“Like a mother-daughter relationship”: Community Health Intermediaries’ knowledge of and attitudes to abortion in Karnataka, India

1. Abstract

Community Health Intermediaries (CHIs)- ANMs, ASHAs, and pharmacists- are key to realising task-sharing efforts to increase abortion access in LMICs, but their knowledge of and attitudes to abortion remains underexplored. Evidence on abortion task-sharing has focused primarily on CHIs’ technical and clinical abilities, overlooking social contexts and norms that influence attitudes and behaviours.

This mixed-methods study describes the abortion knowledge, attitudes, and roles of three cadres of CHIs in rural districts of Karnataka, India. Quantitative data on CHIs’ abortion attitudes (n=118) were collected using the Stigmatising Attitudes, Behaviours, and Actions Scale (SABAS), followed by in-depth interviews (n=21) with a subset of the population over eight months in 2017.

Findings show that CHIs, present at multiple points in women’s abortion trajectories, serve as barriers or facilitate access to abortion care. Their abortion attitudes reflect social contexts and environments, drawing on social norms surrounding fertility, woman- and mother-hood. They demonstrate poor knowledge of abortion laws, conflating them with sex-selection laws. CHIs also reflect poor knowledge of abortion methods. They report little to no training on abortion. CHIs contend with entrenched social and structural inequalities in carrying out their tasks, affecting the kind and quality of care they are able to provide. Understanding CHIs’ experiences, knowledge and attitudes can advance abortion care-provision, support task-sharing efforts, and potentially improve the quality of women’s abortion-seeking experiences.
Keywords: India; abortion; abortion attitudes; abortion stigma; community health intermediaries; task-sharing; community health workers

2. Introduction

In India, despite legalisation of abortion under the Medical Termination of Pregnancy (MTP) Act (GoI, 1971), access to quality abortion care remains difficult. In 2015, of 15.6 million abortions, only 22% (3.4 million) took place in registered health facilities. 11.5 million medical abortions (use of pharmacological drugs to terminate a pregnancy, MA) occurred outside health facilities (Singh et al., 2018b).

Abortion provision is restricted to trained and registered doctors in authorised clinics. Primary Health Centres (PHCs) can provide medical abortion up to eight weeks of gestation (GoI 2003). The paucity of trained/available providers, coupled with legal restrictions, contribute to delays. Rural areas, where 68% of India’s population reside, are particularly affected. Studies show that MA provision through PHCs are rare, affected by lack of (trained) providers and poor availability of medication (Singh et al., 2018a).

Prevailing social norms surrounding fertility, reproduction, and woman- or mother-hood exacerbate barriers to care. Abortion stigma (Kumar et al., 2009), underpinned by these norms, influences care-seeking behaviours. Lack of knowledge about abortion and legality and misinformation about sex-selection (Guttmacher Institute, 2018), act as additional barriers.

The Pre-Conception and Pre-Natal Diagnostic Act (PCPNDT, 1994), addresses imbalanced sex ratios associated with son preference by prohibiting misuse of diagnostic techniques for sex-determination. Widespread campaigns led to high awareness of the PCPNDT, but
knowledge of the MTP Act remains low. Evidence suggests that abortion is equated with sex-determination and the PCPNDT, considering all abortions (whether sex-selective or not) illegal. Unless a clear distinction can be made between the abortion and sex-selective abortion, women may continue to assume that all abortion is illegal (Gandhi, 2014).

Abortion-related care is a continuum which includes access to and provision of accurate abortion-related information (including legality, methods, availability, eligibility, and sources), pregnancy testing and confirmation, service provision including appropriate abortion options, referrals, emotional support, and post-abortion care (Coast et al., 2018).

Recent evidence (Puri et al., 2015) suggests that Community Health Intermediaries (CHIs) can and do play a role in abortion care-provision, performing different tasks at different points in women’s trajectories.

WHO (2015) recommends expanding abortion-related roles of Auxiliary Nurse Midwives (ANMs), pharmacists and some lay health workers (e.g. Accredited Social Health Activists (ASHAs)), potentially making information and services more accessible for women in rural areas or vulnerable groups (e.g. adolescents or unmarried women) (Renner et al., 2013). The recommendations differentiate between CHI cadres.

Current research and programming on abortion task-sharing has focused primarily on technical and clinical abilities of CHIs (Dawson 2014), overlooking the influence of social contexts, conditions, and norms on attitudes and behaviours in healthcare provision (Frymus et al., 2013). CHIs are trusted sources of information, services and support (Mishra, 2014), but they also exist within health system and community hierarchies. CHIs can potentially increase abortion access (Puri et al., 2015), but their relative lack of power within hierarchies
or the influence of social norms and beliefs may limit their impact. At present, there is little
evidence exploring these factors in abortion care.

This mixed-methods study describes the abortion knowledge, attitudes, and roles of three
cadres of lay CHIs – ANMs, ASHAs, and pharmacists/pharmacy workers- in rural districts of
Karnataka, India. It explores how abortion attitudes reflect social contexts and environments,
highlighting how CHIs serve as barriers or facilitate access to abortion care. Understanding
CHIs’ knowledge and attitudes can advance abortion care-provision, support task-sharing
efforts, and potentially improve the quality of women’s abortion seeking experiences.

3. Background
In India, frontline health workers such as ASHAs and ANMs are important for delivery of
sexual and reproductive health (SRH) services (e.g.: contraception advice and access,
administering pregnancy tests and accompanying women to clinics for antenatal care or
institutional delivery) (Scott et al., 2019). Viewing them as “change agents”, interventions
capitalise on their relationships with their communities and contexts to increase access to
services and knowledge (Scott and Shanker, 2010).

Globally, health systems utilise different cadres of frontline workers for different roles (Kok
et al., 2017). In this article, the term “Community Health Intermediaries” (CHIs) refers to
ASHAs, ANMs, and pharmacists/pharmacy workers. WHO (2015) recommendations on
expansion of roles in abortion include ANMs, pharmacists, pharmacy workers and lay health
workers such as ASHAs. Pharmacists/pharmacy workers are not traditionally included as
frontline workers, but as women increasingly turn to pharmacists for medical abortion
(Sowmini, 2013), they take on a more prominent role in care-provision.
SRH services in India are available through public and private health sectors. ASHAs and ANMs function primarily within the public sector, while pharmacists are key personnel in public sector PHCs, but also work in chemist shops that provide services. The three cadres require different qualifications and training periods (Table 1).

<table>
<thead>
<tr>
<th>Cadre</th>
<th>Sector</th>
<th>Minimum qualification/training</th>
<th>Location</th>
<th>Payment structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASHA</td>
<td>Public</td>
<td>Literate, preference for those who have at least ten years of formal schooling. Attend a 23-day course, meant to receive continuous training during their tenure.</td>
<td>Village</td>
<td>Performance-based incentives</td>
</tr>
<tr>
<td>ANM</td>
<td>Public</td>
<td>Two-year course with six-month internship. Possesses basic nursing skills and some midwifery training, but not a fully qualified midwife.</td>
<td>PHC Sub-centre</td>
<td>Salaried</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>Public</td>
<td>Bachelor in Pharmacy (three/four-year course, depending on previous qualifications)</td>
<td>PHC or Community Health Centre (CHC)</td>
<td>Salaried</td>
</tr>
<tr>
<td>Pharmacist</td>
<td>Private</td>
<td>Bachelor in Pharmacy (three/four-year course, depending on previous qualifications)</td>
<td>Village, Block or District headquarters</td>
<td>Salaried</td>
</tr>
<tr>
<td>Pharmacy worker</td>
<td>(Tends to be private)</td>
<td>No direct Indian equivalent, but may have some relevant qualifications/apprenticeship training. In this paper, they are understood as assistants or other staff employed by pharmacies who dispense medicine but do not hold qualifications</td>
<td>Village, Block or District headquarters</td>
<td>Unknown, but likely salaried, perhaps performance-based.</td>
</tr>
</tbody>
</table>

Table 1: CHI cadre by sector, qualification, location, and payment structure

Adapted from Ipas Development Foundation (2017) and Crigler et al. (2014).

In 2005, the National Rural Health Mission (NRHM) created a new cadre of female health workers: ASHAs (NRHM, 2015). ASHAs are ever-married women between 25-45 years and have at least one child. Deliberately conceptualised as married women, NRHM capitalises on local customs of women leaving their natal homes upon marriage and “belonging” to their marital homes and villages. Married women are given leave to speak of matters pertaining to
sex, otherwise taboo outside the sanctioned space of marriage. ANMs supervise ASHAs, provide basic medical care and keep health records and registers.

ASHAs tend to have low educational qualifications and face severe disadvantages relating to gender, class, caste, and other power hierarchies in the health system and in their communities. These power differentials may affect their roles and actions, especially when handling “sensitive” issues like abortion or interacting with authority figures (Schaaf et al., 2018).

PHCs are required to staff qualified pharmacists. Private pharmacies or chemists are embedded in village life; often the first port-of-call for minor ailments. Private pharmacies, by law, must staff registered pharmacists but these rules are not largely followed (Basak et al., 2009) and medication is routinely dispensed by unqualified personnel (Boler et al., 2009). There is no exact equivalent for “pharmacy workers” in India but assistants or other staff employed by pharmacies routinely dispense medicine. Given that women seeking abortion care are unlikely to distinguish between types of pharmacy workers or their qualifications (Stillman et al., 2014), I analyse data on pharmacists and pharmacy workers collectively.

Abortion access in India is situated within broader contexts of family planning and SRH programmes which have historically focused on promotion of permanent methods through incentives and, sometimes, coercion (Unnithan, 2019). ASHAs and ANMs’ tasks include encouraging contraceptive uptake (Ahmad et al., 2012) and sterilisation to meet programme targets (Scott and Shanker, 2010). ASHAs, incentivised for institutional deliveries, contraceptive uptake and meeting sterilisation targets, are not similarly compensated for abortion-related care (Dasgupta et al., 2017).
Availability of reproductive technologies allows sex-determination tests which have been used to selectively abort female foetuses. These tests can only be conducted in the second trimester, and estimates show that only a small percentage of all later-term abortions are due to sex-selection (Stillman et al., 2014). Despite this, sex selection has a significant impact on abortion access as providers may refuse care provision fearing sex-selection (Potdar et al., 2015).

Government-run training programmes for ANMs and ASHAs include abortion laws, confidential counselling and post-abortion care (Jejeebhoy et al., 2011), but delivery is inconsistent and knowledge gaps remain. These programmes are less-established than family planning or maternal and child health programmes. In one study, ASHAs trained to facilitate access to safe abortion, felt restricted by competing programme pressures (Gupta et al., 2017).

Women or their partners/relatives interact with CHIs at different points in their care-seeking trajectories- pregnancy confirmation, information provision including referrals (Coast and Murray, 2014), procuring medical abortion pills (Kalyanvala et al., 2010), emotional support (Ganatra et al., 2010) and in post-abortion care-provision (Gupta et al., 2017). Das et al (2012) find that prevailing contextual norms, histories and priorities influence or constrain CHI behaviour in care-provision. Yet, literature on CHI attitudes to and knowledge of abortion, and impact on quality of care in low and middle-income countries remains scant (Holcombe et al., 2018).
4. Study site and research methods

Data were collected in villages of Bagalkot and Belgaum districts in Karnataka, India over eight months in 2017. Instruments, recruitment strategies, and data analysis were tested before data collection. Ethics approval was granted by the LSE research ethics committee in UK and the KLE Academy of Higher Education and Research in India.

4.1 Instruments and data collection

I used a mixed-methods nested design (quantitative survey followed by in-depth interviews with a sub-sample of respondents) to explore CHIs’ attitudes and explanations of roles in and knowledge of abortion. Combining qualitative and quantitative methods allows greater understanding of member experiences (Wardale et al., 2015).

Quantitative data were collected through a pre-tested, validated 18-item Likert questionnaire (n=118) - the Stigmatising Attitudes, Behaviours, and Actions Scale (SABAS); designed for use in multiple contexts (Ipas, 2015). It has three sub-scales: negative stereotypes about people associated with abortion, discrimination of women who have abortions, and fear of contagion from coming in contact with a woman who has had an abortion. There are no predetermined thresholds for what determines stigmatising attitudes (Shellenberg et al., 2014). Questionnaire face-validity was conducted with researchers and medical professionals (n=6), supported by cognitive testing (n=7) to ascertain robustness and applicability (Collins, 2003).

Instruments were translated into Kannada and Hindi. I, supported by a trained research assistant (GM), collected data. GM possesses previous research experience in the field sites. Before fieldwork, GM was trained on protocols and instruments & tested during the pilot study. ANMs and pharmacists self-administered the questionnaire. Majority of ASHAs
(n=30) preferred to have the statement read out by X1 or X2, simultaneously marking their response on the sheet. It took approximately 10 minutes.

Qualitative data were collected through in-depth interviews (n=21). Topic guide was based on the literature and integrated elements from SABAS, covering knowledge and perceptions of abortion, experiences with abortion-related care-provision and attitudes to abortion.

Interviews were conducted in a quiet room by GM and I. Interviews lasted approximately 60 minutes and were audio recorded. I wrote fieldnotes, reviewing them with GM at the end of interviews.

4.2 Participant recruitment

The study does not aim to generalise about CHIs’ abortion attitudes or actions, but to understand explanations and identify the mechanisms by which they are enacted. Thus, purposive snowball sampling was used to capture respondents with different backgrounds and experiences.

Using the 2011 population census, I identified the most populous talukas (sub-districts), which have a greater number of PHCs and, consequentially, CHIs. I worked with PHCs in Belgaum (n=12) and Bagalkot (n=8), selecting them based on size of population served.

Access was established through the KLE Academy of Higher Education and Research.

CHIs attend a monthly meeting with PHC staff. At every meeting during data collection, interested and available CHIs were invited to participate. Private pharmacists were identified through PHC pharmacists and administrators. There were three refusals or no responses. CHIs who had previous, direct contact with GM were ineligible. Written informed consent was obtained from all participants.
Respondents were asked about follow-up interview participation (one refusal, an ANM) during questionnaire consent procedures. Questionnaires (n=118) with missing responses were excluded (n=5 ANMs, 1 ASHA). Thus, there are 112 eligible responses. Respondents were categorised by cadre and SABAS score distribution (i.e. high, medium, low) to gain insight across cadres and score ranges and select respondents for interview. There were no refusals. Written informed consent was obtained again. No incentives were offered for participation. Interviewees received a small non-monetary token.

4.3 Sample characteristics

Recruitment strategy yielded a heterogeneous sample of providers of different ages and educational backgrounds (Table 2).

Sample characteristics highlight the gendered nature of CHIs- 74% of my sample are women. ASHAs in my sample, similar to the literature, reflect the lowest educational qualifications. Pharmacists in my sample were also gendered, with more men (76%) in both public and private sectors than women.

Table 2: Sample characteristics (total n=112)

<table>
<thead>
<tr>
<th></th>
<th>ASHA (n=39)</th>
<th>ANM (n=35)</th>
<th>Pharmacists* (n=38)</th>
<th>Interviews (n=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N(%)</td>
<td>N(%)</td>
<td>N(%)</td>
<td></td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>Public (n=16)</td>
<td>Private (n=22)</td>
</tr>
<tr>
<td>Belgaum</td>
<td>19(49%)</td>
<td>19(54%)</td>
<td>11(69%)</td>
<td>9(41%)</td>
</tr>
<tr>
<td>Bagalkot</td>
<td>20(51%)</td>
<td>16(46%)</td>
<td>5(31%)</td>
<td>9(41%)</td>
</tr>
<tr>
<td></td>
<td>n/a</td>
<td>n/a</td>
<td>9(56%)</td>
<td>20(91%)</td>
</tr>
<tr>
<td>Sex</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>39(100%)</td>
<td>35(100%)</td>
<td>7(44%)</td>
<td>2(9%)</td>
</tr>
<tr>
<td>Male</td>
<td>n/a</td>
<td>n/a</td>
<td>9(56%)</td>
<td>20(91%)</td>
</tr>
<tr>
<td>Age</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>23-35</td>
<td>7(18%)</td>
<td>4(11%)</td>
<td>3(19%)</td>
<td>6(27%)</td>
</tr>
<tr>
<td>36-45</td>
<td>13(33%)</td>
<td>11(31%)</td>
<td>4(25%)</td>
<td>9(41%)</td>
</tr>
<tr>
<td>46-55</td>
<td>16(41%)</td>
<td>17(49%)</td>
<td>5(31%)</td>
<td>2(9%)</td>
</tr>
<tr>
<td>56-65</td>
<td>3(8%)</td>
<td>3(8.5%)</td>
<td>4(25%)</td>
<td>5(23%)</td>
</tr>
</tbody>
</table>
4.4 Data analysis

Quantitative data were analysed using SPSS v.21.0 (IBM Corp., 2012). After initial analysis, I excluded the sub-scale “fear of contagion” as this measurement’s culturally specific connotations are not conceptually applicable to the Indian context (Holcombe et al., 2018). Reliability was not affected, Cronbach’s alpha (two sub-scales) was $\alpha=0.880$, showing good internal reliability overall. Cronbach’s alpha of 0.7 or higher shows good internal consistency and reliability (Bland and Altman, 1997). The modified questionnaire design may pose measurement error concerns (Holcombe et al., 2018) but, supported by qualitative interviews still provides valid insights into CHIs’ attitudes and beliefs.

Interviews were translated and transcribed verbatim by the author and a professional translator, checked for data quality, anonymised and assigned pseudonyms. Eight transcripts were back-translated for accuracy by a second professional translator. Transcripts were analysed using hybrid thematic analysis (Fereday et al., 2006) in NVivo 12 (2018). The skeleton codebook drew from Coast et al (2018)’s conceptual framework. I reviewed transcripts for familiarity, writing detailed memos on emerging themes and categorised them under existing codes or created new ones. I reviewed transcripts again to consolidate codes. Mixed-methods analysis included a side-by-side comparison of qualitative and quantitative findings to understand how qualitative data illuminates or explains quantitative findings.
(Ivankova et al., 2006). Data were validated using triangulation and engaging in critical
reflexivity during data collection, analysis, and writing (Noble and Smith, 2015).

4.5. Reflexivity

Understanding the researcher as instrument (Pezalla et al., 2012), I take a reflexive approach
to data collection and analysis. GM and I are both unmarried Indian women fluent in the
study languages. GM is local to one of the districts, but participants clearly coded me as
“urban” and “foreign” due to my university affiliation. Working together, our dual positions
may have affected participant perceptions and responses. Our marital status may have
influenced responses, given respectability norms around sexuality and related matters.
Accounting for this during analysis, I paid special attention to the questions we asked and
how we asked them, as well as my own positions on abortion and abortion care-provision

4.6. Limitations

I present CHIs’ attitudes to and knowledge about abortion, as well as their experiences in
care-provision. These data are rich and present insights into how their practices may play a
role in or influence women’s care-seeking, but they do not represent women’s experiences.
My assumptions about its likely impact is supported by evidence from other studies (Coast
and Murray, 2016).

5. Results and Discussion

CHIs’ abortion-related service and information provision are shaped by their navigation of
individual, community, and institutional systems, potentially influencing women’s care-
seeking (Coast et al., 2018). Abortion stigma, manifests across these three levels and is
duplicated in prevailing attitudes and beliefs surrounding womanhood, marriage, and fertility
(Kumar et al., 2009). It shapes CHIs’ attitudes to abortion, is enacted in advice to women and embedded in the contexts and health systems they work with(in).

The modified SABAS is scored for the 15 retained items or by sub-scale. Valid scores range from 15-75. There are no predetermined thresholds for what determines stigmatising attitudes, but higher scores indicate greater stigma (Shellenberg et al., 2014). Reported stigma was low (Fig. 1). Sample mean is 33.9 and median is 32. The distribution is skewed. My sample reports a higher mean than Holcombe et al (2018)’s study with Ethiopian midwives where, unlike my study, the majority of respondents were male. Sample size is too small for statistical tests interrogating the role of gender, but qualitative analysis later in this section suggests that gender may play a role.

Table 3 shows item-level responses by cadre. Strongly agree or agree scored higher (5, 4) than unsure (3), and disagree or strongly disagree (2,1). The response categories are combined at the scale ends to show cadre’s items responses.
### Table 3: SABAS item responses by subscales and cadre

<table>
<thead>
<tr>
<th>ITEM</th>
<th>SCALE RESPONSES (N=112)</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Strongly disagree/disagree (lower stigma scores)</td>
<td>Unsure</td>
<td>Agree/Strongly agree (higher stigma scores)</td>
<td></td>
</tr>
<tr>
<td><strong>SUB-Scale 1: Negative Stereotyping</strong></td>
<td></td>
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</tr>
<tr>
<td>1. A WOMAN WHO HAS AN ABORTION IS COMMITTING A SIN.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>59%</td>
<td>18%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>63%</td>
<td>11%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td>PHARMACIST</td>
<td>47%</td>
<td>26%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM TOTAL</strong></td>
<td><strong>56%</strong></td>
<td><strong>19%</strong></td>
<td><strong>25%</strong></td>
<td></td>
</tr>
<tr>
<td>2. ONCE A WOMAN HAS ONE ABORTION, SHE WILL MAKE IT A HABIT.</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>77%</td>
<td>18%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>80%</td>
<td>6%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>PHARMACIST</td>
<td>50%</td>
<td>21%</td>
<td>29%</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM TOTAL</strong></td>
<td><strong>69%</strong></td>
<td><strong>15%</strong></td>
<td><strong>16%</strong></td>
<td></td>
</tr>
<tr>
<td>3. A WOMAN WHO HAS HAD AN ABORTION CANNOT BE TRUSTED.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>69%</td>
<td>8%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>69%</td>
<td>17%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>PHARMACIST</td>
<td>60%</td>
<td>16%</td>
<td>24%</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM TOTAL</strong></td>
<td><strong>66%</strong></td>
<td><strong>13%</strong></td>
<td><strong>21%</strong></td>
<td></td>
</tr>
<tr>
<td>4. A WOMAN WHO HAS AN ABORTION BRINGS SHAME TO HER FAMILY.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>74%</td>
<td>15%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>83%</td>
<td>3%</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>PHARMACIST</td>
<td>55%</td>
<td>18%</td>
<td>26%</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM TOTAL</strong></td>
<td><strong>71%</strong></td>
<td><strong>13%</strong></td>
<td><strong>17%</strong></td>
<td></td>
</tr>
<tr>
<td>5. THE HEALTH OF A WOMAN WHO HAS AN ABORTION IS NEVER AS GOOD AS IT WAS BEFORE THE ABORTION.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>54%</td>
<td>8%</td>
<td>39%</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>54%</td>
<td>14%</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>PHARMACIST</td>
<td>19%</td>
<td>26%</td>
<td>55%</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM TOTAL</strong></td>
<td><strong>42%</strong></td>
<td><strong>16%</strong></td>
<td><strong>42%</strong></td>
<td></td>
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<tr>
<td>6. A WOMAN WHO HAS HAD AN ABORTION MIGHT ENCOURAGE OTHER WOMEN TO GET ABORTIONS.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>66%</td>
<td>13%</td>
<td>21%</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>71%</td>
<td>6%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>PHARMACIST</td>
<td>69%</td>
<td>13%</td>
<td>18%</td>
<td></td>
</tr>
<tr>
<td><strong>ITEM TOTAL</strong></td>
<td><strong>68%</strong></td>
<td><strong>11%</strong></td>
<td><strong>21%</strong></td>
<td></td>
</tr>
<tr>
<td>7. A WOMAN WHO HAS AN ABORTION IS A BAD MOTHER.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASHA</td>
<td>82%</td>
<td>13%</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>ANM</td>
<td>77%</td>
<td>0%</td>
<td>23%</td>
<td></td>
</tr>
<tr>
<td>PHARMACIST</td>
<td>74%</td>
<td>11%</td>
<td>16%</td>
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<td><strong>ITEM TOTAL</strong></td>
<td><strong>78%</strong></td>
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<td>8. A WOMAN WHO HAS AN ABORTION BRINGS SHAME TO HER COMMUNITY.</td>
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<td>ASHA</td>
<td>77%</td>
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<td>ANM</td>
<td>66%</td>
<td>11%</td>
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<td>PHARMACIST</td>
<td>55%</td>
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<td><strong>ITEM TOTAL</strong></td>
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Higher stigma levels were reported in subscale 1 (negative stereotyping) than in subscale 2 (exclusion and discrimination). Items in subscale 1 are underpinned by abortion stigma. A quarter of respondents - similarly distributed by cadre - agreed/strongly agreed that ‘a woman
who has an abortion is committing a sin’. Respondents—particularly 55% of pharmacists—reported believing that abortion affects a woman’s health (item 5). There are noticeable differences in cadre responses—pharmacists report more negative stereotyping than ASHAs or ANMs.

Low levels of reported stigma (12%) in subscale 2—items predominantly about exclusionary actions or behaviours—are explained by CHIs’ training around respectful care and confidentiality. There is some difference between cadres in this subscale—ANMs consistently scored lower than ASHAs and pharmacists. This may be due to regular interactions with formal health systems or more specialised healthcare training.

The “unsure” category may reflect respondents’ reluctance to accurately report their views. Sub-scale one shows more unsure responses (14%) than subscale two (9%), which may also be due to the construction of the questionnaire. This response—three points—may explain the higher overall stigma score distribution.

5.1. Knowledge as facilitator or barrier

CHIs had poor knowledge of Indian abortion laws and were unaware of current abortion legislation. Their first responses were about sex-selection. Some respondents mentioned foetal abnormality but could not confirm legality.

I: What do you know about the MTP law in India?

R: [hesitates] About law? When there is a girl child, people do this thing to get aborted—such things shouldn’t happen.

I: And what else?
R: What else? That’s all.

-Bhagyashree, 40-year-old ASHA

If the baby hasn’t developed or if there is a problem with the baby, for only that reason the MTP is allowed.

-Anupriya, 49-year-old ANM

Conflation of sex-selection and abortion laws underscores lack of abortion knowledge and investment in training. As Gandhi (2014) cautions, it risks further entrenching the idea of all abortions as illegal.

42% of all respondents- and over half of pharmacists- believed abortion had a negative impact on women’s health. Respondents- across all cadres- mentioned “weakness”- a prolonged malaise, suggesting it affects future fertility. Many reported warning women about adverse consequences of abortion.

Our advice to that lady [...] in your future life, it will be a problem.

-Mahesh, 38-year-old male pharmacist

Current guidelines mandate abortion-related training. However, ASHAs and ANMs reported training did not cover abortion-specific topics. Qualified pharmacists- public and private- also did not receive abortion-specific training. Where they lacked information, ASHAs and ANMs drew on previous experiences and information shared by medical officers or peers to navigate their roles. They turned to “contact knowledge”- experiential learning- to understand abortion and provide advice.
We have seen their [women’s] family situation, we have seen their relationships-we know what state they’re in. Seeing all that, there is experience. This is more [important] than what our training tells us.

-Anupriya, 49-year-old ANM

This contact knowledge is contextualised and rooted in women’s lives, suggesting intimacy and empathy in their understandings. ASHAs and ANMs placed more value on experiential knowledge implying it grounds their reactions to women, tempering attitudes and influencing actions.

ASHAs, ANMs, and public pharmacists shared that medical officers (MO) direct information flow, including on abortion, shaping what information they have access to and are able to share. They perceive MOs as possessing superior knowledge-clinical and otherwise.

I feel I need to listen to higher authority [MO]. More than my knowledge, I think their knowledge is more.

-Chandralekha, 26-year-old ASHA

[MO] will tell us in meeting about what to do or say—we do that only.

-Vinod, 45-year-old male pharmacist

All three cadres, including private pharmacists, suggest women go to a doctor when approached about abortion. They may suggest women go to the local PHC for a referral but rarely volunteer information about specific doctors. ASHAs and ANMs were emphatic about not referring women to private clinics, seeing it as a violation of their contracts with the
public health system. They would, if aware the PHC did not provide abortion services/referrals, suggest women go to the district hospital. For some private pharmacists, it functioned as a directive and a refusal to sell MA pills, rather than as a referral. They reported telling women to seek care from clinics, without specifying who or where to go. They were reluctant to suggest clinics or doctors in case it could be traced back to them.

ASHAs and ANMs, equipped with pregnancy tests, are often present for pregnancy confirmation—a crucial moment in women’s trajectories. Some ASHAs and ANMs considered it their responsibility to inform the MO about women considering abortion. Some felt obliged to support women through their abortions, in case there were future repercussions (e.g. being ignored during the next pregnancy). Additionally, they reflected that unlike antenatal care or delivery, there are no associated government payments or incentives.

If there is some sort of mistake committed [unwanted pregnancy], that has to be told to Madam [MO], [...] we cannot just sit with the information. […] then Madam will say “Get the one who has committed mistake” and we bring her.

- Shubhashini, 38-year-old ASHA

Women’s trajectories are shaped by disclosure and having their decision-making circumvented can have repercussions for women’s lives, especially when managing difficult dynamics with partners or family members. Such arbitrary mandates can undercut women’s trust in CHIs, making it difficult to provide services for similarly “sensitive” issues.

Lack of payment for abortion-related care highlights a discrepancy in task-setting and may shape how CHIs understand and carry out their own roles. ASHAs and ANMs had mixed responses to escorting women to clinics for abortion-related care.
For abortion we don’t go along, there is no payment for that.

-Rajashri, 42-year-old ASHA

Perceived to possess superior knowledge, doctors’ abortion attitudes can influence CHIs’ advice or support. This can heighten the lack of accurate abortion information and strengthen misconceptions such as an adverse impact on women’s health or affecting women’s future pregnancies, especially when information flows are controlled. Interventions focusing solely on CHIs’ technical aptitude overlook how hierarchies and unequal power relations can shape CHIs’ roles and behaviours in abortion access and information provision.

5.2. Abortion attitudes enable or restrict access

CHIs are present at different points in women’s abortion trajectories. Their knowledge of abortion, tempered by their attitudes, can shape the quality of care women experience.

All cadres dissuaded women from considering an abortion or explicitly advised against it, reflecting the value placed on pregnancy and motherhood. They drew on entrenched beliefs like the importance of carrying the first pregnancy to term and motherhood as natural role fulfilment. They suggested abortions negatively affect future fertility and conception, positioning it as punishment or a consequence of abortion. These demonstrate anti-abortion sentiments: acts deserving punishment or stigmatising abortion as dangerous (Beynon-Jones, 2017).

“First child should not be ended”- such things become fixed in our minds, that small children shouldn’t be removed like that.

-Parvathamma, 32-year old ASHA
Evoking morality, some CHIs portrayed pregnancy as a “gift” and abortion as “killing a life force”; underscoring the fertility norms and social value placed on motherhood and reproduction. 56% of respondents disagreed that abortion was a sin, in contrast to the 25% that agreed. Yet, irrespective of their SABAS response, they described abortion as a moral sin or wrongdoing. By depicting abortion as a deliberate denial of life and a rejection of the “essential nature” of womanhood (Cockrill and Nack, 2013), they evoke Goffman’s (1963) construction of stigma as a character blemish and as tribal (i.e. abortion marks you as “spoilt”, part of the “bad” tribe). CHIs used negative framings of abortion- bad, harmful, and sinful- when providing advice. Abortion stigma shapes reproductive decision-making whilst also regulating and reproducing norms of good or bad mother- and woman-hood.

Isn’t that a sinful act? A baby- whatever it is, it’s a life force. [...] if it’s killed there itself [in the womb], there is no use.

-Padmakalyani, 40-year-old ASHA

By delivering the baby, if it is good for her, she should be told no for abortion. If there is some pressure on her because of that it is better to get it done. Even then, foeticide [abortion] shouldn’t be done, it is a sin, right, for that at least [...] she should continue, in my opinion.

-Chandralekha, 27-year-old ANM

Abortion stigma as a norm-regulating mechanism is also present in CHIs’ framing of contraceptive use versus abortion. All three cadres framed abortion- an irresponsible choice- as a consequence of women’s irresponsible lack of (effective) contraception use or sexual abstinence. While understandings of (ir)responsibility are contextual, they inform/are informed by constructions of good/bad mother- and woman-hood.
In delineating between “valid” reasons, CHIs believed women don’t have an abortion “just like that”. They reflect a hierarchy of “good” abortion reasons—foetal abnormalities or threat to a woman’s life. Abortions due to poor socio-economic conditions were also understandable but tempered by frustrations around poor contraceptive use or ineffective family planning. ASHA and ANMs’ frustrations, seen in the context of incentivised family planning goals, highlight competing programmatic pressures (Pulla, 2014).

It [abortion] shouldn’t be used for bad things— for these unmarried [women] and all. If you have young babies at home, or if the growth isn’t there [foetal anomalies], only for those it should be used.

- Abhiruchi, 53-year-old ANM

Few people are very adamant and say “No, I don’t want this at all. Let this go [abortion] and we will see next year”, so to such people we scold them, “What is this? If you had all these things why didn’t you get some pills or condom to use, at least you should have taken an injection?”

- Parvathamma, 33-year-old ASHA

Abortions for birth spacing, birth limiting or to maintain family size were seen as less acceptable. Multiple abortions (Hoggart et al., 2016) caused concern. Only 16% of questionnaire respondents believed women would make it a habit. Yet, interviewees worried that after an abortion, women would control fertility using abortion instead of contraceptive. CHIs linked multiple abortions with future ill-health, impacting future pregnancies. They frame it as a “bad” abortion, tied to notions of irresponsible and selfish women, where ill or “disabled” children are deserved punishment.
from these repeated pregnancies if you will go for MTP then next kids won’t be
healthy, that is why kids are born like that [ill or disabled], we tell them that.

- Abhiruchi, 53-year-old ANM

A spectrum of good/bad abortions emerges- ones that are valid (foetal abnormality, threat to
health/life, socio-economic conditions), less valid (contraceptive failure), and invalid (on
request, multiple abortions, markers of pre-marital sexual activity).

Abortions outside of marriage are characterised by secrecy, shame and stigma, as pregnancy
is a marker of pre-marital sexual activity. All cadres described unmarried women’s
pregnancies as contravening social norms surrounding pre-marital sexual activity—
“mistakes”, reiterating ideas of good/bad woman-hood. Some used colloquial descriptors
like “illegal pregnancies”.

If she is married [...] it’s their personal [business]- her husband, in laws, it’s their
personal [business]. If she is unmarried, gotten pregnant, and tried taking something,
then we look at her somewhat [judgementally].

- Shubhashini, 38-year-old ASHA

Identifying as elders or well-wishers, cadres urged unmarried women to divulge their
partner’s name in order to arrange marriage and restore “honour”.

I used to give [MA pills]. I used to ask first “Why, why do you want to do it now? Why
do you want to go and get it washed [aborted]?” Now, if they are unmarried why should
it be done like this, [they should] get married then.

-Vinod, 44-year-old pharmacist

Marriage bestows respectability and legitimacy in the community, upholding social norms of femininity, marriage, and motherhood. Through marriage, unmarried women’s sexualities are brought back under family and community control and under the umbrella of sanctioned behaviour (Krishnaswamy et al., 2016). If marriage is not a viable option, abortion becomes the last opportunity to save a woman’s dignity and respect. Abortions are a “lesser shame” than pregnancy out of wedlock (Johnson-Hanks, 2002).

5.3. Behaviours as enablers or barriers

ASHAs and ANMs liken their relationships with women to “mother-daughter” or “friends”. They are privy to important milestones in women’s lives, where their advice is valued and sought. They describe some of their own gendered experiences- moving to the village after marriage, pregnancy, childrearing- to draw parallels and kinship between their lives. They suggest that “trust” between women is easier to build, as they face similar challenges and experiences. This gendered understanding and relationship may influence interactions.

Here they keep the mother-daughter relationship with us. [...] because we as woman, when we get married and come to our home [move to husband’s village], there is no other relationship. We tell her, ours is a mother-daughter relation. You keep such thing [in mind] and [speak to us] without any hide and seek.

-Mumtaz, 30-year-old ANM

They report women ask for advice and rely on their knowledge of health systems to inform and guide decision-making, which can ease or create barriers in abortion trajectories.
If they say we don’t want [to continue the pregnancy], I say don’t get it done. If there is someone at home to take care of the kids, then let this one happen! Later, you can get operated [sterilised]... Generally, we don’t let them go for abortion.

-Purnima, 30-year-old ASHA

Acting as an elder or well-wisher shifts the ASHA or ANM from health worker to community member, allowing them to draw on and enforce community norms and ideals. They constantly traverse these two identities. It is present in their care-provision, as they describe scolding women - having unprotected sex resulting in a pregnancy or wanting an abortion.

Scolding is well-documented in maternal health and in SRH services (Grant et al., 2018), as have its negative impacts on women and adolescents (Wood and Jewkes, 2006). While ASHA and ANMs’ questionnaire responses reported low stigma for subscale two, interview respondents engaged in some exclusionary and discriminatory behaviour- scolding or threatening women with disclosure. They explain scolding as care-taking to ensure women understand the consequences of their (in)actions and deter from similar “mistakes” in the future. They describe their scolding as part of their “mother-daughter” or “well-wisher” relationships, and an intrinsic part of the care they provide.

Positioning themselves as elders and well-wishers draws on social practices that anoints them as authority figures in their communities, in addition to their roles as CHIs. It highlights the power differentials between CHIs and abortion-seekers, and its potential impact on women’s abortion trajectories. One way that CHIs wield this power is by insisting on spousal or family consent for abortions, invalidating women’s autonomies and “self-decisions”.
In India, collective decision-making remains the norm for healthcare and other household matters, with male family members often the final decision-makers (Raman et al., 2016). Collective responsibility for women’s reproduction can influence women’s decision-making, superseding her own desires (Heitmeyer and Unnithan, 2015; Paul et al., 2017). All cadres were reluctant to support women’s abortion decision-making without first ensuring her family’s or husband’s consent. Spousal or family consent is framed as institutionally-mandated but the MTP does not require this for adult women. Shaped by contextual decision-making norms, CHIs insistence on collective approval can curtail women’s options or create additional barriers in abortion-care access. Related concerns around risk and blame also compel CHIs to require collective consent.

Sometimes, because of an abortion, there's excessive bleeding- and if she's anaemic or weak, there might be problems. That's why the doctor asks for the family's permission. Doctors- and we- don't want to take any risks.

-Mumtaz, 30-year-old ANM

Despite their roles as norm enforcers, CHIs sometimes ignore and overlook their reservations when confronted by the realities of women’s lives.

Husbands will be drunkards, and they will say no. When women say, ‘No, two kids are enough’, but their husbands don’t wear anything [use condoms]. You know how it is to be a woman- how can I say no?

-Parvathamma, 32-year-old ASHA

ASHAs and ANMs move between health worker and community member identities, drawing on knowledge of women’s lived experiences when offering advice or support. They reference women’s relative lack of agency around reproductive decision-making, tempering their
attitudes and nuancing reactions. In some cases, they draw on own personal experiences to frame it as an act of empathy - another gendered dimension in their roles. These attitudinal shifts, however, remain underpinned by polarisations of good/bad abortions, and woman-and mother-hood.

ASHAs and ANMs described instances of directly supporting women’s access to abortion by circumventing institutional and legal mandates. In cases they considered valid, they procured MA or directed women to specific personnel.

Bhagyashree, a 40-year-old ASHA, advised women seeking abortions to avoid a corrupt doctor, instead directing them to a staff nurse.

R: She gets it [pills] from outside and gives it herself.
I: She gets it from outside and gives it? Doctor doesn’t know?
R: The doctor won’t know.

In some PHCs, an informal network of CHIs collaborated to provide an affordable abortion for some women - economically constrained or meeting other “good” criteria. They described this as providing a safer alternative instead of pushing women to desperate measures or seeking care from “quacks” (i.e. unqualified traditional providers using herbs or implements). They discounted access to other clinical services because of women’s financial constraints.

Private pharmacists also provided medical abortion pills without a prescription when they empathised with women.

Sometimes I am compelled to help her, her condition [poverty] is such- how can I send her away? What might she do if I don’t?

-Arshad, 41-year-old pharmacist
I know her finances- everyone knows. Her husband doesn’t work, her family is no help.

At least someone should try...

-Mumtaz, 30-year-old ANM

CHIs’ willingness to help is influenced by how women fare against notions of good/bad abortions, good/bad mother- and woman-‐hood. There is an affective element in some responses, where willingness to subvert authority is influenced by empathy or other emotions. As responses reflect, their attitudes and behaviours are not shaped by transactional processes and contextual norms alone, but their interactions too (Kok et al., 2017). CHIs traverse individual, community, institutional and framing discourses (Kumar et al., 2009) when navigating roles within abortion-related care. Individuals’ abortion attitudes shift based on who they are interacting with, their relationship, and on their affective response. These shifts and affective responses can influence CHIs’ actions and behaviours, potentially influencing abortion care-provision.

CHIs distinguish between good/bad abortions and mother- and woman-‐hood based on moral and normative constructs of abortion and femininity. They enact abortion stigma through actions and behaviour, treating women differently based on perceptions of where she falls on the good/bad dichotomy. Enacted abortion stigma is a mechanism for social norms and behaviours, regulating who deserves access to abortion care and under which conditions.

CHIs circumventing or subverting mandates to enable access, however, offer another dimension of the interactional nature of abortion stigma. Despite stated objections to abortion or negative stereotyping, respondents drew on personal relationships with abortion-seekers, contextualising experiences and needs. They describe these using emotive language- as Arshad and Parvathamma did- reflecting an affective encounter. It offers an additional dimension for conceptualisations and measurement of abortion stigma: the affective. By
understanding abortion-related care as an emotional task for CHIs, and its effect on access to abortion care, offers additional considerations for training and programmes on abortion access.

6. Conclusion

Findings offer insights into the potential of CHIs in abortion task-sharing, relevant for the Indian context as well as other countries like South Africa and Nepal who are currently considering or expanding task-sharing programmes (Dawson et al., 2014; Glenton et al., 2017; Puri et al., 2015).

CHIs are present at multiple points in women’s care-seeking trajectories. Further research on their different roles can highlight potential intervention points for abortion provision and improve overall quality of care (Benson et al., 2017). However, their abortion attitudes are underpinned by stigma and they demonstrate poor knowledge of abortion and laws, sometimes providing inaccurate information. Embedding abortion-related modules into existing SRH or family planning trainings may create more robust programmes, tackling knowledge gaps. Addressing entrenched notions of good/bad abortions, and mother- and woman-hood, may also help tackle abortion stigma and improve (perceived/actual) quality of care.

CHIs traverse multiple identities in carrying out their tasks and can face entrenched inequalities. Addressing these power differentials are essential for supporting a vital health force, especially when handling “sensitive” issues like abortion (Schaaf et al., 2018).

Abortion attitudes cannot be disconnected from CHIs’ social contexts and interactions, influencing them to enact barriers or facilitate access. They draw on normative binaries when enacting abortion stigma which can create access barriers. In some cases, they respond
empathetically and subvert regulations to enable access. As abortion remains a highly stigmatised procedure, the attitudes and behaviours of singular actors can play pivotal roles in care-seeking. Considering the role of affect can help re-conceptualise dimensions of abortion stigma. Accounting for these complexities and manifestations of abortion stigma can support task-sharing efforts.

Findings offer insights into women’s MA self-use, contributing to current debates (Gerdts et al., 2017; Iyengar et al., 2015). While CHIs can play crucial roles in enabling self-use, they can also play gatekeeping roles; making it harder to access care, raising questions about the function and conceptualisations of CHIs in abortion provision (WHO, 2015).

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