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Original Research Article

## A descriptive study on awareness and attitude of medical undergraduates about the transgender population and their healthcare needs

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### ABSTRACT

**Background:** Medical education in transgender health care can empower physicians to identify and change the systemic barriers to care that cause transgender inequities as well as improve knowledge about transgender specific care. The objective of this study is to estimate the awareness among medical students about the terms related to transgender and their healthcare needs, to create an environment of inclusivity and educate the undergraduate MBBS students to provide highest level of care and advocacy for transgender population and to stress on the fact that the transgender education in the medical curriculum is an inevitable one in the modern medical practice.

**Methods:** Knowledge questionnaire and TABS scale questionnaire was distributed to the 150 students through Google forms and their responses were collected. Knowledge questionnaire was given a score as 1 point for each (28 points). TABS questionnaire was assessed with Likert scale.

**Results:** 52.6 percentage of the students have scored below the median and remaining 48.4 percentage of students have scored above the median score. The undergraduate students have a basic understanding about the healthcare needs of the transgender population and attitude towards transgender is on par with population of similar age group

**Conclusions:** It is been observed that more knowledge regarding the terms about transgender population and their healthcare needs is needed for undergraduate students. A good curriculum to teach about basic health needs of transgender population has to be discussed.

**Keywords:** Transgender, Attitude, TABS scale

### INTRODUCTION

The term transgender, or trans, describes an array of individuals whose sex assigned at birth differs from their current gender identity or one's sex of being male, female, neither, or both. In contrast, cisgender is an adjective used to describe individuals with gender identity that aligns with their sex assigned at birth.<sup>1</sup> For the past decades, transgender people have faced social scrutiny and rejection and marginalization denying them the basic healthcare needs. Transgender people often become the targets of physical and verbal violence and so they experience

greater mental health disorders like depression, anxiety, substance abuse disorders etc. compared to the cisgender population.<sup>2-5</sup> Only very few transgender people come to the outpatient wings of any department of the hospital. Even when they happen to visit the hospital, they hesitate to reveal their gender identity due to social hindrance. The existing binary gender attitude of the medical health professionals leads to false perceptions and clouds their judgement in diagnosing a transgender patient which impacts the treatment and management of the patient gravely.<sup>3</sup> There is no adequate awareness among the medical students regarding the healthcare needs of

transgender population. Medical students must be formally trained in their undergraduate classes about the terms related to the transgender population and their healthcare needs to ensure adequate care. Knowledge is only one part of the equation in removing barriers and providing better care for a stigmatized group, and more work needs to be done to identify effective interventions that improve providers' attitudes towards this population.<sup>6</sup> For an optimal provision of health care services to the transgender population, medical professionals must be kept informed about the social stigmatization and the specific health risk factors concerning the transgender population. This study focuses on the current awareness, knowledge and attitude of the medical students regarding the transgender population among the first year MBBS students of a tertiary care hospital.

### ***Aims and objectives***

Aim and objectives of current study were to estimate the awareness among medical students about the terms related to transgender and their healthcare needs, to create an environment of inclusivity and educate the undergraduate MBBS students to provide highest level of care and advocacy for transgender population and to stress on the fact that the transgender education in the medical curriculum is an inevitable one in the modern medical practice.

## **METHODS**

### ***Study design, location and duration***

Current study is a descriptive study conducted at department of anatomy, Kanyakumari Govt. medical college & hospital, Asaripallam, Kanyakumari District for a period of 1 year (November 2021 to November 2022).

### ***Inclusion and exclusion criteria***

All first year MBBS UG's of KGMC 2021-2022 batch with access to internet were included. Any students who remained absent in either of the class were excluded.

### ***Study procedure and sample size***

Total 150 students of first year MBBS (2021-2022 batch) were requested to assemble at the UG lecture hall of Kanyakumari Government Medical College & Hospital on 25<sup>th</sup> of July, 2022. They were given instructions about the study instruments which are to be used for the study and about the usage of Google Forms to obtain their responses. Details about the TABS scale, validated MCQ questionnaire and their interpretation was explained to them. Links of separate Google forms containing the questions of the TABS scale and validated MCQ questionnaire were sent to them along with informed consent. A total time of 180 mins was given to them and their responses were collected. The collected responses were then analyzed statistically using mean, median,

standard deviation and interquartile ranges in IBM SPSS statistics V22.0. Informed consent was taken from all the participants.

### ***Study instruments***

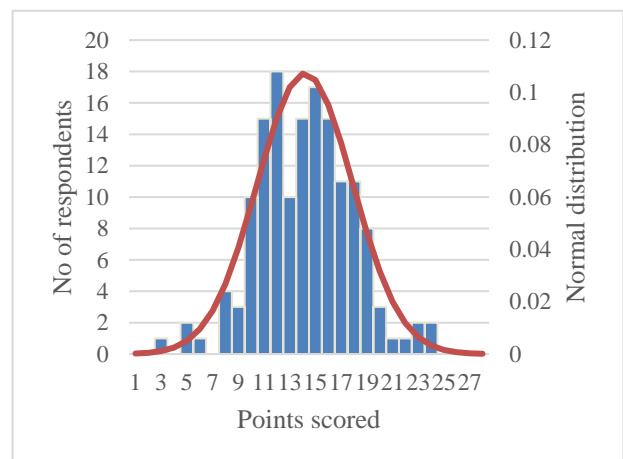
Transgender Attitude and Beliefs Scale (TABS-29 items).<sup>7</sup> This assessment tool mainly deals with three factors: Factor 1 (Interpersonal comfort) which contains 14 items, Factor 2 (Sex/Gender Beliefs) which contains 10 items, Factor 3 (Human value) which contains 5 items. Responses of the TABS scale will be answered on a Likert scale from 1 to 7 with the values 1=Strongly disagree, 2=Disagree; 3=Somewhat disagree; 4=Neutral; 5=Somewhat Agree; 6=Agree; 7=Strongly Agree. Lower scores indicate a higher level of transphobic attitudes. Validated MCQ Questionnaire (28 MCQs with 4 options). The MCQs will be assessed by scoring - one point for one question choosing the single best answer.

### ***Statistical tool and analysis***

The collected responses were then analyzed statistically using mean, median, standard deviation and interquartile ranges in IBM SPSS statistics V22.0

## **RESULTS**

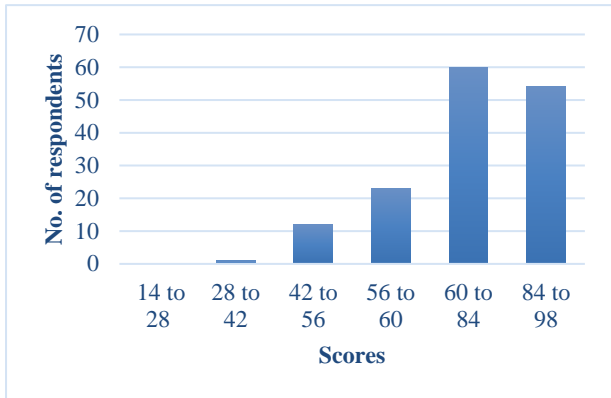
Since the participants included in the study were only first year undergraduates, no sampling method was used and all were in the age group of 17 to 20. The scores obtained by the students were plotted in the histogram format. The (Figure 1) shows that 50% of the respondents scored between 12 to 17 and 75% of the respondents scored above 12.



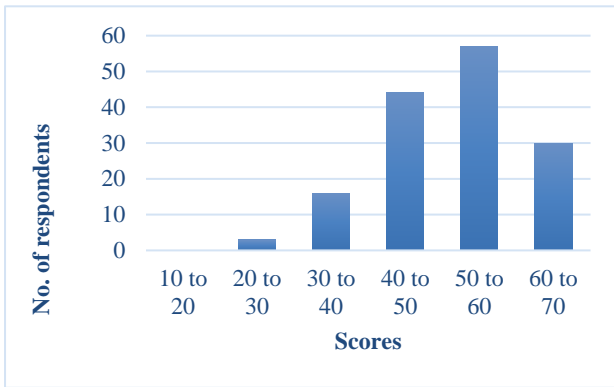
**Figure 1: The knowledge questionnaire score; median-14; mean-14.18, interquartile range-12-17, 50% of the respondents scored between 12 to 17 and 75% of the respondents scored above 12.**

The score distribution of the first questionnaire (knowledge) indicated that 52.6 percentage of the students have scored below the median and remaining 48.4% of

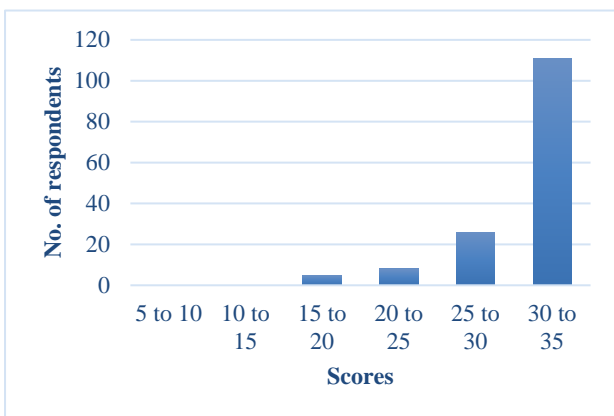
students have scored above the median score. The second questionnaire took account of three factors, Interpersonal comfort, Sex/Gender beliefs and Human value.



**Figure 2: Factor 1 interpersonal comfort; mean-78.47333, standard deviation-13.42023, >75% of the respondents scored above 63.**



**Figure 3: Factor 2 sex/gender beliefs; mean-51.89333, standard deviation-9.273005, >75% of the respondents scored above 35.**

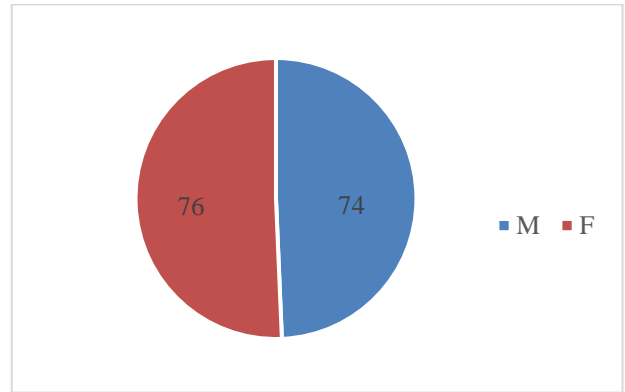


**Figure 4: Factor 3 human value; mean-32.18, standard deviation-3.953176, >75% of the respondents scored above 18.**

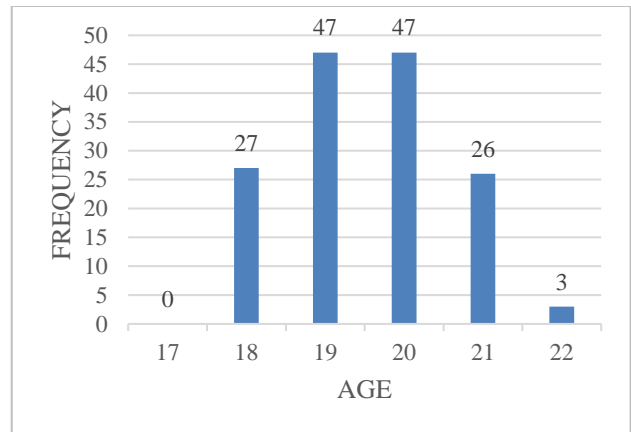
The answers based on the Likert scale is represented by the histograms. Lower scores indicate a higher level of

transphobic attitudes. The (Figure 2) shows >75% of the respondents scored above score 63 in Interpersonal comfort. The (Figure 3) shows >75% of the respondents scored above score 35 in Sex/Gender beliefs. The (Figure 4) shows >75% of the respondents scored above score 18 in Human value. The (Figure 5) shows the sex distribution of the respondents while figure 6 shows the age distribution of the respondents.

**Demographic data of the respondents**



**Figure 5: Sex based distribution of respondents.**



**Figure 6: Age based distribution of respondents.**

**DISCUSSION**

Dubin et al commented that Transgender health has yet to gain widespread curricular exposure, but efforts toward incorporating transgender health into both undergraduate and post graduate medical educations are nascent. There is no consensus on the exact educational interventions that should be used to address transgender health. Barriers to increased transgender health exposure include limited curricular time, lack of topic-specific competency among faculty, and underwhelming institutional support.<sup>8</sup> Click et al has said that Transgender individuals face numerous health disparities and report negative experiences with health care providers related to their gender identity. Significant gaps in medical education regarding transgender health persist despite calls for increased sexual

and gender minority content. The significant disparities in physical health, mental health and access to care currently experienced by transgender persons warrants the continued testing and refinement of educational interventions for future and practicing providers.<sup>9</sup>

James et al has quoted that, final-year medical students have had no teaching on transgender health-related issues beyond equality and diversity sessions. Anxiety stems from a lack of understanding of gender pronouns; misgendering a patient can have hugely negative impacts on the individual and their willingness to seek help again.<sup>10</sup> Liang et al has quoted that student in their preclinical years reported lower levels of knowledge in comparison with students in their clinical years. Respondents more frequently requested additional learning opportunities in transgender and intersex health than in LGB health. Self-reported knowledge of transgender and intersex health lags behind knowledge of LGB health, though these deficits appear partially responsive to targeted educational intervention.<sup>11</sup> Martins et al has quoted that the majority had poor overall knowledge, with a significantly higher percentage of pre-clinical students regarding differences in transgender health needs compared to clinical students. Many students were unsure of how to address and clinically examine patients identifying as transgender. However, most students demonstrated good or fair attitudes towards individuals who identified as transgender, and the majority reported a high or moderate perceived need for the inclusion of trans-health in the medical curriculum.<sup>4</sup>

Voultsov et al has concluded in their study that medical students had a moderately positive attitude towards transgender people with a mean total score of 155.95 (SD=30.63). Participants showed significantly less biased (more tolerant, positive) attitudes towards transgender people on the Interpersonal Comfort (IC) and human value (HV) subscales than on the Sex/Gender Beliefs (SGB) subscale.<sup>12</sup> In the present study, the mean total score of 162.5467(SD=22.02) was obtained which is more than that of the study done by Voultsov et al. Also in the present study, 50 percent of the participants have moderate knowledge (Range: 12 to 17) (Figure 1) about the terms and healthcare needs of transgender population. In our study more than 50 percent of the population of the participants have shown positive attitude towards transgender population (Figure 2-4).

### **Limitations**

Limitations of current study were, the study population has no clarity about the medical terms related to the transgender population. The study population does not belong exclusively to the study place. The study population is limited to first year MBBS students who have no prior clinical experience.

### **CONCLUSION**

The undergraduate students have a basic understanding about the healthcare needs of the transgender population and attitude towards transgender is on par with population of similar age group. Currently, transgender medical education is largely composed of one-time attitude and awareness-based interventions that show significant short-term improvements but suffer methodologically. A curriculum dealing with healthcare needs of transgender population is very essential for undergraduate and post graduate students which includes knowledge, communication, attitude and skills towards transgender health needs. Consensus in the existing literature supports educational efforts to shift toward pedagogical interventions that are longitudinally integrated.

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*Ethical approval: The study was approved by the Institutional Ethics Committee*

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