

MCSA LAC Main Paper

## Supplementary Information

## Annex I. Facility Characteristics

|   | Argentina | Bolivia   | Brazil    | Dominican Republic | El Salvador | Peru      |
|---|-----------|-----------|-----------|--------------------|-------------|-----------|
| <b>Number of participating facilities</b>   | <b>13</b> | <b>11</b> | <b>20</b> | <b>7</b>           | <b>5</b>    | <b>14</b> |
| <b>Location</b>   |           |           |           |                    |             |           |
| Urban   | 13        | 11        | 19        | 4                  | 5           | 14        |
| Rural   | 0         | 0         | 1         | 3                  | 0           | 0         |
| <b>Facility level</b>   |           |           |           |                    |             |           |
| Primary   | 0         | 0         | 0         | 0                  | 0           | 1         |
| Secondary   | 4         | 7         | 8         | 1                  | 4           | 3         |
| Tertiary  | 8         | 4         | 11        | 6                  | 1           | 9         |
| Other   | 0         | 0         | 1         | 0                  | 0           | 1         |
| <b>Resources currently used at facility</b>   |           |           |           |                    |             |           |
| Safe Abortion Guidance/Clinical Handbook  | 13 (100)  | 8 (72.7)  | 11 (61.1) | 6 (85.7)           | 5 (100)     | 8 (57.1)  |
| WHO guidelines (e.g. for postpartum haemorrhage)  | 13 (100)  | 8 (72.7)  | 17 (94.4) | 5 (71.4)           | 5 (100)     | 10 (71.4) |
| Evidence-based, locally adapted guidelines  | 13 (100)  | 8 (72.7)  | 12 (66.7) | 5 (71.4)           | 5 (100)     | 13 (92.9) |
| Clinical audits (e.g. maternal deaths reviews)  | 12 (92.3) | 10 (90.9) | 17 (94.4) | 6 (85.7)           | 5 (100)     | 14 (100)  |
| <b>Surgical abortion method employed for gestational age up to 12-14 weeks</b>                                    | 12 (92.3) | 9 (81.8)  | 18 (90.0) | 1 (14.3)           | 5 (100)     | 14 (100)  |
| <b>Medical abortion offered at the facility (including medical management of incomplete abortion)<sup>1</sup></b> | 13 (100)  | 6 (54.6)  | 19 (95.0) | 4 (57.1)           | 3 (60.0)    | 11 (78.6) |
| <b>Abortion for gestational age &gt;13 weeks offered at facility</b>  | 12 (92.3) | 7 (63.6)  | 16 (80.0) | 5 (71.4)           | 1 (20.0)    | 10 (71.4) |
| <b>Post-abortion contraception offered at facility</b>  | 13 (100)  | 10 (90.9) | 10 (55.6) | 6 (85.7)           | 5 (100)     | 14 (100)  |

<sup>1</sup> Country recognized approval of misoprostol and mifepristone: None: El Salvador (although misoprostol is listed in the National Essential Medicines List) / Misoprostol: Argentina, Bolivia, Brazil, Dominican Republic, Peru / Mifepristone: not registered in any of the countries.

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**Annex II. Criteria for hierarchal classification of abortion-related complications**

| <b>Mild<br/>(3693, 46.3%)</b>  |              | <b>Moderate<br/>(3948, 49.5%)</b>   |              | <b>Potentially-life threatening<br/>complications (PLTC) (245, 3.1%)</b> |              | <b>WHO Near-Miss Criteria (84,<br/>1.1%)</b> |              |
|--|--------------|---|--------------|--|--------------|--|--------------|
| <b>Signs and symptoms on initial<br/>assessment</b>  | <b>N (%)</b> | <b>Symptoms</b>   | <b>N (%)</b> | <b>Symptoms</b>  | <b>N (%)</b> | <b>Organ<br/>dysfunction</b>                 | <b>N (%)</b> |
| Vaginal Bleeding   | 3056 (82.8)  | Bleeding<br><i>Heavy bright red vaginal bleeding (with or without clots), Blood soaked pads/towels/clothing, pallor</i>         | 3813 (96.6)  | Severe haemorrhage   | 138 (56.3)   | Cardiovascular                               | 25 (29.8)    |
| Cervix open  | 2238 (60.6)  | Suspected intra-abdominal injury<br><i>Abdominal pain/cramping, nausea, vomiting distended/tense/hard abdomen Shoulder pain</i> | 777 (19.7)   | Severe systemic infection  | 115 (46.9)   | Coagulation                                  | 23 (27.4)    |
| Abnormal vital signs<br><i>based on temperature, heart rate, systolic/diastolic blood pressure, and respiratory rate</i>               | 640 (17.3)   | Decreased bowel sounds, rebound, tenderness   |              | Uterine perforation  | 11 (4.5)     | Neurologic                                   | 15 (17.9)    |
| Uterine tenderness   | 463 (12.5)   | Infection<br><i>Chills, fevers, sweats Foul smelling vagina discharge History of interference with pregnancy</i>                | 179 (4.5)    |  |              | Hepatic                                      | 15 (17.9)    |
| Abnormal abdominal examination<br><i>Rebounding/guarding, Distended, decreased bowel sounds, tense/hard, tenderness on palpitation</i> | 485 (13.1)   |   |              |  |              | Uterine                                      | 15 (17.9)    |
| Cervical Motion Tenderness   | 356 (9.6)    |   |              |  |              | Renal  | 12 (14.3)    |
| Abnormal appearance<br><i>Sick-looking, pallor, jaundice, clammy</i>   | 190 (5.1)    |   |              |  |              | Respiratory                                  | 8 (9.5)      |
| Abnormal mental status<br><i>Agitated, lethargic, comatose</i>   | 187 (5.1)    |   |              |  |              |  |              |
| Foul smelling vaginal discharge  | 119 (3.2)    |   |              |  |              |  |              |
| Adnexal mass   | 12 (0.3)     |   |              |  |              |  |              |
| Evidence of foreign body   | 9 (0.2)      |   |              |  |              |  |              |

### **Annex III. Development of variables within dataset**

#### Abortion-related national, legal and policy environment

Considering the national, legal and policy environments for provision of safe abortion, a new open-access WHO Global Abortion Policies Database (GAPD) was launched <sup>1</sup>. It contains comprehensive information on the abortion laws, policies, health standards and guidelines for WHO and United Nations (UN) Member States, <sup>1,2</sup>. Using the open-access WHO GAPD, we described the national legal and policy environments surrounding abortion provision across the 6 Latin American and Caribbean countries in our study <sup>2</sup>.

We report abortion-related complications by national level characteristics that included grouping countries according to 1) availability of national guidelines (none or post-abortion care only, or induced and post-abortion care guidelines) and, 2) country-recognized essential medicines for medical abortion (none or misoprostol only or misoprostol and mifepristone).

#### Timing of abortion-related complications based on facility admission

Presentation of abortion-related complication variables were based on clinical admission in the facility. The admission assessment response options were: yes at arrival or within 24 hours of facility stay or yes after 24 hours of facility stay. Less than 0.5% of responses indicated the presentation of the abortion-related complications occurred after 24 hours of facility stay. Therefore, clinical admission indicators for abortion-related complications are interpreted as at arrival/within 24 hours of facility stay for the purposes of the analyses.

#### Annex IV. ACASI Selection Criteria<sup>1</sup>

Women with abortion-related complications who are admitted for a minimum of 24 hours and able and willing to consent; plus experiencing at least one of the following conditions:

- 1) Infection (defined as foul smelling discharge, fever, peritonitis, required parenteral antibiotics for treatment)
- 2) Haemorrhage/anaemia (defined as estimated blood loss > 1000cc, haemoglobin blood transfusion, shock)
- 3) Perforated organs or injury to reproductive organs (i.e. uterine rupture, cervical lacerations)
- 4) Complications which result in operative management

| Country        | Women with ACASI criteria | Women answering ACASI | Response rate |
|----------------|---------------------------|-----------------------|---------------|
| Argentina      | 47                        | 47                    | 100%          |
| Bolivia        | 77                        | 44                    | 57.1%         |
| Brazil         | 109                       | 70                    | 64.2%         |
| El Salvador    | 8                         | 0                     | 0%            |
| Peru           | 191                       | 112                   | 58.6%         |
| Dominican Rep. | 52                        | 52                    | 100%          |
| <b>TOTAL</b>   | <b>484</b>                | <b>327</b>            | <b>67.5%</b>  |

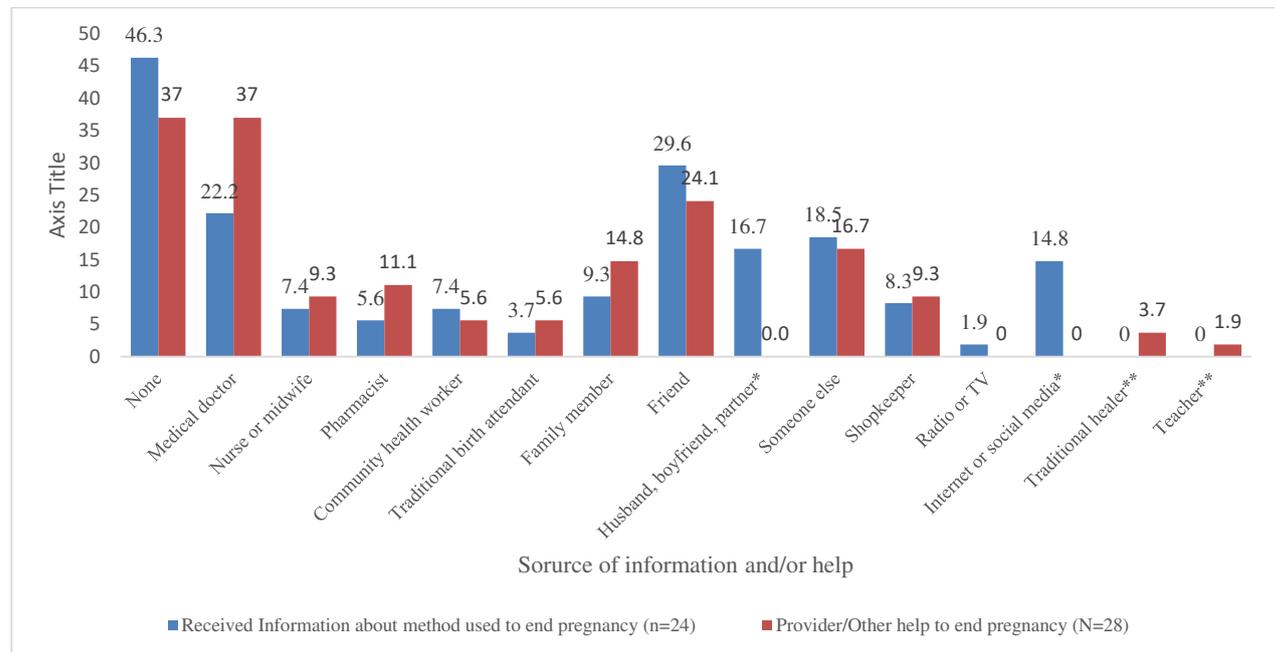
<sup>1</sup>These numbers were calculated based on the inclusion criteria and available data on admission and discharge dates at the country level.

### Annex V. National, sociodemographic and obstetric characteristics of ACASI study population by severity of abortion-related complications

|  | Entire population<br>(N=7983) | ACASI<br>(N=327) |
|--|-------------------------------|------------------|
| <b>SOCIODEMOGRAPHIC AND OBSTETRIC</b>                      |                               |                  |
| <b>Age (in years)</b>                                      | <b>7963</b>                   | <b>327</b>       |
| ≤19  | 964 (12.1)                    | 34 (10.4)        |
| 20 - 29  | 3720 (46.7)                   | 160 (48.9)       |
| ≥30  | 3279 (41.2)                   | 133 (40.7)       |
| <b>Marital Status</b>                                      | <b>7356</b>                   | <b>312</b>       |
| Single   | 651 (21.9)                    | 2852 (22.6)      |
| Other than single  | 2315 (78.1)                   | 9762 (77.4)      |
| <b>Education</b>   | <b>6736</b>                   | <b>293</b>       |
| No education   | 72 (1.1)                      | 4 (1.4)          |
| Primary  | 865 (12.8)                    | 49 (16.7)        |
| Secondary or more  | 5799 (86.1)                   | 240 (81.9)       |
| <b>Gainful occupation**</b>                                | <b>6441</b>                   | <b>271</b>       |
| Yes  | 2017 (31.2)                   | 108 (39.9)       |
| <b>Previous pregnancies</b>                                | <b>7944</b>                   | <b>326</b>       |
| 0  | 1984 (24.9)                   | 81 (24.9)        |
| 1 or more  | 5960 (75.0)                   | 245 (75.2)       |
| <b>Previous abortions</b>                                  | <b>5958</b>                   | <b>245</b>       |
| 0  | 3507 (58.9)                   | 142 (57.9)       |
| 1 or more  | 2451 (41.4)                   | 103 (42.0)       |
| <b>Gestational age (in weeks)*</b>                         | <b>7983</b>                   | <b>327</b>       |
| <13  | 5886 (73.7)                   | 180 (55.1)       |
| ≥13  | 995 (12.5)                    | 95 (29.1)        |
| Undetermined   | 1102 (13.8)                   | 52 (15.9)        |
| <b>Expulsion of products of conception before arrival*</b> | <b>7716</b>                   | <b>310</b>       |
| Yes  | 3061 (39.7)                   | 158 (50.9)       |

\*p-value <0.0001; \*\*p<0.05

### Annex VI. Self-reported sources of information and help used to end pregnancy (N=54)



\*Response option only included for information question

\*\*Response option only included for help question

## References

1. Johnson BR, Jr., Mishra V, Lavelanet AF, Khosla R, Ganatra B. A global database of abortion laws, policies, health standards and guidelines. *Bull World Health Organ* 2017; **95**(7): 542-4.
2. Johnson BR, Lavelanet AF, Schlitt S. Global Abortion Policies Database: a new approach to strengthening knowledge on laws, policies, and human rights standards. *BMC International Health and Human Rights* 2018; **18**(1): 35.