

Original Research Article

Bridging gaps in LGBTQ+ healthcare: a cross-sectional assessment of medical professionals' knowledge, awareness, and attitudes

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ABSTRACT

Background: The healthcare disparities related to LGBTQ+ community are notably high. The scenario is further worsened by the incomplete knowledge and unfavourable attitudes of health professionals. The current study evaluates the knowledge, attitudes and awareness of Indian medical graduates related to LGBTQ+ healthcare.

Methods: A cross-sectional survey was conducted between January to March 2023 at a tertiary care teaching hospital in North India. Participants included interns, junior and senior residents, post-graduates and faculty members. A pre-validated, semi-structured questionnaire was used for data collection. An awareness-raising campaign was finally conducted in the institute.

Results: 120 responses were collected, out of which 73% claimed that they were aware of what LGBTQ+ stood for, however only 56% could correctly expand the acronym. About a quarter of the participants reported that they had never received any training in their undergraduate period, and expressed their need of additional training. While majority agreed that LGBTQ+ status should not be regarded as disorder, only 62% were willing to accept the uptake of decision by own family member. The sensitization session was well-received by all.

Conclusions: Awareness and readiness of Indian medical graduates with regards to LGBTQ+ is low while attitude towards receiving more training is positive. For better preparedness of health professionals, curricular reforms and focused educational interventions are required at undergraduate level.

Keywords: LGBTQ+ healthcare, Medical education, Healthcare disparities, Cultural competency, Attitudes, Awareness

INTRODUCTION

The lesbian, gay, bisexual, transgender and queer or questioning people (LGBTQ+) community is reportedly facing health disparities and discrimination throughout the globe.¹⁻³ These disparities are presumably due to social stigma, lack of inclusive care and inadequate training program of medical professionals.³⁻⁵ The lack of knowledge and negative attitudes among health providers can have severe impact on the treatment offered to LGBTQ+ individuals.^{3,4}

While this community is already at a greater risk of physical illnesses like cancer, sexually transmitted infections and higher mental illnesses, the lack of quality healthcare can impose serious consequences.^{1,3,4,6,7} The additional health needs like sexual and reproductive health, gender-affirming care and mental health support are generally disregarded.² This is concerning as the experiences of discrimination, rejection and isolation have additional detrimental effects on their well-being.^{4,6}

Literature indicates that possession of necessary training and expertise including soft skills and cultural sensitivity

amongst treating medicals is scarce.^{1,7-9} This is further found worsened with many professionals engaged in lack of cultural competency and discriminatory practices.^{1,3} Most common cause of this is insufficient training in medical programs which often specifically overlook LGBTQ+ health.^{1,5} Lack of diversity and inclusion training is further worsened by the ingrained stereotypes and practices which foster and unkind and inconsiderate atmosphere for patients.^{1,2} Hence, closing these gaps is essential to provide high quality care regardless of sexual orientation or gender identities of patients.^{1,3}

Studies have shown that large number of professionals are not aware of the health risks faced by LGBTQ+ population due to which there is lost opportunity. Additionally, professional hostility and uneasiness to deal with gender diversity have been observed.^{1-4,10} These bias in fact have been particularly found higher among older generations of physicians.²

The educational interventions have demonstrated increase in knowledge, awareness and attitudes complemented by long-term real time practice change evaluations.^{7,9}

With this background the current study was built to offer an evaluation of Indian medical professionals' attitudes, knowledge, and awareness of the LGBTQ+ community's healthcare needs.³ This study was distinct in a number of ways.

Emphasis on the Indian context

Although research on LGBTQ+ healthcare has been done all over the world, less attention has been paid to the particular context of India. For LGBTQ+ individuals, India's social and cultural environment poses particular difficulties and obstacles. Understanding these particular difficulties will help guide culturally relevant interventions.^{3,5}

Assessment of various domains

To assess the knowledge, awareness, and attitudes of healthcare professionals, a multifaceted approach is needed. This all-encompassing approach will enable a nuanced comprehension of the obstacles to LGBTQ+ people receiving high-quality healthcare.^{1-3,10}

Comparison of demographic trends

The research tried to examine correlations between healthcare professionals' knowledge, awareness, and attitudes regarding the LGBTQ+ community and demographic trends. In the medical community, this can help pinpoint which groups need particular interventions.³

A sensitization program within our institute was the culmination of this study.^{3,6} This program addressed the particular problems noted in the study, with the ultimate

goal of enhancing participants' knowledge and abilities and improving healthcare for LGBTQ+ patients.

To address these important topics, the study was planned with the following objectives: to determine the knowledge and awareness of medical professionals about the LGBTQ+ community, to assess medical professionals' awareness and understanding of the LGBTQ+ community's healthcare needs, to assess the attitudes of healthcare providers toward the LGBTQ+ community's healthcare needs, to compare the demographic trends and relations regarding the knowledge and awareness of LGBTQ+ community needs, and to conduct a sensitisation programme to create awareness in our institute.

METHODS

The study was conducted as a cross-sectional observational study to assess the current knowledge, awareness and attitudes of medical professionals regarding LGBTQ+ community and their healthcare needs. The study was conducted at a tertiary care hospital and medical college in North India in period of January to March 2023. The study participants were healthcare professionals including interns, junior residents, post-graduates, senior residents and faculty members of the institute.

Sample size was calculated based on previous studies and expected knowledge of 80% at tertiary hospital and precision of 7% with 95% confidence level which was 126. Three basic strata were identified i.e. interns, JR and PGs, SRs and faculty- accordingly population proportionate to size participants were chosen randomly from each stratum.

A semi-structured questionnaire after thorough literature review and the scope of the questionnaires was limited to basic knowledge, attitude and awareness of a primary care physician of first contact. The questionnaire was pre-validated with 4 experts in surgical and obstetric department who were excluded from study participant list. The questionnaire was then pilot tested on 10 interns to further check for suitability and understanding before full deployment.

The study was started after getting approval from the Institutional Research and Ethics Committee. Before filling out the questionnaire, participants had to give their consent after being told about the study's objectives. All data collected was anonymous and confidential. The data was entered into Microsoft excel and analysed.

Awareness initiatives

A special session was held at the college annual feat- arrhythmia to raise awareness of LGBTQ+ health issues among the institute's medical professionals. This session's goals were to highlight the value of understanding LGBTQ+ healthcare needs and to foster an inclusive environment within the institute.

RESULTS

A total of 120 responses were received, in which males (48%) and females (52%) were represented equally, without any response as another gender. Study participants included 28 (23%) interns, 26 (22%) JR/PGs, and 66 (55%) faculty including SRs. Among the faculties, 23 were from the non-clinical phase I and II department, including forensic medicine, and 69 from the clinical department (phase III and IV). In our study, 60% of the population was Hindus, followed by Sikh (34%), Islam (2%) and 4% atheists.

Various questions were asked to assess their knowledge of LGBTQ+. 87 (73%) said they knew what LGBTQ+ stood for, but only 49 (56%) were able to expand it correctly. 56% of interns, 61% of JR/PGs and 65% of faculty/SRs gave the correct answers. In addition, 66% of men

answered correctly against 58% by women but this did not turn out to be significant. Of all respondents, only 67% had correct knowledge of the plus sign in LGBTQ+, which is significantly higher for women than for men ($p=0.012$). 57% correctly knew that queer was used as an umbrella term for ambiguous gender. In terms of legal aspects, 72% knew that LGBTQ+ was legalized in our country, and 73% had knowledge of IPC section 377. Similarly, different questions were asked to assess their knowledge and experience related to LGBTQ+ medical care. Of 120 respondents, 83% believed that LGBTQ+ had a higher risk of sexually transmitted diseases, which was significantly lower among interns ($p=0.022$) and females ($p=0.028$). 61% knew that patients who wish to do so can seek hormone replacement, 66% knew that transgender people have a different reproductive anatomical structure, which is significantly lower among interns ($p=0.022$). Only 46% answered correctly about which of all LGBTQ+ need PAP smear for early diagnosis of cervical cancer (Table 1).

Table 1: Knowledge assessment based on designation and gender of participants.

Knowledge variables (indicating correct responses)	Designation			Chi square (p)	Gender		Chi square (p)
	Interns (n/%)	JR/PG (n/%)	Faculty/ SR (n/%)		Male (n/%)	Female (n/%)	
Full form of LGBTQ+ (N=87)	10 (55.6)	11 (61.1)	33 (64.7)	0.482 (0.786)	31 (65.9)	23 (57.5)	0.656 (0.418)
Meaning of "+" in LGBTQ+	20 (71.4)	18 (69.2)	42 (63.6)	0.604 (0.810)	32 (55.2)	48 (77.4)	6.674 (0.012)
Umbrella term for ambiguous gender	15 (53.6)	17 (65.4)	36 (54.5)	1.036 (0.622)	35 (60.3)	33 (53.2)	0.618 (0.465)
LGBTQ+ legalization in India	20 (71.4)	22 (84.6)	44 (66.7)	2.93 (0.230)	44 (75.9)	42 (67.7)	0.973 (0.418)
IPC section 377	23 (82.1)	20 (76.9)	44 (66.7)	2.527 (0.273)	43 (74.1)	44 (71)	0.151 (0.838)
Requires PAP smear	10 (36)	13 (50)	32 (46)	1.52 (0.462)	27 (47)	28 (45)	0.023 (1.00)
High risk for STDs	19 (67.9)	21 (80.8)	60 (90.9)	7.421 (0.022)	53 (91.4)	47 (75.8)	0.028 (5.232)
Hormone replacement requirement	16 (57.1)	15 (57.7)	42 (63.6)	0.549 (0.794)	37 (63.8)	36 (58.1)	0.577 (0.413)
Different anatomical structure in transgender	13 (46.4)	16 (61.5)	50 (75.8)	7.791 (0.022)	42 (72.4)	37 (59.7)	0.178 (2.16)

The participants' self-preparedness to deal with LGBTQ+ health needs was obtained on a Likert scale. The majority (50.8%) of participants rated their preparedness to address LGBTQ+ health needs as below average, 36.7% as average, and only 12.5% regard themselves as experts. The majority (75%) of participants said they were not taught about the LGBTQ+ health issue during their undergraduate studies (Figure 1).

The majority (73%) felt they needed additional training to meet LGBTQ+ medical health needs, and 83% suggested adding it to the undergraduate medical curriculum. (Figures 2 and 3).

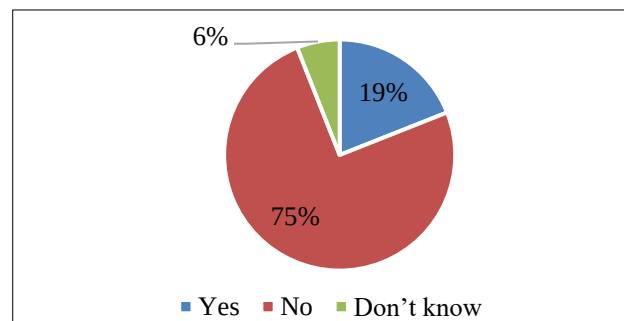


Figure 1: Pie chart showing whether LGBTQ+ health aspects were taught in curriculum.

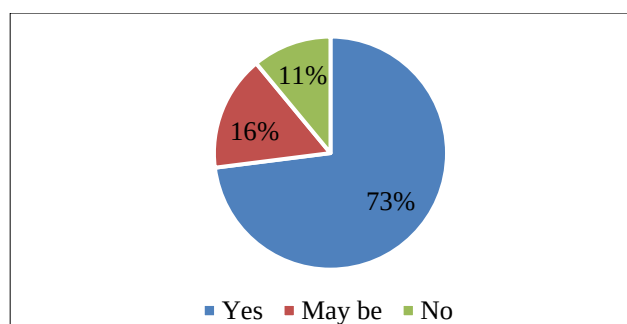


Figure 2: Pie chart showing response of participants to the need of additional training.

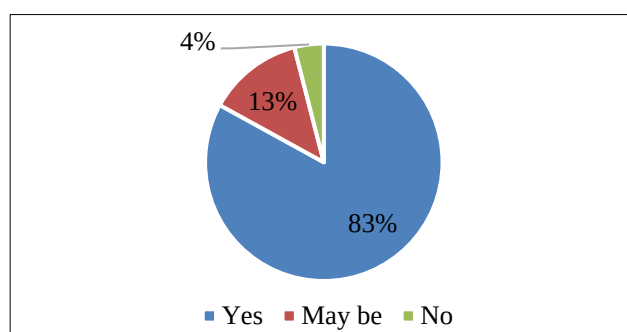


Figure 3: Pie chart showing participants response towards including LGBTQ+ health in medical curriculum.

Attitude of the participants was measured on a five-point Likert scale on various areas. Figure 4 indicates that majority disagreed to consider it as sexual disorder (60%), mental disorder (59%) or genetic disorder (43%). Most of the participants (76%) agreed that it is their personal choice. Majority of participants (58%) felt that LGBTQ+ may requires surgical intervention, 44% think that they require psychological intervention and 41% were neutral for need of medical intervention.

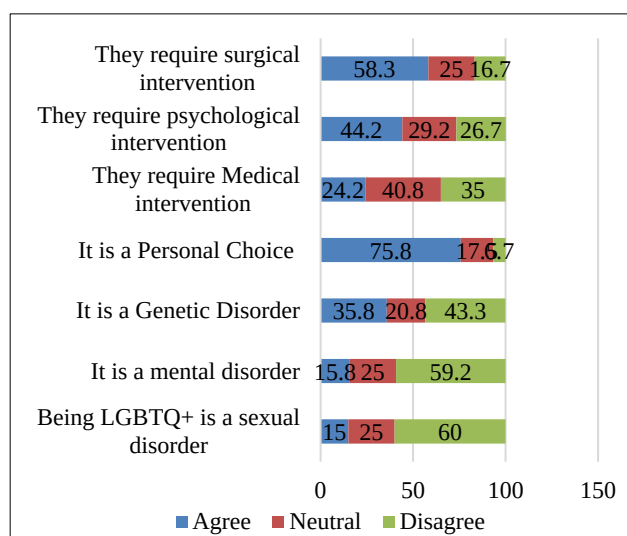


Figure 4: Bar chart depicting participants' attitudes.

Only 62% stated that they would accept their own family member according to their choice of preference against other options (Figure 5).

An awareness sensitization program was conducted during the college annual fest wherein a stage play was organized by the theatre group of the students and interns of the medical college highlighting the need of healthcare inclusivity of LGBTQ+ population and the role of medical healthcare professionals. The play was widely appreciated by the audience which included all students and faculty of the college recognizing the need and importance of correct knowledge, awareness and positive attitude of Indian medical graduates.

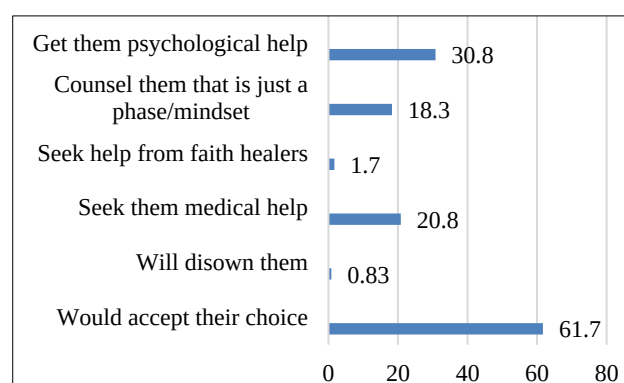


Figure 5: Participants attitude towards acceptance of family member as LGBTQ+.

DISCUSSION

Current level of medical professionals' knowledge of LGBTQ+ healthcare

The findings of the current study show huge gaps about LGBTQ+ terminology, healthcare needs and further legal issues amongst medical professionals. While 73% responded that they know what LGBTQ+ meant, only 56% were able to correctly expand the full form. This result is consistent with Nama et al's research, who also reported that healthcare professionals from a variety of specialties lacked a common understanding of LGBTQ+ terminology.¹¹

It is significant to note the observed variations in knowledge among professional designations. Although these differences were not statistically significant, faculty and senior residents showed slightly greater knowledge (65% correctly expanding LGBTQ+) than junior residents/postgraduates (61%), and interns (56%). It calls into question whether undergraduate education and ongoing professional development are sufficient given the slight increase in knowledge across career stages. According to Obedin-Maliver et al, LGBTQ+ health content is frequently lacking in medical curricula, resulting in substantial knowledge gaps that last throughout professional careers.¹²

The gender gap while demonstrating knowledge about LGBTQ+ was highlighted with 77.4% females against 55.2% males ($p=0.012$) correctly responding to “+” in LGBTQ+ acronym. This finding is similar to Sabin et al who reported that female healthcare workers demonstrate more inclusive knowledge and attitudes as compared to male counterparts.¹³ This difference in knowledge metrics suggests a hidden relationship between gender and LGBTQ+ health which needs to be further explored.

Healthcare needs and clinical knowledge

We found some especially alarming gaps in clinical knowledge about LGBTQ+ health needs. Even though 83% of respondents acknowledged that LGBTQ+ people are more likely to contract STDs, their understanding of particular healthcare requirements was noticeably lacking. There is a serious knowledge gap that could have an immediate influence on preventive care, as only 46% of respondents correctly identified which LGBTQ+ people need Pap smears for cervical cancer screening. This is consistent with Eckstrand et al's findings, who found that providers' knowledge of changes to cancer screening for transgender patients was similarly lacking.¹⁴

The substantial discrepancy in interns' knowledge of the various anatomical features of transgender people (46.4% correct answers versus 75.8% faculty, $p=0.022$) points to shortcomings in medical education. Our results highlight the critical need for curriculum reform, as 75% of participants stated that LGBTQ+ health issues were not covered in their undergraduate education. According to Dubin et al, in order to decrease healthcare disparities and enhance clinical competency among medical students, comprehensive education on transgender health is crucial.¹⁵

The observed disparities in STD risk knowledge by gender (91.4% among males versus 75.8% among females, $p=0.028$) and designation (67.9% among interns versus 90.9% among faculty, $p=0.022$) underscore the intricate relationship between clinical knowledge, gender socialization, and professional experience. These results are in line with research by Bonvicini, who found that providers' knowledge of LGBTQ+ health risks is greatly influenced by their professional experience and specialized education.¹⁶

Self-perceived preparedness and educational needs

Possibly the most alarming finding is that the majority of participants (50.8%) rated their preparedness as below average, with only 12.5% claiming to be experts in addressing LGBTQ+ health needs. Given that 75% of them stated they did not receive any training on LGBTQ+ health during their undergraduate studies, this self-evaluation is consistent with their educational experiences. The educational gaps are highlighted by the fact that 73 percent participants supported the need for additional training and

83 percent favoured the inclusion of LGBTQ+ health in undergraduate curriculum.

This recognized lack of readiness is consistent with research from around the world. Morris et al's systematic review, found that healthcare providers in various nations and healthcare systems self-report being ill-prepared.⁹ An important opportunity is presented by the stated desire for more training, as Bristol et al shown that focused educational programs can greatly increase knowledge and self-assurance in LGBTQ+ healthcare delivery.¹⁷

Our study revealed a gap between knowledge and exposure to education, which suggests systemic problems in medical education. Our results corroborate Obedin-Maliver's claim that LGBTQ+ health content has historically been overlooked in medical education, as three-quarters of participants reported having no undergraduate training in LGBTQ+ health despite its importance across specialties.¹²

Attitudes regarding LGBTQ+ people and their medical needs

Our study's attitudinal measures show both enduring worries and positive trends. As evidence of their increasing alignment with current medical knowledge, the majority of participants disagree to classification of LGBTQ+ status as a sexual disorder (60 percent), mental disorder (59%), or genetic disorder (43%). According to Keuroghlian et al, this change in perceptions represents progress from the historical pathologization of LGBTQ+ identities.¹⁸

On the other hand, attitudes regarding interventions show more nuanced viewpoints.

Majority 58 percent responded that LGBTQ+ people might need interventions in form of surgery, 44 percent supported need of psychological interventions, however 41 percent were neutral about need of medical interventions. These responses indicate persistent inclination to medicalize LGBTQ+ identities. According to Hafeez et al, the ongoing medicalization of LGBTQ+ identities exacerbates healthcare disparities encouraging needless interventions while possibly ignoring real healthcare needs.⁴

With 62% of respondents saying they would accept the sexual orientation or gender identity of a family member; the acceptance measures offer especially insightful information. Despite showing majority support, this number shows that more than one-third of medical professionals would find it difficult to accept themselves, which could affect how they interact with patients. This result is consistent with Burke et al's research, who recorded the impact of individual values on LGBTQ+ patients' clinical care.¹⁹

Demographic pattern and institutional background

Our study's demographic makeup offers crucial background information for analysing the findings. Strong

comparative data is provided by the balanced gender representation (48% male, 52% female), although the lack of participants who identified as non-binary reflects larger issues with gender diversity in the medical field. Due to the fact that the religious distribution (60% Hindu, 34% Sikh, 2% Muslim, and 4% atheist) closely reflects regional demographics, it reflects how cultural factors may affect attitudes and knowledge.

A cross-sectional view across career stages is provided by the professional distribution, which includes 55% faculty and senior residents, 22% junior residents and postgraduates, and 23% interns. This allows for an analysis of how knowledge and attitudes change as a result of professional development. The representation of both clinical (77%) and non-clinical (23%) departments provides important information about possible distinctions between those who work primarily in academic roles and those who have direct patient care responsibilities.

The findings imply that institutional climate has a major impact on knowledge and attitudes, even though specific data on institutional factors were not gathered. The resounding 83 percent support for curriculum reform shows that institutional priorities influence individual competency. According to Fisher and Mustanski, provider competence for LGBTQ+ healthcare is significantly shaped by the institutional climate.²⁰

Effectiveness of sensitization program

One promising strategy for filling in the identified knowledge gaps is the sensitization program that was put in place during the college annual fest. The program involved the entire college community, including faculty and students, with a theatrical performance that highlighted healthcare inclusivity for LGBTQ+ populations. The reported positive reception points to the possibility of attitude change, even though thorough pre- and post-intervention assessments were not carried out. This strategy is consistent with other published studies on the value of experiential and creative learning strategies in fostering a shift in perceptions of LGBTQ+ healthcare, as reported by Lelutiu-Weinberger et al. As mentioned, treatments that target both emotional and cognitive processes at the same time frequently result in more substantial and long-lasting improvements in attitudes and actions.²¹ The incorporation of this sensitization program into the annual fest, an established institutional structure, is a promising strategy for long-lasting change, despite the limitations of single interventions. According to Phelan et al, claimed that in order to encourage long-lasting changes in attitudes and behaviour, LGBTQ+ content must be ingrained in institutional culture.²²

Our cross-sectional survey identifies important but solvable gaps in the attitudes, knowledge, and awareness of medical professionals about LGBTQ+ healthcare. The interaction of institutional and individual factors emphasizes the necessity of multilevel interventions.

Limitations

Being a single institution study, limits the additional comparisons and generalizability of findings. Furthermore, this is a self-reported perception of professionals and may be influenced by social-desirability bias, while actual competence in workplace may vary.

CONCLUSION

Knowledge, awareness and attitudes related to LGBTQ+ healthcare are seemingly low and variable amongst healthcare professionals. However, there is a representation of overarching need and acceptance of curricular reforms and training programs to acquire LGBTQ+ healthcare competencies.

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