For legal terminations, the estimates ranged from 30 minutes to six hours, with a mean wait time of one hour and 30 minutes for either procedure. Key informants reported that there were no waiting lists for patients seeking safe, lawful termination of pregnancy.

With regard to facilitative supervision and quality of care provided, 81.3% of hospitals in the census reported having a system for internal review of abortion complications and/or maternal mortality. However, only 7.1% of primary-care facilities had a system or process in place for reviewing complications related to abortion and/or maternal deaths.

Equipment and logistics

As part of the census, availability of equipment needed for CAC services was assessed and compared with the standards in the 2003 Reproductive Health Policy and Standards to identify equipment gaps that might impede service delivery.

Table 19: Number of public hospitals lacking furniture by region (n=16)

	Accra n=6	Ashanti n=6	Eastern n=4	Total n=16 (%)
Gynae/examination couch with stirrups	1	1		1 (6.3)
Instrument trolley	1	1		2 (12.5)
Portable/adjustable lamp	1	2		3 (18.8)
Stepping stool	1	2		3 (18.8)
Revolving stool	4	6	1	11(68.7)
IV-drip stand	2			2 (12.5)

Table 20: Number of public polyclinics, maternity homes, health centres and RCHs lacking furniture by region (n=74)

	Accra n=25	Ashanti n=15	Eastern n=34	Total n=74 (%)
Gynae/examination couch with stirrups	14	11	12	37 (50.0)
Instrument trolley	7	5	22	34 (46.0)
Portable/adjustable lamp	11	13	24	48 (64.8)
Stepping stool	12	8	11	31 (41.9)
Revolving stool	19	14	33	66 (89.2)
IV-drip stand	4	1	20	25 (33.8)

In general, the basic furniture needed for rendering contraceptive and CAC is available at the hospital level (Table 19). One Accra hospital lacks an examination couch for performing reproductive health exams and procedures. At the primary-care level, half of the facilities lack an examination couch (50%), and about half lack other essential equipment for contraceptive and CAC provision (Table 20).

Table 21: Number of public hospitals lacking infection-prevention (IP) supplies by region (n =16)

	Accra n=6	Ashanti n=6	Eastern n=4	Total n=16 (%)
Autoclave	2	2		4 (25)
Boiler	2	2	1	5 (31.3)
Decontamination buckets	2		1	3 (12.5)
Plastic trays for high-level disinfection (HLD)	1	4	1	6 (37.5)

Table 22: Number of public polyclinics, maternity homes, health centres and RCH lacking IP supplies by region (n=74)

	Accra n=25	Ashanti n=15	Eastern n=34	Total n=74 (%)
Autoclave	14	11	28	53 (71.6)
Boiler	15	6	18	39 (52.7)
Decontamination buckets	4	3	8	23 (31.1)
Plastic trays for HLD	17	10	19	46 (62.2)

Basic supplies needed for proper IP through sterilization or high-level disinfection of medical equipment were available in three-quarters of public hospitals (Table 21). At the primary health-care level, three in 10 (31.1%) facilities are without the necessary decontamination buckets for HLD with 2% gluteraldehyde or 0.5% chlorine solution (Table 22). The majority lack a steam autoclave (71.6%) or boiler (52.7%).[63] IP strategies reported were generally appropriate. Reusable cannulae were processed using a variety of means. Three sites use a 0.5% chlorine solution, two sites boil the cannulae, three sites use Cidex®, and four employ steam autoclave.

[63] Ipas MVA Plus® aspirators must be high-level disinfected (HLD) or sterilized before first use and after each procedure. They do not need to be HLD or sterile at the time of use. Cannula must be HLD or sterile at the time of each use.

Table 23: Public hospitals lacking medical equipment by region (n=16)

	Accra n=6	Ashanti n=6	Eastern n=4	Total n=16 (%)
Graves speculums (small)	3	4	1	8 (50.0)
Graves speculums (medium)	3	3	1	7 (43.8)
Graves speculums (large)	4	4	1	9 (56.3)
Ambu bag	2	2		4 (25.0)
Atraumatic tenaculum	3	3		6 (37.5)
Sponge-holding forceps	2			2 (12.5)
Blood pressure machine/ sphygmomanometer	2			2 (12.5)
Stethoscope	2			2 (12.5)
Thermometer	2			2 (12.5)

Table 24: Public polyclinics, maternity homes, health centres and RCH lacking medical equipment (n=74)

	Accra n=25	Ashanti n=15	Eastern n=34	Total n=74 (%)
Graves speculums (small)	17	12	24	53 (71.6)
Graves speculums (medium)	11	12	26	49 (66.2)
Graves speculums (large)	17	13	23	53 (71.6)
Ambu bag	19	13	24	56 (75.6)
Atraumatic tenaculum	15	13	25	53 (71.6)
Sponge-holding forceps	8	2	15	25 (33.7)
BP machine/sphygmomanometer	2		3	5 (6.7)
Stethoscope	2		3	5 (6.7)
Thermometer	2	1	3	6 (8.1)

Essential medical equipment for reproductive health was lacking in roughly half of the hospitals in the census. Graves specula were absent in 43.8-56.3% of the 16 hospitals. Greater Accra Region hospitals had the greatest unmet need for furniture, medical equipment and IP supplies. Medical-equipment gaps at the primary level were more common, affecting up to three-quarters of sites in the census. A shortage of speculums of all sizes, tenaculae, and even emergency equipment (Ambu bags) may be contributing to the relatively low number of facilities rendering long-term contraception and CAC services at the primary level.

Availability of manual vacuum aspirators and the various sizes of cannulae were also assessed in the facility census. The 2003 Ghana Health Service Reproductive Health Policy mandates that facilities stock a minimum of six MVA aspirators per hospital and two MVA aspirators per health centre to assure that equipment is always available for use.

Table 25: Number of public hospitals lacking the recommended stocks of uterine-evacuation equipment by region (n=16)

	Accra n=6	Ashanti n=6	Eastern n=4	Total = 16 (%)
Manual vacuum aspirator	5	2	1	8 (50.0)
4mm cannulae	2	2	2	6 (37.5)
5mm cannulae	2	1	1	4 (25.0)
6mm cannulae	1			1 (6.3)
7mm cannulae	1	1		2 (12.5)
8mm cannulae	2	1	1	4(25.0)
9mm cannulae	2	1	2	5 (31.3)
10mm cannulae	1	2	2	5 (31.5)
12mm cannulae				0 (0.0)

Five of the six hospitals in Greater Accra had insufficient stocks of MVA compared with two of six in Ashanti and one of four in Eastern.

Table 26: Number of public primary-level facilities lacking the recommended stocks of uterine evacuation equipment by region (n=74)

	Accra n=25	Ashanti n=15	Eastern n=34	Total = 74 (%)
Manual vacuum aspirator	22	13	33	68 (91.9)
4mm cannulae	23	13	31	70 (94.6)
5mm cannulae	24	13	32	69 (93.2)
6mm cannulae	22	13	31	66 (89.2)
7mm cannulae	22	13	32	67 (90.5)
8mm cannulae	22	13	32	67 (90.5)
9mm cannulae	23	13	32	68 (91.9)
10mm cannulae	22	13	32	67 (90.5)
12mm cannulae	22	13	32	67 (90.5)

Less than 10% of primary-health centres had the GHS recommended minimum stock of two manual vacuum aspirators. Twenty-two of the 25 (88%) primary health-care facilities in Greater Accra, 13 of 15 sites (86.6%) in Ashanti and 33 of 34 (97%) facilities in Eastern lacked sufficient manual vacuum aspirators. Similarly high proportions of primary-health centres (>90%) lacked the necessary cannulae sets to provide postabortion and legal termination services.

MVA perceptions and acquisition

Table 27: Perceptions of the advantages of MVA versus sharp curettage (n=18)

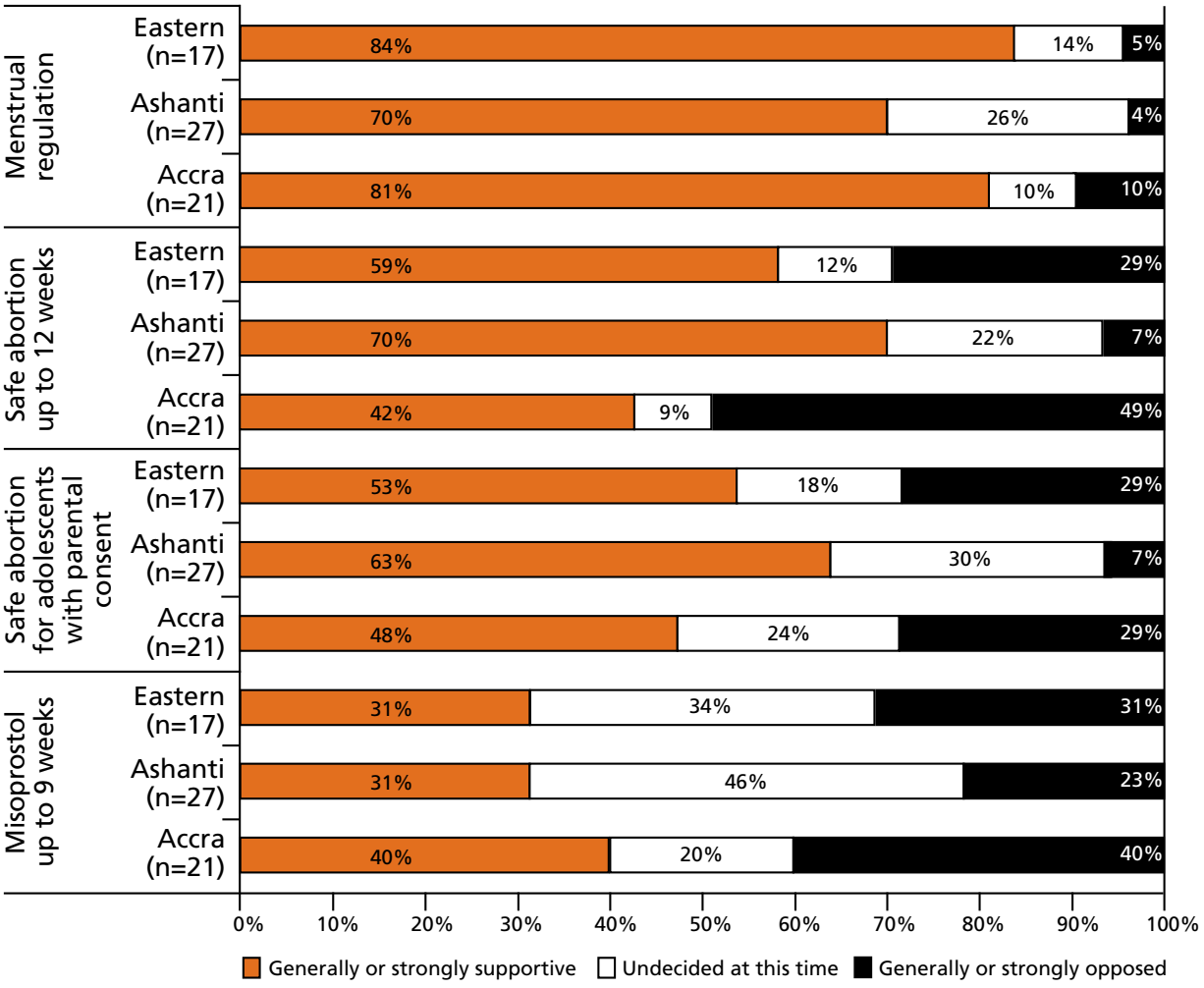
	%
Decreased risk of uterine perforation and other complications	87.5
Can be done in the procedure room	75
Lower cost for the facility	68.6
Fewer staff required	62.5
Reduced recovery time in the ward	62.5
Ability to offer outpatient (ambulatory) service	62.5
Lower cost for patient/client's family	56.3
Reduced need for anaesthesia	56.3
Reduced need for anaesthesiologist/anaesthetist	43.8

Only sites offering MVA were asked about its comparative value. Concerning the advantages of MVA compared to sharp curettage, 87.5% of respondents felt MVA reduces the risk of uterine perforation and other complications. Three quarters (75%) of respondents identified its usage in a simple procedure room as advantageous while slightly more than two-thirds (68.6%) cited its reduced cost to the facility as a benefit. About 60% reported that compared with sharp curettage, MVA use reduces staff requirement, reduces recovery time for patients (62.5%) and can be offered on an outpatient basis (62.5%). More than half (56.3%) perceived the lower cost to the client and family and the reduced need for anaesthesia as beneficial.

Among current users of MVA, there were very few barriers reported to use for PAC and/or legal abortion care. Three-quarters of sites offering uterine evacuation (75%) reported that MVA instruments were "always" available when they were needed. Most facilities (62.5%) obtained their MVA stocks from Ghana Health Services, 28.8% received MVA as part of a training course offered by an NGO, and 8.3% had purchased from a distributor. The four most commonly mentioned barriers to the routine use of MVA were: (1) lack of training in MVA; (2) perception that re-supplies of MVA instruments are hard to acquire; (3) a habit or reluctance to try a new technique and (4) perception that purchasing of instruments involved a high cost.

Attitudes toward implementation of aspects of CAC

Figure 6: Hospital-management attitudes toward implementations of specific services (n=65)

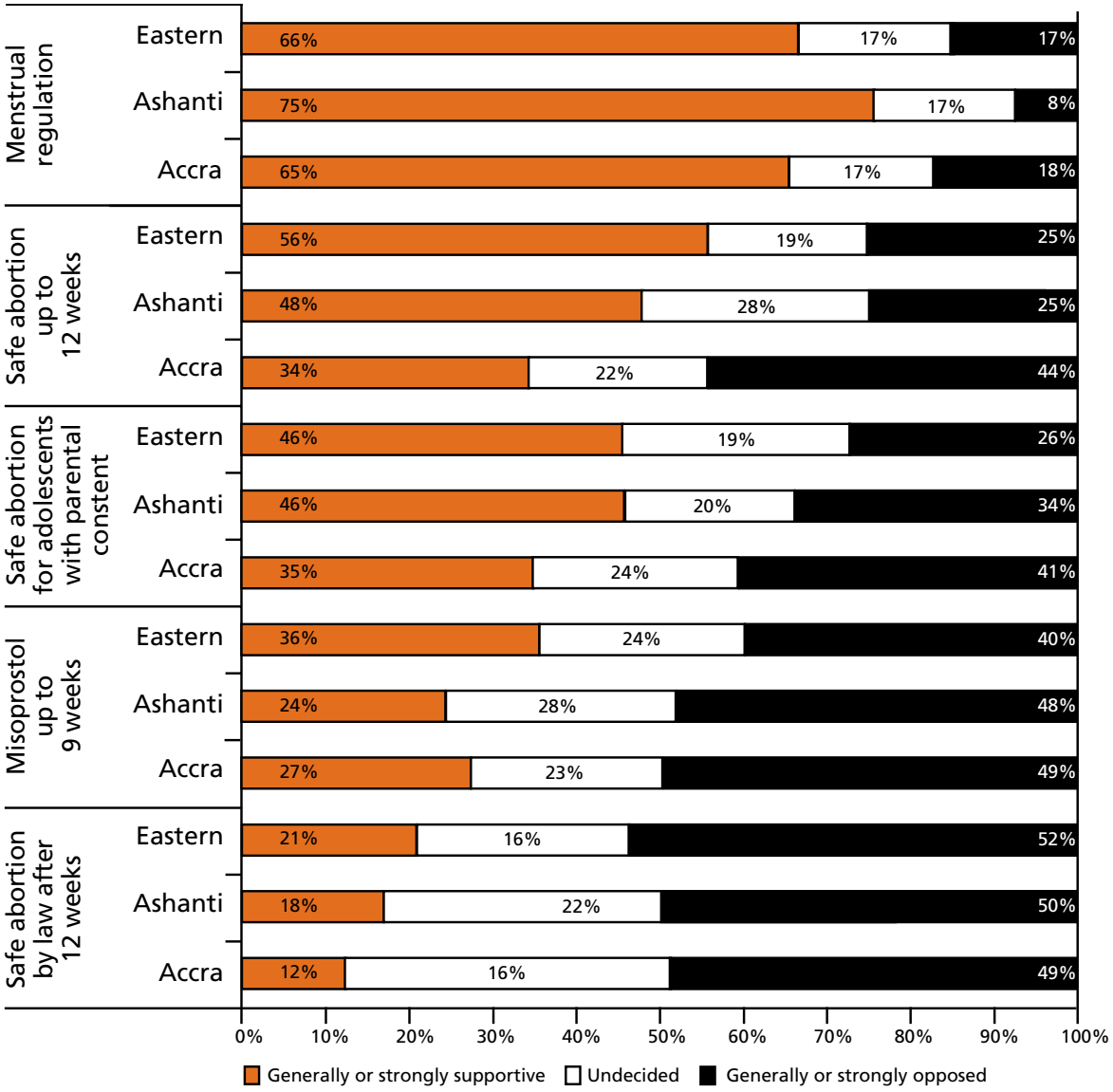


Hospital-management attitudes toward implementing specific aspects of legal termination were assessed. On implementation of MR care, a solid majority (as high as 94% in Eastern Region) was supportive. Opposition to MR was minimal; however, as many as one-quarter (26%) of respondents were undecided in Ashanti Region.[64] Regarding the inauguration of safe-abortion services up to 12 weeks, the regions' responses varied widely. The greatest support was expressed by hospital managers in Ashanti (70%), followed by Eastern (59%), and Greater Accra (42%). Between 0-22% of managers were currently undecided about their attitude toward offering of early safe abortion in accordance with the law. With regard to the provision of CAC for adolescents, roughly half of hospital managers (48-63%) were in support of providing safe abortion for this population if provided with parental consent. Almost one-third of respondents (29%) oppose adolescent

[64] The term "menstrual regulation" was not defined in the survey.

CAC with parental consent in the Eastern and Greater Accra, while Ashanti Region had only minimal (7%) opposition. About one-quarter of management (18-30%) were undecided as to their attitudes toward offering services to adolescents with parental consent. A relatively modest support for the provision of misoprostol alone for abortion up to nine weeks (31% in Eastern, Ashanti and 40% in Greater Accra) was reported. Nearly half of managers in Ashanti (46%) were undecided about this evacuation technique. Opposition to the use of misoprostol for early abortion varied from one-quarter (24%) in Ashanti to as much as 40% in Greater Accra. Providing safe abortion beyond 12-weeks gestation in accordance with the law had the least support among hospital management. Almost half of those surveyed (48% of respondents in Ashanti Region) were undecided. Only 13% in Eastern, 33% in Greater Accra and 36% in Ashanti would support offering termination in the second trimester.

Figure 7: Health-worker attitudes toward implementation of specific services (n=513)

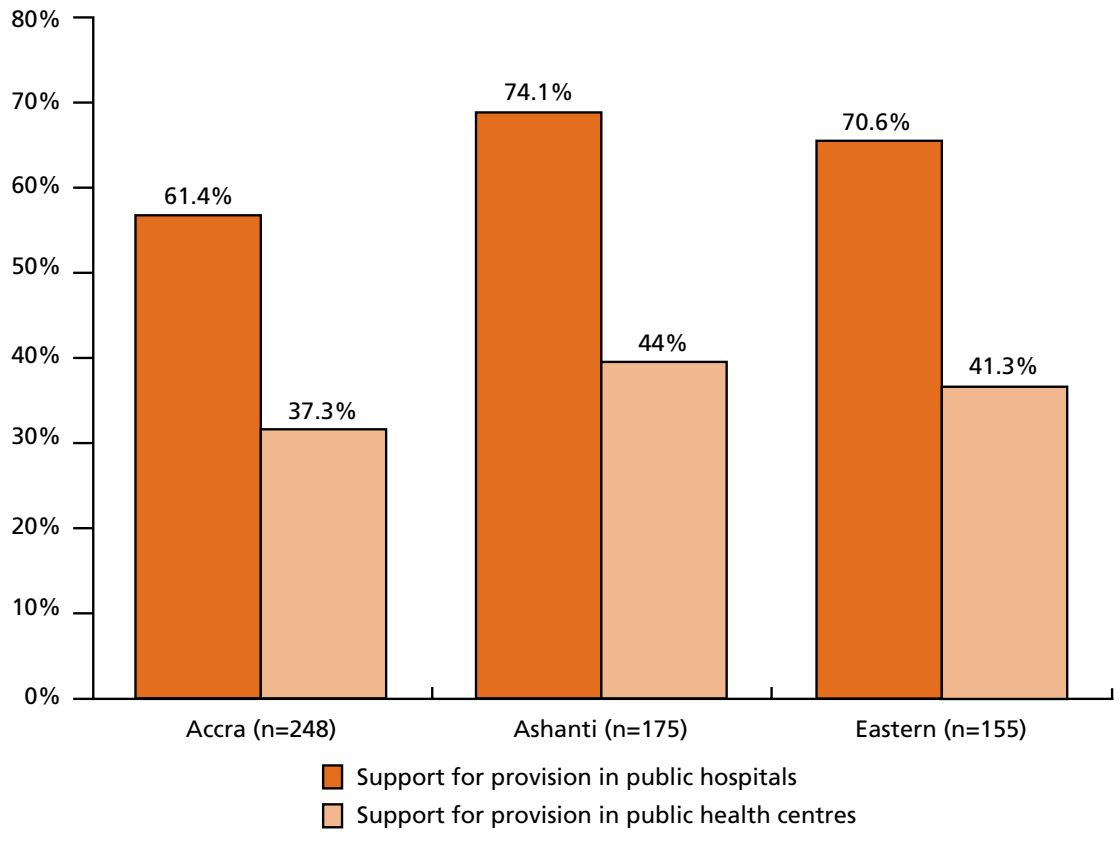


Health-worker attitudes toward the inauguration of uterine-evacuation services in their workplace were surveyed. Roughly two of every three (65-66%) clinicians in Eastern and Greater Accra and as many as three of every four (75%) respondents in Ashanti were "generally" or "strongly" supportive of starting MR services in their public facility. With regard to early abortion up to 12 weeks in accordance with the law, health-worker responses varied widely. While a slight majority (56%) in Eastern Region favour implementation, only one-third (34%) are supportive in Greater Accra. A similar disparate pattern is observed for attitudes toward care of adolescents with parental consent, usage of misoprostol and legal termination beyond 12 weeks gestation.

Location preferences

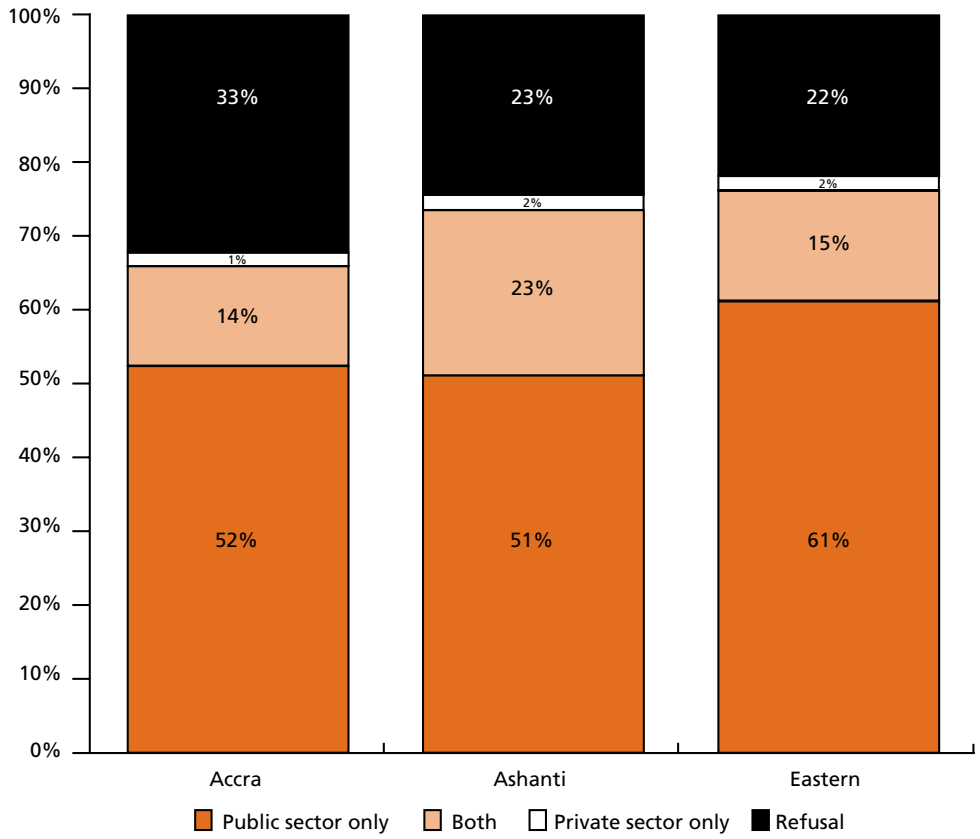
Most health workers and management (61.6%) offer strong support for the establishment of legal abortion services at the hospital level. However, less than half of health staff (36.3%) reported that they were "generally" or "strongly" supportive of having legal abortion offered at the health-centre level. Between 2% and 13% of respondents were undecided. The reasons for specific location preferences were not surveyed. Respondents in Greater Accra are 1.5 times less likely to support public-hospital provision of abortion care than those in the other two regions (C.I.1.1-2., p<.04).

Figure 8: Support for establishment of legal abortion services by region (n=578)



Most health workers (54.2%) surveyed reported that if they were to provide safe abortion as permitted by law, they would prefer to offer it in the public sector rather than the private sector. There was a slight regional variation, with Eastern Region having a slightly higher proportion (61%) opting for public sector only. About 17% (14-23%) of respondents wanted to offer CAC services in both public and private sectors. This preference in favour of the public sector may be due to fact that most respondents currently work in the public sector.

Figure 9: Health-worker preferences regarding the location of personal CAC practice

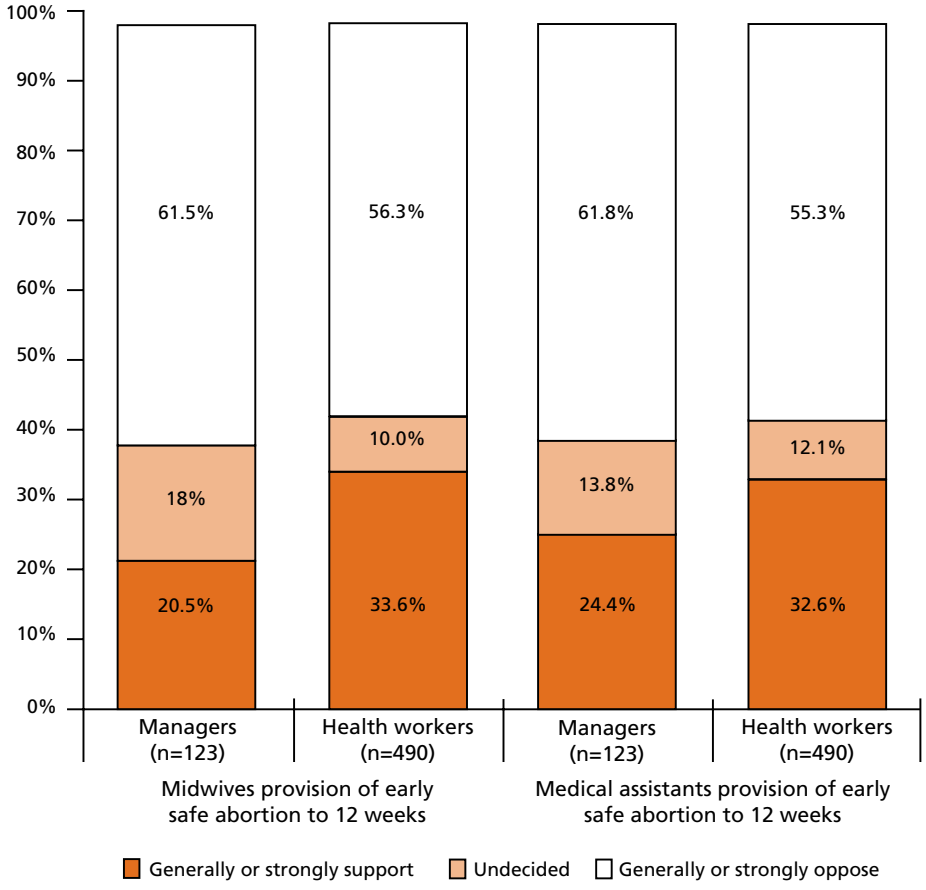


Clinician personal interest in providing abortion-care services within public hospitals is higher than for public-health centres in all regions. However, between 14% and 23% were interested in offering safe abortion as permitted by law in their private practices. The reasons for preferring the public sector included: the availability of colleague support, the presence of equipment and specialists in case of complications, perceived enhanced transparency, affordability, and protection from provider liability. The reasons for preferring to render care in the private sector included a desire to offer greater privacy and confidentiality for patients and to help prevent future unwanted pregnancies.

Staffing preferences

The majority of managers and health workers expressed general or strong opposition to the provision of early safe abortion by midwives and medical assistants. Midwives and medical assistants with midwifery training are authorized by the GHS to provide early legal abortion in accordance with the law under the 2006 GHS Standards and Protocols. These attitudes may reflect a lack of awareness of the new GHS policies and protocol.

Figure 10: Attitudes among management and health workers toward the provision of early safe abortion by midlevel cadres



A significantly higher proportion of respondents from Eastern Region (45.6%) supported midwife provision of safe abortion as permitted by law; this was followed by Ashanti Region with 37.7% of respondents supportive of midwives providing early safe abortion. Respondents from the Greater Accra Region were the least likely to support task shifting to midlevel cadres with just more than one-quarter of respondents in favour. Eastern Region has had multiple interventions to improve the status of midwives as PAC providers.[65]

[65] Billings, Debbie, Victor Ankrah, Traci L. Baird, Joseph Taylor, Kathlyn P.P. Ababio and Stephen Ntow. 1999. Midwives and comprehensive postabortion care in Ghana. In Huntington, D. and N. Piet-Pelon, eds. *Postabortion care: Lessons from operations research*. New York, Population Council and Fullerton, Judith, Alfredo Fort and Kulmindar Johal. 2003. A case/comparison study in the eastern region of Ghana on the effects of incorporating selected reproductive health services on family planning services. *Midwifery,* 19(1):17-26.

Training in PAC and CAC services

Table 28: Distribution of staff eligible to provide uterine evacuation by district

		# of eligible staff per district
Accra	Accra Metro	630
	Dangbe East	17
	Tema	146
Ashanti	Adansi N	10
	Amansie W	8
	Kumasi Metro	396
Eastern	Akwapim N	39
	Akwapim S	31
	Birim S	36
	New Juaben	148
Total		1461

For the purpose of this calculation, "eligible staff" was defined as midwives, medical officers, medical assistants, residents, interns and obstetricians/gynaecologists. More than 70% of the professional staff who have the technical capacity to offer CAC are located in the two major metropolitan areas of Accra and Kumasi.

Table 29: Training in PAC by cadre (n=3,003)

Eligible workforce in the 90 facilities surveyed	Already trained in PAC
384 doctors	39 (10.2%)
1018 midwives	24 (2.4%)

When key informants were asked to estimate how many of the 3003 clinical staff were reportedly trained in PAC, they estimated that only 10.2% of doctors and 2.4% of midwives were trained. These are likely to be underestimates, as staff self-reports shown below indicate a higher proportion of service providers.

Interest in training and service provision

Health workers were asked about their current scopes of practice. In terms of uterine evacuation, one-third (32.5%) of respondents in 2005 offered PAC, while 14.6% (60) offered early abortion care with MVA as permitted by law.

Table 30: Provision of specific RH services and demand for training and support (n=513)

	Currently offering (%)	Willing to offer if given training and support (%)
Offer PAC	32.5	81.4
Offer MR	n/a	81.4
Offer safe, early abortion care with MVA up to 12 weeks as permitted by law	14.6	42.8

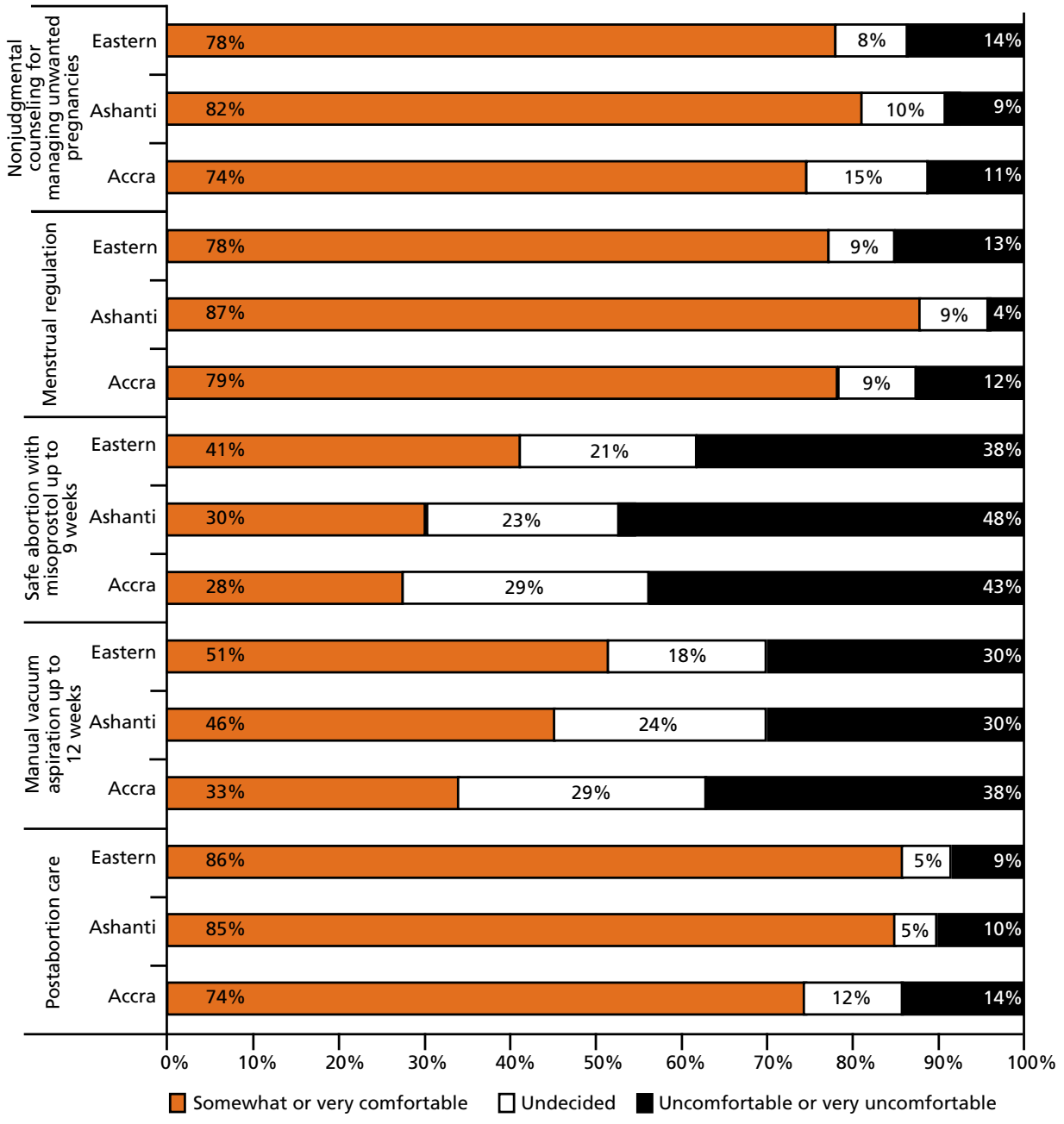
If given training and support, a significantly greater proportion of health workers are willing to provide PAC, MR and safe early abortion with MVA.[66]

Table 31: Staff previous provision of services (n=513)

	Districts	# of staff who offered PAC in 2005	# of staff who offered legal abortion in 2005
Greater Accra	Accra Metro	20	12
	Dangbe East	6	2
	Tema	10	2
Ashanti	Adansi N	17	2
	Amansie W	3	0
	Kumasi Metro	41	20
Eastern	Akwapim N	7	5
	Akwapim S	4	2
	Birim S	11	7
	New Juaben	10	6
Total		**141**	**60**

[66] Between 15% and 20% of respondents did not answer these questions; presumably, these were cadres who are ineligible to offer some of the queried services.

Figure 11: Health-worker attitudes toward personal performance of specific services (n=430)



Health workers were asked which specific services they would be willing to offer if given adequate training and administrative support. At the time of the survey, a significant proportion of health workers (23.4%) were undecided about their future scope of practice. Between 74-86% were very comfortable with personally

rendering PAC service. Similar proportions (74-82%) were willing to be trained to offer nonjudgmental counseling for managing unwanted pregnancies. In spite of the fact that the 2003 Reproductive Health Policy and Standards allows for MVA use up to 12 weeks, most health workers were more comfortable with delivering MR (more than 80%) compared with 43% (range 33-51%) for MVA up to 12-weeks gestation.[67] A similar proportion reported willingness to be trained to offer early abortion to adolescents with parental consent (43%). Roughly a third (28%-42%) of respondents was comfortable personally providing safe abortion with misoprostol up to nine weeks. This small number may due in part to the fact that there had not been any formal introduction or guidelines for the use of misoprostol up to nine weeks before the study. Respondents in all three regions were most comfortable providing PAC. A significant proportion of respondents (30-38%) were uncomfortable providing MVA up to 12 weeks. Health workers in Greater Accra were less likely to feel comfortable offering PAC ($p<.003$) and less likely to feel comfortable offering CAC ($p<.001$).

Role of faith and trust in service delivery

Table 32: Respondents' assessment of the frequency with which their faith influences their behaviour in the workplace (n=645)

	Number of respondents	%
Always	166	25.7
Often	65	10.1
Occasionally	151	23.4
Rarely	39	6.0
Not at all	129	20.0
Unsure	88	13.6
Total	**645**	**100%**

For a third of public-health workers surveyed, religious faith is a major influence on their health-care delivery. One-quarter (25.7%) report "always" and 10.1% report "often" being influenced by faith in their workplace conduct. A similar proportion (23.4%) report being "occasionally" influenced by their faith at work. For one in five (20%) respondents, faith was not cited as an influence, and 13.6% were unsure of its role in their behaviour. The GHS Code of Ethics, Patient's Charter, and Code of Conduct and Disciplinary Procedures stress the vital importance of respecting the dignity, privacy, autonomy and diversity of health workers and patients alike. At the relaunch of the three documents in 2005, Professor Agyeman Badu Akosa, former Director General of the Ghana Health Service, advised health professionals to show empathy: "You should always put yourselves in the shoes of your patients and accord them all the respect due them."

[67] Since "menstrual regulation" was not defined in the survey, we cannot infer all respondents shared the same conceptual definition of this term.

To explore the issue of empathy, the attitudes of health workers regarding the role of sexual violence and mental illness in pregnancy were surveyed. Although 62.7% of health workers affirmed that unwanted pregnancy could cause mental-health problems for women, more than half (52.2%) agreed with the statement that "pregnant women and girls would assert false mental health claims to access safe abortion." Similarly, a majority (71.6%) agreed with the statement that "pregnant women and girls would falsely claim to have been raped in order to qualify for a legal termination." Health-worker concerns regarding the potential of pregnant women and girls to "abuse" the rape and mental-health indications of the law merit further scrutiny. Respondents from Greater Accra Region were more likely to agree with these statements ($p<.02$).

Figure 12: Health-worker and management beliefs about the link between mental health and unwanted pregnancy (n=563)

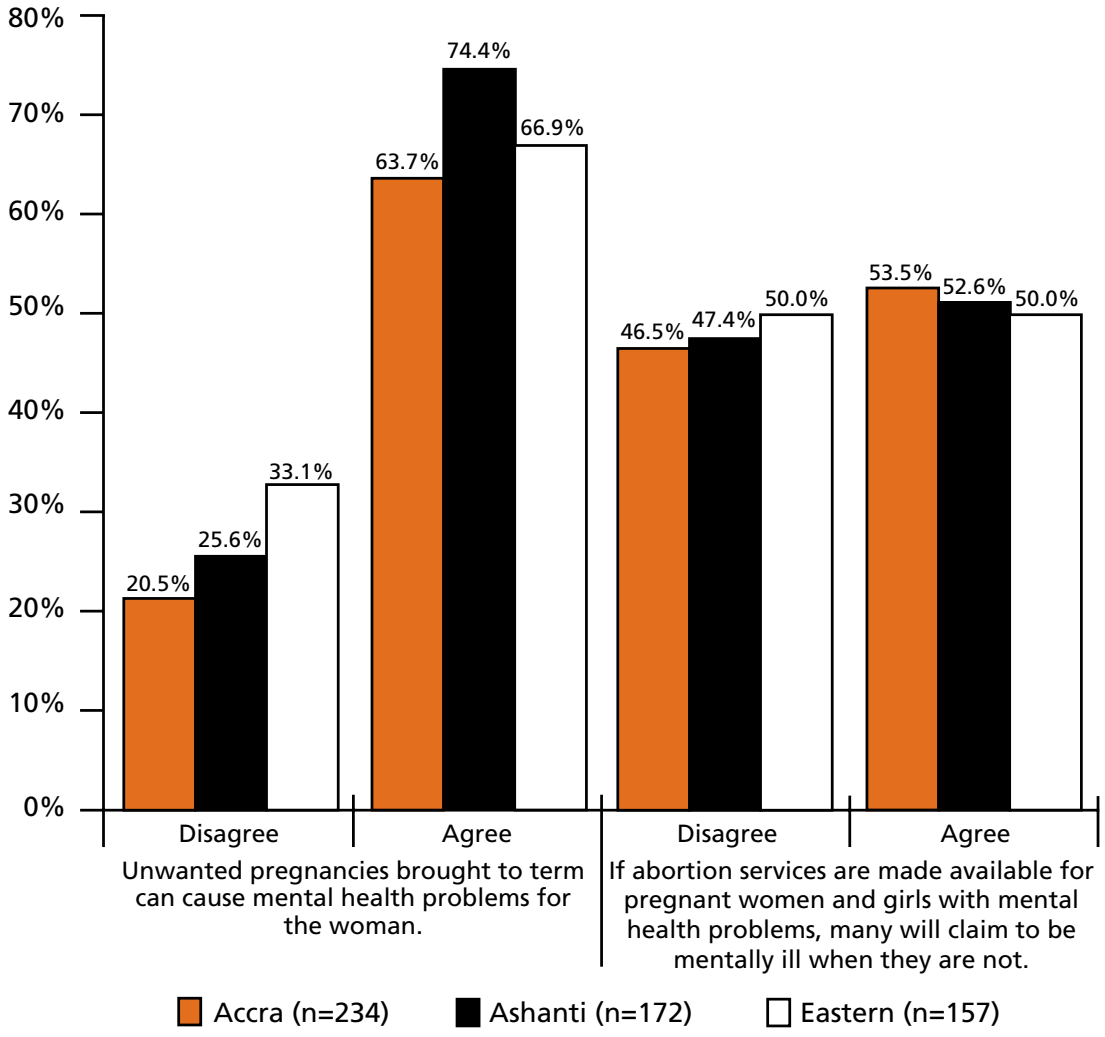
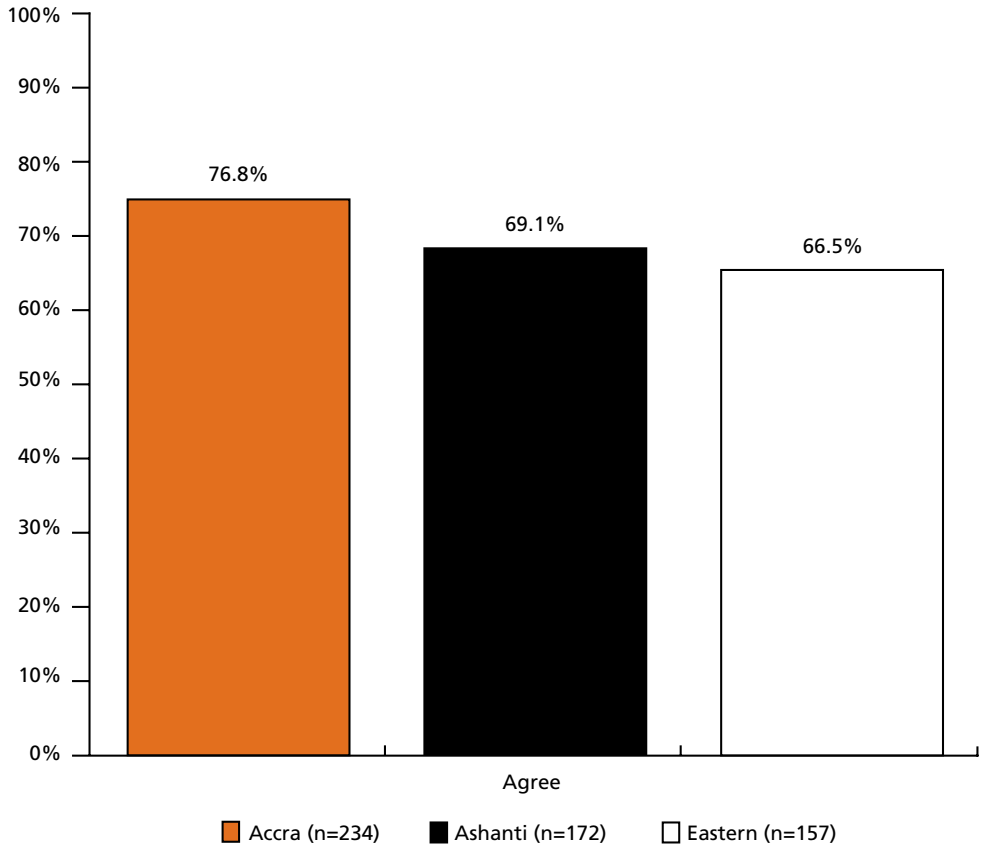


Figure 13: Health-worker and management concerns regarding potential for false rape claims by pregnant women requesting legal abortion by region (n=563)



Motivations to offer SAC as permitted by law

There are many factors that may impinge on the decision to offer SAC. These may include an awareness or perception of the societal benefits of available safe-abortion services. The three motivational factors most cited by health workers were: the desire to reduce maternal mortality and morbidity (75.6%), the desire to help women avoid the injuries from self-induced or badly performed abortions (73.5%), and the desire to help restore women's physical and mental health when they have been the victims of rape or incest (65.4%).