

Assessing Health System's Capacity to Provide Post-Abortion Care: Insights from Seven Low-and Middle-Income Countries

Sahar Razaⁱ, Rajon Banikⁱ, Syed Toukir Ahmed Noorⁱ, Esrat Jahanⁱ, Abu Sayeedⁱ, Nafisa Huqⁱⁱ, Shams El Arifeenⁱ, Anisuddin Ahmedⁱ, Ahmed Ehsanur Rahmanⁱ

ⁱicddr,b

ⁱⁱIndependent University, Bangladesh

Background

Post-abortion care (PAC) is considered an essential, life-saving health service^[1]. It encompasses a comprehensive package of services tailored to meet the needs of women who have undergone spontaneous or induced abortions. It includes both curative and preventive elements. More than 20 million women in the Low-and Middle-Income Countries (LMICs) require PAC services following unsafe abortions, yet only 6% of them receive

such care^[2]. Ensuring the availability, readiness, and functionality of PAC services within health facilities is crucial for addressing these unmet needs^[3]. However, limited and outdated evidence exists regarding healthcare facilities' current status and capacity to provide PAC, particularly in limited-resource settings.

Objective

To assess the current capacity of health systems to provide PAC services and report changes in this capacity over time across seven LMICs in three regions.

Method

- Analysed secondary data from Service Provision Assessment (SPA) surveys between 2015 and 2022.
- Across three regions in seven LMICs [Afghanistan, Bangladesh, Nepal, The Democratic Republic of Congo (DRC), Ethiopia, Senegal and Haiti].
- Included 2,951 primary facilities and 473 referral facilities offering normal delivery services.
- Evaluated primary facilities for basic PAC, while referral facilities for comprehensive PAC.
- Used Signal Function approach to assess PAC capacity across countries^[3]:

Signal functions (Expected functions for all facilities)

- Remove retained products of conception*
- Administer parenteral antibiotics*
- Administer parenteral uterotonics*
- Administer intravenous fluids**
- Provide at least one modern, short-acting family planning method at time of survey**

Basic post-abortion care

- Communicate with referral facilities**
- Has vehicle with fuel to transport patients needing referral**
- Has staff capable of undertaking normal deliveries on duty or who are on call for 24 hr per day, 7 days per week

Comprehensive post-abortion care

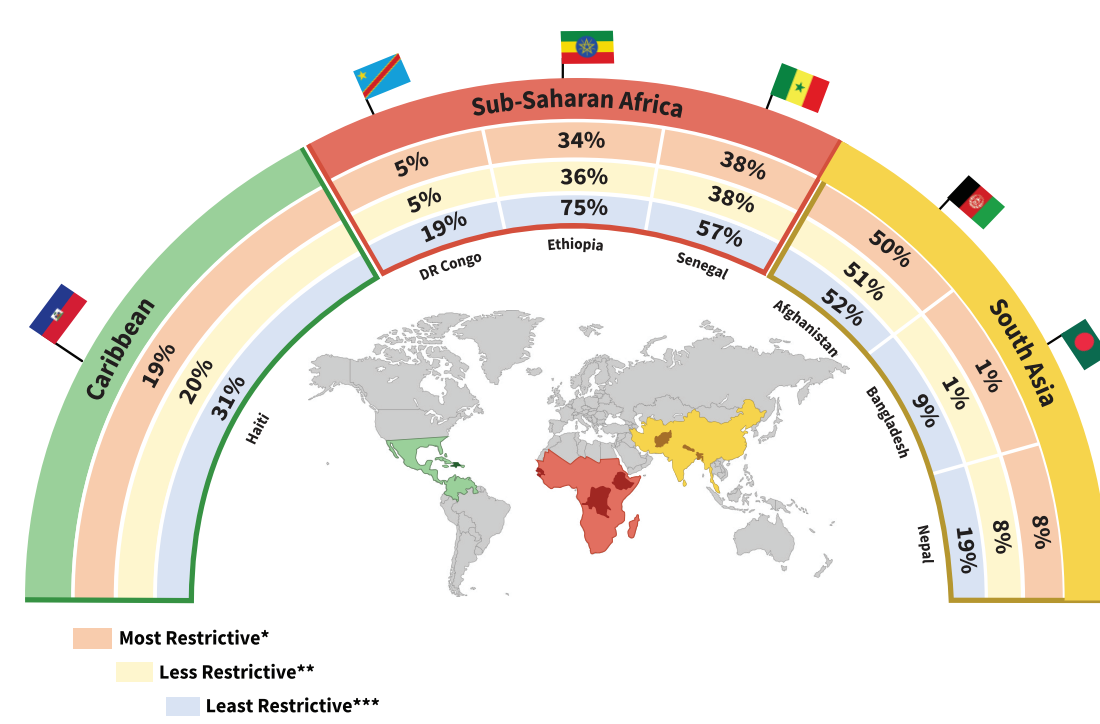
- Administer a blood transfusion*
- Undertake major abdominal surgery (proxied by provision of caesarean section)*
- Provided at least one long-acting, reversible family planning method** or permanent method at gnntime of survey
- Has staff capable of doing caesarean sections on duty or who are on call 24 hr per day, 7 days per week***

*Assessed on the basis of facility reporting if they had ever provided the service.

Assessed on the basis of the availability and validity or functionality of a given item (drug or equipment) at the time of survey. *Assumed that staff who were capable of doing caesarean sections were also capable of doing normal deliveries, and therefore did not include this factor in comprehensive capability.

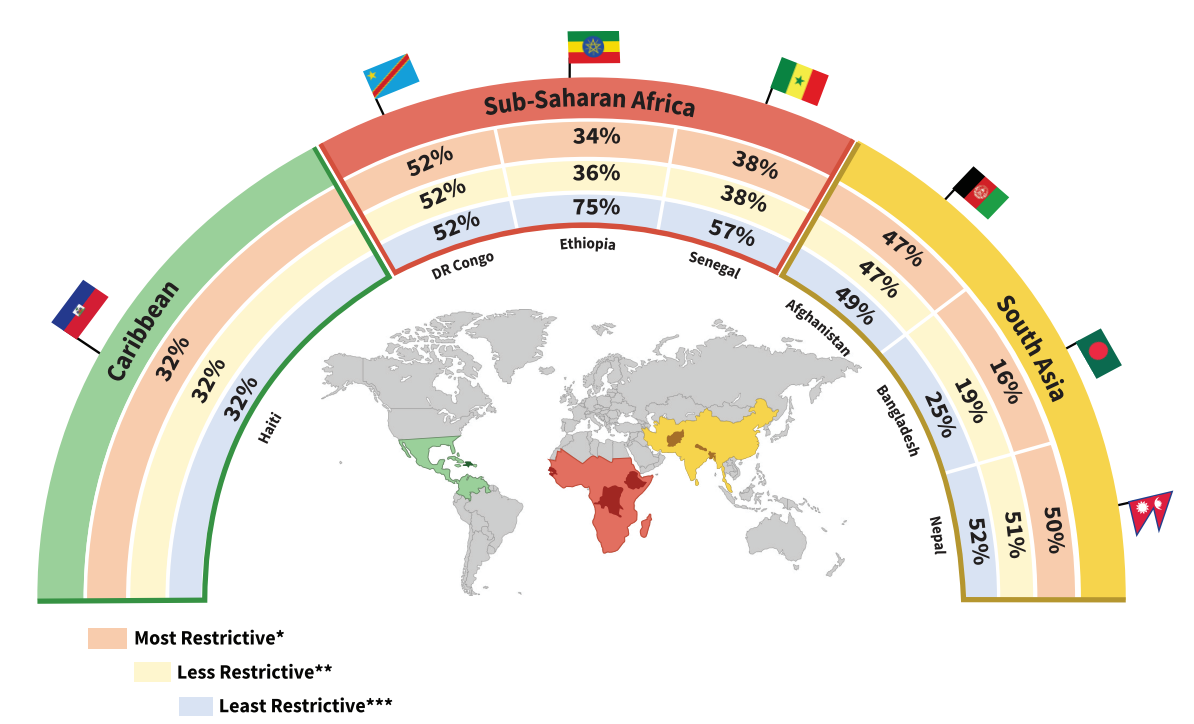
Results

Figure-1: Capacity to provide Basic PAC



*All indicators. **Excluding staff with delivery ability for 24 hr per day, 7 days per week. ***Excluding staff with delivery ability for 24 hr per day, 7 days per week, and referral ability, including availability of short-acting, long-acting, or permanent family planning methods.

Figure-2: Capacity to provide Comprehensive PAC



*All indicators. **Excluding staff with caesarean ability for 24 hr per day, 7 days per week. ***Excluding undertake major abdominal surgery ability and staff with caesarean ability for 24 hr per day, 7 days per week.

Not to scale

Table-1: Status of signal functions to provide basic PAC services among primary facilities offering delivery services in seven LMICs, 2015-2022

Basic Signal Functions	Caribbean		Sub-Saharan Africa		South Asia	
	Afghanistan (n=67)	Bangladesh (n=266)	Nepal (n=102)	DRC (n=1196)	Ethiopia (n=193)	Senegal (n=231)
1. Removal of retained products of conception (%)	84	39	40	63	86	74
2. Administer parenteral antibiotics (%)	84	98	31	79	94	77
3. Administer parenteral uterotonics (%)	94	50	56	96	99	95
4. Administer intravenous fluids (%)	100	45	58	81	97	94
5. Modern short-acting family planning methods available (%)	80	98	59	6	99	95
6. Capacity to communicate with referral facilities (%)	93	8	18	51	48	77
7. Vehicle with fuel for referral (%)	91	13	48	16	88	70
8. Staff capable of undertaking vaginal deliveries available 24 hr per day, 7 days per week (%)	95	48	58	96	93	99

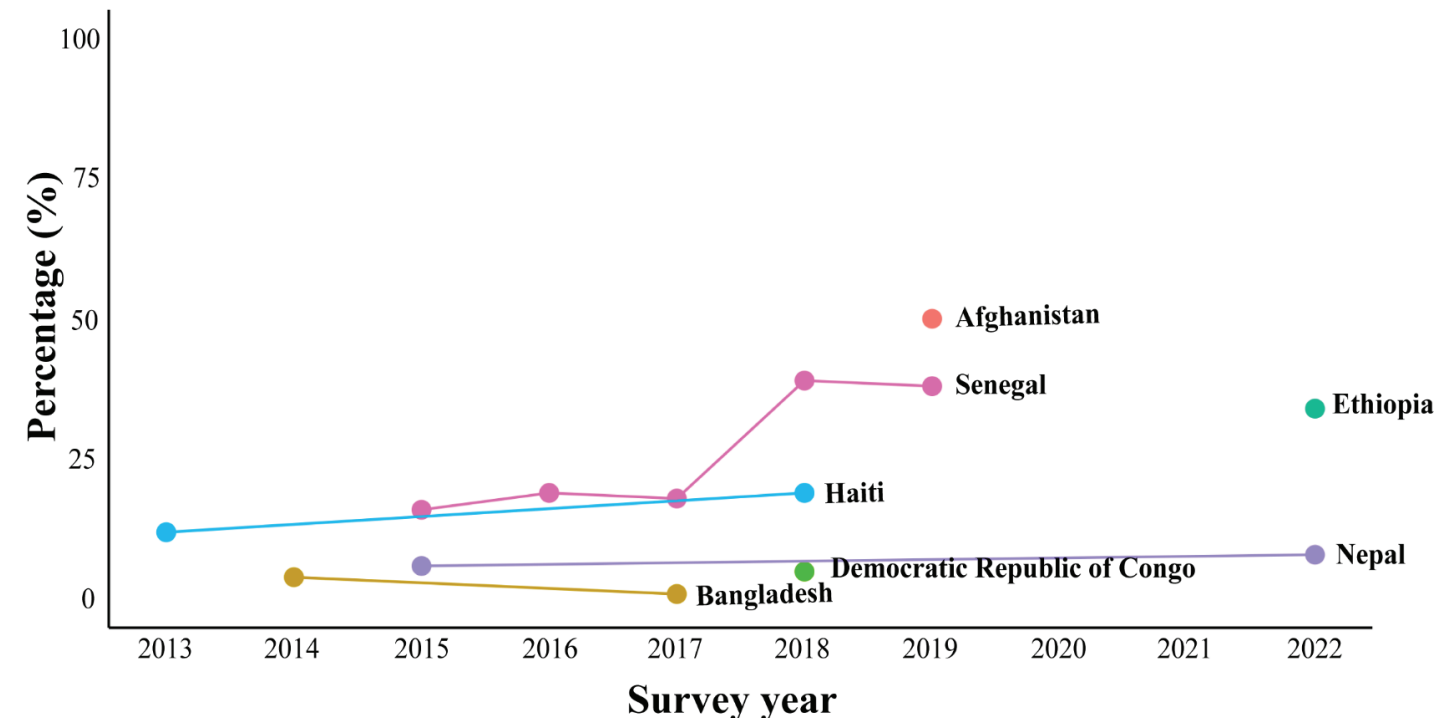
Below 50% 50 to 80% 80 to 100%

Table-2: Status of signal functions to provide comprehensive PAC services among referral facilities offering delivery services in seven LMICs, 2015-2022

Comprehensive Signal Functions	Caribbean		Sub-Saharan Africa		South Asia	
	Afghanistan (n=45)	Bangladesh (n=92)	Nepal (n=112)	DRC (n=24)	Ethiopia (n=65)	Senegal (n=103)
1. Removal of retained products of conception (%)	97	75	79	82	97	87
2. Administer parenteral antibiotics (%)	92	99	69	95	99	96
3. Administer parenteral uterotonics (%)	92	97	75	99	99	100
4. Administer intravenous fluids (%)	100	94	78	93	96	100
5. Modern short-acting family planning methods available (%)	90	74	70	80	95	75
6. A blood transfusion (%)	78	54	59	98	87	79
7. Undertake major abdominal surgery (proxied by provision of caesarean section) (%)	92	65	58	98	92	79
8. Provided at least one long-acting, reversible family planning method or permanent method at time of survey (%)	82	91	68	90	98	100
9. Has staff capable of doing caesarean sections on duty or who are on call 24 hr per day, 7 days per week (%)	90	61	57	97	91	79

Below 70% 70 to 90% 90 to 100%

Figure-3: Trends in capacity to provide basic PAC services in primary facilities across seven LMICs.



- In terms of basic PAC services in primary facilities, the capacity of **Senegal** (from 16% in 2015 to 38% in 2019; $p=0.001$) and **Haiti** (from 12% in 2013 to 19% in 2018; $p=0.007$) increased.
- The capacity of **Bangladesh** decreased (from 4% in 2014 to 1% in 2017; $p=0.016$) over time.

Conclusion

- There are substantial gaps in the capacity to provide basic and comprehensive PAC services in the selected countries.
- Investing in primary health care and improving communication and transportation should be the priority for enhancing basic PAC services.
- Strengthening referral hospitals to effectively handle emergencies and conduct major surgeries can significantly bolster the capacity to provide comprehensive PAC services.

References:

- Huber D, Curtis C, Irani L, Pappa S, Arrington L. Postabortion care: 20 years of strong evidence on emergency treatment, family planning, and other programming components. *Global Health Science and Practice*. 2016. doi:10.9745/GHSP-D-16-00052;
- Sully EA, Biddlecom A, Darroch JE, Riley T, Ashford LS, Lince-Deroche N, et al. Adding it up: investing in sexual and reproductive health 2019. 2020;
- Campbell OMR, Aquino EML, Vwalika B, Gabrysch S. Signal functions for measuring the ability of health facilities to provide abortion services: An illustrative analysis using a health facility census in Zambia. *BMC Pregnancy Childbirth*. 2016;16. doi:10.1186/s12884-016-0872-5.