Factors enabling women with pelvic organ prolapse to seek surgery at mobile surgical camps in two remote districts in Nepal: a qualitative study

Mala Chalise¹, Malinda Steenkamp², Binaya Chalise³

ABSTRACT

Background: Pelvic organ prolapse (POP) is a major reproductive health problem in Nepal, though many women delay seeking treatment. To address this, the Nepalese government has been providing free vaginal hysterectomies with pelvic floor repair to women in mobile surgical camps. Studies exploring factors that enable women to attend these camp settings are limited. This study aimed to identify factors that affected women seeking surgical treatment for POP at mobile surgical camps.

Methods: The study used a qualitative approach. Twenty-one women with POP were recruited in two week-long mobile surgical camps held in two remote districts in Nepal during April and May 2013. Data were collected from individual face-to-face interviews and were analysed thematically.

Results: Three themes and six subthemes emerged from the analysis. The first theme, "health-system factors", suggests that accessibility and affordability of the treatment, and the supportive role of female community health volunteers facilitate women to seek treatment in the camp. The second theme, "factors related to sociocultural norms", reveals that reaching the end of reproductive years and approval by relevant influential family members empowers women to take up surgical treatment in the mobile surgical camp. Similarly, the third theme, "individual-level factors", includes women’s experience of POP, such as worsening symptoms and fear of development of cancer, as factors enabling women to seek treatment.

Conclusion: Enablers to seeking treatment at mobile surgical camps for women are related to the Nepalese health system, sociocultural norms and individual experiences of women. Each of these factors should be considered when conducting mobile surgical camps, if women’s uptake of treatment is to be enhanced.

Key words: enablers, facilitators, mobile treatment camp, Nepal, seeking treatment, uterine prolapse

BACKGROUND

Pelvic organ prolapse (POP) is major reproductive health problem in Nepal, affecting 6–37% of women.⁴ It is a progressive condition where the cervix descends into the vagina or beyond because of weakened pelvic muscles.² Based on the level of descent of the uterus, POP can be graded as first degree if the uterus sags into the upper vagina, second degree if the uterus descends to the introitus, third degree if the cervix is outside the introitus, or fourth degree if the uterus and cervix are completely outside the introitus. Third- and fourth-degree prolapse require surgery; most often this will involve a vaginal hysterectomy (VH) with pelvic floor repair (PFR).³

While POP is considered a disease of postmenopausal age in other parts of the world,⁶ a Nepalese woman’s journey with POP can start when she is just in her 20s.⁷,⁸ Additionally, POP is not only a reproductive health outcome related to women’s
age, parity, obstetric history or menopause; its causes are also deeply rooted in complex Nepalese sociocultural norms that tend to devalue women. A substantial proportion of Nepalese women seek treatment only after living with POP for many years. Women’s uptake of POP treatment is a complex process affected by many factors, including embarrassment, household duties, the availability and affordability of health services, the patriarchal nature of families, a lack of control over family earnings and especially women’s lack of power and involvement in making decisions about their own health care. A majority of women with POP progress to the more severe form and many need surgery by the time they seek treatment. However, surgical treatment like VH with PFR is not available as routine health service at district- or local-level health institutions.

In 2008, the Supreme Court of Nepal declared POP a human rights issue, in response to litigation filed by women’s rights activists. The government was criticized for its insensitivity towards the issue and the court ordered the Ministry of Health and Population and Ministry of Women, Children and Social Welfare to initiate effective interventions to prevent, as well as treat, the condition. As a result of the court proceedings and continuous advocacy of Nepali Civil Society, the Ministry of Health and Population pledged to provide free VH with PFR for reducing the prevalence of prolapse. The government strategy aimed to provide free surgery to 200,000 women by 2014/2015 through static and mobile outreach clinics. POP mobile surgical camps are mobile outreach clinics that provide VH with PFR for the treatment of POP. The study reported on in this paper was conducted in 2013, when a mobile surgical camp was widely preferred to a static clinic, as it used information, education and communication activities to create demand and increase the accessibility of the service for rural, marginalized and other underserved populations.

Factors that enable women to attend the mobile surgical camps for treatment remain under-researched. It was important to understand such factors from the women’s perspectives, in order to enhance the uptake, as well as the delivery, of the services offered in the mobile surgical camps and subsequently for effective management of POP in Nepal. This study therefore explored factors that acted as facilitators for affected women to seek surgical treatment at mobile surgical camps.

Recently, there have been varied stances on the effectiveness of mobile surgical camps as a treatment option. There are significant discussions about the management of POP in Nepal and whether the approach of mobile surgical camps should be offered. This study may contribute insights into the relevance of the mobile-camp approach and subsequently for informing trade-offs between different approaches for effective management of POP in Nepal.

METHODS

Setting

The Ministry of Health and Population sent out an invitation to tender, and nongovernmental organizations (NGOs) had opportunities to submit bids. The organizations that won the bid conducted a screening camp to identify cases for treatment. The dates and locations for the mobile surgical camps were decided in consultation with the District Public Health Office and other stakeholders. Information about the surgical camps was provided to the target audience through a variety of means, such as broadcasting in local media, and announcements by female community health volunteers in mothers’ groups.

This study was conducted during April and May 2013 at two mobile surgical camps in two different districts (see Table 1). Each lasted a week, with one taking place in a remote district hospital (District A) and the other in a remote primary health-care facility (District B). At each surgical camp, gynaecological outpatient clinics were held from 08:00 to 14:00 daily and staffed by a medical team comprising a male gynaecologist, a male physician and two female nurses. About 100 women presented per day. Each woman attending the camp was registered at the registration desk. Personal information such as age, educational status, address and contact details were recorded. The women were then guided to a room where their obstetric history, medical history, treatment history, behavioural factors and main reasons for presenting for treatment were recorded.

A team of the camp staff, consisting of a physician, a nurse and health workers from the local health facility, conducted general and systematic examination of patients. The team explained and encouraged women to undergo internal examination. Women who agreed were taken to a separate room where a male gynaecologist, in the presence of a female nurse, performed a pelvic examination to ascertain the presence and degree of prolapse. The Pelvic Organ Prolapse Quantification System (POP-Q) was used for grading the prolapse. Symptomatic patients with third- or fourth-degree prolapse were recommended for surgery and referred to the laboratory for blood and urine tests. Those who were deemed medically fit and consented to surgical treatment waited 40–45 minutes before undergoing surgery. Each woman undergoing surgery in the camp was provided with free treatment, medicine and food during their hospital stay, as well as reimbursements for transportation costs to return to their homes post-surgery. Women were hospitalized for 3 days post-surgery, where they were monitored for discomfort and complications and given relevant medication, including for relieving pain. Patient counselling was also done regarding taking relevant precautions and the recovery period. Table 1 summarizes district-specific settings and the study methods.
Table 1. Description of settings and methods according to district

<table>
<thead>
<tr>
<th>Setting</th>
<th>District A</th>
<th>District B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location by ecological region</td>
<td>Hilly</td>
<td>Himalayan</td>
</tr>
<tr>
<td>Transportation facilities</td>
<td>Limited in rural areas</td>
<td>Limited</td>
</tr>
<tr>
<td>Health facilities</td>
<td>Major hospitals offering VH service in urban</td>
<td>No major hospitals offering VH service in the</td>
</tr>
<tr>
<td></td>
<td>areas of the district</td>
<td>district</td>
</tr>
<tr>
<td>Mean age of first marriage</td>
<td>18 years</td>
<td>17 years</td>
</tr>
<tr>
<td>Female literacy rate</td>
<td>51.7%</td>
<td>17.8%</td>
</tr>
<tr>
<td>Ranking of district (out of 75)</td>
<td>Ranked top 20th to 30th</td>
<td>Ranked last 15th</td>
</tr>
<tr>
<td>Poverty and Deprivation Index</td>
<td>Ranked top 20th to 30th</td>
<td>Ranked last 15th</td>
</tr>
<tr>
<td>Socioeconomic and Infrastructural Development Index</td>
<td>Ranked top 20th to 30th</td>
<td>Ranked last 15th</td>
</tr>
<tr>
<td>Women Empowerment Index</td>
<td>Ranked top 20th to 30th</td>
<td>Ranked last 15th</td>
</tr>
<tr>
<td>Overall composite score</td>
<td>Ranked top 20th to 30th</td>
<td>Ranked last 15th</td>
</tr>
<tr>
<td>Methods</td>
<td>Convenience</td>
<td>Purposive, using criterion sampling technique</td>
</tr>
<tr>
<td>Inclusion criteria</td>
<td>• Confirmed by the medical team as requiring VH</td>
<td>• Confirmed by the medical team as requiring VH</td>
</tr>
<tr>
<td></td>
<td>• Medically fit to undergo VH</td>
<td>• Medically fit to undergo VH</td>
</tr>
<tr>
<td></td>
<td>• Willing to participate in the study</td>
<td>• Willing to participate in the study</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Able to understand and speak Nepali language fluently</td>
</tr>
<tr>
<td>Number of participants interviewed</td>
<td>16</td>
<td>5</td>
</tr>
</tbody>
</table>

VH: vaginal hysterectomy.

Recruitment

Twenty-five women were invited to participate in this study and 21 agreed. Reasons for non-participation were poor health, unease about being audio-recorded and reluctance to talk to the interviewer. Sixteen participants were recruited in District A, using convenience sampling. Inclusion criteria were that women required surgery (VH with PFR), were medically fit to undergo surgery and were willing to be interviewed. It was decided to attend a second camp to ensure an adequate number of participants. Five women were recruited in District B, using criterion sampling. The interviewer (first author) was unfamiliar with the local dialects and had no funding to employ interpreters. Therefore, an additional criterion for selecting women in the second camp was that they could understand and speak Nepali.

Data collection

Individual face-to-face interviews were conducted. An interview guide, informed by other studies, was prepared by researchers and was pretested in one of the camps in District A. Open-ended questions were used, related to the history of onset of uterine prolapse, symptoms experienced by the participants, treatment history, decision-making process for seeking treatment at a mobile surgical camp, and factors influencing women to attend the camp for treatment. The first author conducted the interviews. In both districts, women were approached while they were waiting for surgery. The interviewer explained the study to women in Nepali and invited them to participate. Women who agreed to be interviewed were guided to a separate room by the first author, to maintain privacy. Interviews lasted for 20–35 minutes and were audio-recorded. Interviews were stopped when data saturation was reached.

Analysis

The interviews were first transcribed verbatim in Nepali and then translated into English. Where necessary, informal help from a bilingual translator was sought and a bilingual dictionary was used as a reference. The translated interviews were read by an independent public health professional and matched with the recordings to ensure the completeness, accuracy and clarity of translation. The translated interviews were analysed thematically, based on Braun and Clarke’s guide to six-phase
Data were stored and organized for analysis using NVivo 10 (QSR International). Emerging issues in the transcripts were coded into categories. Later, similar categories were identified and grouped together to form themes. After that, the themes and their subthemes were structured into a hierarchy to form a thematic map. Observations from the field notes were later used to supplement the description of the themes that emerged from the analysis. Confidentiality was maintained by using anonymous identification details with a letter and a number (W1–W21).

**Ethics**

The Human Research Ethics Committees of the University of Adelaide, Australia, and the Nepal Health Research Council approved the study. Many women in Nepal are illiterate. Detailed information about the study was provided verbally in Nepali and verbal consent was audio-recorded. Participants were reassured that the decision regarding participation would not influence or impact their treatment process. Consent included permission to audio-record the interviews.

**RESULTS**

Characteristics of the participants according to districts are presented in Table 2.

“Facilitators to seeking treatment in the mobile surgical camp” was the overarching theme. The analysis yielded three themes around (i) health-system factors; (ii) factors related to sociocultural norms; and (iii) individual-level factors. Six subthemes were also identified. The themes and their associated subthemes are presented in Table 3 and are discussed next.

**Health-system factors**

This theme comprises two subthemes. The first, “geographical accessibility and affordability of treatment”, relates to the location of camps and the cost of VH with PFR. The second subtheme, “the supportive role of female community health volunteers”, describes the positive influence of these volunteers on decision-making by affected women.

### Table 2. Characteristics of participants

<table>
<thead>
<tr>
<th></th>
<th>All (n = 21)</th>
<th>District A (n = 16)</th>
<th>District B (n = 5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Median age, years</td>
<td>41 (SD = 9.3; range = 25–60)</td>
<td>45 (SD = 9.1; range = 30–60)</td>
<td>35 (SD = 5.4; range = 25–40)</td>
</tr>
<tr>
<td>Duration of prolapse, years</td>
<td>13 (SD = 9.6; range = 3–22)</td>
<td>17 (SD = 9.8; range = 3–21)</td>
<td>7 (SD = 3.0; range = 3–11)</td>
</tr>
<tr>
<td>Mean number of live children</td>
<td>4</td>
<td>4</td>
<td>4</td>
</tr>
</tbody>
</table>

SD: standard deviation.

### Table 3. Subthemes, themes and overarching themes describing reasons to attend the mobile surgical camp for surgery

<table>
<thead>
<tr>
<th>Subthemes</th>
<th>Themes</th>
<th>Overarching theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Geographical accessibility and affordability of treatment</td>
<td>Health-system factors</td>
<td>Facilitators to seeking treatment in the mobile surgical camp</td>
</tr>
<tr>
<td>The supportive role of female community health volunteers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reaching the end of reproductive years</td>
<td>Factors related to sociocultural norms</td>
<td></td>
</tr>
<tr>
<td>Approval by relevant influential family members</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Increasing severity of symptoms</td>
<td>Individual-level factors</td>
<td></td>
</tr>
<tr>
<td>Fear of potentially fatal consequences such as developing cancer</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Geographical accessibility and affordability of treatment

Women with POP would usually have to travel long distances, often over difficult terrain, for treatment. The mobile camps allow women to access treatment closer to home, by overcoming the transportation barrier. Participants articulated the positive aspects of proximity:

- It is near. We don’t need to travel far because of this camp. It has come to our doorstep. [W13]

- We have to walk down the hill for three – four hours to reach bus station. There is no fixed schedule [...] have to wait for long to catch a bus to get there [hospital]. Buses do not come here during rainy season. They [drivers] say it is difficult to drive bus due to bad condition of the road. We have to walk all the way to hospital during rainy season [...] travelling to city [for treatment] is not easy for us. It is far easier to come here for treatment. [W17]

Women indicated that treatment costs in major hospitals, where surgical treatment would have otherwise been done, would constitute a huge proportion of their income. Provision of free VH with PFR in the camp made it affordable and this acted as a motivator.

- Our financial condition is not so good. If my family was well-off, I would have been taken to hospital at farther places [...] travelling to [the] regional centre [the nearest place where a major hospital is located] costs much. We are not able to afford [it] even if we sell our house and land [...] I have not been able to seek treatment due to poverty. [W12]

The supportive role of female community health volunteers

Several participants revealed that they heard about the camp from female community health volunteers, during mothers’ group meetings where information is provided to local women on maternal and child health issues. The female community health volunteers encouraged women to attend for surgical treatment and provided them with current information about the location of a mobile camp. One woman stated:

- I knew about this [mobile surgical camp] from [the] female community health volunteer. There was a meeting of the mothers’ group in our village. In that meeting, the female community health volunteer said to me, “you are suffering from this condition. Please go there [to the camp] and get your treatment done. Also please share this information with other women who are facing this problem”. That’s why I have come here. [W7]

Factors related to sociocultural norms

This theme comprises two subthemes that relate to the impact of complex sociocultural values embedded in Nepalese society. The first subtheme “reaching the end of reproductive years”, relates to reproductive expectations from women, and the second subtheme “approval by relevant influential family members”, encompasses obtaining permission from the head of the household as an enabler in seeking treatment.

Reaching the end of reproductive years

Women in Nepalese society are expected to give birth to several children, at the very least until they have a boy. Participants who did not have a son explained that their decision to seek treatment was influenced by the fact that they were reaching the end of their reproductive years and were now biologically unfit for further childbearing. An older woman who wanted to give birth to a baby boy reasoned:

- They say that [a] woman will not be able to conceive after she is 50 years. I might have given birth to another one too if I hadn’t been this age and if I did not have any problem in my uterus. I have been trying but unable to conceive [for] 5 years. Now I don’t have any hope. [W10]

Approval by relevant influential family members

For the younger participants, the decision to seek treatment had to be approved by family members (especially the mother-in-law and/or husband). One participant explained:

- My husband suggested me for this [seeking treatment in the camp]. Later I talked to them [in-laws]. They agreed on it. I could come here only after obtaining permission from them. [W1]
Fear of potentially fatal consequences such as developing cancer

Participants mentioned that they had heard about the risk of having worse health outcomes if prolapse was not treated in time. They were worried that they might develop cancer if they did not seek treatment soon. The fear had a “positive” outcome, in that women sought treatment in the camp. For example, an affected woman who had been suffering for 7 years without telling anyone stated:

I had heard from my sister-in-law saying that one might suffer from cancer if the condition is left untreated […] I gathered courage to tell her, “Kanchi” [sister-in-law], I am suffering from uterine prolapse and want to undergo treatment. [W16]

DISCUSSION

This study investigated factors that enabled women with POP to undergo treatment in the mobile surgical camps in two remote Nepalese districts. Geographical accessibility and affordability of treatment; the supportive role of female community health volunteers; reaching the end of reproductive years; approval by relevant influential family members; increasing severity of symptoms; and fear of potentially fatal consequences such as developing cancer were identified as facilitators to seeking treatment in the mobile camps. These factors were organized into three themes, i.e. health-system factors; factors related to sociocultural norms; and individual-level factors. This study aids understanding of treatment-seeking behaviour in the setting of a mobile surgical camp, unlike other studies of health-seeking behaviour that have examined the issue in static facilities such as hospitals. It is important to understand such factors, in order to achieve the government’s goal of offering treatment options.

The way in which the Nepalese health system is organized has a profound effect on the treatment for POP. Although most people reside in rural areas, there is an acute shortage of health services in these regions. Consequently, as participants indicated, remote-living women have to travel long distances to urban areas for appropriate treatment. This is also often unaffordable, not only because the treatment is expensive, but because of the high costs (direct, indirect and opportunity costs) associated with travelling and undergoing the treatment. Poverty and geographical inaccessibility of health services limit the treatment options available to women. The mobile surgical camps make treatment options accessible, because the surgery is offered free of charge closer to home and women are reimbursed for transportation costs. The findings of this investigation complement those of earlier studies conducted in the context of low-income countries, which found that the affordability and accessibility of treatment have a significant impact on utilization of maternal and reproductive health services.

However, use of mobile surgical camps has been criticized for several reasons. First, in the absence of any clinical protocols to guide the procedure, the quality of service delivered was uncertain. Second, remuneration provided to the NGOs delivering the service was based on the number of surgical procedures performed. Consequently, the providers had an incentive to create a supplier-induced demand, which could have resulted in doing unnecessary surgery. Lastly, NGOs lacked follow-up plans to assess and manage post-surgical complications once the women left the camps. Therefore, the government has discontinued use of mobile surgical camps. While screening is still done in mobile camps, surgery is now done in listed medical institutions, where women are offered free surgery and post-surgical care and their transportation cost is reimbursed. Moreover, a reference manual on management of POP has been published to assure the quality of surgical management for POP.

Nevertheless, the study provides evidence that costs associated with transportation are not the only barrier in accessing surgical treatment at hospitals. Lack of an appropriate transportation system to reach treatment centres is another hindrance in accessing service. This means that reimbursement of transportation costs is not enough to address transportation barriers. Therefore, solutions to overcome these challenges are needed if free surgery is to be performed at static hospitals alone. One way to do this would be to establish community support groups where members of these groups help women to travel to health centres and back home after surgery. In addition, the government should ensure that listed hospitals are in reasonable proximity to women in need of surgery. Where demand for surgery is high in remote areas, listed hospitals could provide services through a mobile surgical camp by adhering to specified standards as an extension of their service, to meet the demand.

The role of female community health volunteers in the uptake of treatment is important, as they have up-to-date information about treatment options for affected women and can link these women with the mobile screening camps. A strong relationship between the provision of information on the availability of health services and addressing barriers to accessing these services has been reported in the literature. There is, therefore, a definite need for mobilizing female community health volunteers during the planning and implementation of the camps, so that more women could be informed and motivated to seek screening.

The complex sociocultural norms of Nepalese society have an impact on women seeking treatment. Women hold inferior positions to men within the family unit and in Nepalese society in general. Male members of a household are typically expected to be the head of the family and maintain the family legacy by fathering a son. Conversely, wives are accorded a lower status in a household and are expected to consider their husband an object of absolute veneration. A woman is also expected to perform all household chores, and, in doing so, to be servile to other members of family as well, especially her husband and mother-in-law. The pervasive inequalities in gender roles borne out of these hierarchical relationships complicate the process of seeking treatment, thereby placing the decision-making autonomy of women in the hands of their mothers-in-law and/or husbands. As observed in this and other studies, it is customary for women to obtain approval from their decision-makers to seek treatment. The practical implication
is to target key decision-makers to recognize the impact of POP and to encourage them to value the benefits of treatment for affected women. This might allow more women to seek treatment. A reasonable approach to address this issue could be to encourage couple communication, family interaction and joint decision-making in seeking treatment for POP.2,4 In the meantime, addressing existing gender inequalities by educating girls, increasing employment opportunities for girls and women, and increasing women’s control over household finances is also critical.

Sociocultural norms, such as strong preference for a son, are still prevalent in Nepalese society, and have a negative effect on treatment-seeking behaviour. A study that explored women’s experiences of POP in a hilly district of Nepal identified that it is not uncommon for a woman to delay treatment for reasons such as shame or fear of discrimination.29 In addition, this study also found that a woman will delay treatment until she has given birth to a son or has become biologically incapable of childbearing.

It is considered socially inappropriate to discuss gynaecological problems, such as POP, openly,2 and POP carries a social stigma.2 Women are, therefore, more likely to refrain from seeking treatment, owing to fears of being humiliated and rejected by their society members.15 As evident in this study, it was only when symptoms worsened to the point where women found them unbearable, or experienced a fear of developing cancer, that they considered surgical treatment. A number of other studies have also found that increasing symptom severity acts as a motivator for seeking treatment.30,31 This finding needs to be interpreted with caution, however, as delaying treatment until symptom severity increases can have adverse health impacts. Hence, we propose that it is necessary to educate women about the progression of the condition, its potential health impacts and the importance of seeking timely care. More importantly, the social stigma and taboos around “female issues” need to be addressed. Strategies for minimizing the social stigma could include health education and social marketing approaches, to correct misconceptions related to POP and its consequences.32

The study has some limitations. First, the pressing deadline for completing the study within 4 months did not allow exploration of the heterogeneity of women’s experiences by participants’ caste, class, ethnicity and geographical area. Consequently, the way in which these diversities shape women’s journeys in seeking surgery remains unexplored. Understanding the influence of this heterogeneity is essential, in order to offer targeted and nuanced recommendations for timely treatment of POP in Nepal, and further research on these aspects is recommended. Second, participants in District B had to be chosen on the basis of their ability to speak Nepali. The study may have missed out elucidating other enablers, as it is likely that women would have been more comfortable and less restricted in sharing their views had the interviews been conducted in the regional dialect.

**Conclusion**

This study explored factors that facilitated women in two remote districts in Nepal to seek surgery in mobile surgical camps. It found that factors associated with the Nepalese health system, women’s personal experiences of POP and the deeply rooted sociocultural Nepalese norms were significant in influencing women seeking treatment. These factors lie on a continuum and should be addressed in different ways simultaneously if the prevalence of POP is to be reduced by enhancing timely uptake of surgical treatment in this population.

**ACKNOWLEDGEMENTS**

The authors would like to thank participants for their cooperation. They are thankful to Cathryn Josif, Senior Project Officer, Western Australian Centre for Health and Ageing, University of Western Australia, and Lesley Barclay, Professor and Head of the University Centre for Rural Health, School of Public Health, and University of Sydney, Australia, for their guidance on conducting qualitative research.

**REFERENCES**

Chalise et al.: Pelvic organ prolapse in Nepal


How to cite this article: Chalise M, Steenkamp M, Chalise B. Factors enabling women with pelvic organ prolapse to seek surgery at mobile surgical camps in two remote districts in Nepal: a qualitative study. WHO South-East Asia J Public Health 2016; 5(2): 141–148.

Source of Support: Nil. Conflict of Interest: None declared. Authorship: MC developed the research proposal, collected and analysed the data for this study, and wrote the primary draft while she was a Masters of Public Health student at the University of Adelaide. MS was the principal supervisor of the study while MC was a Masters of Public Health student and she reviewed and commented on the paper. BC assisted MC in designing the study and questionnaire. He also assisted MC in proofreading the primary draft and writing the final version of the manuscript.