors.

Methods

The Health Facility Survey* was fielded January–May 2023 in a national sample of 596 health facilities across the four provinces of Pakistan (Balochistan, Khyber Pakhtunkhwa, Punjab and Sindh), the regions of Azad Jammu and Kashmir and Gilgit-Baltistan, and the Islamabad Capital Territory. The sample was representative of public and private facilities at each level of care (primary, secondary, tertiary). A higher proportion of private tertiary facilities, public teaching hospitals, district headquarter hospitals (DHQs) and Tehsil headquarter hospitals (THQs) were sampled because of their expected central role in provision of postabortion services in Pakistan. All estimates presented in this report are weighted to represent the universe of private and public health facilities providing reproductive health care in the provincial and regional strata surveyed.

Information was collected through interviews with a senior staff member from each sampled facility who was knowledgeable about PAC service provision in the facility. The respondents were asked about various aspects of PAC that their facility provides: medical procedures to treat complications from induced abortion or miscarriage; postabortion counseling and contraceptive provision or referrals; and availability of equipment, medicines and trained staff.

We compiled the essential interventions and components of infrastructure that should be available for a facility to provide PAC at the primary and referral levels of care (Table 1, page 3) based on criteria outlined by the MoNHSRC and those developed by other researchers.[9,12,13] These key interventions and activities parallel Pakistan's guidelines for the delivery of high-quality PAC and also facilitate global comparisons.

Public and private facilities were categorized into two levels—primary and referral—according to their classification in the MoNHSRC national standards and guidelines for the delivery of high-quality PAC.[9] Private secondary-level facilities, although not mentioned in the MoNHSRC guidelines, are considered higher-level facilities based on their similarity to DHQs and THQs in size and services offered. Primary-level

*A Health Professionals Survey was also fielded as part of the 2023 Women's Health Study; findings from that survey are not included in this report.

TABLE 1. Essential services and components of infrastructure for adequate provision of postabortion care at primary and referral facility levels

Primary-level facilities	Referral-level facilities
Removal of retained products of conception	Removal of retained products of conception
Provision of antibiotics	Provision of antibiotics
Provision of oxytocin/ergometrine	Provision of oxytocin/ergometrine
Provision of intravenous fluids	Provision of intravenous fluids
Provision of four or more reversible modern contraceptive methods*	Provision of four or more reversible modern contraceptive methods*
Ability to communicate with referral facilities by telephone or other means	Administration of blood transfusion
Availability of a functional ambulance with fuel to transport patients needing referral	Availability of a functional operating room
24-hour availability of on-duty or on-call staff (gynecologist, female doctor, lady health visitor) capable of undertaking normal deliveries	Provision of general anesthesia
	Provision of at least one permanent contraceptive method (tubal ligation or vasectomy)
	24-hour availability of on-duty or on-call staff (gynecologist, female doctor) capable of doing cesarean section

*Condoms, pill, injection, implant, IUD, emergency contraception.

facilities include government MCH centers, rural health centers and basic health units, along with all primary-level private facilities. Referral-level facilities include public teaching hospitals, DHQs and THQs, and higher-level facilities include secondary- and tertiary-level private facilities. We use the term "referral/higher level" in some instances to describe these public and private facilities jointly.

Provision of Postabortion Care Nationally

Our survey results found that 80% of facilities nationally provide services for complications from abortion or miscarriage (Table 2, page 4). More than three-quarters of facilities (77%) offer misoprostol as a method of treatment, while 34% provide D&E and 24% offer vacuum aspiration. Half (50%) of facilities report providing D&C, a method that is not recommended for treatment of postabortion complications by WHO[6] or by Pakistan's MoNHSRC.[9] One in three respondents (35%) have received training in either manual or electric vacuum aspiration. Though 70% of facilities provide at least one contraceptive method for postabortion patients (data not shown), only half (51%) provide four or more modern reversible contraceptive methods.

Provision of Postabortion Care by Sector, Urban-Rural Locality and Level of Facility

The provision of PAC is similar across the private and public sectors (79% and 82%, respectively; data not shown), and across primary-level facilities in each sector (78% in public and 80% in private; Table 2). However, there are notable differences in the provision of PAC across facilities located in urban (83%) and rural areas (77%) and across referral/higher-level facilities in the public (86%) and private (94%) sectors. All of the methods for treatment of postabortion complications are more widely available in urban areas than in rural areas, and in referral/higher-level facilities than primary care facilities, in both the public and private sectors. The absolute levels of availability of misoprostol treatment are high at both levels of facilities in both sectors (ranging from 74% to 85%), while proportions of facilities offering vacuum aspiration methods are much lower (from 15% to 45%).

Capacity to Deliver Components of PAC, by Sector and Level of Facility

Very high proportions of primary- and referral/higher-level facilities (76% to 100%) are equipped with the necessary medicines and supplies to provide some components of PAC required to meet government guidelines—antibiotics, oxytocin/ergometrine and intravenous fluids (Table 3, page 5). The availability of these three essential medicines is higher in the public sector than in the private sector, at both the primary and referral/higher levels of care.

At the primary-care level, just 39% of public facilities have a telephone or other means of communication with referral facilities, while that is true for 75% of private facilities. A higher proportion of public-sector, primary-level facilities have a vehicle with fuel to transport patients needing referral than private facilities (37% and 13%, respectively). Almost half (49%) of all primary-level facilities have 24-hour availability of staff capable of undertaking normal deliveries, an indicator of capacity to manage patients with an incomplete abortion and no other complications.

At the referral/higher level, most facilities (82%) have 24-hour availability of staff capable of doing cesarean sections, an indicator of capacity to manage severe postabortion complications. In addition, most referral/higher-level facilities have these essential elements of capacity to provide surgery for severe complications: provide blood transfusion (85%), have a functional operating room (89%) and provide general anesthesia (74%). While the capacity to offer these services is high in both the public and private sectors,

higher-level private facilities have notably higher capacity to provide these services than referral-level facilities in the public sector.

Provision of Postabortion Contraceptive Services, by Sector and Level of Facility

Postabortion contraceptive services are considered a key component of PAC because contraceptives help to prevent future unintended pregnancies. Provision of at least one permanent contraceptive method among referral/higher level facilities is relatively low nationally (35%; Table 3); however, the share is higher in the private sector (40%) than in the public sector (27%). Nationally, only half (50%) of primary-level facilities offer four or more modern contraceptive methods, while two-thirds (65%) of referral/higher-level facilities do so (data not shown). A higher proportion of public facilities offer four or more contraceptive methods than those in the private sector, at both levels of facilities (Table 2).

Discussion and Recommendations

At the national level, our findings indicate high availability of PAC services overall. Most health facilities—public and private and primary and referral/higher-level—offer postabortion services (80%). The large majority also provide misoprostol as a method for treating postabortion complications (77%). Most facilities in both sectors and levels of facilities have the capacity to provide antibiotics, oxytocin/ergometrine and intravenous fluids to PAC patients (about 90%).

However, the findings show that there are significant variations in care by facility level and sector. Our study identified important gaps that need to be addressed in the provision of essential elements of PAC outlined in the MoNHSRC 2018 PAC service delivery guidelines,[9] in both the public and private sectors and at both levels of facilities:

- Three-quarters (78%) of primary-level facilities do not provide vacuum aspiration; this WHO-recommended method should be made more widely available. The proportion of respondents who had been trained in vacuum aspiration procedures is low (35%) and increasing training in this method would be a first step toward expanding the availability of this method.
- Most primary-level facilities cannot implement the timely transfer of referred patients, either because of their inability to communicate with referral facilities or the lack of a functional ambulance. This is an important gap—prompt treatment

TABLE 2. Percentage of health facilities providing postabortion care and selected components of care, by locality, sector and level of facility, Pakistan, 2023

	% Urban	% Rural	% Public		% Private		% All facilities
			Primary	Referral	Primary	Higher	
Facility type*							
Facilities that treat postabortion complications	83	77	78	86	80	94	80
Facilities that provide delivery services but not postabortion care	11	18	17	9	14	4	15
Methods offered for postabortion care							
Medication abortion (misoprostol)	82	73	74	84	80	85	77
Vacuum aspiration (manual and/or electric)	29	20	15	45	32	44	24
Dilation and curettage	54	46	44	72	52	75	50
Dilation and evacuation	39	30	27	66	35	71	34
Respondents trained in vacuum aspiration	38	33	31	53	38	39	35
Contraceptive services							
Provision of counseling	82	77	78	85	78	92	79
Referrals for contraceptive methods	49	55	54	30	52	47	52
Provision of four or more reversible modern contraceptive methods†	50	51	53	69	44	62	51
No. of facilities	**310**	**286**	**232**	**63**	**216**	**85**	**596**

*Not showing 5% of facilities that do not offer postabortion care or delivery services and one facility with missing information on delivery services.
†Condoms, pill, injection, implant, IUD, emergency contraception. *Note:* Numbers of facilities are unweighted totals and percentages of facilities are weighted estimates.

of patients with severe complications is necessary to minimize consequences for patient health and to prevent deaths.

- Two in five referral/higher-level facilities lack one or more of the essential components to treat severe postabortion complications. These findings point to limitations in the health system's capacity to support and treat patients with more severe complications.

While all primary- and referral-level facilities in the public sector in Pakistan are mandated to provide PAC,[8] we found that one in five of these facilities do not provide this service, potentially leaving PAC out of reach for many women. Most of these facilities provide delivery services, which indicates that they should also be able to offer basic care for abortion-related complications.[12]

Contraceptive counseling is widely offered (79% of all facilities); however, only about half of all facilities actually provide women with a range of modern, reversible contraceptive methods and only one-third of referral/higher-level facilities provide a permanent method. Providing comprehensive contraceptive counseling and a choice of modern methods at the time of postabortion care helps women and couples make informed decisions to achieve their reproductive and family planning goals.

Research on health systems' capacity to provide PAC services that meet WHO-recommended standards of care has been conducted in other countries.[12] This research shows that the proportion of facilities that can fully meet recommended standards of care for PAC—that is, to provide all recommended components—is generally not as high as the proportions providing some specific components. While further in-depth research for Pakistan is planned to examine the capacity to fully meet required standards of care described in MoNHSRC and global guidelines for quality postabortion care, our findings highlight the unfinished goal of providing well-rounded services to women in need. More information on PAC services in Pakistan, including the number of women treated for complications, is available in the full study report.[11]

Concerted efforts are needed to address the gaps in the availability of quality PAC services in both the public and private sectors in Pakistan, particularly among primary-level facilities that are most accessible to the majority of women who live in rural areas. PAC services should be expanded and strengthened to meet the needs of women with abortion complications and to reduce the negative impacts of inadequate quality, coverage and timeliness of postabortion care on women's health and survival.

TABLE 3. Capacity to provide components of postabortion care among primary-level facilities and referral or higher-level facilities, by sector, Pakistan, 2023

	% Public	% Private	% All facilities
% of primary-level facilities capable of providing the following postabortion care components			
Provision of antibiotics	98	86	93
Provision of oxytocin/ergometrine	95	76	87
Provision of intravenous fluids	96	92	94
Ability to communicate with referral facilities by telephone or other means	39	75	54
Availability of a functional ambulance with fuel to transport patients needing referral	37	13	27
24-hour availability of on-duty or on-call staff capable of undertaking normal deliveries	47	52	49
No. of facilities	**232**	**216**	**448**
% of referral/higher-level facilities capable of providing the following postabortion care components			
Provision of antibiotics	100	86	92
Provision of oxytocin/ergometrine	95	85	89
Provision of intravenous fluids	100	89	93
Administration of blood transfusion	73	93	85
Provision of at least one permanent contraceptive method	27	40	35
Availability of a functional operation room	77	97	89
Provision of general anesthesia	67	78	74
24-hour availability of on-duty or on-call staff capable of doing cesarean section	77	85	82
No. of facilities	**63**	**85**	**148**

Note: Numbers of facilities are unweighted totals and percentages are weighted estimates.

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3rd Floor NTC Regional Headquarters Building (North), Sector F-5/1
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