

Prevalence of ocular findings in transgender and barriers for not reporting to eye hospitals and clinics

Abstract

Background: Transgender, is one whose gender identity, behaviour, and expressions are different from that assigned at birth. They are also called third gender or eunuch transversity as they don't conform to the traditional notion of male and female thus are not accepted by the mainstream society, so their rights for everything like health, education, culture, dignity are violated. Before dividing the world into two gender boxes, we are all human beings who deserve to enjoy every opportunity and benefits of living, including healthcare, and its important component Eye care.

Aim: the aim of this research work was to find the prevalence of eye problems in transgender and to explore factors and barriers for not reporting to eye care hospitals and clinics for seeking eye care.

Methods: the study design of this research work was descriptive cross-sectional study design and technique used for collecting data of sample size 73 was snowball non-random sampling technique from participants who represented themselves as a transgender in a setting of transgender communities.

Results: The prevalence of ocular findings in transgender was 68.5% and the main barriers for not reporting to eye clinics was fear of discrimination, financial problems, lack of awareness, verbal abuse, misconceptions. And factors for not wearing spectacles are cosmetic issues occupational restrictions and discomfort. There is a significant effect of barriers, age and last eye examinations on ocular findings in Transgender with the p-value =0.006, 0.009 and 0.030 respectively.

Keywords: eye complications, transgender issues, vision problems, eye disorder, stigma

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Introduction

Transgender is the one whose behaviour, gender identity and expressions are dissimilar from that assigned at birth.¹⁻³ The stigmatized community⁴ comprises 2.5 million (0.3-0.5%) of the global population.⁵ Transgender has long been a part of the South-Asian culture.^{6,7} According to rough unofficial record about 1.5 million eunuchs are present in Pakistan.⁸ They are also called "third gender" "eunuch transvestites" or "two-spirits" both in-laws and cultural traditions.⁹ In Pakistan third gender, lives in seniority-based hierarchal communities led by Gurus. Transgender are ill-treated since childhood and mostly are reflected as offensive by the society.¹⁰ They have to face discrimination in the society.¹¹ Discernment and discourteous comments by the citizens and schoolmates lead them to leave educational institutes that eventually terminates the access of respectable employment.¹² They are compelled to adopt such means of earning; dancing, blessing births, begging and sex trades which in no case are acceptable or honored by the society.¹³

Transgender, who do not adapt to orthodox notions of male or female gender norm, is not accepted by mainstream society.¹⁴ The results of these prevalent discriminations are considerable that can range from unemployment and homelessness to ailment and eventually death.¹⁵ Human, cultural and gender rights, care, dignity, which they deserve, are violated by traditional social norms. Due to the profound mismatch between their social gender role, gender identity, and gender expression, they feel discomfort while moving in society.¹⁶ This discrimination on the basis of gender and social

exclusion¹⁷ significantly imposes negative aspects on their health,^{18,19} and experiences disproportionality high burden of diseases²⁰ including eye health issues,²¹ because of barriers; discrimination, harassment, violence and injustice, in seeking health and eye care.

Before the identification of male and female we all are human beings, so we all are same and have same rights towards every little detail of life,²²⁻²⁴ and health care is one of these,²⁵ this study is going to look into eye care issues, in this marginalized community. Since the eye is a major sensory organ, which allows vision and vision has an essential role in one's life, affected vision is not an individual problem because it not only impacts people's personal life but also reduces their skills and productivity. As Transgender are already deprived of essentials of life and they have limited access to all the healthcare services in the community because of stigma, discrimination, fear, discomfort, lack of awareness, cost and financial issues.²⁶ Hence, it is of vital importance to pay consideration to eye care of Transgender in order to have a positive impact on their functionality.

This research has explored their problems related to eye and the reasons for not reporting or visiting eye hospitals and clinics for seeking eye care. During this study researcher had yet to see them in clinics or outdoor patients department and as less research work is done as far as transgender's eye health issues are concerned. (World Professional Association for Transgender Health, Founder of Transgender Visibility & Education Network). This research had explored whether it is social barrier or they encounter fewer problems related to the eye or their occupation does not demand it.

Materials and methods

Study population	Transgender
Study design	Descriptive cross-sectional study design
Setting	Transgender communities
Duration of study	This research took 5 months for completion
Sample size	106 participants Sample size = z^2pq/e^2 Whereas $z = 1.96$, $p = (\text{No. of transgender in Pakistan} / \text{Total population of Pakistan} \times 100)$ $p = 1500,000/200000000 \times 100 = 7.6\%$
Calculation of sample size	$p = \text{Prevalence which in this case was taken as } 7.6\%$ $q = 100 - p$ $e = 5$ which is % for the chance of error By putting value; sample size = $(1.96)^2(7.6)(100-7.6)/25$ Sample size = 106
Sample technique	Sampling technique was snowball non- random sampling
Sample selection	<i>Inclusion criteria:</i> Transgender <i>Exclusion criteria:</i> Transgender, who refuses to respond, was not included

Data collection procedure

Ethical consideration was signed after presenting synopsis in front of IRB committee of Pakistan Institute of ophthalmology, Rawalpindi. After that researcher tried to find a positive communication for report building to interact with the participants for the data collection as it is hidden and stigmatized population, for this researcher searched NGOs working with or for Transgender people ,on Google and Facebook (Social networking site) , in Rawalpindi and wrote emails to the related personals, and left messages on Facebook, finally got a link on Facebook page of SAFFAR NGO , an organization run by a Transgender for the betterment of Transgender people in Rawalpindi. Kashish was working as a makeup artist in national news channel and a radio jockey in a local radio channel. After having a meeting with SAFFAR's head and with the collaboration of Al-Shifa Trust Eye Hospital, Rawalpindi, Eye Camp team (ACCO), planned a free eye camp for Transgender of Rawalpindi and Islamabad. A researcher gave awareness on Eye care and announced the date and timing for free eye camp only for Transgender on radio channel as a guest speaker in a show " Morat Aik Qudrat" hosted by Transgender;(NGO's head). As this community is stigmatized, deprived of trust and living on extreme margins, they demanded incentive and it was given in the form of free eye Check-up, medicines, and spectacles provided by ACCO (Alshifa Centre for community ophthalmology). And part of the data collection was done from Faisalabad, after approaching to Transgender living areas and ensuring them incentives, data collection was done at eye department of DHQ, Faisalabad.

Step 1

After getting informed consent from respondents Sociodemographic data of participants was collected verbally and documented by a researcher.

Step 2

- Visually acuity was recorded and refraction was done by subjective (hit & trial) & objective (retinoscopy & auto refractor) methods.
- City university Color Vision chart and Hamilton- Veale Contrast Sensitivity chart was used to assess and record the Color vision and Contrast sensitivity of participants respectively.
- Handheld Slit lamp or direct ophthalmoscope was used for detailed examination of the eye

Step 3

A questionnaire was administered to every participant for physical ocular problems and barriers faced by them while seeking eye care were recorded.

Results

Socio-Demographic characteristics

Out of 73 respondents, 57 (78 %) were transgender female and 16 (21.9%) were the transgender male.

Age of the participants: There were 6 age groups in this study and most of the participants belonged to age group 25-35 years (38.4 %) shown in Table 1.

Table 1 Age of the participants

Age (years)	Frequency (N = 73)	Valid percent (%)
18-24	7	9.6
25-34	28	38.4
35- 44	26	35.6
45-54	9	12.3
55-64	2	2.7
65 or above	1	1.4

Source: Authors calculations

Self-recognition in a community

In Transgender community out of 73 participants, 56 (76%) of the Transgender participants recognize themselves in their community by their “Guru” or group head name and 3(4.2 %) were not under guru system while 13(17.8 %) are recognized according to their location territory.

Living arrangement

As most of the participants were under guru system so 63 (86.3%) were living separate from their families and only 9 (12.32 %) were living with their families as shown in Figures 1&2.

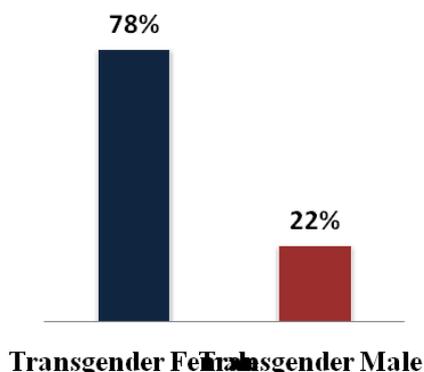


Figure 1 Socio demographic characteristics.

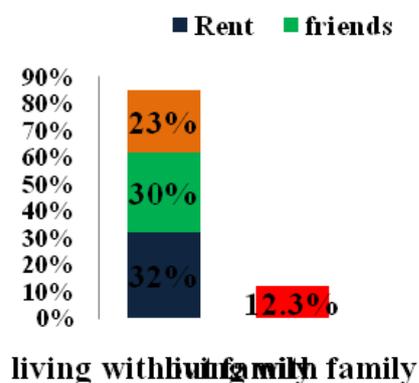


Figure 2 Living arrangement.

Educational level

In this study Educational level of Transgender shown in Figures 3&4 was very low for most of the participants. As 20 (27.4%) Transgender were illiterate, 10 (13.7%) had once studied under madrasa, 14 (19.2%) managed up to primary, 16 (21.9%) were matric pass and 10 (13.7%) after great struggle did intermediate and only 3 (4.1%) persuaded graduation.

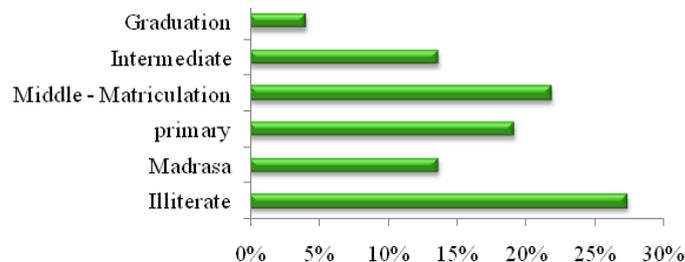


Figure 3 Educational level.

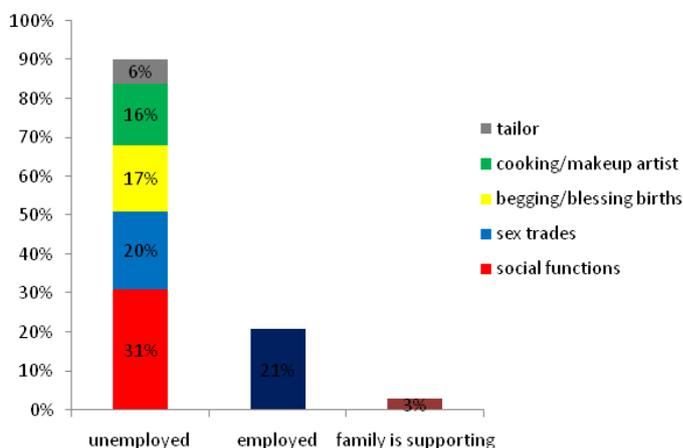


Figure 4 Source of income.

Employment status, income, and source of income

Most participants in the study 56 (76%) were unemployed and their source of income are shown in the figure below and among them, only 3 (4.1%) had family support and only a small number 16 (21%) were employed. They had very low socioeconomic status shown in Table 3.

Table 2 Prevalence of ocular findings

Ocular Findings	Frequency (N=73)	Valid percent (%)
Refractive errors		
Myopia	13	17.8
Hypermetropia	5	6.8
Astigmatism	6	8.2
Presbyopia	9	12.3
Defective color vision	10	13.6
Defective contrast sensitivity	4	5.47

Table Continued...

Ocular Findings	Frequency (N=73)	Valid percent (%)
Ocular pathologies		
Allergic conjunctivitis	12	16.4
Blephritis	11	15.7
Convergence insufficiency	5	6.8
Strabismus	2	2.7
Cataract	2	2.7
Blephritis & conjunctivitis	3	4.1
Chalazion & blephritis	1	1.4

Source: Authors calculations

Table 3 Comparison of age and ocular findings

Age	Blephritis	Allergic conjunctivitis	Convergence insufficiency	Strabismus	Cataract	Chalazion & Blephritis	Blephro Conjunctivitis
18-34	4 5.48%	6 8.22%	2 2.74%	1 1.37%	0	0	1 1.37%
35-54	7 9.59%	6 8.22%	3 4.11%	0	1 1.37%	1 1.37%	2 2.74%
55-65 above	0	0	0	1 1.37%	1 1.37%	0	0

Health and general trends for seeking healthcare in transgender community

Maximum number of Transgender had suffered from some health issues in their lives and their number was reported as 49 (67.1%), while 24(32.9%) had no previous health issue record.

Major illnesses

Transgender with major illnesses were 23 (31.5%). Among those 23 (43%) were suffering from Hepatitis (43%), diabetes mellitus (17%), Hypertension (21%), Tuberculosis (13 %), AIDS (4.3 %), Thyroid disease (2 %).

History of surgery

Transgender undergone any surgery was 22 (30.1%) and 51 (69.9%) of them never had any surgical procedure.

History of substance abuse and addiction

Smoking, drug use, and alcohol consumption were recorded in 34 (46.6%) participants and 39 (53.4%) gave negative history.

Health facilities for transgender

When participants were enquired about health facilities provided to them they responded positively and 64 (87.7 %) reported that they did not get separate health facilities while 9 (12.3%) reported that they had visited special health facilities, only for Transgender.

Demand for health facilities

According to the participants, 37 (50.7%) voted that they would like to prefer separate special health facilities and 36 (49.3%) showed

preference to visit mainstream health facilities.

Trends for seeking healthcare in a marginalized community

Among Transgender participants, the general trend to seek health care was 27 (37 %) from local pharmacies and dispensaries, 21 (28 %) from government hospitals, 19 (26%) did self-medication or home remedies and 6 (8.2 %) visited homeopathic.

Eye health and perception/ trends of eye care in transgender community

Importance of eye health

Every participant 73(100%) out of 73 strongly agreed that eye health is important for them.

History of eye problems

41 (56.2%) of participants encountered problems related to the eye, while 32 (43.8%) never encountered any eye related problem.

Last eye examination

Most of the participants, 53 (72.6%) reported that they never seek eye care while 9 (12.3%) had eye care more than one year ago and 11 (15.1 %) consulted eye physician within a year.

Use of optical devices

Usage of optical devices such as spectacle was reported in 9 (12.3%) while the use of contact lens was reported for cosmetic purpose in 14 (19.2%). A number of 50 (68.5%) participants never used any optical device.

Task-related vision

73 (100%) of participants strongly agreed that they need good eyesight to perform their jobs.

Optical device preferences

47 (64.4%) of participants preferred contact lenses over spectacles, while 26 (35.6%) answered that they had no issue with the use of spectacle.

Demand for separate eye clinics/Hospitals for transgender community

The demand for separate eye clinics specified only for the transgender community was voted by 53 (72.6%) participants while 20 (27.4%) did not follow the trend.

Prevalence of ocular findings

The prevalence of ocular findings in Transgender was 68.5% i.e. 50 participants had ocular findings; diagnosis may include multiple findings in one participant details are shown in Table, while 31.5% were registered as normal (Tables 4–8).

Table 4 Relation between age and ocular findings

Category	Age			X2	P value
	18-34	35-54	55-65 >		
Have Ocular Findings	18(51.4%)	29(39.7%)	3(4.1%)	9.449 (2)	0.009
Do not have ocular findings	17(48.6%)	6(17.1%)	0(0%)		

Table 5 Relation between gender and ocular findings

Category	Transgender		X2	P value
	Male	Female		
Have ocular findings	12 16.40%	38 52.10%	0.402 (1)	0.526
Do not have ocular findings	4 5.50%	19 26.00%		

Table 6 Relation between last seeked eye care and ocular findings

Category	Last seek eye care			X2	P value
	Till one year	More than one year	Never		
Have ocular findings	11 15.10%	7 9.60%	32 43.80%	7.037 (2)	0.03
Do not have ocular findings	0 0.00%	2 2.70%	21 28.80%		

Table 7 Relation between ocular findings and barriers for not reporting to eye hospitals/clinics

Category						X2	P value
	Financial problem	Faced discrimination	Verbal abuses	Ignored because of lack of awareness	Mis-conception		
Have ocular findings	8 11.00%	20 27.40%	1 1.40%	14 19.20%	7 9.60%	14.572(4)	0.006
Do not have ocular findings	8 11.00%	3 4.10%	3 4.10%	2 2.70%	7 9.60%		

Table 8 Barriers for not wearing spectacles

Reasons	Frequency (N=73)	Valid Percent (%)
Cosmetic issues	21	28.8
Occupational restriction	19	26.0
Will not feel comfortable	16	21.9
Financial problems	6	8.2
Any other	11	15.1

Barriers faced by transgender people

Family rejection

In this research, the main cause of marginalization and stigma was rejection by family reported by 63 (86.3%) of participants and only 9 (12.3%) were living with their family members.

Barriers faced by transgender while seeking education

Barriers faced by transgender while seeking education or continuing with education were: Fear of discrimination on the basis of their gender faced by 32 (43.8%) participants, 19 (26 %) reported that lack of resources and financial support was the main barrier ,while 6 (8.2%) left education because there were no separate schools for transgender and 14 (19.2 %) reported that discrimination, lack of

resources and no special schools adjunctively was the main reasons for not seeking education, and only 2(2.7%) had no reasons to discuss.

Discrimination faced by transgender in hospitals while seeking healthcare

Discrimination on the basis of their gender was reported by 31 (42.5%) participants while seeking health care.

Barriers for not reporting to eye clinics/hospitals if transgender encountered eye problems

Discrimination

According to transgender, 23 (31.5%) registered that they do not report to an eye clinic in accordance to seek eye care when they encountered eye problem because they had faced discrimination before while seeking health care.

Financial problem

One of the barriers for not reporting to eye clinics was the financial problem, as faced by 16 (21.9%) participants.

Lack of awareness

According to the participants, 16 (21.9%) reported that they ignored to go to eye clinics because of lack of awareness of its impact on visual status.

Verbal abuses

One of the barriers faced by 4 (5.5%) participants was verbal abuses by society members, which forces them to refrain from public places.

Misconception

One of the barriers reported by 14 (19.2%) of the participant is the misleading concept that if they consult Eye care physician then they had to use spectacle.

Discussion

The main objective of this study was to determine the Prevalence of ocular findings in Transgender and secondly, to find barriers to not reporting to eye hospitals/clinics. The ones who articulated a transgender identity in their schools' stated elevated proportions of discrimination and mistreatment (43.8%), lack of resources and financial issues (26%) that's why because of family rejection (86.3%) and non-availability of separate schools (8.2%) participants were forced to drop out from school. As discussed by J. Grant, those who expressed a transgender identity or gender non-conformity while in grades K-12 stated shocking rates of harassment (78%), physical attack (35%) and sexual violence (12%); harassment was so severe that it steered nearly one-sixth (15%) to leave a school in K-12 settings or in higher education and (19%) reported facing homelessness at some point in their lives because they were transgender or gender non-conforming; the majority of those trying to contact a homeless shelter were agitated by shelter staff members or occupants (55%), (29%) were turned away overall, and 22% were sexually assailed by inhabitants or staff.¹²

Due to these barriers, 50 (68.49%) had educational status below intermediate, while 20 (27.4%) participants in this research were

illiterate. As reported by Majid, 72 % respondents were illiterate out of 50 respondents, because they were culturally deprived.²⁷ In context to resolve the issue of educational level, there were two schools of thought among transgender participants; (50%) participants voted to study or continue their education in mainstream schools, because they do not want to create a third world' which pushes them towards stigmatization and marginalization. According to these participants, they were also equal to those beings that have a conventional notion of male and female gender, and they deserve to be treated equally. And the second school of thought with (50 %) transgender participants was fed up of bullying, discrimination, and mistreatment, and demanded separate education institute for transgender, with the thought that 'bird of feather flocks together', as society is never going to change.

Due to low education level, lack of family support, eviction, incarceration based on their gender identity, participants faced difficulties in finding jobs and only (28%) were employed but were working at very lower ranks like office boy, sweepers, tailor or cook. And the monthly income of 76.7% participants was less than 15 thousand PKR. As a consequence of these actions of discrimination, due to biasness by society and lack of protecting laws, exponentially increases unemployment and unstable economic and home life; forces (68%) participants of this study, to adopt the occupations like begging, dancing and sex trades. As discussed in research conducted by N. Nazir et al.¹³ where 83.5% of the eunuch population was involved in these three occupations which is the main reason of disgust they face from the world.¹³ All of these factors had a major impact on a participant's self-esteem and quality of life, which leads to depression and anxiety, as 23 % participants reported that they were not satisfied with their identity. As a consequence to avoid social stress, 46% participants, were indulged in substance abuse and addiction; which leads to poor health outcomes. As discussed in research conducted by Stephanie L. Budge et al., where partakers accomplished measures on identity of transgender, family history of mental health concerns, perceptions of loss, depression, anxiety and hopelessness, and the rates of depressing symptoms were; 51.4% of transgender women, 48.3% for transgender men and anxiety were 40.4% for transgender women; 47.5% of transgender men and reason for this was lack of social support and was related directly as well as indirectly to distress variables by avoidant coping.

Transgender individuals often miss out on preventative health care, especially the one that is not associated with gender- transition, and this is a foremost causative factor that explains health disparities in the population of Transgender. In this study, 49 (67.1%) transgender participants, had suffered from some health issues in their life, while 23(31.5%) had major illnesses include diabetes mellitus, Hypertension, Tuberculosis, AIDS, and Thyroid disease and 22(30.1%) had ever undergone any surgical procedures. Discrimination on the basis of their gender was reported by 31(42.5%) participants while seeking health care. Most of the participants (63%) preferred to seek healthcare from local dispensaries/ pharmacies and would use self-medication or home remedies in order to avoid discrimination and unwelcoming environment of hospitals. Due to marginalized and stigmatized this community is quite sensitive, mainstream healthcare workers stay ignorant about the unique care and requirements of Transgender patients than the average patient. So, this ignorance by coincidence creates painful and even hostile circumstances for transgender persons that avert them from pursuing, respectful and appropriate, routine health and eye care. As discussed in Research conducted by S. Reisner found association between discrimination and avoiding health care (n=94) p-value = 0.015, Transgender

experiencing lifetime discrimination in health care was associated with a nearly 3-fold increased odds of delaying healthcare and Primary reason for avoiding or delaying health care in the past 12 months (N=46) were Provider and healthcare barriers 30.4 %, Cost and finances 26.1 %, Fear and discomfort 21.7 %, No health insurance and Other 11.7%.

In this research, 68.5% (50) participants had ocular findings, Among 73 participants, 53(72.6%) were those participants; who had never gone for an eye examination and among these 53(72.6%) participants' 32 (43.8%) had ocular findings. 9 (12.3%) were those, who had last eye examination more than a year ago; among these 9 (12.3%), 7 (9.6%) still had ocular findings. While 11 (15.1%) were those who had last eye examination within a year and diagnosed with ocular findings; all of these 11(15.1%) still had persisting ocular findings. In this study, out of 73 patients, the count of ocular findings were, refractive errors (32.8%), presbyopia (12.3 %), ocular diseases (49.8%); allergic conjunctivitis (16.4%) were in participants because of usage of cosmetic contact lenses without taking proper care of disinfecting the contact lenses and poor hygiene is the cause of blepharitis in (15.7%) participants, color vision defect (13.6 %), contrast sensitivity defect (4.1%). Diagnosis may include multiple findings in one participant.

In this study, most often cited Barriers for avoiding eye care were, having past experiences of discrimination (31.5 %), harassment and verbal abuses (5.5%), fear of future discrimination, misconceptions of being prescribed by eye physicians (19.2%), lack of resources and financial support (21.9%), ignorance due to lack awareness of severity of condition and limited provider knowledge(21.9%). One of the major barriers for not visiting eye hospitals was the misconceptions of Transgender is the fear of being prescribed with glasses, and the main reasons for this barrier, in (28.8%) participants were fear of effect of glasses on their cosmetic appearance and (26%) reported that use of glasses would cause hindrance in their occupational activities, and (21.9%) cited that wearing spectacles would be uncomfortable.

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Conflicts of interest

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