



ORIGINAL RESEARCH PAPER

Dentistry

DEVELOPMENT OF A QUESTIONNAIRE TO ASSESS THE PERCEPTION OF DENTISTS TOWARDS TRANSGENDER PATIENTS

KEY WORDS: Transgender, Dentist, Perception

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ABSTRACT

Background Transgender community faces immense amount of adversities including less acceptance from family and friends, lack of employment opportunities, verbal and physical abuse, isolation and rejection. A lack of knowledge about the biology and health needs of transgender community and a generalized aversive attitude against them are a few reasons for this discrimination. In spite of their increased health needs, they face discrimination from health care professionals including dentists. **Objectives** Currently, there are no psychosocial tool for examining the knowledge, attitude, and perceptions of dentists towards transgender patients. Accordingly, a tool was developed and tested to provide an instrument for measuring the same. **Methods** A thorough literature review and expert panel analysis of the questions was done followed by pretesting of the tool. The responses were marked on a likert scale .Reliability and factor analysis were performed using SPSS software. **Results** The final factor analysis loaded as two factors with nine items which were defined as emotional and cognitive perception. The present item pool was named as dentist perception questionnaire which can be used to assess the perception of dentists towards transgender patients. **Conclusions** Although further testing and refinement is needed, this survey instrument provides an initial and conceptually unique tool for assessing the knowledge, attitude and perception of dentists towards transgender patients.

Introduction

Transgender/eunuch is an umbrella term which is used to describe people whose gender identity or expression does not match the sex they are assigned at birth.¹The origin of the word eunuch is from Greek word meaning “keeper of the bed”. Transgender communities are historically significant and exist in many cultural contexts. In different parts of the world they are labelled differently ; bakla in the Philippines, xaniths in Oman, serrers among the Pokot people of Kenya, and kinnars, jogappas, jogtas, or shiv-shaktis in South Asia.² In India transgender people are mainly called as “hijra,” which actually refers to third gender or “male-to-female” transgender people; most see themselves as neither men nor women.³

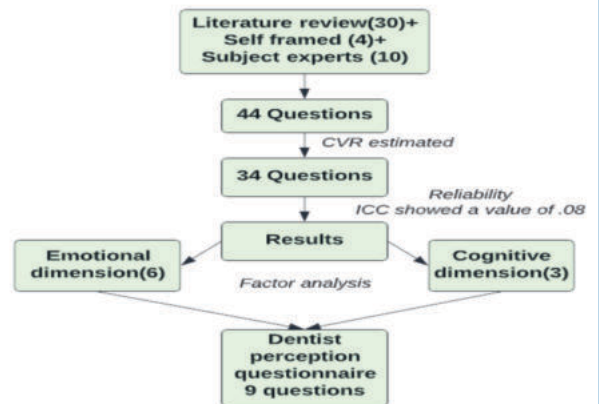
Transgender people are one of the neglected special vulnerable groups in India who need to be given special attention. Though this community faces discrimination in all parts of the world, the attitude towards transgender people in the Indian society is particularly discriminatory and biased. Conservative nature of Indian society and constricted mindset are few reasons for this. Indian census has never recognized third gender till 2011. The census revealed the total population of transgender to be around 4.88 lakh ,also 55,000 children were identified as transgender by their parents.⁵

This community faces a lot of pressure and discrimination from the society. Less acceptance by family and friends, lack of employment opportunities ,verbal and physical abuse and isolation and rejection are some of them. Transgender people are more likely to have dropped out of education, had to move away from family and friends, and faced workplace discrimination, limiting their educational and economic opportunities.⁶

This will lead them in ending up in underground professions like begging and sex work. Increased stress among these communities will lead them to slip into addictions like alcoholism, drug abuse and smoking.

Methods

Figure. 1 Flowchart of methodology



Lifestyle addictions, stress altogether contribute to a higher prevalence of general diseases as well as dental diseases in transgender community. Studies show that ,periodontitis, oral mucosal lesions and prosthetic needs are seen at a higher prevalence compared to the general population.^{8,9,10,11} Habits like tobacco smoking, alcoholism and lack of awareness about dental hygiene worsens the condition.^{7,12} Adding insult to injury, they are also denied general, oral health, and psychological assistance.¹³ In India, the accessibility to medical and dental facilities for the eunuchs are nearly non-existent.¹¹ Some may think of discrimination or maltreatment by health professionals as being overtly insulting or derogatory in their speech towards individuals .On the other hand some of them are reluctant in providing treatment to them.^{14,15,16} A lack of knowledge about the biology, health care needs of transgender community and the concern of high HIV prevalence are some of the reasons for this discrimination.^{17,18,19,20} To the best of our knowledge, there are no psychosocial tool examining knowledge, attitudes, and perceptions of

dentists towards transgender patients in India. Accordingly, a tool was developed and tested to provide an instrument for measuring dentists' knowledge, attitudes, and perceptions of dentists which can be used for any future recommendations in this field.

1)Literature Review

For the purpose of the development of this questionnaire a thorough review of literature was conducted to assess the current state of knowledge, attitude and perception of dentists towards transgender individuals and the challenges faced by the transgender individuals in the society. Also, articles on survey tools and several KAP studies conducted in both medical and dental fields were reviewed. The databases assessed for literature review included PubMed, PSYCINFO, sociological abstracts etc . Research items included various boolean combinations and permutations of the term transgender ,LGBTQ, oral health, attitude ,perception, dentists, questionnaire etc. Most of the studies were conducted on health care professionals in general which included physicians, specialists and nurses .We failed to find an exclusive study on the KAP of dentists towards transgender individuals. So for this purpose our own development of an instrument was necessary. Thirty questions were selected after review of literature and fourteen self framed questions and questions framed from subject experts were added to the list.

2)Expert Panel Review

Expert panels were used when specialized input and opinion is required for an evaluation. Generally a variety of experts are engaged based on the related field and who can give their inputs.11 subject experts have done the evaluation this including five senior staff of the dental department and 6 from medical college .

3)Content validity ratio

Content validity ratio was computed from the response of subject experts. Content validity aids us to identify the degree to which an instrument has an appropriate sample of items for the construct being measured. Content validity ratio of more than 0.5 was considered and a questionnaire was developed with the remaining items.

4) Pretesting of the instrument

Data collection was done from 111 practicing dentists in Bangalore district, Karnataka. Questionnaire was send in the form of google forms. Using google forms for data collection made the procedure easier and helped to reduce the errors. Excluding the incomplete responses , we got 107 responses which was subjected to factor analysis

Results

Concepts identified in the literature review were useful in the selection of items for the questionnaire. Most of the review was conducted in the health care providers in general rather than any specific area. The present instrument mainly tried to discover the 1) knowledge of dentists towards transgender patients Eg: "I have got a basic education from my dental education about delivering treatment to transgender patients." , "I would need to be better educated about transgender individuals to provide appropriate dental care for them." 2)Attitude Eg: "I would feel comfortable working closely with a transgender individual.", "I believe that transgender individuals should be accepted completely into our society.",3)Perception Eg: "I feel that there should be no restriction of rights for transgender individuals.", " I believe that a decreased hospital attendance of transgender people is an end result of perception of society towards them, and we healthcare professionals cannot do anything about it." Last four questions were self framed emphasizing on treatment delivery.

"I am aware about transgender individual's increased healthcare needs and I want to make sure my service will

benefit them, but I don't know how to approach them."

"I believe that a healthcare camp exclusively for transgender individuals, will help them in delivering appropriate treatment". , " I feel that while delivering treatment to a transgender, their lifestyle /increased prevalence of lifestyle diseases concern my wellbeing. ", "I believe that there is an existing negative/aggressive attitude among transgender people towards the society which is a barrier for healthcare professionals approaching them".

Subject experts marked their responses based on the the appropriateness of the questions in this particular tool as "relevant" or "irrelevant. Some of them have marked their impressions on particular questions. Content validity ratio of more than 0.5 was considered and a questionnaire was developed with the remaining items. Data collection was done with google forms. Participants were asked to mark their response on a likert scale of Strongly agree, agree , neutral, disagree and strongly disagree. The responses strongly agree and agree were taken as positive response, and the responses disagree and strongly disagree were considered as negative. Data was entered in SPSS 22 and factor analysis was done. Values above 0.5 were considered. The final factor analysis loaded as two factors with nine items. The two factors was defined as emotional and cognitive perception. The same questionnaire was checked for interclass correlation which showed cronbach's alpha of 0.08 The present item pool is named as dentist perception questionnaire. This can be used to assess the perception of dentists towards transgender patients. Responses were marked on a likert scale of strongly agree, agree, neutral, disagree and strongly disagree.

Table no:1 Final list of questions of the dentists' perception questionnaire

1)	I would prefer not to treat transgender patients.
2)	I believe that it would be beneficial to society to recognize the state of being transgender as natural.
3)	I believe that transgender individuals are viable and contributing members of our society
4)	I believe it is the responsibility of all healthcare providers to care for LGBTQ patients.
5)	I believe that a decreased hospital attendance of transgender individuals is an end result of perception of society towards them, and we healthcare professionals cannot do anything about it.
6)	I believe that a healthcare camp exclusively for transgender people will help them in delivering appropriate treatment.
7)	I am aware of dentists or advanced practice providers who exhibit attitudes or beliefs about the transgender population that I feel are barriers to care.
8)	I am aware of front desk staff who exhibit attitudes or beliefs about the transgender population that I feel are barriers to care.
9)	I am aware of nursing staff/attenders who exhibit attitudes or beliefs about the transgender population that I feel are barriers to care.

DISCUSSION

It is evident from the review of articles that transgender population has an increased prevalence of oral diseases and less utilization of dental services.^{21,22} The discrimination shown by the dentists towards transgender patients is one of the cause for the development of this questionnaire. So a questionnaire like this will helps us to know the knowledge ,attitude and perception of dentists towards transgender patients which can also be used for future research in this area. This questionnaire was developed systematically with reliance on the relevant literature, expert panel review ,content validity ratio assessment and factor analysis. At the end of the factor analysis we have arrived in two factors

defined as emotional and cognitive perception. The same questionnaire was checked for interclass correlation which showed cronbach's alpha of 0.8(0.8 or higher=exemplary,0.7-0.79=extensive,0.6-0.69=Moderate) which showed exemplary internal reliability.²³

There are few limitations for this instrument. Cultural, religious and geographical changes may influence the attitude and perception of health care professionals towards transgender patients. In addition to this the level of knowledge about LGBTQ community through curriculum impact the knowledge, attitude and perception of healthcare professionals towards transgender patients. Therefore the generalisability of this instrument should be done with a intensive background research.

CONCLUSION

A survey instrument helps us to access a large group quickly. If study participants can respond anonymously, research about controversial and sensitive issues can be done unhesistantly .The present instrument (dentist perception questionnaire) can be used to assess the perception of dentists towards transgender patients. Although further testing and refinement is needed, this survey instrument provides an initial and conceptually unique tool for knowledge, attitude and perception of dentists towards transgender patients.

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