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Silicone use among Nepali transgender women: the hazards of beauty

Pramod Raj Regmi and Edwin van Teijlingen Faculty of Health and Social Sciences, Bournemouth University, Poole, UK, and Sanjeev Raj Neupane

Australian Federation of AIDS Organisations (AFAO), Bangkok, Thailand

Abstract

Purpose – It is widely believed that transgender individuals in Nepal inject silicone for face and body manipulation, a phenomenon thought to be common among transgender individuals globally. Therefore, this qualitative study conducted in Nepal explored: (1) awareness of silicone use and sources of information; (2) reasons for using silicone; (3) notion of cost and quality of these procedures; (4) reported negative aspects, including side effects and (5) health seeking behaviors of Nepali transgender women.

Design/methodology/approach – The authors carried out eight focus group discussions (FGDs) with transgender women at four different districts of Nepal, five in the capital Kathmandu and three in different rural areas. We also interviewed three transgender women who preferred not to participate in the FGD but were happy to be interviewed separately. Similarly, six interviews with stakeholders working for sexual and gender minority populations were also conducted.

Findings – Most FGD participants were young (mean age 23.06 ± 3.9 years) and the majority (55%; n = 34) completed grade six to high school level. Peer networks of transgender people and the Internet were the more popular sources of information about silicone. The decision to use silicone was largely influenced by the desire to look beautiful and more feminine. Often they appear not to follow the recommended procedures for silicone use. Their health seeking behavior regarding side effects or complications of these procedures was very poor. **Originality/value** – Findings reflect that targeted interventions aimed at transgender individuals should educate them on the use of silicone, as well as explore safe and affordable approaches to meet gender-related appearance needs of Nepali transgender people.

Keywords Silicone injection, Transgender, Harm reduction, Nepal Paper type Research paper

Introduction

Injecting silicone to manipulate physical appearance is thought to be common among transgender women and is mainly applied to the lips, thighs, breasts, hips and buttocks to achieve a cosmetic enhancement. Silicone is easy to inject, permanent and relatively inexpensive [1].



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However, for many transgender women, accessing illicit silicone fillers may be the only choice available to make changes to their appearance due to the high costs of gender affirmation surgeries [2]. As these illicit substances are not approved for body modification or cosmetic purposes [3] transgender people inject silicone without prior medical supervision. Studies have shown the use of silicone by transgender people ranging from 17% in San Francisco, USA, 49% in Brazil [4] to a high of 69% among a transgender sample in Thailand [5].

Injecting silicone frequently involves nonmedical products and equipment in nonsterile and unhealthy environments [6]. The mass media often reports about injecting low-grade substances to attain a feminine shape. For example, a transgender woman referred to in the media as a "toxic tush doctor", was sentenced for injecting a mixture of cement, glue, mineral oil and tire sealant into a woman's buttocks [7]. Past research and case reports have reported the hazards of silicone injections such as infection, foreign body reaction (hypersensitivity), granulomatous diseases, unavoidable dermatologic complications and migration of the silicone/implantable material [1,6,8–11]. These complications may require transgender women to seek the treatment of a dermatologist or plastic surgeon. In some cases, silicone injection has led to acute pulmonary hemorrhage, pneumonitis and organ injury or failure [6]. This suggests that the use of nonmedical grade products, incorrect volume injection and/or placement can have life-threatening health consequences for transgender people.

Over the past few decades, Nepal has witnessed significant legal improvements that affirm the rights of sexual and gender minority (SGM) people such as lesbian, gay, bisexual and transgender (LGB&T). The Constitution of Nepal and strategic documents such as the Nepal Health Policy [12] and the Nepal Health Sector Strategy 2015–2020 [13] protect the rights of the SGMs [12,13]. Nepal currently acknowledges its transgender community by allowing a third category of "others" [meaning "other sex" than male or female] on passports, citizenship certificates, voters' identity cards and immigration forms. However, this socially vulnerable population faces high levels of discrimination in social, administrative and health care settings in a culture that is often very traditional. This results in high levels of unmet needs in health and social care among transgender populations.

There are about 25*m* trans people worldwide [14]. In Nepal, it is estimated that in 2016, the range of transgender individuals was between 18,704 and 24,216 without specifying the proportion of trans women or men [15]. However, the ambiguity around definitions of transgender identity combined with stigma and discrimination of transgender populations makes it hard to establish precise numbers of the transgender population. The recent proposal to shift descriptive elements of transgender identity from "mental health disorders" to "sexual health categories" may reduce stigma and help improve the estimation of the size of this population [16].

Recent global literature signals that the general health of transgender people is among the least prioritized research fields [17,18]. Limited research on transgender individuals in Nepal or other South Asian countries suggests that these studies are predominantly focused on human immunodeficiency virus (HIV), sexually transmitted infections (STIs), sexual behavior and, recently, around mental health and well-being issues of the transgender population. It could be because the transgender population is one of the key populations that are disproportionately affected by HIV [19]. For example, transgender individuals in low- and middle-income counties are 50 times more likely to be infected with HIV than other adults of reproductive age [20]. The high prevalence of HIV among Nepali transgenders is also documented in the recent Integrated Biological and Behavioral Survey of Nepal [21]. Studies have also been conducted among Nepal's transgender population on suicidal ideation and attempted suicide and separate studies on smoking and alcohol consumption [22]. Furthermore, because the uptake of health care services including HIV Testing and Counselling by Nepal's transgender population is poor [23] due to Nepali society's generally

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Similar to transgender people from other geographical settings, it is believed that transgender women in Nepal also use silicone for face and body manipulation. However, there is a lack of research on silicone use by Nepali transgenders. In this paper, we studied findings from a qualitative study that primarily aimed to explore hormone use by Nepali transgender women [25]. During focus group discussions (FGD) [26] and interviews [27] with transgender women, many unexpectedly spoke about issues around silicone use. Therefore, this paper focuses on such issues raised by participants around silicone use.

Methods and materials

We conducted eight FGDs among transgender women aged 18 years and above. The number of participants in each FGD ranged from seven to nine persons. In order to capture diverse views, eight FGDs (five from the capital city of Kathmandu) were carried out in four of the seven provinces of Nepal (Table 1), representing mountain, hill and *Terai* (low land region of Southern Nepal). As in most countries globally, marginalized groups are often attracted to bigger cities because attitudes are generally more liberal. Nepal has a largely rural population with only one big city. In this study, we included three transgender women who preferred not to participate in the FGD but who were happy to be interviewed separately. Similarly, we carried out six key informant interviews (KII) with relevant stakeholders, including representatives working in non-governmental organizations (NGOs) supporting the SGM population in Nepal. We conducted FGD and interviews up to the data saturation point [28].

We invited potential research participants using a convenience sampling strategy in close collaboration with a NGO working for the SGM population in Nepal. Participants for the FGDs were invited through the NGO's network as it was not possible to use more public recruitment strategies for this hard-to-reach and marginalized population.

The FGDs and interview guides were developed based on the literature and expert consultation and pretested [29] through one FGD with transgender women in Kathmandu. Copies of FGD and interview schedules are available from the first author on request. All the FGDs and interviews were conducted in Nepali by experienced qualitative researchers in a mutually convenient private place agreed in advance between the researchers and the participants. Most of our FGDs lasted between one to two hours whereas the individual interviews took between 45 min to one hour. The researchers made short field notes of nonverbal behavior during the qualitative data collection process.

With permission from the participants, the FGDs and interviews were audio-recorded. These recordings were transcribed [30] and then translated into English by a Nepali researcher. Transcripts were cross-checked against the original recordings. Any transcription disagreements were discussed between the PRR and SRN. Each transcript listed the setting, how the discussion focus was established, key differences to previous qualitative data and a reflection on issues identified in the session. NVivo 11 (QSR International Pty Ltd, Australia) was used to organize qualitative data [31]. As part of the thematic analysis [32], PRR inductively coded all transcripts (interviews and FGDs together) and EvT and SRN coded half of the

	Province/district	Participants N
	Province 1: Sunsari (1 \times FGD)	8
	Province 3: Kathmandu (5 \times FGD)	39
	Province 4: Kaski (1 \times FGD)	7
nts bv	Province 6: Banke $(1 \times FGD)$	8
	Total	62

Table 1. FGD participants by study areas

JHR 35.2 transcripts each as second independent coders. All data concerning silicone use contributed to the distillation of the themes listed below. Relevant quotes are presented to illustrate the key themes [33]. The consolidated criteria for reporting qualitative studies (COREQ) checklist then followed to report the qualitative data from this study [34].

Our study protocol was approved by Bournemouth University [Ref: 12251] and the Nepal Health Research Council [Ref: 188/2016]. Through a participant information sheet in Nepali, research participants were provided with information about the study procedure, confidentiality, study purpose, risk and benefits to the participants and complaint procedure [35]. Informed consent was obtained from all research participants prior to the FGDs and interviews. No monetary incentive except travel expenses was offered to participants.

Results

The mean age of FGD participants was 23.06 ± 3.9 years and more than half of the participants (55%) had completed grade six to high school level education (Table 2). Just under one-third of our FGD participants had completed higher secondary education (above School Leaving Certificate [SLC] level). Most participants (n = 51; 82%) were from Brahmin/ Chhetri and Janajati ethnicity, some 39% lived with friends and 42% worked in restaurants/bars.

Five themes emerged from the FGD and interviews: (1) familiarity and source of information about silicone: (2) reasons for silicone use: (3) notions of cost and quality: (4) reported negative aspects and (5) health-seeking behaviors of Nepali transgender women. These are discussed in turn below.

Socio-demographic characteristics ($N = 62$)	N (%)	
<i>Ethnicity*</i> Brahmin/Chhetri Newar Janajati (including Tharu/Chanduari) Dalit	26 (41.9) 8 (12.9) 25 (40.3) 3 (4.8)	
<i>Education</i> Up to primary (up to 5 grade) Up to school level (6 to SLC) Higher (above SLC)	9 (14.5) 34 (54.8) 19 (30.6)	
Occupation Bar dancer Waiter Business NGO/development worker Sex worker Modeling/fashion Unemployed	$12 (19.4) \\14 (22.6) \\4 (6.5) \\4 (6.5) \\3 (4.8) \\1 (1.6) \\24 (38.7)$	
<i>Currently living with</i> Friends Family Alone	24 (38.7) 24 (38.7) 14 (22.6)	
<i>Time at current address</i> ≤6 months >6 months Note(s) : *Ethnicity recoded as per the census of Nepal	15 (24.2) Tai 47 (75.8) Characteristics o partic	

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(1) Familiarity and source of information about silicone

Most participants were familiar with silicone use among Nepali transgender people. When asked about the source of their knowledge, they noted the Internet, particularly "YouTube" or "Google", and peers as the main sources of information, for example:

 \dots It is an internet generation. We can know everything if we search on Google. For this, we should know to check the internet. (FGD, VII)

...I watch YouTube and learn about many things including silicone use, sex-change surgery... we also learn many things from our friends who have done these things...I found out from my friend who works with me in the same office. I went with him for silicone injection as he knew the place. (FGD VIII)

Participants stated that services for injecting silicone are not widely available in Nepal but claimed that there are many places in Kathmandu where these procedures are carried out. Many participants spoke about having used silicone, as exemplified by the following quotes:

Here are fillers [silicone] for my beautiful chin. This is not Botox, it is silicone. (FGD, I)

I have injected silicone. She has also done [pointing to another participant]. It is available in Kathmandu. (FGD, I)

(2) Reasons for silicone use

Our participants highlighted several factors that encouraged them to use silicone. Frequently reported reasons were body image, identity and wider social acceptance. Some also argued that personal satisfaction and the opportunity for long-term relationships (e.g. marriage) were the other reasons for injecting silicone. One participant stated

I used to feel a bit uncomfortable previously. I did not roam here and there but was running my own hotel. Boys used to come, eat at my hotel but also wanted to touch me here [= showing breast]. They would say that this person is like this...so I did this [silicone injection]. Now I feel better than before. (FGD, III)

Another participant spoke about silicone use to help her look more feminine without going through a sex change operation:

I am transgender and want to maintain my identity. I think about implanting silicone if I get the money, but I do not want to undergo the complete sex change and become a woman. Some of our friends do want to have sex-change but I don't have that desire. (FGD, IV)

When we ask them if they are using any medicine to become like a girl, most of them say, "Everything is fine. I just want to increase my breast by using pills or silicone. (KII, III)

Similarly, financial benefits to look more feminine, particularly by transgender sex workers were also frequently shared by participants, for example:

...Some work as sex workers so they need to look beautiful to attract clients. The lower part [of your body] can be covered and can only be shown during that time [= sex] but more attraction is focused on the upper part [= breasts]. So it is compulsory to have it [= silicone implants]. If their upper part [breasts] looks natural, then they can get the rate they want. (In-depth interview, III)

Rather than earning, actually we do not want to do sex work. It is easier for us to negotiate for extra money if our body looks nice. (FGD, III)

The notion of fewer side-effects of silicone compared to other procedures for body manipulation such as sex hormones or sex reassignment surgery was also reported, as exemplified by these quotes:

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JHR 35.2 ...hormone use produces adverse effects on our health...compared to that, silicone use does not cause any sort of major complication so we choose this but it is not cheap either. (FGD, IV) Use of silicone among

Others suggested silicone might be used after hormone therapy or in combination with it:

My friend used silicone because her breasts did not develop. (FGD, II)

(3) Notions of cost and quality

There was consensus among participants that the quality of services abroad is much better than in Nepal, therefore, they always preferred getting silicone abroad, particularly in Bangkok:

...Yes, it is done in Teku [a place in Kathmandu]...we have seen our friends get silicone there...There is some difference like in the case of Bangkok they do it [= silicone implant] from the armpit area, but here [= Nepal] they do it from here [= showing side of the breast]. Stitches are also visible if it is done from here [= showing side of the breast] while it would not be so visible from the armpits. (FGD, VII)

...I have heard that silicon implantation is available in Nepal these days. But I haven't had silicone implants in Nepal. I went abroad for this. (In-depth Interview, III)

 \ldots the implants done in Nepal are a bit hard. . . it is not as good as in Thailand. The wound may be visible if you do in Nepal. (FGD, II)

Participants stated that the cost of silicone implants ranged from one to two hundred thousand Nepali Rupees (equivalent to US\$ 1,000–2,000) depending on the amount of silicone inserted. For silicone injection procedures performed overseas, travel and accommodation added to the overall expense as reported by participants:

 \dots I have used silicon here [= breasts]. It cost me about two lakhs [= USD 2000] and something to go and to return [Thailand]. It cost one lakh fifty thousand [= USD 1500] for silicon implant only. (FGD, VII)

These high costs associated with the procedures were highlighted as barriers to seeking these services. Hence, some participants mentioned that only wealthy people could afford these procedures, for example:

...only people who have a good job can afford these procedures. Some are in the modeling field and some are running their own business...they may go overseas and take advantage of these services. (FGD, III)

 \ldots I am saving money for making the upper part first [silicone use in breast]. I will possibly have a sex change later. (FGD, II)

One interviewee opted for hormones as these are cheaper than silicone injections:

I took Nilocon White [= oral contraceptive pill] as I did not have enough money for silicone use. (Indepth Interview, II)

(4) Negative aspects

Though many argued that there are few side effects of silicone use, some reported negative aspects of these procedures. They agreed that silicone needs to be carefully handled, especially massaged:

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transgender women ... It has a chance of getting damaged. In some people, it might be hard if massage is done carelessly during the "medicine period" immediately after insertion. In many cases, it becomes loose and reaches up to here (indicating) because of excess massage. Getting loose is also a fault and becoming hard like stone is also a fault. (FGD, I)

There was also the view that the weather can impact adversely on silicone implants:

...Silicon implant of [name] had already hanged down. Also, the climate of Nepalgunj [western Nepal] is not good, it is very hot there. And the weather of Kathmandu is also not good. If we have any problem, then how can we come to Kathmandu and how can we go overseas? (KII, V)

Another key informant said:

 \dots They get information from their friends, so they have not clearly understood the side effects and future consequences of these procedures. If they use this without counseling, they might not have any instant side effects now, but there can be huge side effects in the future. So, there is a need for counseling for them. (KII, IV)

(5) Health-seeking behaviors

Participants generally believed that there is no need for follow-up care after silicone use. They claimed that health care seeking or counseling after silicone injection is not necessary. However, some stated that they would seek health care services if they have any health issues related to silicone or hormone use or other health issues. Participants reported that they generally seek services in Nepal. However, if there is a complicated situation, they prefer to go overseas.

... [Name] used silicone some time ago. She is going to Bangkok because her breast on one side is small and another side is larger. (FGD, III)

Simple follow up is possible here but we have to go abroad [Thailand] if we have any kind of reaction. (FGD, II)

... No, we did not have to do anything [after silicone] like that. (In-depth Interview, I)

Most said that follow-up services (if required) from Nepal were good. Few participants, however, said that they did not get proper advice from health care providers in Nepal as doctors or nurses were not aware that transgender people used silicone.

Issues of stigma and discrimination were often mentioned related to their transgender identity, for example when seeking hospital care:

No, I did not go anywhere. If I do a check-up and if there are serious problems then. . . I had gone to teaching [=Teaching Hospital] once. I had to take off my clothes for a video x-ray. There were boys also. I felt very shy thinking that my breast would be seen. (FGD, III)

The following quote gives examples of how interviewees had been ill-treated by health care staff members who could not accept their gender identity:

I was very insulted in [= hospital name] counter. It was 7-8 years ago. My hair was also long, I used to use makeup. I had a bit of a problem and came for a check-up. At the counter, they saw me and insulted me. Then I felt angry and shouted and said, "They called me hijada [local term in South Asia for transgender individuals]. (FGD III)

The above quotes illustrate that there is still discrimination in many health services toward transgender people in Nepal. This prevents many of them from taking up services or sharing their health problems with professionals.

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Discussion

This is the first study that explores views around silicone use by Nepali transgender women. Our study found that transgender women are aware of silicone use and many had undergone procedures to feminize their contours. Peers of transgender people and the internet played a significant role in accessing information about silicone use. Indeed, seeking sensitive information on topics such as sexuality and reproductive health from peers is not unique in Nepal [36] or South Asia [37]. However, seeking information from peers may not always be a reliable approach due to inadequate competency in complex and technical issues. Similarly, the Internet seems to be a popular channel for information on silicone implants among Nepali transgender individuals. We argue that assessing the reliability of online information is difficult. Moreover, users require a good level of health literacy as well as English language competency as online content is generally in English, and consequently, limited access to potentially poor information through peers or the Internet may lead to a "badly" informed choice for transgender individuals.

Participants discussed many factors that encouraged them to use silicone. However, their main motives were to look more feminine and beautiful. Some even resorted to silicone to attract clients (those working as sex workers) or to establish a long-term relationship. This desire poses a risk as they do not always follow the recommended procedures for silicone use or follow up or treatment for any side effects. Improper silicone injection practices may lead to complications including migration of the silicone [9,38]. Furthermore, as silicone is a permanent material, treatment of its side effects or complications may be difficult. In many cases, the only option is surgical excision [1] which can be costly for transgender women who are already burdened by poor financial circumstances. Lack of access to appropriate care is associated with poor mental health outcomes such as depression, self-harm and suicide among transgender individuals [39,40]. There is also evidence that transgender people share needles and syringes to inject hormones or silicone [41]. If injections are not performed in a sterile manner or the injection equipment is contaminated, there is the additional hazard of the transmission of blood-borne infections such as HIV, Hepatitis B and C [42]. Targeted interventions to Nepali transgender individuals, therefore, should help disseminate such information.

Our participants frequently questioned the quality of the silicone or the procedures available in Nepal. These perceptions forced them to seek services abroad which are expensive for most transgender individuals due to their unemployed status or being engaged in low-income jobs. Moreover, due to the language barriers abroad or poor assertiveness skills, transgender people may not know whether they are serviced by medical or nonmedical practitioners. Many believed that the health professionals in Nepal were not aware of silicone use by the transgender population, which prevented them from seeking health professional care. There is, therefore, a need to orient/educate health professionals as they may not understand the need of transgender people or be aware of the health implication of silicone.

The transgender population has many health issues in addition to sexual and reproductive health and HIV prevention. Deeply rooted traditional societies, as seen in Nepal, have not only made the transgender person's life difficult but this discrimination also acted as a barrier to seeking health and social care services. Resolving this requires a holistic approach to meet the health care needs of transgender people in Nepal. Most current programs for the transgender population or other SGM populations in Nepal focus on promoting safe sex behaviors as this is considered a key issue due to HIV and high-risk sexual behaviors [19,20,22]. Current programs in Nepal have tended to ignore silicone use or other procedure such as gender reassignment surgery or hormone use among the transgender population. If the current interventions provide training on silicone use and issues such as hormone use and their side effects, transgender people may cascade the proper

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information to their peers just like they are currently doing for HIV and STI prevention and care.

Although the transgender population constitutes a small proportion of the population, to achieve universal health coverage as envisioned in the Sustainable Development Goals, it is imperative to understand the need for health care and the risk behaviors of the transgender population in Nepal. A recommendation for future practice is that programs should explore safe and affordable approaches to meet gender-related appearance needs of Nepali transgender people. For future research, we suggest further quantitative research is needed to determine: (1) the overall prevalence of silicone use among transgender women and (2) the consequences of silicone use on the transgender people. In addition, future studies should seek a deeper understanding of factors that motivate transgender people to engage in potentially risky behaviors.

Strengths and limitations

This is the first in-depth study of its type in Nepal. Moreover, despite the sensitivity of the topic, most participants were actively engaged during the FGD and interviews, giving us a rich data set, and no single participant dropped out during the course of the study. However, this study has its limitations: first, despite having covered the capital and three more remote cities, we may have missed the views of transgender women from other sociocultural or behavioral backgrounds. Secondly, as we recruited through a local organization working for the transgender community, we may have missed people who do not want to be part of this network. Thus, our participants may have already been better exposed to the health and social issues facing the transgender populations. Third, as sexuality issues are not openly discussed in Nepal, our participants might not have shared very personal and sensitive issues openly. Finally, as the findings of this study emerged from a qualitative study that aimed to explore hormone use of Nepali transgender women, our focus group and interview questions may have missed other key aspects of silicone use. Similarly, as the issues with silicone emerged and as it was not part of the interview schedule, many KII did not mention it. If we had asked these questions of KIIs we may have had more responses on the topic from them. As a consequence, this paper is largely based on insights from transgender women.

Conclusion

Nepali transgender individuals are generally familiar with silicone use and other procedures such as hormone use, gender reassignment surgery or surgical procedures for body manipulation. However, their health-seeking behaviors regarding the hazards in the form of side effects or complications are very poor. One practical recommendation is that targeted intervention programs should include education on silicone use and other procedures used to manipulate the physical appearance and their impacts, including recognizing side effects of silicone use. Awareness-raising interventions can help transgender populations to make more appropriate decisions about both body beautification and health care seeking practices if this is required.

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Corresponding author

Pramod Raj Regmi can be contacted at: pregmi@bournemouth.ac.uk

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