

# BMJ Open Female genital cosmetic surgery: a cross-sectional survey exploring knowledge, attitude and practice of general practitioners

M Simonis,<sup>1,2</sup> R Manocha,<sup>3,4</sup> J J Ong<sup>5,6</sup>

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For numbered affiliations see end of article.

## Correspondence to

Dr M Simonis;  
magdalena.simonis@mac.com

## ABSTRACT

**Objective:** To explore general practitioner's (GP) knowledge, attitudes and practice regarding female genital cosmetic surgery (FGCS) in Australia.

**Design:** Cross-sectional survey.

**Setting:** Australia.

**Sample:** GPs who attended a women's health seminar and GPs who subscribed to a non-governmental, national health professional organisation database that provides education to primary care professionals.

**Method:** A national online survey of GPs was conducted for the 10-week period, starting 1 week prior and 2 months after a Women's Health seminar was held in Perth on 8 August 2015. 31 questions prompted GPs' knowledge, attitudes and practice in managing patients asking about FGCS.

**Results:** The survey was fully completed by 443 GPs; 54% had seen patients requesting FGCS. Overall, 75% (95% CI 71% to 79%) of GPs rated their knowledge of FGCS as inadequate and 97% (95% CI 94% to 99%) had been asked by women of all ages about genital normality. Of those who had seen patients requesting FGCS, nearly half (44%, 95% CI 38% to 51%) reported they had insufficient knowledge of risks of FGCS procedures and 35% (95% CI 29% to 41%) reported seeing females younger than 18 years of age requesting FGCS. Just over half (56%, 95% CI 51% to 60%) of the GPs felt that women should be counselled before making a referral for FGCS. More than half the GPs suspected psychological disturbances in their patients requesting FGCS such as depression, anxiety, relationship difficulties and body dysmorphic disorder.

**Conclusions:** GPs see women of all ages presenting with genital anatomy concerns and in those who request FGCS, GPs often suspected a range of mental health difficulties. GPs require greater education to support their patients who request FGCS.

## INTRODUCTION

The popularity of female genital cosmetic surgery (FGCS) is growing and genital modification for cosmetic reasons has many social

## Strengths and limitations of this study

- This is the first large survey that explores general practitioner (GP) experience of female genital cosmetic surgery (FGCS).
- Nearly, all GPs surveyed have been asked about genital normality in women of all ages.
- Thirty-five percent of GPs had been asked about FGCS by girls under the age of 18.
- The survey confirms the need for further education of GPs.
- This is a skewed group of GPs with mainly women's health interest.

and medical implications. FGCS, also known as vulvoplasty, refers to a group of non-medically indicated cosmetic surgical procedures that change the structure and appearance of the healthy external genitalia of women, or internally in the case of vaginal tightening.<sup>1 2</sup> More specifically, it encompasses labiaplasty (trimming of the labia minora and less commonly labia majora), hymenoplasty, vaginoplasty (also known as vaginal reconstruction), mons pubis liposuction, vaginal 'rejuvenation' or laser 'rejuvenation', G-spot augmentation and Orgasm-shot.<sup>1 2</sup> Following liposuction, breast augmentation and rhinoplasty, labiaplasty was reported to be the fourth most common cosmetic surgical procedure according to US statistics in 2013, rising by 44% in the 2013 alone.<sup>3</sup> Over the decade 2003–2013, Australia had a three-fold increase in labiaplasties<sup>4</sup> and the UK a fivefold increase.<sup>5</sup> Australian government statistics indicate a 140% increase in requests for rebatable vulvoplasty from 640 in 2001 to more than 1500 in 2013,<sup>4</sup> without a concomitant rise in genital disease diagnoses.<sup>6</sup> These figures do not reflect the true number of procedures performed, as an unknown number of procedures are performed in the private sector for which there are no accurate published figures.

Much of the research published to date has emanated from the UK and USA. It has explored sociocultural reasons for the rise in FGCS procedures,<sup>7 8</sup> the ethical aspects regarding its heavy marketing by sectors of the medical profession<sup>7 9–11</sup> and surgical discourse regarding techniques,<sup>1 2 12–15</sup> with little published literature for the medical profession discussing risks and long-term outcomes of FGCS.<sup>15 16</sup> The role of the general practitioner (GP) regarding this emerging area of surgery has been identified as a ‘new dilemma for the general practitioner (GP)’.<sup>9 10 17</sup>

A recently published qualitative study from Australia interviewed 27 health professionals of which 13 were GPs.<sup>18</sup> This study revealed that although all of the GP participants were aware of FGCS and all practitioners had seen patients who had questioned whether their genital appearance was normal, they were unaware of how to best manage these consultations. In response to the increasing demand for FGCS and advice sought from the GPs regarding FGCS, the Royal Australian College of General Practitioners launched the resource guide for health professionals titled, ‘Female Genital Cosmetic Surgery: a resource for general practitioners and other health professionals’ on 31 July 2015.<sup>19</sup> As the first point of contact with the healthcare system, informed GPs can play an important and central role in educating women and girls regarding the varied range of genital appearance and the risks of genital surgery.<sup>17</sup> They can also help to address modifiable psychosocial factors, thereby assisting women towards better health outcomes.<sup>7 17</sup>

To date, limited quantitative research has explored the management of FGCS from the GP perspective. This study addresses a significant research gap by being the first to explore the knowledge, attitude and practice regarding FGCS in a large group of GPs.

## METHODS

### Study population

In order to recruit GPs, the online survey (see online supplementary file 1) and Information Statement (see online supplementary file 2) were sent via email three times at intervals of 3 days each, to ~11 000 GPs. This group of GPs voluntarily subscribes to a private educational organisation database to receive free seminar information, material, invitations and updates in matters pertaining to primary healthcare and this database has been in existence since the year 2000. The *RACGP guidelines* were published and launched on 31 July 2015. The survey was first sent out on 3 August 2015 and during the Women’s and Children’s seminar, at which an FGCS information session for GPs was held on 8 August 2015. It was considered important to send out the survey prior to the seminar and as close to the launch of the RACGP guidelines, in order to assess a baseline of GP knowledge. The survey ran for the 10-week period and was closed when the response rate remained at 1, for 3

consecutive weeks which also coincided with a GP response rate of around 1% of the national GP population and 4% of the database GP population. The Raosoft sample size calculator was used ([http://www.raosoft.com/sample\\_size.html](http://www.raosoft.com/sample_size.html)) to attain a confidence level of 95% and margin error of 5%. Accordingly, the largest sample size required from the estimated 33 275 GPs in Australia was 380. The number of survey responses preceding the seminar reached 379 and following the seminar, there were 64. Of the 64 respondents, it is not possible to differentiate between those who attended the FGCS information session and those who did not.

### Data collection

*Survey Monkey* was used to create and administer the online survey (see online supplementary file 1), which was prepared by two GPs (MS, RM) and a Sexual Health physician (JJO). The survey items contained questions about the GP’s knowledge, attitudes and practice regarding FGCS. Two open-ended items on the GP’s attitudes to FGCS were included at the end of the survey, inviting free text responses. The survey was pilot tested with 20 primary care health professionals before distribution. This was a voluntary opt in, anonymous survey and no incentives were offered to participants. Only the fully completed surveys were examined.

### Analysis

Participant demographics and their knowledge, attitudes and practice variables were analysed descriptively. Ninety-five percent CIs were calculated for proportions using the modified Wald method. All analyses were performed using the statistical software, STATA (Statacorp. 2013. *Stata Statistical Software: Release 13*). The 2 open-ended questions were manually analysed by 3 researchers independently and the 6 main themes and 29 subthemes were agreed on. We used a qualitative descriptive research approach, a pragmatic approach commonly used in health science research as it aims to provide straight descriptions of events or topics in everyday language rather than an interpretive or theory-based analysis.<sup>20 21</sup>

This research was approved by the Alfred Health Human Ethics Committee (Project 348/15).

## RESULTS

There were 443 fully completed GP survey responses out of a total of 461. Each incomplete response was manually examined and the decision to exclude the information was based on the failure to progress beyond the first question. **Tables 1–3** give the overview of the 443 respondents’ knowledge, practice and attitudes; **tables 4–7** look closer at the 242 GPs who have seen women requesting FGCS.

Demographics are summarised in **table 1** where comparison is made to nationwide data. The majority (74%)

**Table 1** Demographics of general practitioners

Demographics	Study participants (n=443) n (% , 95% CI)	Australian General Practice National Workforce Statistics* 2014–2015 (n=33 275) n (% , 95% CI)
Mean age (SD) in years	52.9 (11.2)	Unavailable as mean age; NWS data show age distribution as total: <35 years: 4413 age 35–44: 5262 age 45–54: 8609 age 55–64: 7773 age65–74: 3605 age75+: 773
Duration of practice (SD), years	23.7 (12.4)	Unavailable
Female	327 (74%, 70% to 78%)	14 695 (44%, 44% to 45%)
Location of practice		
Urban	218 (49%, 45% to 54%)	22 427 (67%, 67% to 68%)
Outer metropolitan	109 (25%, 21% to 29%)	6326 (19%, 19% to 19%)
Rural+remote	112 (25%, 21% to 30%)	3836 (12%, 11% to 12%)
Missing	4 (1%, 0% to 2%)	686 (2%, 2% to 2%)
GP special interest in		National data indicating GP practice interest areas were unavailable
Women's health	340 (77%, 73% to 80%)	
Mental health	181 (41%, 36% to 46%)	
Sexual health	155 (35%, 31% to 40%)	
Obstetrics/gynaecology	122 (28%, 24% to 32%)	
Cosmetic surgery	26 (6%, 4% to 8%)	

\*Data available from <http://www.health.gov.au/internet/main/publishing.nsf/content/General+Practice+Statistics-1>  
CI, confidence intervals; SD, standard deviation.

**Table 2** Knowledge general practitioners have regarding female genital cosmetic surgery (n=443)

Knowledge GPs have regarding FGCS (n=443)	n (% , 95% CI)
GP feels they did not have adequate knowledge of FGCS	333 (75%, 71% to 79%)
GP feels confident assessing genital appearance	
In female patients	337 (76%, 72% to 80%)
In male patients	287 (65%, 60% to 69%)
GP acquired information regarding FGCS from	
Media	74 (17%, 14% to 20%)
Conferences	96 (22%, 18% to 26%)
Medical training	49 (11%, 8% to 14%)
RACGP FGCS resource	26 (6%, 4% to 8%)
Other health professionals	98 (22%, 19% to 26%)
Consumer websites	30 (7%, 5% to 10%)
GP feels confident to give patient adequate advice for each of the following procedures	
Labiaplasty	130 (54%, 47% to 60%)
Hymenoplasty	83 (34%, 29% to 40%)
Perineoplasty	62 (26%, 21% to 31%)
Vaginal 'rejuvenation'	59 (24%, 19% to 30%)
Clitoral hood reduction	55 (23%, 18% to 28%)
Vulval liposuction	34 (14%, 10% to 19%)
Orgasm shot	10 (4%, 2% to 7%)
G-spot augmentation	11 (5%, 3% to 8%)

of GP participants were women (95% CI 70 to 78) and the mean age of all participants was 52.9 years with a mean duration of practice being 23.7 years. The majority of respondents (77%, 95% CI 73% to 80%) expressed a special interest in women's health.

Analysis of GP knowledge of FGCS procedures (table 2) showed that 75% (95% CI 71% to 79%) of total GPs rated their knowledge about FGCS as inadequate and they accessed information from conferences (22%, 95% CI 18% to 26%), other health professionals (22%, 95% CI 18% to 26%) and the media (17%, 95% CI 14% to 20%). When participants were asked if they felt confident to give advice for each of the FGCS procedures, the responses ranged from 4% to 54%.

About half of the GPs (56%, 95% CI 51% to 60%) felt that a woman should be counselled before proceeding to FGCS (table 3) and that FGCS should not be performed on women <18 years, unless for genuine medical reasons (53%, 95% CI 48% to 57%). A third (33%, 95% CI 29% to 38%) indicated they needed more information before developing an opinion about FGCS requests and some indicated that if a woman requested FGCS, it was a matter of freedom of choice regardless of whether or not the GP felt it was appropriate or in the patient's best interests (21%, 95% CI 17% to 25%). Few GPs

**Table 3** General practitioner attitudes to female genital cosmetic surgery (n=443)

GP attitudes to FGCS (n=443)	n (% , 95% CI)
I need more information before developing my opinion	147 (33%, 29% to 38%)
If a woman wants this (FGCS), it is her choice	92 (21%, 17% to 25%)
FGCS should not be performed on women <18 years unless for genuine medical reasons	233 (53%, 48% to 57%)
A woman should be counselled first before referral for FGCS	247 (56%, 51% to 60%)
FGCS is acceptable even when only for cosmetic reasons	44 (10%, 7% to 13%)
FGCS is unacceptable when only for cosmetic reasons	64 (14%, 11% to 18%)
FGCS is not different from other types of cosmetic surgery, in my opinion	95 (21%, 18% to 26%)

**Table 4** GP experience and management of patients who are considering FGCS (n=242)

GP experience and management of patients who are considering FGCS (n=242)	n (% , 95% CI)
GPs who have seen patient aged <18 requesting FGCS	84 (35%, 29% to 41%)
Patient asked GP about opinion of genital normality	235 (97%, 94% to 99%)
Patient asked GP for genital examination	177 (73%, 67% to 78%)
GP examined genitalia	
All the time	181 (75% 69% to 80%)
Sometimes	34 (14%, 10% to 19%)
Patient asked GP opinion regarding FGCS	157 (65%, 59% to 71%)
GP felt comfortable discussing aspects of FGCS on request from patient	143 (59%, 53% to 65%)
Patient requested referral for FGCS from GP	157 (65%, 59% to 71%)
GP discussed risks of FGCS procedures with patient	
All the time	99 (41%, 35% to 47%)
Sometimes	25 (10%, 7% to 15%)
Only if they ask me	11 (5%, 3% to 8%)
I am not sufficiently aware of risks to discuss	107 (44%, 38 to 51)
GP felt confident discussing short-term risks of FGCS	83 (43%, 29% to 40%)
GP felt confident discussing long-term risks of FGCS	57 (24%, 19% to 29%)
Resources GPs used as information sources for patient consultations	
<i>Labia Library</i> (website, <a href="http://www.labialibrary.com">www.labialibrary.com</a> )	85 (35%, 29% to 41%)
Diagrams	85 (35%, 29% to 41%)
Anatomy books	53 (22%, 17% to 28%)
Consumer websites	21 (9%, 6% to 13%)
RACGP FCGS resource	21 (9%, 6% to 13%)

considered FGCS acceptable when only for cosmetic reasons (10%, 95% CI 7% to 13%).

**Table 4** summarises the responses of 242 GPs who have managed patients specifically requesting FGCS and indicates how they rate their knowledge and what they have experienced. Overall, the number of requests for referrals from these GPs per annum were low in number with the most common range given being 1–10 per year. The majority of these GPs (88%, 95% CI 83% to 92%) had been asked for a referral for surgery but only a minority felt confident advising patients about short-term risks (34%, 95% CI 29% to 40%) and long-term risks (24%, 95% CI 19% to 29%) associated with FGCS procedures and less than half of the GPs (41%, 95% CI 35% to 47%) discussed risk with their patients all of the time. The majority of these GPs (73%, 95% CI 67% to 78%) were asked by patients for a genital examination in conjunction with the request for referral and 75% of GPs (95% CI 69 to 80) always examined the genital area of women requesting FGCS.

Virtually, all the GPs who responded to the survey (97%, 95% CI 94% to 99%) had been asked by patients regarding genital normality at some time, independently of a request for FGCS information or referral. Not all of the GPs, however, expressed confidence in assessing female genital anatomy (76%, 95% CI 72% to 80%). The age range of patients seen by GPs requesting FGCS referral varied from as young as 10 years to as old as 65 and about a third (35%, 95% CI 29% to 41%) of GPs had been asked about FGCS by girls under the age of 18.

**Table 5** provides a list of modifiable psychosocial problems that were identified by the majority of respondents as significantly affecting a woman's motivation to have FGCS and an overall 41% (95% CI 36% to 46%) of the GPs listed mental health as an area of practice interest also. More than half of all the GPs surveyed suspected the following conditions as 'often' or 'sometimes' contributing to their patients' request to have FGCS: anxiety (67%, 95% CI 60% to 72%),



**Table 5** General practitioner diagnoses or suspects the following psychosocial issues in women who request FGCS (n=242)

Psychosocial factors	General practitioners suspected these factors as 'sometime/most of the time' n (% , 95% CI)
Anxiety	161 (67%, 60% to 72%)
Relationship difficulties	143 (59%, 53% to 65%)
Body dysmorphic disorder	133 (55%, 49% to 61%)
Depression	121 (50%, 44% to 56%)
Sexual dysfunction	101 (42%, 36% to 48%)
Eating disorders	68 (28%, 23% to 34%)
History of sexual abuse	57 (24%, 19% to 29%)
Domestic violence	30 (12%, 9% to 17%)

relationship difficulties (59%, 95% CI 53%) and body dysmorphic disorder (55%, 95% CI 49% to 61%). Table 6 outlines the list of the social factors influencing the perceived need for FGCS listed in the survey; 100% (95% CI 98% to 100%) of the GPs thought their patients were most commonly influenced by each of fashion (appearance in clothes), comfort in clothes, perception of beauty and pornography. An adjoining column in table 6 correlates some free text responses given by the GPs, to these same factors.

The key themes revealed in the open-ended questions are listed in table 7. A typical comment from one GP suggests that GPs see many women with genital anatomy concerns and few for FGCS requests stated: "I do not have many women asking me questions about FGCS, they sometimes ask for referral to surgeons they have heard of. But almost on a daily basis I have women ask me if their genitals look 'normal' and often wish their labia were smaller" (female, aged 28 years, urban practice, 3 years, women's health interest, trained in Australia). The GPs who responded were mostly female with an interest in women's health, which implies that self-selection may have occurred. A possible explanation for this is suggested in this open-ended statement, "While our practice specializes in women's health, I suspect most patients considering FGCS discuss this with the female GPs—I am a mere male and have only rarely had a discussion re this matter with a female patient" (male aged 70, urban practice for 30 years, women's health interest, trained overseas).

The significance of the genital examination was encapsulated by one respondent: "This is what happens in my rooms. I see people who worry that they may not look normal. They always look normal. I reassure them of such. They usually appear very relieved. I try to address reasons for their concern, and with this I guess I close the door by and large on some potential requests for surgery" (female, aged 50, urban practice, 22 years, women's health interest, trained in Australia).

Interestingly, the following statement suggests that genital concerns are not always expressed by the patient

and they might therefore not be addressed: "At first pap smear or when examining a young woman for the first time I will always comment 'everything looks entirely normal' the response is always 'relief' even when I wasn't aware there was any anxiety beforehand" (female, aged 52, rural practice, 25 years, women's health interest, trained in Australia).

A free text response from a female GP aged 34 years (urban practice, 8 years, trained in Australia) explains why genital examination is not always undertaken: "Most of my patients have been so set on having it done that they were not open to counselling, an examination of the genitals etc."

Others reported a lack of knowledge and need for further GP education, "I think we should know more to be able to counsel our patients. Currently I just refer them as I cannot answer their questions" (female, aged 28, urban practice, 3 years, women's health interest, trained in Australia).

## DISCUSSION

This study is the largest study to examine GP knowledge, attitudes and practice in a previously little explored area. The majority of GPs who responded were female, primarily interested in women's health and had more than two decades of GP experience. We elicited themes that GPs should play a central role in being the primary source of information regarding FGCS, provide genital anatomy advice, assess for concurrent mental health issues and appropriately refer as necessary (table 7).

The findings suggest that nearly all GPs have seen women with genital normality concerns and of the patients who request FGCS, GPs often suspected or diagnosed a range of psychological problems. GPs were seen to be important in screening for mental health issues and providing relief for genital anxiety concerns (table 7). More than a third of the GPs have seen girls under 18 requesting FGCS and the majority of the GPs felt in need of more information to support their patients.

The findings regarding genital anatomy concerns among women are consistent with a large international survey, which explored women's knowledge and attitudes to their genital appearance<sup>22</sup> and found that only 27% stated that they knew their vaginal appearance exactly, 48% had a reasonable idea and 24% had a partial idea, or no idea at all. Similarly, a small qualitative study of 21 university students conducted in Australia indicated that young women had little knowledge of genital appearance, anatomy and diversity.<sup>23</sup> Although 97% of the GPs in this study had been asked about genital normality, examination was performed in only 77% of consultations, which correlates with published research from the UK<sup>8</sup> which found that only 77% of referrers reported physically examining the patient.

There are many complex issues that can unfold following an apparently simple remark such as 'am I normal down there?'. GPs can reassure women, but only if they

**Table 6** General practitioners who have seen women requesting female genital cosmetic surgery suspect the following modifiable social factors influencing women's decisions (n=242)

Quantitative component: what social influences impact patients who ask about FGCS?	General practitioners n=242 (%; 95% CI)	Qualitative component: examples of 'free text' responses which reveal subthemes also listed in table 7
Fashion (comfort in clothes)	242 (100%, 98% to 100%)	<i>"some women do have extremely large labia minora that protrude and are visible in swimwear, are uncomfortable"</i> (female, aged 47, 20 years in outer metropolitan practice, women's health interest, trained in Australia)
Perception of beauty	242 (100%, 98% to 100%)	<i>"Reflects a social shift to the importance of appearance over values and substance and perhaps another way we devalue and objectify women"</i> (male, aged 55, 20 years rural practice, Obstetric interest, trained in Australia)
Pornography	242 (100%, 98% to 100%)	<i>"Most patients I see requesting genital cosmetic surgery are extremely poorly informed about normal anatomy, based on porn"</i> (female, aged 45, 8 years urban practice, sexual health interest, trained in Australia)
Perception of normal	206 (85%, 80% to 89%)	<i>"The trend for 'full Brazilian' hair removal has 'uncovered' vulvas and made them more 'visible' to women and their partners. Many people think that a 'normal' vulva is supposed to look somewhat pre-pubertal"</i> (female, aged 60, 35 years urban practice, women's health, trained in Australia)
Spouse/partner comments	132 (55%, 48% to 61%)	<i>"It is a dangerous fashion—relates a lot to partner pressure and young males watching easily available internet pornography in my opinion"</i> (female, aged 64, 35 years in outer metropolitan practice, women's health, trained in UK) <i>"Had been coerced to have FGCS by her ex-husband who humiliated her and made her feel she was abnormal and unlovable"</i> (female, aged 56, 30 years urban practice, women's health, trained in UK)
Physical discomfort	102 (42%, 36% to 48%)	<i>"Excessive labia minora may be very uncomfortable with excessive discharge and irritation"</i> (female aged 57, 25 years in urban practice, women's health, trained in Australia) <i>"The majority of requests have been due to media presenting skewed version of normality, influencing both partners. Only one patient request due to physical discomfort"</i> (female, aged 57, 20 years in urban practice, women's health interest, trained in Australia)
Consumer websites	69 (29%, 23% to 25%)	<i>"In the vast majority of patients I think they have been swayed by the media/ online information re what is normal. I really don't think females used to be overly concerned until recently"</i> (male, aged 57, 21 years in urban practice, obstetric interest, trained in Australia) <i>"I think the overwhelming access to internet visual images is a major factor in women's perception of 'normal' even if they do not disclose this to us"</i> (female, aged 54, 30 years in urban practice, women's health, trained in Australia)
Fashion (appearance in clothes)	54 (22%, 18% to 28%)	<i>"Fashions change—even sexual and genital cosmetic fashions. Loss of genital tissue to comply with fashion,..."</i> (male, aged 51, 23 years in outer metropolitan urban practice, women's health interest, trained in Australia)
Peer comments	41 (17%, 13% to 22%)	<i>"Peer group pressure, in younger age groups, seems to be one of the most important factors promoting the decision to seek FGCS"</i> (male, aged 60, 31 years in urban practice, women's health interest, trained in UK)

**Table 7** Major themes from free text responses to Question 30: “What is your opinion regarding the role of GPs for FGCS?” Total responses 417 (n 443)

Major theme	Subtheme
GP is seen as an educator: (i) regarding FGCS (ii) genital anatomy	<ul style="list-style-type: none"> <li>▶ Source of information regarding FGCS</li> <li>▶ Information regarding risks of FGCS</li> <li>▶ Provides access to information regarding FGCS</li> <li>▶ Provider of ‘normal anatomy advice’</li> <li>▶ Reassures women regarding their normality</li> </ul>
GP is seen as the ‘gateway’ to referral pathway	<ul style="list-style-type: none"> <li>▶ GP should be able to assess women regarding need for surgery.</li> <li>▶ GP should avoid providing referral when only for ‘cosmetic’ or ‘aesthetic’ reasons.</li> <li>▶ GP should refer to gynaecologist rather than to plastic surgeon</li> <li>▶ GP seen as ‘first port of call’ by patients</li> <li>▶ GP should refer to psychologist psychiatrist for mental health issues</li> </ul>
GPs request information regarding FGCS	<ul style="list-style-type: none"> <li>▶ Need more information regarding risks of FGCS</li> <li>▶ Need more information regarding FGCS practices</li> <li>▶ Patients expect GP to know about FGCS and genital anatomy</li> <li>▶ GP issued referral in past due to lack of information about FGCS</li> <li>▶ Lack of information is a cause of low confidence giving advice</li> <li>▶ Need more information in order to form opinion regarding FGCS</li> </ul>
GP examination of genital area is necessary	<ul style="list-style-type: none"> <li>▶ Provider of reassurance</li> <li>▶ Routine gynaecological examination is an opportunity to educate women regarding genital normality</li> <li>▶ Examination on expression of genital anatomy concern</li> </ul>
GP screen for mental health issues is important	<ul style="list-style-type: none"> <li>▶ GP role is to provide or refer for counselling</li> <li>▶ GP reassurance provides relief of minor anxiety symptoms</li> <li>▶ Some serious mental health issues may present with genital anxiety concerns</li> <li>▶ Relationship issues can cause genital anxiety concerns</li> </ul>
GP role is very important	<ul style="list-style-type: none"> <li>▶ For patient education</li> <li>▶ For patient reassurance regarding normality</li> <li>▶ For appropriate referral</li> <li>▶ GP is seen as a reliable source of information</li> </ul>
GP performs multiple functions	<ul style="list-style-type: none"> <li>▶ GP should ‘listen, examine reassure, counsel, then if necessary refer’</li> <li>▶ This is a sociocultural trend, outside the realm of medicine</li> </ul>

themselves are confident of normality. As depictions of genital anatomy are sparse in the medical literature,<sup>24</sup> it is not surprising that only 75% of GPs were confident in evaluating normality of female genital anatomy.

More than half of the participant responses suggested that women seeking advice for FGCS may be in an emotionally vulnerable state, as GPs suspected or diagnosed a range of psychological difficulties. There is evidence that GPs deal with multiple issues per consultation and are identifying mental health issues such as depression more frequently than 10 years ago.<sup>25</sup> These findings correlate with a study that explored online forums for reasons women were enquiring about labiaplasty and compared them with the reasons they gave the surgeons for wanting the modification.<sup>26</sup> The study suggested that contrary to reasons patients gave their surgeon such as their ability to exercise due to rubbing or chafing of genital tissue, the online forums disclosed deeper emotional distress due to anxiety regarding normality, aesthetics, embarrassment or even sexual anxiety related to this.<sup>22 26–31</sup> This adds a different light to the study of Miklos and Moore,<sup>16</sup> which found that 37% sought FGCS for aesthetic reasons only, 32% for functional

impairment, 31% for functional and aesthetic reasons. Many studies report size of the labia minora as the most common concern, and that most women seeking genital cosmetic surgery believe that their labia minora are too visible,<sup>2 8 11 16 28</sup> however, the psychological and emotional drivers for wanting surgery are as yet, less well researched.

Adolescents see GPs for genital anatomy concerns also and the Australian Medicare statistics so far indicate that FGCS incidence in the group aged 15–25 has matched the group aged 26–45,<sup>4</sup> which are similar to findings in the UK<sup>5</sup> and USA.<sup>3</sup> More than half the GPs surveyed also believed that it should not be performed on women <18 years, unless for genuine medical reasons, which complies with the recommendations from the joint Royal College of Obstetricians and Gynaecologists and British Society of Paediatric and Adolescent Gynaecology (BritsPAG) position statement.<sup>32</sup> GPs conveyed the importance of appropriate referral to either a gynaecologist, cosmetic surgeon or mental health professional (table 7). This raises some significant issues for the GP, since the Medical Board of Australia issued the Cosmetic Surgery Guidelines in March 2016,<sup>31</sup> which

state that 'for major cosmetic procedures', which encompasses FGCS, 'patients under the age of 18 should be referred for mandatory psychological evaluation and have a 3 month cooling off period'. The psychological evaluation can now be conducted by a GP (who does not perform cosmetic procedures), or by a psychologist or psychiatrist. The guidelines do not directly address the BritsPAG call for consideration of delayed genital maturation which occurs around the age of 18.

GPs in this survey desired more information regarding this surgical trend to support their patients with confidence. The RACGP resource guide was launched 1 week before the women's and children's health seminar and the survey revealed that only 6% of the total respondents knew about it and had accessed it. Although GPs have to date received little formal training or education on the topic, the survey findings suggest that 51% of GPs do make the effort to discuss the possible risks of surgery.

### Strengths and limitations

Strengths include this being the largest study of GPs to date. Although the GP demographic is not representative of all Australian GPs which may indicate bias, it does however comprise mostly of female GPs with an interest in women's health, half of whom have experience in managing patients who have requested FGCS and this may in turn increase the validity of these findings. This GP demographic would by extension see more female patients who have genital anatomy concerns or are inquisitive regarding FGCS procedures than other GPs<sup>33</sup> and as such, provides insight into knowledge gaps, concerns and recommendations of experienced GPs. It can provide a useful baseline of information from which further research in areas of GP knowledge of FGCS, genital anatomy, GP counselling skills along with the impact of teaching tools can be instigated. A limitation of the study is that the findings cannot be generalised to the rest of the GP population; however, the level of knowledge in other GPs might be even lower. The genital anatomy concerns and FGCS requests the GP sees may herald significant underlying mental health, sexual and domestic abuse issues, that have not yet been diagnosed and it is important that the GP be mindful of this when giving advice and consider appropriate referral.

Limitations of the study are that the group who responded may have self-selected due to the seminar content and differentiation of the survey respondents was based on timing of survey response rather than seminar attendance. The composite of GP experiences and management derived from the answers covered a wide range of GP experiences and asked for the GPs' view of why patients requested FGCS and how prepared the GPs felt to handle these questions. The GP interpretations, however, could be a mix of what the patient has told them and what is derived from their own clinical judgement. While some of the questions are open to

subjective interpretation, the tables do however provide a broad baseline of responses that outlines GP experience and behaviour. Such a foundation can be useful in developing GP and patient resources along with areas for further study. Other limitations pertain to the use of terms such as 'counselling' and 'sexual dysfunction' which were not specified in detail in order to simplify the survey and increase participation. Although the two open-ended questions identified a diverse range of themes and effort was made to present the breadth of themes, the responses lack the richness of qualitative interviews. The identified themes should be further explored through indepth interviews. The sociocultural influences were not differentiated in relation to patient age group and as such, we could not distinguish differences between adolescents who might be responding to peer comments, the pressures of the fashion industry and exposure to pornography, compared with the older woman following childbirth or on entering a new relationship after divorce who might seek FGCS wanting 'the new look' and the 'new me'.<sup>18</sup> The terms 'low', 'medium' or 'high' were used as a measure of levels of confidence rather than a numerical scale, thereby increasing the variability of the response according to personal interpretation.

The aim of any doctor-patient interaction should be to provide the patient with the best and most appropriate care for the presenting symptom and ultimately to do no harm, whether that be short term or long term.<sup>33</sup> The surge in requests for FGCS has implications for the clinician and the RACGP guide can provide GPs with information sufficient to enable them to assist women to make better informed choices.<sup>19</sup> There is need to explore reasons influencing the rise in surgery requests for adolescents under the age of 18 and to conduct objective research of long-term and short-term risks of FGCS that evaluate sexual satisfaction and aesthetic appearance satisfaction. Further research that explores the degree and range of psychological disturbances that motivate the FGCS requests would be welcomed as would a follow-up study to evaluate the impact of the RACGP guide in addressing GP needs.

### CONCLUSION

GPs see females of all ages regarding genital anatomy concerns and for FGCS requests. Most of the GPs who had managed patient requests for FGCS felt underprepared to provide advice and requested professional education. Females of all ages, some with complex psychosocial and mental health issues, requested FGCS information of the GPs which suggests that the GP is seen as an important information source, who in turn can play a pivotal role in patient education and care in this emerging area.

#### Author affiliations

<sup>1</sup>Department of General Practice, University of Melbourne, Carlton, Victoria, Australia



<sup>2</sup>Royal Australian College of General Practitioners, Expert Committee Quality Care, Melbourne, Victoria, Australia

<sup>3</sup>Sydney Medical School Northern, The University of Sydney, Sydney, New South Wales, Australia

<sup>4</sup>Academic Department of Psychiatry, Kolling Institute, Northern Sydney Local Health District, St Leonards, New South Wales, Australia

<sup>5</sup>Faculty of Medicine, Nursing and Health Sciences, Monash University, Clayton, Victoria, Australia

<sup>6</sup>Melbourne Sexual Health Centre, Carlton, Victoria, Australia

**Twitter** Follow Magdalena Simonis at @Cyclades12

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