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Obstetrical providers' preferred mode of delivery and attitude towards non-medically indicated caesarean sections: a cross-sectional study

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Disclosure of interests

None declared. Completed disclosure of interests form available to view online as supporting information.

Contribution to authorship

JR, MA, FA and JMB conceived and designed the study. JR, MA, VP, RAC, AEF, HBK, JDM, MM, MLM, GMT, ABP, LR, JAS, MT and SV implemented the study and collected the data. JR, MA, FA and JMB developed the plan of analysis and interpreted the data. JR, MA, FA and JMB analysed the data. JR and JMB drafted the manuscript. All of the authors provided critical revisions of and approved the manuscript.

Details of ethics approval

Ethical approval was obtained from the following participating research organisations and hospitals. Tulane University Human Research Protection Program approved the study on 9 March 2015 (Protocol ID: 14–632629). Comité de Ética en Investigación de Centro de Educación Médica e Investigaciones Clínicas 'Norberto Quirno' (CEMIC) approved on 30 March 2015 (Protocol ID: 939). Comité de Bioética 'Dr Vicente Federico del Giúdice' de Hospital Nacional Profesor Alejandro Posadas approved the study on 24 April 2015 (Protocol ID: 008 EMnPI15/15). The Duke University Health System IRB for Clinical Investigation approved a reliance agreement on 27 May 2016 (Protocol ID: Pro00072429). Instituto de la Maternidad y Ginecología Nuestra Señora de las Mercedes accepted the study on 21 September 2016 and accepted approval by CEMIC ethics committee. Sanatorio de la Mujer en Rosario, Argentina, relied on the approvals by Hospital CEMIC and Hospital Posadas, approved the study on 1 April 2016.

Supporting Information

Additional Supporting Information may be found in the online version of this article:
Appendix S1. Survey of healthcare professionals.

Abstract

Objective—To describe obstetrical providers' delivery preferences and attitudes towards caesarean section without medical indication, including on maternal request, and to examine the association between provider characteristics and preferences/attitudes.

Design—Cross-sectional study.

Setting—Two public and two private hospitals in Argentina.

Population—Obstetrician-gynaecologists and midwives who provide prenatal care and/or labour/delivery services.

Methods—Providers in hospitals with at least 1000 births per year completed a self-administered, anonymous survey.

Main outcome measures—Provider delivery preference for low-risk women, perception of women's preferred delivery method, support for a woman's right to choose her delivery method and willingness to perform caesarean section on maternal request.

Results—168 providers participated (89.8% coverage rate). Providers (93.2%) preferred a vaginal delivery for their patients in the absence of a medical indication for caesarean section. Whereas 74.4% of providers supported their patient's right to choose a delivery method in the absence of a medical indication for caesarean section and 66.7% would perform a caesarean section upon maternal request, only 30.4% would consider a non-medically indicated caesarean section for their own personal delivery or that of their partner. In multivariate adjusted analysis, providers in the private sector [odds ratio (OR) 4.70, 95% CI 1.19–18.62] and obstetrician-gynaecologists (OR 4.37, 95% CI 1.58–12.09) were more willing than either providers working in the public/both settings or midwives to perform a caesarean section on maternal request.

Conclusions—Despite the ethical debate surrounding non-medically indicated caesarean sections, we observe very high levels of support, especially by providers in the private sector and obstetrician-gynaecologists, as aligned with the high caesarean section rates in Argentina.

Keywords

caesarean section; cesarean section/epidemiology; cesarean section/utilisation; maternal request; non-medically indicated caesarean section; obstetricians' attitude

Introduction

Women in every region of the world except Africa are delivering by caesarean section (CS) at rates above which the World Health Organization (WHO) considers medically indicated.¹ In 2014, 40.2% of women in Latin America and the Caribbean (LAC) delivered via CS, the world's highest rate.¹ Should current trends continue, the CS rate in the LAC will reach 50% by 2025.^{1,2} The international rise in CS rates has been attributed to an increase in non-medically indicated CS, including CS on maternal request (CSMR).^{1,3–11} Evidence suggests, however, that women prefer to deliver vaginally and CSMR rates are unlikely to account for the CS trends; rather, the remaining variables, providers and health system, are likely synergistically driving the increase in non-medically indicated CSs.^{12–19} In an

analysis of CS rates of 120 Latin American institutions, ‘being a private as opposed to a public institution, having some economic incentive for CS as opposed to no incentive, and having 50 maternity beds’ explained 48% of the variability among risk-adjusted CS rates.¹⁵

Given evidence highlighting the indubitable role of providers in determining mode of delivery, performing a CSMR and ensuring true informed consent for a non-medically indicated procedure, providers’ attitudes on the topic remain of significant interest. There is considerable variability in their attitudes towards a woman’s right to choose her mode of delivery: 38 versus 54% of samples of providers surveyed in Denmark and USA, respectively, support a woman’s right to choose.^{20,21} Similarly, willingness to perform a CSMR ranged from 15 to 79% in samples of providers surveyed in Spain and UK, respectively.²² This variation in provider attitudes towards medically unjustified CS reflects an unresolved debate over the available evidence comparing modes of delivery in low-risk women, women’s reproductive rights, providers’ ethical responsibilities and societal implications of a shift in resources.^{17,23}

Countries with CS rates significantly above the recommended WHO threshold are priority locations for exploring the opinions of obstetrical providers towards non-medically indicated CS.^{4,24} With CS rates estimated between 29 and 60%, Argentina can serve as an apt model for understanding this phenomenon.²⁴ This paper aims to describe a sample of Argentine obstetrical providers’ preferred modes of delivery for low-risk women, their perception of women’s preferred modes of delivery and their attitudes toward CS without medical indication, including CSMR. Provider factors associated with such preferences and attitudes will also be examined.

Methods

Setting

This paper describes the delivery preferences and attitudes of a sample of obstetrical providers in Argentina. Between March 2016 and 2017, a cross-sectional study was conducted in one public and one private hospital in the province of Buenos Aires, one private hospital in the province of Santa Fe and one public hospital in the province of Tucumán. Hospitals with at least 1000 deliveries per year were eligible and were selected based on prior research collaboration and wish to participate. Both public and private hospitals were included to capture diverse patient populations in these distinctive clinical settings. All the hospitals included have an affiliation with academic institutions. The hospital self-reported caesarean section rates in the four hospitals were: 61.8, 51, 46.6 and 37.3% in the year the study was conducted. The private healthcare system in Argentina is predicated on higher socioeconomic status and patients have prepaid or employer-funded health insurance.²⁵ In the private setting, there is care continuity between antenatal and delivery care; as such, the same obstetrician-gynaecologist (Ob-Gyn) usually cares for a woman during pregnancy and performs her delivery. Therefore, the private setting is associated with more personalised care. Public hospitals are funded by the State and patients receive free care regardless of insurance status. In the public setting, women are attended by a variety of providers, including midwives, throughout their pregnancy and delivery. In

Argentina, approximately 99% of births occur in hospitals and 55% of women deliver in the public setting.^{26,27}

Participants

Ob-Gyns and midwives who provide antenatal care (ANC) and/or labour and delivery services and have delivery decision-making power were eligible to participate. Senior medical staff/administration in each hospital developed a census of all providers meeting this criterion.

Variables

Demographic factors gathered about the providers in the study include: age (stratified by 35 years old and younger, and older than 35 years), gender, type of healthcare practitioner, position in hospital (staff member or resident), hospital subsector (public, private or both subsectors), years working in the field and personal reproductive history (if they or their partner has biological children and, if so, the delivery method(s) of said biological children). Because of the linear correlation in our study between age and the number of years since receiving a degree, this single variable was used to capture both (as was done in Kwee, 2004).²⁸ Age was treated as a dichotomous variable to align with our hypothesis that attitudes and opinions will be established when the provider has worked independently for a number of years. In general, providers in Argentina who are 35 years old completed residency training 4 to 5 years ago, an adequate time since residency training for a provider to form their own opinions, preferences and practices. The age of 35 was chosen as the cut-off age at which attitudes and preferences would be well formulated. Analysis by hospital was considered, but the individual hospital sample sizes were too small to power results. The two private hospitals had 17 and 43 providers, respectively. The two public hospitals had 71 and 37 providers, respectively.

Preparatory phase

This study involved a preparatory phase to develop the survey questionnaire (see Supporting information Appendix S1), as no core outcome set (COS) exists for this topic. In this phase (April–September 2015), qualitative data was gathered from Focus Group Discussions (FGDs) and In-Depth Interviews (IDIs) with a total of 10 health providers from one private and one public hospital in the province of Buenos Aires. The FGDs and IDIs were used to develop a survey following standard methodology.²⁹ In December 2015, the survey was verified in a pilot phase with a convenience sample of four providers selected from these hospitals. This preparatory phase is described elsewhere.³⁰ The survey is available as a supplement (Appendix S1).

Procedures

At each hospital, a hospital employee serving as the site coordinator was in charge of the site's research activity and personally invited eligible providers to participate and administered the consent process. To ensure anonymity, the survey was self-administered and returned in a sealed envelope to the site coordinator; the census of eligible providers, including eligible non-respondents, did not register provider characteristics.

Statistical analysis

The sample size was constrained by the provider population size in the four participating hospitals. Each hospital aimed to survey at least 80% of eligible providers to ensure survey validity. Descriptive, bivariate and multivariate analyses were performed to describe opinions, preferences and healthcare professional characteristics (age, gender, sector, profession and reproductive history) and to examine the relationship between these opinions/preferences and provider characteristics. Crude and adjusted odds ratios (ORs) and 95% confidence intervals (CIs) were computed using logistic regression. Adjusted ORs were adjusted for professional characteristics *a priori* considered covariates of interest (age, gender, sector, profession and biological children) based on literature review and qualitative data. Outcome measures (provider delivery preference for low-risk women, their perception of women's preferred delivery methods, their support for a woman's right to choose her delivery method and their willingness to perform caesarean section on maternal request) were dichotomised into '1' ('Yes, CS or Yes, I agree') and '0' ('VD, don't agree, don't know, or don't want to answer'), depending on the specific wording of the question. Given that only Ob-Gyn providers were surveyed in the private setting, a sensitivity analysis was conducted to evaluate this interaction. All analyses were done using STATA Version 14.0.367. Study data were collected and managed using REDCap electronic data capture tools hosted at the institute for Clinical Effectiveness and Health Policy (IECS).³¹

Results

Table 1 summarises the characteristics of the enrolled providers. Of the 187 eligible providers in the four hospitals, 168 providers were enrolled (89.8% participation rate). The remaining 19 providers did not agree to participate. Of the providers, 27.4% only work in the public sector, 25.6% only work in the private sector and 47.0% work in both sectors. The majority of providers surveyed were female (59.5%), over 35 years of age (63.7%), and were trained as Ob-Gyn physicians (76.8%). Trainees constituted 21.4% of the total sample. Of the 105 (62.5%) of providers with biological children, 43.8% of these providers (or their partners) had delivered only via vaginal delivery (VD), 41.9% had delivered only via CS and 14.3% had delivered via both VD and CS. All of the providers in the private sector and 84.8% of the providers working in both the public and private sector were Ob-Gyns.

Almost all providers (92.3%, $n = 155$) expressed a preference for a VD for their patients in the absence of a medical indication for a CS (Table 2). Three providers (1.8%) indicated a preference for a CS and 10 providers (6.0%) indicated that they did not have a preference. Regarding perceived patient preference, 42.9% ($n = 72$) of providers believe that women prefer a VD, 35.7% ($n = 60$) believe that women prefer a CS and 21.4% ($n = 36$) believe that their patients have no preference for mode of delivery. Regarding non-medically indicated CSs, 74.4% ($n = 125$) of providers believe that their patients should have the option for CS and 66.7% ($n = 112$) of providers would perform a CSMR; however, only 30.4% ($n = 51$) of providers would consider a non-medically indicated CS for themselves or their partner (Table 2).

In the unadjusted analysis, there were statistically significant differences in provider attitudes towards CS by provider age, gender, sector, profession and history of biological

children (Table 3). Providers who are Ob-Gyns (OR 9.18, 95% CI 4.07–20.71), work in the private sector only (OR 4.52, 95% CI 1.26–16.23), male (OR 4.24, 95% CI 1.99–9.03), personally delivered (or their partner) only by VD (OR 3.80, 95% CI 1.53–9.44), older than 35 years of age (OR 2.39, 95% CI 1.23–4.65) and have biological children (OR 2.20, 95% CI 1.14–4.25) were significantly more willing to perform a CSMR. Conversely, providers working only in the public sector (OR 0.13, 95% CI 0.06–0.30) were significantly less willing to perform a CSMR. Details of the comparison groups are given in Table 3.

In the multivariate analysis adjusted for age, gender, sector, profession and history of biological children, the relation to willingness to perform a CSMR was strengthened for providers who work only in the private sector (OR 4.70, 95% CI 1.19–18.62) and have biological children (OR 3.00, 95% CI 1.11–8.09) and was attenuated, but remained significant for Ob-Gyns (OR 4.37, 95% CI 1.58–11.82) (Table 4). The inverse relation remained, but was attenuated for providers who work only in the public sector (OR 0.25, 95% CI 0.10–0.66. In a sensitivity analysis involving only Ob-Gyn providers that was conducted to ascertain a potential interaction with sector, the results were unchanged (results not presented).

Discussion

Main findings

Obstetrical providers in four hospitals in Argentina prefer VDs for their patients without a medical indication for CS. Congruently, two-thirds of providers would *not* consider a non-medically indicated CS for their (or their partner's) delivery. Over one-half of providers believe women prefer CSs or have no delivery mode preference. Furthermore, three-quarters of providers support a woman's right to choose her delivery mode and two-thirds would perform a CSMR. In adjusted analysis, providers trained as Ob-Gyns, in the private sector and with children, were more willing to perform CSMR than were providers trained as midwives, in the public or both sectors and without children.

Strengths and limitations

Given the potential for social desirability/response bias, all surveys were self-administered. Informed consent included a discussion of the survey's confidentiality to site coordinators and anonymity to researchers. To limit survey bias, the survey tool was developed and validated in qualitative and pilot phases. Several factors prevent generalisability across Argentina or other settings. Although chosen via a convenience sample and with sample sizes limited by eligibility, all eligible providers (or a smaller representative sample when staff size was very large) were invited to participate and a minimum site recruitment rate of 80% was set and achieved (89% overall), limiting non-response bias and strengthening the sample representativeness. The four hospitals represent a diversity of obstetrical providers; however, we did not explore how organisation policies and ethos, including the hospital affiliation with academic institutions, could have biased results or evaluate why hospitals declined to participate. Finally, large confidence intervals due to small sample sizes limit interpretation.

Interpretation

Comparable to the providers surveyed, >89% of nulliparous Argentine women surveyed in their third trimester preferred VD.^{25,30} Our results highlight an inconsistency between providers' stated preference for VD and their practices, reflective of a complex culture of decision-making and competing incentives.^{4,16,17,32} This inconsistency has been documented in other countries including Brazil.^{13,16} We acknowledge that it is unknown whether provider attitudes are associated with their CS rates. However, even if personal CS rates data were available, they would not always be applicable. For example, due to duty shift changes in public hospitals, different providers may make decisions and perform deliveries.

Furthermore, evidence supports that, even with variation in healthcare systems and populations, providers significantly impact the delivery mode decision.^{12,15,17,30} An indirect measure that provider attitudes are likely associated with high CS rates comes from the observation that working in private hospitals is associated with higher CS rates, as corroborated by our results. Qualitatively, a sample of pregnant women in the Argentine public sector reported viewing 'mode of delivery not as a choice, but as a medical decision' and 'often had the decision made for them by their physician'.³³ Furthermore, our results demonstrate a gap between providers' desire to support women's autonomy (74%) and their awareness of women's preferences (only 45% of providers believe their patients prefer VD). Of a sample of low-risk, nulliparous, private-sector Argentine women preferring VD in their third trimester, 11% had a documented scheduled CS, 13% of which had medical indications.²⁵ Of a sample of private-sector Brazilian women preferring VD during their third trimester, 34% delivered via scheduled CS.³⁴

In our study, providers were more supportive of women's right to choose (74%) and were more willing to perform non-medically indicated CSs (66%) than were providers surveyed in studies in Turkey,³⁵ Denmark,²⁰ USA²¹ and Israel,³⁶ reporting rates of support and willingness of between 38 and 57%. Providers were comparable to providers surveyed in Australia (77% willing)³⁷ and UK (79% willing).²² Factors associated with the greatest support for CSMR, Ob-Gyn profession and private sector, have been documented in surveys and/or cohort studies in Canada, Brazil and Australia.^{34,38–40} The interaction between profession and hospital sector is complicated because private hospitals often only have Ob-Gyns. The private-only providers in our sample were all Ob-Gyns. Regardless of this, the association between profession and CSMR support is predictable. Ob-Gyns train as interventionists and surgeons in high-acuity situations, whereas midwives traditionally train to manage low-risk pregnancies.^{2,6,17} Accordingly, the attitude of midwives is consistently less favourable towards CSMR.^{6,38}

Varying CS rates between public and private sectors have been attributed to contextual differences. In cultures valuing technology and intervention, CSs are often associated with improved care quality, higher socio-economic status and greater patient autonomy.^{17,32,40,41} However, if Argentine private sector women truly had more autonomy, private sector CS rates (>50%) would be lower, given evidence of women's preference for VD.^{24,25,33} Public sector-only providers were significantly less willing to perform CSMR, consistent with a

public-sector cultural dynamic of less patient autonomy, including a lack of provider choice.³³

Finally, the impact of providers' personal birth experience on preferences is inconsistent between studies.^{20,42,43} Whereas a sample of Danish providers who had VDs were less supportive (OR = 0.49) of CSMR, a sample of German providers highly supported CSMR whether they were nulliparous (67%) or only had CS (69%).^{20,43} While our sample size limits analyses by delivery mode(s), providers with children were more willing to perform CSMR than providers without children and are less likely to believe their patients prefer CS. In contrast, a sample of Scottish providers with children were significantly *less* likely than providers without children to prefer non-medically indicated CSs. A sample of German providers was almost equally supportive of CSMR whether nulliparous or with history of CS.^{42,43}

The growing prevalence of non-medically indicated CSs raises a complex ethical debate.^{5,11,17,38,44–50} In 1998, the International Federation of Gynecology and Obstetrics (FIGO) declared using 'available evidence' that: 'performing CS for non-medical reasons is ethically not justified' and 'physicians have the responsibility to inform and counsel women in this matter'.^{8,23,51} The 2004 Argentine Law for Humane/Respectful Birth mandates the legal right to a 'natural childbirth, respectful of biological and psychological times, avoiding invasive practices and provision of medications that are not justified by the state of health of the parturient or the person to be born'.⁵² Other bodies support physicians offering or declining CSMR based on their risk/benefit analysis.⁵³ However, multiple factors, including imbalanced physician incentives and a lack of randomised controlled trials comparing delivery modes in low-risk women, hinder an objective risk/benefit analysis. While an ethical framework equating reproductive rights with increased delivery choice and autonomy is argued, others reason that rights are better promoted with objective, evidenced-driven information and counselling for making informed decisions.^{17,47,48}

Conclusion

Despite overwhelming provider preference for VD for low-risk women, provider factors may contribute to excessive CS rates: (1) support for women's autonomy to choose non-medically indicated CSs, (2) willingness to perform a CSMR, (3) perception that women prefer CS or lack a preference, despite contradicting evidence. These factors may bias the patient-provider delivery decision-making process to favour CS, especially with private-only sector/Ob-Gyn providers, who were significantly more supportive of women's autonomy and CSMR. Further research is warranted to understand the causes and implications of rising rates of non-medically indicated CSs and to explore the interactions of providers and pregnant women with regard to pertinent medical and ethical concerns. Given that 10 of the 25 countries with the highest CS rates in the world are in LAC, our findings can inform international efforts to reduce CS rates.^{1,4,19}

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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Table 1Provider demographic characteristics ($n = 168$)

	<i>n</i> (%)
Age	
35 years	61 (36.3)
>35 years	107 (63.7)
Gender	
Female	100 (59.5)
Male	68 (40.5)
Profession	
Obstetrician-Gynaecologist (Ob/Gyn)	129 (76.8)
Certified Ob-Gyn	97 (75.0)
Resident in third or fourth year	32 (25.0)
Midwife	39 (23.2)
Certified Midwife	35 (89.7)
Resident in third or fourth year	4 (10.3)
Years since receiving degree, ^a Median (IQR)	12 (5–19)
Work sector	
Public only	46 (27.4)
Private only	43 (25.6)
Both sectors	79 (47.0)
Biological children	
No biological children	63 (37.5)
Yes biological children	105 (62.5)
Mode of delivery of biological children ($n = 105$)	
Only vaginal delivery	46 (43.8)
Only caesarean section	44 (41.9)
Both vaginal delivery and caesarean section	15 (14.3)

^aMissing 1 response from years since receiving degree.

Table 2

Providers' preferred method of delivery, perception of women's preferred mode of delivery and attitudes towards non-medically indicated caesarean section ($n = 168$)

	Vaginal delivery <i>n</i> (%)	Caesarean section <i>n</i> (%)	No particular preference <i>n</i> (%)
I prefer the following mode of delivery for my patients in the absence of a medical indication for caesarean section ^a	155 (92.3)	3 (1.8)	10 (6.0)
I believe that the majority of my patients prefer the following mode of delivery ^a	72 (42.9)	60 (35.7)	36 (21.4)
	Yes <i>n</i> (%)	No <i>n</i> (%)	Do not know/want to answer <i>n</i> (%)
I believe women should be able to choose their delivery method, in the absence of a medical indication for a caesarean section	125 (74.4)	31 (18.5)	12 (7.1)
I would perform a non-medically indicated caesarean section on maternal request	112 (66.7)	36 (21.4)	20 (11.9)
I would consider having a non-medically indicated caesarean section for myself or my partner	51 (30.4)	106 (63.1)	11 (6.6)

^a Do not know/want to answer was an option. Received no responses.

Table 3
Attitudes towards caesarean section, by provider characteristics (crude OR, 95% CI)

Provider characteristics	n	I believe that women prefer a caesarean section as their preferred mode of delivery		I believe women should be able to choose their delivery method, in the absence of a medical indication for a caesarean section		I would perform a non-medically indicated caesarean section on maternal request		I would consider having a non-medically indicated caesarean section for myself or my partner.	
		Crude OR, 95% CI		Crude OR, 95% CI		Crude OR, 95% CI		Crude OR, 95% CI	
Age									
Age ≤35	61	1.00	–	1.00	–	1.00	–	1.00	–
Age >35	107	0.40	0.21–0.78	1.78	0.87 – 3.61	2.39	1.23 – 4.65	1.55	0.76–3.15
Gender									
Female	100	1.00	–	1.00	–	1.00	–	1.00	–
Male	68	0.73	0.07–8.23	1.58	0.76–3.27	4.24	1.99–9.03	0.93	0.47–1.82
Sector									
Both	79	1.00	–	1.00	–	1.00	–	1.00	–
Public only	46	2.32	1.10–4.88	0.77	0.35–1.67	0.13	0.06–0.30	0.83	0.39–1.80
Private only	43	0.12	0.03–0.43	4.00	1.28–12.49	4.52	1.26–16.23	0.34	0.12–0.85
Profession									
Midwife	39	1.00	–	1.00	–	1.00	–	1.00	–
Obstetrician-Gynaecologist	129	0.65	0.31–1.34	2.63	1.22–5.65	9.18	4.07–20.71	1.61	0.70–3.69
Certified provider	132	1.00	–	1.00	–	1.00	–	1.00	–
Resident	36	1.38	0.65–2.94	1.55	0.63–3.86	0.85	0.40–1.85	0.85	0.38–1.93
Biological children									
No, biological children	63	1.00	–	1.00	–	1.00	–	1.00	–
Yes, biological children	105	0.44	0.23–0.84	1.12	0.55–2.29	2.20	1.14–4.25	0.90	0.46–1.77
Delivery method for self or partner									
No biological children	63	1.00	–	1.00	–	1.00	–	1.00	–
Only had vaginal delivery	46	0.27	0.11–0.65	1.76	0.68–4.51	3.80	1.53–9.44	0.45	0.18–1.15
Only had caesarean section	44	0.76	0.35–1.66	1.11	0.46–2.67	1.71	0.77–3.84	1.79	0.80–3.97
Had both vaginal delivery and caesarean section	15	0.28	0.07–1.07	0.42	0.13–1.34	1.20	0.38–3.78	0.54	0.14–2.12

Crude and adjusted OR of provider willingness to perform a caesarean section upon maternal request, by provider characteristics

Table 4

Provider characteristics	<i>n</i>	I would perform a non-medically indicated caesarean section on maternal request	
		Crude OR, 95% CI	Adjusted OR ^a , 95% CI
Age			
Age ≤35	61	1.00	1.00
Age >35	107	1.23–4.65	0.53–3.74
Gender			
Female	100	1.00	1.00
Male	68	1.99–9.03	0.41–3.03
Sector			
Both	46	1.00	1.00
Public only	43	0.06–0.30	0.10–0.66
Private only	79	1.26–16.23	1.19–18.62
Profession			
Midwife	39	1.00	1.00
Obstetrician–Gynaecologist (Ob/Gyn)	129	4.07–20.71	1.58–12.09
Biological children			
No, biological children	63	1.00	1.00
Yes, biological children	105	1.14–4.25	1.11–8.09

^a Adjusted model includes all variables once (age, gender, sector, profession and biological children).