Status of Comprehensive Abortion Care Service in Paschim Bardhaman District, West Bengal – A Mixed-Method Study

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Abstract

Background: Delivering quality comprehensive abortion care (CAC) service, accessible and affordable to all care seekers, at every tier is essential to reduce maternal morbidity and mortality. Objectives: The study aimed to assess the infrastructural availability of the health facilities, describe beneficiary characteristics, and to explore constraints in CAC service provision from the providers’ perspectives. Materials and Methods: A mixed-method study was conducted during December 2019 to February 2020 in Paschim Bardhaman District, West Bengal. All 10 public health facilities of the district providing CAC services were visited for infrastructural assessment. Record review of all care seekers from 2015 to 2018 was done to assess their characteristics. In-depth interview of the administrative heads of facilities and district level program officers was done to explore constraints faced in service provision. Quantitative data were analyzed by SPSS version 20, and qualitative data were analyzed thematically using NVivo software. Results: Physical infrastructure was adequate in only 40% of the facilities; however, drugs and contraceptives were universally available. About 49.5% of the care seekers had induced abortion; 63.5% underwent manual vacuum aspiration; 21.5% did not return for follow-up, and only 50% adopted postabortal contraception. Major issues explored were lack of trained manpower, logistics and physical infrastructure, and inadequate supervision and monitoring. Conclusion: The study highlighted gaps in preparedness of the health facilities for the provision of quality CAC services including some major constraints from the provider’s perspectives.

Keywords: Abortion, comprehensive abortion care, public health facilities, paschim bardhaman district, West Bengal

Background

Availability and access to safe abortion, an essential reproductive health need of women, are important components of health services to ensure respectful maternity.[1] Globally, every year around 4.7% to 13.2% of maternal deaths are attributed to unsafe abortion.[2] In India, only 22% of abortions were considered to be safe.[3] Approximately, 8% of maternal mortality are attributed to unsafe abortions during 2018.[3] Besides legal provision, abortion care to be effective, continuous improvement of service quality is required to be ensured to meet health-care needs and rights of women.[4] Substantial studies have been conducted on abortion care in India suggesting that stigma, lack of knowledge about safe services, and paucity of trained and accessible providers lead women to seek care from unsafe sources leading to adverse health consequences.[5]

The provision of safe abortion services is one of the strategies in India under the reproductive and child health program.[6] However, besides strategies and guidelines, the facilities providing services are required to be appropriately equipped and responsibly functional. In contrary to this, studies in some states reported low availability of abortion services.[7-11] Thus, the need for comprehensive abortion care (CAC) strategy has been felt, developed, and implemented in India in a phased manner.[12] The elements of CAC include medical and surgical methods of termination of pregnancy, postabortal contraception, and follow-up.[13]

West Bengal, the fourth most populous state of India, accounts for 10% of overall registered abortions.[1] Limited studies
could be retrieved which evaluated implementation of various interventions, programs, and policies on safe abortion in West Bengal. In Paschim Bardhaman district also, the CAC service is being provided since 2015. However, various aspects of its implementation status and constraints remained unknown, better understanding of which might improve the service provision. In this perspective, the present study had been conducted in Paschim Bardhaman district to assess the availability of infrastructure and other resources of the health facilities for CAC service provision, sociodemographic profile, and abortion care-seeking characteristics of the women. Constraints in service provision from the providers’ perspectives have also been explored.

**Materials and Methods**

A descriptive mixed-method study with a qualitative component was conducted in cross-sectional design across 10 public health delivery facilities providing CAC services, during December 2019 to February 2020 in Paschim Bardhaman District, West Bengal. Review of records of all the abortion care seekers was done for a reference period of 3 years (2015–2018) at these 10 facilities – one district hospital, one subdivisional hospital, and eight block-level facilities. Health administrators of the selected facilities including the district level program officers for CAC were considered as study participants for the qualitative component of the study.

**Quantitative part**

Selected health facilities were visited for data collection using a predesigned pretested schedule. Facilities were observed regarding physical infrastructure and other resources required for CAC with a standard checklist adapted from the manual on CAC, developed by the Ministry of Health and Family Welfare.[3] Relevant records/registers available in the facilities (CAC register, opinion form, admission register, etc.), were reviewed for the reference period. Profile and characteristics (age, religion, method of pregnancy termination, reasons for termination, postabortal contraception, follow-up, etc.) of abortion care seekers were collected.

**Qualitative part**

In-depth interview of purposively selected 10 incharges of the facilities (doctors) was undertaken with a predesigned in-depth interview guide for exploring the constraints of abortion care service provision from the providers’ perspective and data saturation reached.

**Data analysis**

Quantitative data were analyzed using SPSS software version 20 (Armonk, NY: IBM Corp. Released 2011). Availability of infrastructure was assessed by assigning a score of 1 for availability and 0 for nonavailability, in specified domains of six broad areas, e.g., medical method of abortion (MMA) drugs, physical infrastructure, equipment, medicines, contraceptives, and logistics. In each area, the score is expressed out of 100, giving rise to a maximum attainable score of 600 for any given institution. More was the score; more equipped was the facility to provide the desired service. Qualitative data were analyzed thematically. The one-to-one interviews were recorded, audio-taped, and transcribed as verbatim. The interviews were read word by word, data were extracted. Deciding the unit of analysis, all the text data were coded inductively from units to categories. The final text report and hierarchical cluster analysis were prepared from the summary of the coded text condensed into different themes. These themes represented the collective understanding of the text data pertaining to perceived constraints. The qualitative data were analyzed using NVivo (Release 1.0, QSR International) software and reported following consolidated criteria for reporting qualitative research guidelines.

**Ethical considerations**

Ethical clearance was obtained from the Institutional Ethics Committee (IEC) of Burdwan Medical College and Hospital (Memo No: BMC/3320, dated. 23.12.19). Before in-depth interview, informed consent was obtained from the participants. The confidentiality and anonymity of information were strictly maintained.

**Results**

**Infrastructural availability**

Only 4 (40%) facilities had adequate physical infrastructure, i.e. all the recommended infrastructural provisions for CAC service. There were no resource constraints for MMA drugs and contraceptives in any of the institutions. Almost all the equipment, except bowl, and strainer for tissues were present in 70% of the centers, whereas about half of the required equipment were unavailable in one block-level facility [Figure 1]. None of the facilities had a trained counselor and 50% did not have any separate counseling room. Similar pattern of infrastructural deficits was observed in both district and block-level facilities [Table 1].

**Beneficiary profile**

Table 2 described the profile of abortion care seekers. Nearly 67.2% of them were between 20 and 29 years and 23% were between 30 and 39 years, almost all were married (99.8%); 79.6% belonged to Hinduism and the rest to Islam. The gestational periods in most of the cases were 7 weeks or less (82%). Induced and incomplete abortions were 49.5% and 47.6%, respectively; manual vacuum aspiration (MVA) was the mode of abortion for majority (63.5%); 21.5% care seekers did not attend any follow-up visit. The status of postabortal contraception was “unknown” for 33% of the cases; 17% of the beneficiaries refused to adopt any contraception.

**Constraints in service provision from the providers’ perspectives**

In relation to the constraints in abortion care service provision, the following themes were derived through in-depth interviews, as depicted in Figure 2, and each theme is described below.
One interviewee said, “Manpower shortage, no trained staff nurse, a single scavenging staff and myself are only trained. It is not possible to give service every day or even on fixed days when there is meeting or other training programs…Counselor is there but not trained.”

“Other medical officers may be trained for CAC and designated particularly for this program. Re-orientation of the trained manpower will be of immense help.”

**Physical infrastructure and logistics**

No health facilities had the required physical infrastructure, IEC materials, provision of privacy, and confidentiality, as per the CAC guideline. Precounseling room and designated procedure room were absent in all facilities.

“Old building with no area for extension…abortion is done in Labour room …No preprocedure room is there…trying to utilize the existing infrastructure for maximum service provision.”

“In spite of maintaining good quality of service and hygienic control, the patients lose confidence on us due to our poor infrastructure, lack of privacy and confidentiality.”

**Abortion care service**

Issues related to postabortion contraception, postprocedure follow-up visits, adherence to guidelines; information and communication were found to be major hindrances.

Postabortion contraception was not accepted by all beneficiaries, and postprocedure follow-up visits were not found to be recorded against all care seekers.

One interviewee said, “Most are not coming for follow-up…. Those who come are not willing to accept contraceptive methods…this is a vicious cycle. Not adopting contraceptives-unwanted pregnancy-induced abortion-no contraceptives-unwanted pregnancy again most of them don’t give proper address.”

Guideline was adhered to at every facility except at district hospital. The interviewee at district hospital level said, “Most of the MVA cases under CAC program are written as D/E and therefore not reported…otherwise huge number of abortion is being performed daily but with old conventional methods…. The number of CAC performances which are reflected in the government portal…I feel is underreported…”

Lack of proper information and communication regarding postabortion services was particularly due to the absence of any counseling service during or after the procedure:

“If the lady counselor is trained then, when she goes for her field visit, she can help in IEC and record keeping.”

**Supervision and monitoring**

Supervision and monitoring seemed to be an important factor in quality service provision. Two important components of this theme were monitoring and record keeping.

One respondents said, “BMOH should be relieved from this responsibility of nodal person of CAC and a separate monitoring officer to be designated for this purpose. Staff nurse should receive an elaborate training which is not so, at present record keeping part should be given due importance.”

A district-level interviewee added: “Supervision and monitoring is not up to the benchmark due to lack of officers and mobility support …supervising tier at sub district level is also deficient … lack of BPHN, PHN also affecting the program at the block level.”

**DISCUSSION**

This study in mixed-method approach revealed deficiencies and constraints in effective implementation of CAC services in Paschim Bardhaman district.

Overall preparedness of the facilities for quality service provision is yet suboptimal. None of the institutions had adequate infrastructural provisions, similar to a study in South 24 Parganas, West Bengal, where only 26.2% of the centers were equipped for adequate service provision and only 50% had IEC materials, similar to the present study findings (56.3%).[1]

Majority (67.2%) of the beneficiaries were early adults, of the age group of 20–29 years, similar to a study in Maharashtra:[14] 81.4% of the abortions were conducted within 8 weeks, similar to a study by Sayami (88.6%)[15] but lower than a study conducted in West Bengal (57.5%).[1] The major reason for seeking abortion care in the present study was documented as contraceptive failure (94.8%), contrary to unknown reason for 77.5% cases reported by another study in West Bengal.[1] Medical method of termination was adopted in 17.1%, similar to a study conducted in Nepal (14%);[13] among the rest (82.9%) who had not undergone MMA, only 63.5%
had MVA as method of abortion, similar to findings from health facility surveys (HFS) in other states (64%).[16] About 19.4% beneficiaries undergone D/E in contrary to CAC guidelines. Similar deviation was noted in HFS data (surgical methods in 5%)[16] and in a study from West Bengal (surgical methods in 80%).[1] This reveals that despite the availability of newer and safer intervention technologies, they are not being implemented at ground level.

Constraints and key areas of concern in delivering quality abortion service to the care users as explored through in depth interviews in the present study [Figure 2] need to be duly considered and acted upon.

**Human resource**

Unavailability of adequately trained manpower to continuously meet the needs and rights of women emerged as the greatest concern. In most of the cases, there is only one trained medical officer, entrusted with many simultaneous assignments leading to prolonged waiting time of service seekers or referral to higher center. An absolute shortage of trained counselors dedicated for CAC has led to suboptimal provision of service components, particularly follow-up and postabortal contraception. Besides shortage of human resources, lack of communication between the district and block level health authorities regarding orientation of existing manpower has impeded effective implementation of CAC services at all levels. Training, retraining, and capacity building were emphasized, and reorientation of previously trained personnel was also highlighted.

**Physical infrastructure and logistics**

CAC, a woman-centered approach, needs dedicated space for ensuring privacy, confidentiality, and dignity. This is found grossly inadequate along with shortage of IEC materials and activities. Generating awareness for early care seeking among the beneficiaries will help to reduce the complications at large.

| Facilities                     | Physical infrastructure                               | Equipment                  | Medicine                                             | Logistics                                      | Trained manpower          |
|--------------------------------|------------------------------------------------------|----------------------------|------------------------------------------------------|-----------------------------------------------|----------------------------|
| Asansol                        | Counseling room; screen for privacy                 | Bowl and strainer          | Injection aminophylline; injection sodium bicarbonate; injection Calcium gluconate | Consent form; poster; booklet; flipbook       | Trained counselor          |
| Durgapur Sub Divisional Hospital | -                                                   | Bowl and strainer          |                                                     | Consent form; booklet; flipbook               | Trained counselor          |
| Panagarh rural hospital (block) | Counseling room; Preprocedure examination room     | Anterior. vaginal wall retractor, cheatle forceps; bowl and strainer, cidex tray | RMP opinion form (Form I); booklets; leaflets; flipbooks | Trained counselor          |
| Laudoha rural hospital (block)  | Counseling room; screen for privacy                | Bowl and strainer          |                                                     | Consent form; booklet; flipbook               | Trained counselor          |
| Andal rural hospital (block)    | Counseling room; preprocedure examination room. foot step | Anterior. vaginal wall retractor, bowl and strainer, cidex tray | Consent form; poster; booklet; leaflets; flipbook   | Trained counselor          |
| Raniganj block primary health center | Counseling room; examination table                 | Bowl and strainer          |                                                     | Consent form; poster; leaflets; flipbook      | Trained counselor          |
| Akhalpur block primary health center | All physical infrastructure                         | Instrument trolleys; OT slipper; plastic gown; surgical mask; head cap; trolley sheets; anterior. vaginal wall retractor; cheatle forceps; bowl and strainer; Ambu bag; autoclave; boiler, cidex tray; utility gloves | Local anesthetics, uterotonics; injection adrenaline; injection aminophylline; injection sodium bicarbonate; injection Calcium gluconate; injection dopamine | Consent form; poster; booklets; leaflets; flipbook | Trained counselor          |
| Barabani block primary health center | -                                                   | Bowl and strainer          | Injection sodium bicarbonate; injection Calcium gluconate; injection dopamine | Booklet; flipbook                           | Trained MO, Staff Nurse, trained counselor |
| Bhadrapur block primary health center | -                                                   | Bowl and strainer          | Injection sodium bicarbonate; injection Calcium gluconate; injection dopamine | Booklet; leaflets; flipbook                  | Trained counselor          |
| Pithaikery block primary health center | -                                                   | Bowl and strainer          | Injection aminophylline; injection sodium bicarbonate; injection calcium gluconate | Booklet; flipbook                           | Staff Nurse, trained counselor |

Staff nurse, OT: Operation theatre, OM: Medical officer

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**Table 1: Facility-wise infrastructural deficits with respect to different requirements**

| Facilities                     | Physical infrastructure                               | Equipment                  | Medicine                                             | Logistics                                      | Trained manpower          |
|--------------------------------|------------------------------------------------------|----------------------------|------------------------------------------------------|-----------------------------------------------|----------------------------|
| Asansol                        | Counseling room; screen for privacy                 | Bowl and strainer          | Injection aminophylline; injection sodium bicarbonate; injection Calcium gluconate | Consent form; poster; booklet; flipbook       | Trained counselor          |
| Durgapur Sub Divisional Hospital | -                                                   | Bowl and strainer          |                                                     | Consent form; booklet; flipbook               | Trained counselor          |
| Panagarh rural hospital (block) | Counseling room; Preprocedure examination room     | Anterior. vaginal wall retractor, cheatle forceps; bowl and strainer, cidex tray | RMP opinion form (Form I); booklets; leaflets; flipbooks | Trained counselor          |
| Laudoha rural hospital (block)  | Counseling room; screen for privacy                | Bowl and strainer          |                                                     | Consent form; booklet; flipbook               | Trained counselor          |
| Andal rural hospital (block)    | Counseling room; preprocedure examination room. foot step | Anterior. vaginal wall retractor, bowl and strainer, cidex tray | Consent form; poster; booklet; leaflets; flipbook   | Trained counselor          |
| Raniganj block primary health center | Counseling room; examination table                 | Bowl and strainer          |                                                     | Consent form; poster; leaflets; flipbook      | Trained counselor          |
| Akhalpur block primary health center | All physical infrastructure                         | Instrument trolleys; OT slipper; plastic gown; surgical mask; head cap; trolley sheets; anterior. vaginal wall retractor; cheatle forceps; bowl and strainer; Ambu bag; autoclave; boiler, cidex tray; utility gloves | Local anesthetics, uterotonics; injection adrenaline; injection aminophylline; injection sodium bicarbonate; injection Calcium gluconate; injection dopamine | Consent form; poster; booklets; leaflets; flipbook | Trained counselor          |
| Barabani block primary health center | -                                                   | Bowl and strainer          | Injection sodium bicarbonate; injection Calcium gluconate; injection dopamine | Booklet; flipbook                           | Trained MO, Staff Nurse, trained counselor |
| Bhadrapur block primary health center | -                                                   | Bowl and strainer          | Injection sodium bicarbonate; injection Calcium gluconate; injection dopamine | Booklet; leaflets; flipbook                  | Trained counselor          |
| Pithaikery block primary health center | -                                                   | Bowl and strainer          | Injection aminophylline; injection sodium bicarbonate; injection calcium gluconate | Booklet; flipbook                           | Staff Nurse, trained counselor |
**Table 2: Characteristics of the beneficiaries availing comprehensive abortion care services** *(n=1221)*

| Characteristics                              | Frequency (%) |
|----------------------------------------------|---------------|
| **Gestational period (weeks)**               |               |
| ≤7                                           | 997 (81.8)    |
| 8-12                                         | 212 (17.4)    |
| 13-20                                        | 10 (0.8)      |
| **Nature of abortion**                       |               |
| Induced                                      | 605 (49.5)    |
| Incomplete                                   | 581 (47.6)    |
| Septic                                       | 20 (1.6)      |
| Missed                                       | 15 (1.3)      |
| **Reason of abortion**                       |               |
| Contraceptive failure                        | 1158 (94.8)   |
| Hazardous to continue pregnancy              | 63 (5.2)      |
| **Mode of abortion**                         |               |
| MVA                                          | 775 (63.5)    |
| MMA                                          | 209 (17.1)    |
| D/E                                          | 237 (19.4)    |
| D/C                                          | 0             |
| **Follow-up**                                |               |
| Done                                         | 820 (67.2)    |
| Not done                                     | 263 (21.5)    |
| Status unknown                               | 138 (11.3)    |
| **Postabortal contraceptives**                |               |
| PAIUCD                                        | 323 (26.5)    |
| OCP                                          | 232 (19.0)    |
| Condoms                                      | 63 (5.2)      |
| Refused                                      | 203 (16.6)    |
| Status unknown                               | 400 (32.7)    |

MVA: Manual vacuum aspiration, MMA: Medical method of abortion, PAIUCD: Postabortal intrauterine contraceptive device, OCP: Oral Contraceptive Pill, D/E: Dilatation and Evacuation, D/C: Dilatation and Curettage

**Abortion care services**

In the present study, only 67.2% of beneficiaries came for follow-up, which appears to be a serious constraint. Effective IEC activity could significantly improve the situation.

Deviation from the guidelines in regard to service provision was also found, though only at district hospital level. Almost all the surgical methods were other than MVA, which was not popular among the medical officers. Moreover, these cases were not documented being under reported as abortion cases.

**Supervision and monitoring**

Medical termination of pregnancy (MTP) providers appeared to be unaware of the mandatory requirements imposed by the MTP act for recording of cases. Abortions conducted through medical methods are grossly under reported similar to a study in Jharkhand.(8) Although lack of access to safe abortion has always been recognized as a significant medical and social problem, it has failed to occupy due priority.

No monitoring of the facilities is done at the state level, as also observed in a study in Jharkhand.(8) A designated nodal person other than the administrative heads along with a dedicated team might bring favorable change in the present status of CAC program.

**CONCLUSION**

Despite CAC services are being implemented in public health facilities since years, facilities in Paschim Bardhaman district are facing challenges to implement it properly due mainly to lack of infrastructure, shortage of trained manpower, especially trained counselor, inadequate logistics, and issues regarding overall monitoring and supervision of the program. Beside facility-level measures, focused and priority attention from the state and district level health authorities is warranted for addressing the issues revealed through the present study.

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**Conflicts of interest**

There are no conflicts of interest.

**REFERENCES**

1. Pyne S, Ravindran TK. Availability, utilization and health providers’ attitudes toward safe abortion services in public health facilities of a district in West Bengal, India. Womens Health Rep 2020;1:80-8.
2. Say L, Chou D, Gemmill A, Tuncalp O, Moller AB, Daniels J, et al. Global causes of maternal death: A WHO systematic analysis. Lancet Glob Health 2014;2:e233-33.
3. Ministry of Health and Family Welfare Government of India. Comprehensive Abortion Care. 2nd ed. New Delhi: Ministry of Health and Family Welfare Government of India; 2018.
4. Mossie Chekol B, Adera Abdi D, Andualem Adal T. Dimensions of patient satisfaction with comprehensive abortion care in Addis Ababa, Ethiopia. Reprod Health 2016;13:144.
5. Stillman M, Frost JI, Singh S, Moore AM, Kalyanwala S. Abortion in India: A Literature Review. New York: Guttmacher Institute; 2014. p. 12-4.
6. Ministry of Health and Family Welfare, Government of India. Implementation Guide on RCH II. New Delhi, India: Ministry of Health and Family Welfare, Government of India; 2005. Available from: https://nhm.gov.in/images/pdf/programmes/arsh/guidelines/implementation_guide_on_rch-2. [Last accessed on 2020 Mar 03].
7. Aich P, Banerjee SK, Jha TK, Aggarwal A, Sinha D. Situation Analysis of MTP Services in Bihar. New Delhi, India: Ipas India; 2011. p. 45.
8. Aich P, Banerjee SK, Jha TK, Aggarwal A, Sinha D. Situation Analysis
of MTP Services: Jharkhand. New Delhi, India: Ipas India; 2011. p. 22.

9. Banerjee SK, Clark KA, Warvadekar J. Results of a Government and NGO Partnership for Provision of Safe Abortion Services in Uttarakhant, India. New Delhi, India: Ipas India; 2009.

10. Banerjee SK, Andersen KL, Warvadekar J. Pathways and consequences of unsafe abortion: A comparison among women with complications after induced and spontaneous abortions in Madhya Pradesh, India. Int J Gynaecol Obstet 2012;118 Suppl 2:S113-20.

11. Deepa N, Gulati S, Wavadekar J, Banarjee SK. Improving Comprehensive Abortion Care Services in Chhattisgarh through State Government-Ipas Partnership: A Facility Baseline Assessment. New Delhi, India: Ipas India; 2010.

12. Deepa N, Warvadekar J, Gulati S, Banarjee SK, Aggarwal P. Improving Comprehensive Abortion Care Services in Meghalaya through State Government-Ipas Partnership: A facility Baseline Assessment. New Delhi, India: Ipas India; 2011.

13. Ministry of Health and Family Welfare. Comprehensive Abortion Care Training and Service Delivery Guidelines. New Delhi: Government of India; 2010.

14. Kumar N. Current abortion practices in India: A review of literature. Int J Reprod Contracept Obstet Gynecol 2014;3:293-300.

15. Sayami JT. Trends in Comprehensive Abortion Care (CAC) and characteristics of women receiving abortion care in a tertiary hospital in Nepal. BMC Womens Health 2019;19:1-7.

16. Singh S, Shekhar C, Acharya R, Moore AM, Stillman M, Pradhan MR, et al. The incidence of abortion and unintended pregnancy in India, 2015. The Lancet Global Health. 2018;6:e111-20.