

Research Article

# Assessment of the Level of Understanding on Sexual Minorities Among Medical Practitioners in Govt Hospitals of Tamilnadu

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## Abstract

Gender and Sexual minorities refer to groups who experience unequal treatment and is characterized by physical and cultural distinctions from the dominant group, often facing prejudice and discrimination. In India varied levels of understanding regarding sexual minorities among medical practitioners, with a general trend of limited formal training in LGBTQIA+ health needs, leading to potential discrimination and non-inclusive care. A cross-sectional study is conducted among 100 randomly selected registered medical practitioners in government hospitals of Tamil Nadu. Among the study participants 32% of doctors had an understanding on sexual minorities with their undergraduate degree knowledge, 57% had an understanding on sexual minorities with the postgraduate degree knowledge. While 43% gained understanding in their clinical practice. 27% of medical practitioners had knowledge on transgender act. 63% of the medical practitioners had a perception on sexual minorities that they are obese. 35% felt the sexual minorities are having multiple sexual partners, 25% felt they are having mental health issues, 40% perceived that the sexual minorities had injuries due to violence, 82% of the practitioners perceived the sexual minorities are under substance usage. 12% of the practitioners felt the sexual minorities are adequately immunized. It was observed that a considerable proportion of participants had limited knowledge about these groups, with only a minority having received undergraduate education or practical experience related to Female sex workers (FSWs), Men having sex with men (MSMs), and transgender health issues. Additionally, awareness of key legislative acts, such as the Transgender Act, was notably low among the surveyed medical practitioners. It is imperative to prioritize the integration of FSW, MSM, and transgender health education into medical curricula and continuing education programs for practicing medical professionals.

## Keywords

Medical Practitioners, Sexual Minorities, Government Hospitals, Level of Understanding

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## 1. Introduction

In recent years, there has been a growing recognition of the importance of understanding and addressing the healthcare needs of sexual minorities, including lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA+) individuals. In India, despite legal advancements such as the decriminalization of consensual same-sex relations, societal attitudes towards sexual minorities remain complex and varied across different regions. Tamil Nadu, known for its progressive social policies, provides an interesting context to explore the level of understanding and acceptance of sexual minorities within the healthcare sector, particularly in government hospitals that cater to a significant portion of the population, including marginalized communities.

Studies reveal that LGBTQI patients experience higher rates of delayed diagnoses, inadequate treatment, and poorer health outcomes compared to the heterosexual population [1]. These disparities are often rooted in stigma and discrimination within healthcare settings, where a lack of understanding regarding sexual orientation and gender identity (SOGI) can create barriers to accessing quality care [2]. Additionally, it is essential to consider the sexual orientation, gender identity, gender expression, and sex characteristics (SOGIE.SC) aspect, which highlights the diverse experiences and needs within the LGBTQIA+ community.

This research article aims to address this gap by conducting a comprehensive assessment of the level of understanding and attitudes towards sexual minorities among medical practitioners working in government hospitals across Tamil Nadu. This study seeks to delve into key aspects, including the extent of medical practitioners's knowledge and awareness regarding SOGIE.SC, the specific health needs and challenges faced by sexual minorities, [3-7] and the attitudes, beliefs, and perceptions of medical practitioners towards these individuals. Previous studies have emphasized the importance of healthcare providers having adequate knowledge about LGBTQIA+ health issues to provide effective care [3, 8-10]. Moreover, the study investigates the adequacy and effectiveness of existing training programs and educational initiatives aimed at sensitizing medical practitioners towards LGBTQIA+ issues within the government healthcare system [11-13]. It identifies the institutional, cultural, and societal barriers that hinder the provision of inclusive healthcare services to sexual minorities and explores potential strategies to overcome these challenges [14-16]. By shedding light on the current state of understanding and acceptance of sexual minorities among medical practitioners in government hospitals of Tamil Nadu, this research endeavors to inform policy interventions, educational initiatives, and institutional reforms aimed at fostering a more inclusive and equitable healthcare environment for all individuals, regardless of their sexual orientation, gender identity, gender expression, or sex characteristics.

## 2. Aims & Objectives

### 2.1. Aim

The aim of this study is to assess the level of understanding and attitudes towards sexual minorities among medical practitioners in government hospitals of Tamil Nadu, India, with the goal of informing interventions to improve the provision of equitable healthcare services.

### 2.2. Objectives

- 1) To evaluate the knowledge and awareness of medical practitioners regarding sexual orientation, gender identity, and the specific health needs and challenges faced by sexual minorities.
- 2) To assess the attitudes, beliefs, and perceptions of medical practitioners towards sexual minorities, including their level of acceptance, empathy, and willingness to provide non-discriminatory healthcare services.

## 3. Methods

### 3.1. Study Type

This study adopts a Cross-Sectional design to assess the level of understanding and attitudes towards sexual minorities (FSWs, MSMs and Transgenders) among medical practitioners in government hospitals across Tamil Nadu.

The operational definitions for the sexual minorities are:

- 1) FSW: Women aged 18 or more, who are engaged in consensual sex for money or payment in kind, as a means of livelihood in the last 6 months.
- 2) MSM: Men aged 18 years or more, who had anal or oral sex with a male partner in the last one month.
- 3) Transgender: Person aged 18 or more, whose self-identity does not conform unambiguously to conventional notions of male or female gender roles but combines or moves between these. It also includes persons, aged 18 or more, whose gender identity is different from the sex assigned at birth.

### 3.2. Inclusion Criteria

- 1) Registered Medical practitioners with an MBBS degree working in the Tamil Nadu health department on either a regular or contractual basis.
- 2) Individuals who provide informed consent to participate in the study.

### 3.3. Exclusion Criteria

- 1) Medical practitioners without an MBBS degree.

- 2) Medical practitioners not currently employed within the Tamil Nadu health department.
- 3) Individuals unwilling to provide informed consent.

simple random sampling technique. This selection process involved generating random numbers to ensure the randomness and representativeness of the sample.

### 3.4. Study Place

The study is conducted across various government hospitals in Tamil Nadu to ensure representation from different geographical regions of the state.

### 3.5. Sample Size

The sample size was determined using the formula  $4pq/d^2$ , resulting in a calculated sample size of 100.

### 3.6. Sampling Method

From the state government's database of registered medical practitioners, 100 doctors were randomly selected using a

### 3.7. Data Collection

Data collection was performed using a semi-structured peer-reviewed questionnaire designed specifically for this study. Trained interviewers conducted face-to-face interviews with the selected medical practitioners to gather data. The questionnaire included items related to knowledge, attitudes, perceptions, and experiences regarding sexual minorities in healthcare settings. The collected data were then entered into Microsoft Excel for storage and management. Subsequent analysis was conducted using the Statistical Package for Social Sciences (SPSS) version 16 to derive meaningful insights and conclusions from the gathered data. Institutional ethical committee approval was obtained from Government Thiruvavur medical college.

## 4. Results

**Table 1.** Knowledge, Attitude and Practices of Medical practitioners on Sexual minorities in Government Hospitals of Tamilnadu.

| Variables                    |          | Frequency N=100 | Percent | Cumulative Percent |
|------------------------------|----------|-----------------|---------|--------------------|
| Age                          | 21 to 30 | 20              | 20      | 20                 |
|                              | 31 to 40 | 25              | 25      | 45                 |
|                              | 41 to 50 | 21              | 21      | 66                 |
|                              | 51 to 60 | 57              | 57      | 100                |
| Gender                       | Female   | 43              | 43      | 43                 |
|                              | Male     | 57              | 57      | 100                |
| UG knowledge                 | Yes      | 32              | 32      | 32                 |
|                              | No       | 68              | 68      | 100                |
| PG knowledge                 | Yes      | 57              | 57      | 57                 |
|                              | No       | 43              | 43      | 100                |
| Practice knowledge           | Yes      | 43              | 43      | 43                 |
|                              | No       | 57              | 57      | 100                |
| Worked under NACO programme  | Yes      | 24              | 24      | 24                 |
|                              | No       | 76              | 76      | 100                |
| Knowledge on Transgender act | Yes      | 27              | 27      | 27                 |
|                              | No       | 73              | 73      | 100                |
| Years of experience          | 1 to 5   | 27              | 27      | 27                 |
|                              | 6 to 10  | 10              | 10      | 37                 |
|                              | 11 to 15 | 22              | 22      | 59                 |
|                              | 16 to 20 | 21              | 21      | 80                 |

| Variables                   |              | Frequency N=100 | Percent | Cumulative Percent |
|-----------------------------|--------------|-----------------|---------|--------------------|
|                             | 21 to 25     | 6               | 6       | 86                 |
|                             | 26 to 30     | 10              | 10      | 96                 |
|                             | 30 and above | 4               | 4       | 100                |
| Place of practice           | Rural        | 38              | 38      | 38                 |
|                             | Urban        | 62              | 62      | 100                |
| Identified Overweight/Obese | Yes          | 63              | 63      | 63                 |
|                             | No           | 37              | 37      | 100                |
| Multiple sexual partners    | Yes          | 35              | 35      | 35                 |
|                             | No           | 65              | 65      | 100                |
| Mental health               | Yes          | 25              | 25      | 25                 |
|                             | No           | 75              | 75      | 100                |
| Injury/violence             | Yes          | 40              | 40      | 40                 |
|                             | No           | 60              | 60      | 100                |
| Immunization                | Yes          | 12              | 12      | 12                 |
|                             | No           | 88              | 88      | 100                |
| Substance Use               | Yes          | 82              | 82      | 82                 |
|                             | No           | 18              | 18      | 100                |

Out of 100 participants 20 (20%) were in the age group of 21 to 30 years, 25 (25%) were in the age group of 31 to 40 years, 21 (21%) individuals aged 41 to 50 years, and 34 (34%) were in the 51 to 60 years. 57 (57%) of the participants were male, 43 (43%) individuals were female. that 68 (68%) participants had no undergraduate knowledge regarding sexual minorities, whereas 32 (32%) did, 57 (57%) had post graduate knowledge and 43 (43%) had no such knowledge. 43% had practice knowledge while 57% did not possess such knowledge. 24% of the participants had also worked under the NACO programme while 76% had not. It was also seen that 27% had knowledge on the Transgender Act while 73% did not. 62 (62%) respondents practiced medicine in urban areas whereas 38 (38%) in rural areas. (27%) had reported to have 1 to 5 years of experience, 10 (10%) had 6 to 10 years of experience, 22 (22%) had 11 to 15 years of experience, 21 (21%)

had 16 to 20 years of experience, 6 (6%) had 21 to 25 years of experience, 10 (10%) had 26 to 30 years of experience and 4 (4%) had 30 or more years of experience.

The perception of medical practitioners on the sexual minorities. 63% perceived that the people who belonged to sexual minorities were overweight or obese while 37% had no such perception. 35% felt that these minorities had multiple sexual partners while 65% did not feel that. 25% perceived that the patients had mental health issues while 75% did not perceive any such issue. 40% felt that these minorities had some injuries or experienced violence while 60% did not feel that. 12% felt that such patients were immunized while 88% did not. 82% of the medical practitioners felt that their patients belonging to sexual minorities under substance use while 18% did not feel that.

**Table 2.** Correlation between age, years of practice and total years of experience.

| S. No. | Variables                                       | Pearson Correlation | Significance |
|--------|-------------------------------------------------|---------------------|--------------|
| 1      | Age with Years of practice                      | 0.903               | 0.00         |
| 2      | Age with Total years of experience              | 0.903               | 0.00         |
| 3      | Years of practice and Total years of experience | 0.999               | 0.00         |

There is a statistically significant correlation between age and years of practice, age and total years of experience and,

years of practice and total years of experience with a Pearson correlation of 0.903, 0.903 and 0.999 respectively.

**Table 3.** Association between various various variables among the study participants.

| Variables          |       | Knowledge on Transgender act |          | Chi Square Value | Asymptotic Significance |
|--------------------|-------|------------------------------|----------|------------------|-------------------------|
|                    |       | Yes                          | No       |                  |                         |
| Practice Knowledge | Yes   | 20 (20%)                     | 23 (23%) | 14.571           | 0                       |
|                    | No    | 7 (7%)                       | 50 (50%) |                  |                         |
| Total              |       | 27 (27%)                     | 73 (73%) |                  |                         |
| Variables          |       | Knowledge on Transgender act |          | Chi Square Value | Asymptotic Significance |
|                    |       | Yes                          | No       |                  |                         |
| Place of Practice  | Rural | 16 (16%)                     | 22 (22%) | 7.095            | 0.01                    |
|                    | Urban | 11 (11%)                     | 51 (51%) |                  |                         |
| Total              |       | 27 (27%)                     | 73 (73%) |                  |                         |
| Variables          |       | UG Knowledge                 |          | Chi Square Value | Asymptotic Significance |
|                    |       | Yes                          | No       |                  |                         |
| injury/violence    | Yes   | 18 (18%)                     | 22 (22%) | 5.178            | 0.029                   |
|                    | No    | 14 (14%)                     | 46 (46%) |                  |                         |
| Total              |       | 32 (32%)                     | 68 (68%) |                  |                         |

There is a statistically significant association found between knowledge of the transgender act and practice knowledge of the medical practitioners. It can also be seen that 50% of them who have no practice knowledge also did not have any knowledge on the Transgender Act. there is a statistically significant association found between knowledge of the Transgender act and the place of practice. It was also seen that 51% of the participants who practiced in urban regions had no knowledge on the Transgender Act. there is a statistically significant association found between UG knowledge and the perception of the participants regarding injury/violence experienced by the sexual minorities. It was also noted that 46% of the participants who had no UG knowledge also did not perceive the sexual minorities patients to have experienced injury or violence.

## 5. Conclusion

The findings of this study shed light on the understanding, attitudes, and perceptions of medical practitioners towards female sex workers (FSWs), men who have sex with men (MSMs), and transgender individuals in government hospitals across Tamil Nadu. It was observed that a considerable proportion of participants had limited knowledge about these groups, with only a

minority having received undergraduate education or practical experience related to FSWs, MSMs, and transgender health issues. Additionally, awareness of key legislative acts, such as the Transgender Act, was notably low among the surveyed medical practitioners.

## 6. Recommendations

In light of the study's findings, several recommendations are proposed to address the observed gaps and enhance the provision of healthcare services for female sex workers (FSWs), men who have sex with men (MSMs), and transgender individuals within government hospitals of Tamil Nadu. Firstly, it is imperative to prioritize the integration of FSW, MSM, and transgender health education into medical curricula and continuing education programs for practicing medical professionals. By incorporating modules that cover sexual orientation, gender identity, and the specific health needs of these groups, medical practitioners can develop a better understanding and awareness of FSW, MSM, and transgender health issues. Furthermore, concerted efforts should be made to advocate for the development and implementation of policies and protocols that promote inclusive and non-discriminatory healthcare practices. This includes en-

sure compliance with legislative acts such as the Transgender Act and establishing guidelines for respectful and affirming care for FSW, MSM, and transgender patients.

Engagement with FSW, MSM, and transgender community organizations and advocacy groups is essential to foster partnerships and collaborations that facilitate greater understanding and sensitivity among medical practitioners. By involving community members in the design and delivery of healthcare services, hospitals can tailor their approaches to better meet the needs of these groups. Continued research is necessary to further explore the experiences and healthcare access barriers faced by FSWs, MSMs, and transgender individuals in Tamil Nadu. This includes conducting qualitative studies to gain deeper insights into the lived experiences of these individuals and quantitative assessments to track progress and identify areas for improvement over time. Regular training sessions and sensitization programs should be conducted within hospitals and healthcare institutions to create a more inclusive and supportive environment for FSWs, MSMs, and transgender individuals seeking healthcare services. By providing ongoing education and opportunities for dialogue, medical practitioners can cultivate a culture of respect, empathy, and acceptance towards all patients, regardless of their sexual orientation or gender identity.

Additionally, efforts should be made to increase awareness and create safe spaces within healthcare settings to make FSWs, MSMs, and transgender individuals feel more comfortable approaching medical practitioners. This can include initiatives such as signage indicating affirmative practices for these groups, providing resources specific to their health needs, and fostering an atmosphere of openness and acceptance in patient interactions. In conclusion, by implementing these recommendations, policymakers, healthcare administrators, and medical professionals can work collaboratively to ensure that FSWs, MSMs, and transgender individuals receive equitable, culturally competent, and affirming healthcare services in government hospitals across Tamil Nadu.

## Abbreviations

|      |                                    |
|------|------------------------------------|
| FSW  | Female Sex Workers                 |
| MSM  | Men having Sex with Men            |
| TG   | Transgenders                       |
| NACO | National AIDS Control Organization |

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## Author Contributions

**Janakiram Marimuthu:** Conceptualization, Data curation, Formal Analysis, Funding acquisition, Investigation, Methodology, Resources, Software, Supervision, Validation, Visualization, Writing – original draft, Writing – review & editing

**Joseph Raj:** Project administration, Resources, Supervision

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**Karthikeyan murugan:** Data curation, Formal Analysis, Software, Validation

**Kaustav Gauthaman:** Data curation, Formal Analysis, Validation, Visualization

## Conflicts of Interest

The authors declare no conflicts of interest.

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