Psychological Risk Factors among Transgender Community: The Mediating Role of Body Dissatisfaction between Quality of Life, Suicidal Ideation and Social Interaction Anxiety

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ABSTRACT

Social attitudes, prejudice, and stigmas towards the transgender community vary worldwide. Consequently, the prevalence of suicide attempts, self-injurious behaviors, and associated psychological factors was very common among them. The current study examined the association between quality of life, suicidal ideation, social interaction anxiety, and body image among trans genders. A descriptive-survey method was used, and about 200 trans genders aged 18-45 were approached. They were recruited by snowball sampling from different cities of Pakistan. Four questionnaires were used to assess the quality of life, body image states, social interaction anxiety, and suicidal ideation. Their demographic details like age, profession, income, and education were also gathered. The results showed no significant difference in demographic variables concerning body image, social interaction anxiety, quality of life, and suicidal ideation ($p<0.05$). Results of mediation analysis by using Smart-PLS showed that body image significantly mediates the association between quality of life and suicidal ideation ($r=0.164$, $p<0.001$), and it also mediates the relationship between quality of life and social interaction anxiety ($r=0.184$, $p<0.001$). The findings revealed that psychological comorbidities and marginalized racism are very common among trans communities. Efforts should be taken to reduce this discrimination to facilitate their growth.

Keywords: Quality of life, suicidal ideation, social interaction anxiety, body image, transgender

INTRODUCTION AND LITERATURE REVIEW

Gender identity can be defined as the ability of a person to internalize oneself with the socially accepted binary classification system (male, female) and communicate accordingly with their gender-defined roles. The word Trans means non-confirming, especially towards gender expression. A person whose appearance and behavior are not following their birth identity is called transgender. Transgender is a metaphor for all the people whose behavior, appearance, and actions do not fit into the binary system. Several terms are used to denote these people, like transsexual, intersex, transvestites, crossdressers, etc., but in Pakistan, they had names like Khusra, Khawja sera, and Hijra (Nasir & Yasir, 2015; Suleman & Rahman, 2020). Despite the transgender person (protection of rights) act 2019, which states that these people are protected against discrimination and given optimal opportunities for education, employment, and health care, they are constantly victims of hate crimes (harassment, bullying, mistreatment, and social exclusion).

The reason is that people are not pretty welcoming from the beginning, and anything away from the norm is considered weird. Instead of being more welcoming and accepting, people used to make fun of them and mimic them for being the way they are. Despite the fact that trans genders have their own individuality, different cultures consider it normal to make fun of them without realizing that every individual deserves equal regard and respect. It is a well-established fact that these people are the true victims of physical and emotional abuse by their fellow citizens. Even the government and the law enforcers are fueling this social disaster by not enforcing the law to protect their basic rights. The literature suggests that the trans community is always the victim of bullying and maltreatment from their peers and parents. It was examined that the trans population reported more mental health issues than the general population. According to a survey, 246 trans genders were examined, and results showed that 10% of them experienced PTSD and 15% suffered from different psychological disorders (Testa et al., 2015).

The transgender community is never accepted as active members of society that's why they are not offered even the basic rights of health care (Shah, 2017; Suleman & Mohamed, 2019). The only way of earning is begging and dancing because the government has not allocated funds for them, and they are being refrained from taking part in prestigious government jobs. They have no sense of respect and individuality they often get bullied by their peer in school and may discontinue their education and even be marginalized by their family member at a very young age. It was reported that 1 out of 50 children is reported to be transgender (Ali, 2017). According to a survey by

AWAZ-cds (2016) in collaboration with United Nations, the estimated number of trans genders in Pakistan is 1,50,0000, and the number of sex workers in this population is about 60,000. The database shows that the trans community has been deprived of the basic human rights that severely affect their physical and mental health; thus, it can be concluded that their quality of life is not satisfactory.

Gender minorities have been given the greatest attention in many countries. Still, in Pakistan, the issue is not addressed properly, and epidemiological research is very limited in this area, although substantial research on psychosocial problems related to transgender people exists. According to a met analysis between 2011-2016, it was suggested that trans-gender youths are more prone to develop psychological disorders (depression, anxiety, post-traumatic stress, and antisocial personality disorder) compared to other youths (Connolly et al., 2016; Suleman, Mohamed & Ahmmed, 2020). The problem is not just limited to a health concern. These people are turned to the field to earn money (dancing, begging) because the educational system won't accept them even the parents of trans children are forced to give away their child to the trans community due to the fear of shame and guilt that's how the system refrained them to make pace towards the employment sector. A recent survey on school children showed that transgender students were more inclined to victimization and substance abuse than other students (John et al., 2019; Suleman et al., 2021). Similarly, a study on 10th-grade students showed that trans students are at high risk of suicidal ideation almost 61% of students idealize suicide, and 31% attempt to take their life (Veale, Watson, Peter & Saewyc, 2017).

According to Bultler et al., 2019 the rate of depression and other mood disorders are relatively high among trans genders and non-conforming individuals. The prevalence of these disorders is 20% more in them than in the normal population. Gender-related stigmas drive these elevated levels of stress. Social interaction anxiety stems from the negative evaluation of people, which is the core of developing gender-related stress. Many studies suggest social anxiety significantly contributes to gender discrimination and negative future evaluation, threatens one's identity, and leads to victimization and rejection. Thus, a person having transphobia may avoid social interaction and shut one's self down from other people due to the fear of negative evaluation and rejection that's why these people tires to avoid the anxiety-provoking situation and succumb to loneliness (Rood et al., 2016; Teata et al., 2015).

Body image is significantly related to poor mental health, especially for individuals diagnosed with a gender identity disorder. A core feature of this disorder is not being satisfied with one biological sex and tires to identify with the opposite gender. Previous literature has supported that trans genders are more concerned with their body weight and physical appearance than their peers' cisgenders. They experienced high levels of anxiety and body dissatisfaction and showed more vulnerability to developing eating disorders (Witcomb et al., 2015). Other factors contribute to body dissatisfaction, like social comparison and the negative evaluation of other people. Verbal and physical abuse, body concerns, and quality of life are also related to body dissatisfaction and are the fundamentals of suicidal ideation in trans youth. Regardless of the growing body of research related to trans gender issues, there remains a paucity of literature focusing on psychosocial vulnerabilities like suicidality, body image, social isolation, and quality of life (Simons, Schrager, Clark, Belzer, & Olson, 2013).

The present study tries to highlight these factors through a descriptive survey while prelusive findings are present in Pakistan in the form of case reports and qualitative analysis, but there exists a need to explore more. Thus, this study examines the relationship between quality of life, suicidality and social interaction anxiety and the mediating role of body dissatisfaction in the trans community.

OBJECTIVES OF THE STUDY

1. To gauge the association between quality of life, body dissatisfaction, suicidal ideation, and social interaction anxiety.
2. To compare the quality of life, body dissatisfaction, suicidal ideation, and social interaction anxiety among different groups of trans genders.

HYPOTHESES OF THE STUDY

1. Body dissatisfaction will likely mediate the association between quality of life and suicidal ideation
2. Body dissatisfaction will likely mediate the association between quality of life and social interaction anxiety.
3. There will be a significant difference among trans genders concerning their profession.
4. There will be a significant difference among trans genders concerning their income.

METHODOLOGY

Research Design

The descriptive survey investigated the association between quality of life, suicidality, social interaction anxiety, and body dissatisfaction among trans genders.

Sampling Technique

The Snowball sampling technique was used to select participants.

Participant's Characteristics

A total sample of 200 transgender people was taken from various cities of Pakistan. A statistical power analysis (G-power) was used to calculate the sample size for structural equation modeling, along with a power level of 0.8 and a significance level of 0.05. Their age range was 18-45 years. The sample was collected from transgender of different occupations (begging, dancing, singing, working). Since most of the community was uneducated, an investigator administrative approach was used.

Statistical Analysis

The data was analyzed using Smart PLS (3.0). Partial least square analysis was preferred because it has less sensitivity to data normality and is very effective for complex designs with small sample size. Reliability analysis was performed to check the consistency of the scales. T-test and analysis of variance were employed to measure the difference.

Ethical Consideration

Potential participants were selected by the researcher based on the inclusion criteria. After their selection, they were asked to state their willingness to participate in the study. Almost 520-25 minutes were served to fill out the questionnaire. The informed consent included sufficient information about the research purpose. In the end, they were ensued about their responses' privacy and provided feedback to maintain confidentiality.

Instruments

Four instruments well, developed questionnaires were used to record the responses of the participants.

Body Image States Scale (BISS)

The scale accesses a person's subjective perception about their overall physical appearance, e.g., body size, shape, weight, and physical attractiveness, and the satisfaction associated with their ideal and true body image. It's a six-item scale expressed on a nine-point Likert scale—ranges from extremely physically unattractive (1) to physically attractive (9). Three items were reversed scored (2, 4, 6). The total score is the mean of every item, and high scores indicate higher satisfaction. The scale's reliability in the original study is 0.77 and 0.72 in the current study (Cash et al., 2002).

World Health Organization Quality of Life (WHOQOL-BREF)

The World Health Organization Quality of life scale (WHOQOL-BREF) measures the quality of life in the context of individual personal goals, culture, values, standards, and concerns. It's a 26-item scale expressed on a five-point Likert scale. It ranges from 1 to 5. It has four domains physical health (7 items), psychological health (6 items), environment (8 items), social relationship (3 items), and two other items that assess the overall quality of life and general health. A total score is determined by calculating each domain's mean score and multiplying each domain score with 4. A high score indicates a higher quality of life. The scale's reliability in the original study is (0.66-0.84) and 0.86 in the current study (WHOQOL Group, 1998).

Social Interaction Anxiety Scale (SIAS)

Social Interaction Anxiety Scale (SIAS) was used to measure social anxiety, especially during talking and meeting other people that may involve scrutiny. It's a 20-item scale expressed on a five-point Likert scale. Ranges from 0 to 4. Item no. 3,9,11 was reversed scores; the possible score ranges from 0 to 80; the total score can be obtained by summing the scores on twenty items. The cut score is 36, and a high score indicates a possible diagnosis of social anxiety. The scale's reliability in the original study is (0.88-0.93) and 0.87 in the current study (Mattick & Clarke, 1998).

Beck Scale for Suicidal Ideation (BSSI)

The scale assesses the presence and intensity of suicidal thoughts a week before evaluation. It's a 19-item scale expressed on a three-point Likert scale. Ranges from 0 to 2. The total score can range from 0 to 38. If a person answered positively on the fifth item, they could answer the rest of the

items. Thus the first five items are used as screening and the full scale for data analysis. There is no cut-off score to categorize. A high score indicates greater suicide risk and self-destructive thought patterns. The scale's reliability in the original study is (0.85) and 0.96 in the current study (Beck et al., 1988).

RESULTS

Table 1

Demographic Characteristics of Respondents (N=200)

Variables	Frequency	Percentage
Age		
< 25 Years	47	23.5
25-35 Years	83	41.5
> 35 Year	70	35
Profession		
Worker	81	40.5
Non Worker	119	59.5
Income		
< 1,000 Rupees	19	9.5
1,000 - 5,000 Rupees	48	24
5,000 -10,000 Rupees	55	27.5
10,000 -15,000 Rupees	37	18.5
>15,000 Rupees	41	20.5
Education		
Illiterate	123	61.5
Primary	16	8
Middle to Matric	43	21.5
Graduate	18	9

Table 1 indicates the demographic characteristics of participants concerning age, income, education, and profession in the form of frequency and percentage. The results showed that most of the participants were beggars having no education.

Table 2

Reliability Statistics of the Measures

Measures	Cronbach's Alpha	No. of Items
SIAS	0.8	20
QOL	0.8	26
SIS	0.9	19
BIMSS	0.7	6

Note: Social Interaction Anxiety Scale (SIAS), Quality of Life (QOL), Suicidal Ideation Scale (SIS), Body Image States Scale (BIMSS)

Table 2 displays the internal consistency of the items. All scales show good reliability, which indicates that further analysis can be done.

Table 3

An indirect effect of quality of life on suicidal ideation through body dissatisfaction among trans genders.

Paths	Beta	S.D	t-value	p-value	R^2
QOL -> BISS	0.29	0.05	5.02	0.000***	
QOL -> SI	-0.26	0.07	-3.80	0.000***	0.184
BISS -> SI	-0.16	0.07	-3.47	0.000***	

Note: QOL=quality of life, BISS= body dissatisfaction, SI= suicidal ideation, p<0.05*, p<0.01**, p<0.001***

Table 3 indicates the path analysis in which body dissatisfaction is used to mediate between the quality of life and suicidal ideation. The results showed that Quality of life has a significant impact on body dissatisfaction determination (*B*= -0.93, t= 5.029, p= < 0.001) and body dissatisfaction has a significant impact on suicidal ideation (*B*= -0.16, t= -3.47, p= < 0.001). Thus, the indirect effects are significant, indicating significant mediation (R^2=0.164).
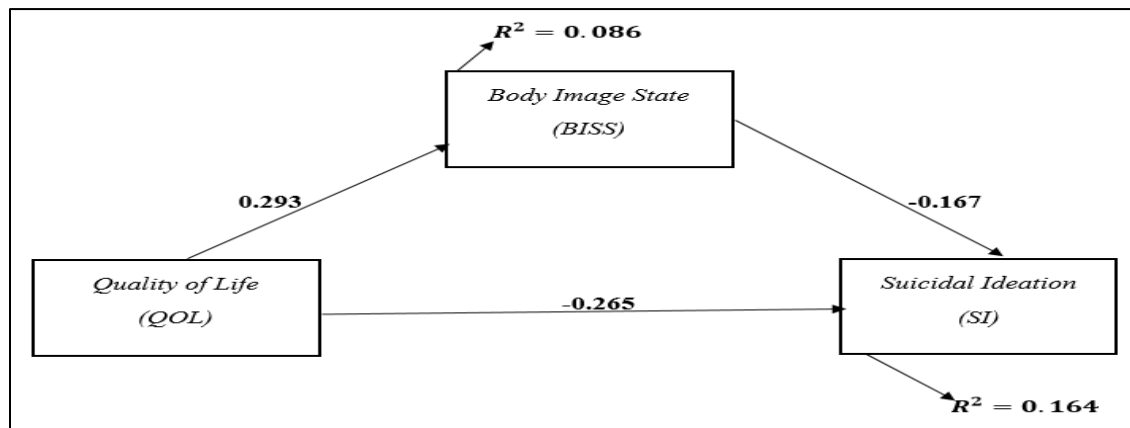

Figure 1: Structural Equation Model showing mediated relation between quality of life and suicidal ideation.

Table 4

An indirect effect of quality of life on social interaction anxiety through body dissatisfaction among trans genders.

Paths	Beta	S.D	t-value	p-value	R^2
QOL-> BISS	0.29	0.05	4.93	0.000***	
QOL -> SIA	-0.29	0.07	-3.99	0.000***	0.184
BISS ->SIA	-0.25	0.08	-2.99	0.001***	

Note: QOL=quality of life, BISS= body dissatisfaction, SIA= social interaction anxiety, p<0.05*, p<0.01**, p<0.001***

Table 4 indicates path analysis in which body dissatisfaction is used as a mediator between quality of life and social interaction anxiety. The results showed that Quality of life has a significant impact on body dissatisfaction determination (*B*= 0.29, t= 4.93, p= < 0.001) and body dissatisfaction has a significant impact on social interaction anxiety (*B*= -0.25, t= -2.99, p= = 0.001). Thus, the indirect effects are significant, indicating significant mediation (R^2=0.184).
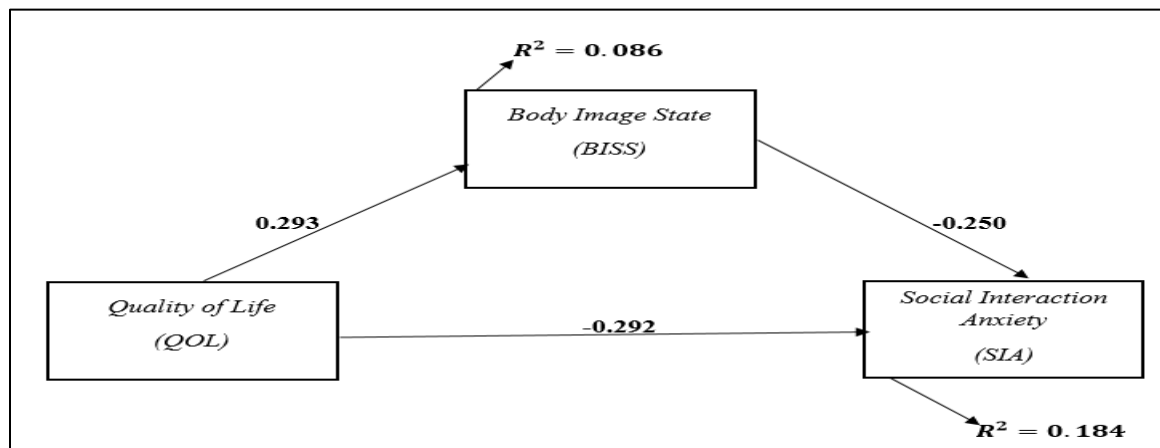

Figure 2: Structural Equation Model showing mediated relation between quality of life and social interaction anxiety.

Table 5

Profession difference using independent sample t-test for study variables

Variables	Profession	N	Mean	S.D	t-value	p-value
SIA	Worker	81	30.54	9.76	1.62	0.107
	Beggar/Dance/Function	119	33.19	12.32		
QOL	Worker	81	82.06	12.11	1.441	0.151
	Beggar/Dance/Function	119	79.50	12.46		

SI	Worker	55	7.85	11.08	1.086	0.279
	Beggar/Dance/Function	67	10.27	13.07		
BISS	Worker	81	4.83	0.61	0.22	0.826
	Beggar/Dance/Function	119	4.81	0.48		

Note: QOL=quality of life, BISS= body dissatisfaction, SI= suicidal ideation, SIA= social interaction anxiety p<0.05*, p<0.01**, p<0.001***

Table 5 displays professional differences using an independent sample t-test. The results showed no significant difference between worker and Beggar/Dance/Function concerning the quality of life, body dissatisfaction, suicidal ideation, and social interaction anxiety. Therefore, all the scales have the same average score with no massive difference (p>0.05).

Table 6

Descriptive statistics of trans genders according to income group for study variables.

Variables	Income Groups	N	Mean	Std. Deviation	Std. Error
SIA	Less than 1000	19	26.8947	11.30828	2.59430
	1000 to 5,000	48	33.3333	8.93555	1.28973
	Between 5,000 to 10,000	55	33.0000	10.95952	1.47778
	Between 10,000 to 15,000	37	33.1892	14.39683	2.36682
	More than 15,000	41	30.9756	11.33686	1.77052
	Total	200	32.1200	11.40200	.80624
QOL	No Income	19	83.2105	17.64646	4.04838
	Between 0 to 5,000	48	81.2292	10.91795	1.57587
	Between 5,000 to 10,000	55	80.1273	9.71455	1.30991
	Between 10,000 to 15,000	37	82.1351	13.00889	2.13865
	More than 15,000	41	77.6098	13.56812	2.11898
	Total	200	80.5400	12.35441	.87359
S.I.	No Income	16	9.8125	12.24864	3.06216
	Between 0 to 5,000	28	6.5714	10.51781	1.98768
	Between 5,000 to 10,000	31	8.8387	12.22592	2.19584
	Between 10,000 to 15,000	22	12.7727	13.83209	2.94901
	More than 15,000	25	8.9600	12.66057	2.53211
	Total	122	9.1803	12.22111	1.10645
BISS	No Income	19	4.9123	.56756	.13021
	Between 0 to 5,000	48	4.8646	.47721	.06888
	Between 5,000 to 10,000	55	4.7697	.50967	.06872
	Between 10,000 to 15,000	37	4.8333	.67243	.11055
	More than 15,000	41	4.7764	.47815	.07467
	Total	200	4.8192	.53252	.03765

Note: QOL=quality of life, BISS= body dissatisfaction, SI= suicidal ideation, SIA= social interaction anxiety, p<0.05*, p<0.01**, p<0.001***

Table 7

Analysis of variance (ANOVA) according to Income Groups for study variables.

Variables		Sum of Squares	df	Mean Square	F-value	p-value
SIA	Between Groups	1086.100	5	217.220	1.700	.136
	Within Groups	24785.020	194	127.758		
	Total	25871.120	199			
QOL	Between Groups	749.063	5	149.813	.981	.431
	Within Groups	29624.617	194	152.704		
	Total	30373.680	199			
SI	Between Groups	1577.354	5	315.471	2.219	.057
	Within Groups	16494.678	116	142.196		
	Total	18072.033	121			
BISS	Between Groups	1.038	5	.208	.727	.604
	Within Groups	55.394	194	.286		
	Total	56.432	199			

Note: QOL=quality of life, BISS= body dissatisfaction, SI= suicidal ideation, SIA= social interaction anxiety, df = degree of freedom, $p<0.05^*$, $p<0.01^{**}$, $p<0.001^{***}$.

Table 7 indicates variance according to income groups. The results showed that there exists no significant difference concerning income among all study variables (quality of life, body dissatisfaction, suicidal ideation, and social interaction anxiety) ($p>0.05$).

DISCUSSION

The study's main objective was to measure the mediating effect of body image on suicidal ideation and social interaction anxiety, along with the demographic difference.

It was hypothesized that body image significantly mediates the relation between quality of life and suicidal ideation, and the findings are consistent with other studies. Trans genders reported more psychosocial burdens, loneliness, dissatisfaction, mental health problems, and suicide-related issues, indicating that this minority group is more vulnerable than their cisgender peers (Conolly et al., 2016; Eisenberg et al., 2017). According to a survey report, 41.8% of youth reported self-injurious behavior, and this alarming statistic is related to the trans community (Dickey et al., 2015). One potential reason is the biological risk factors associated with their identity. They were always victimized and bullied for their body image and faced physical and verbal abuse from their family members. That trauma is unbearable for most individuals, and they are more likely to commit suicide to escape this guilt. Transgender youth are always at high risk of abuse. A study reported that 12% of trans youth are the victims of sexual abuse, 35% experience physical abuse, and 78% report gender harassment. These are the proximal risk factors for suicidal ideation and suicidal attempt in trans youth (Grant et al., 2011)

It was also hypothesized that body image significantly mediates the relation between quality of life and social interaction anxiety, and the findings are consistent with previous literature. The

reason is that the early stages of transgender identity are associated with confusion and role redemption. They consistently search for their true identity, marked by a high degree of mental health difficulty, distress, and substance abuse. They constantly face societal pressure to conform to binary gender roles and to fit in; they are forced to endure the negative attributes of people (Sivertsen, Rakil, Munkvik & Lonning, 2019). This victimization fueled social interaction anxiety, consequently affecting their body image and leading to gender dysphoria (Reisner et al., 2015). Many studies indicated that the trans community has a greater prevalence of suffering from eating disorders and body dissatisfaction. High levels of body dissatisfaction is associated with low self-esteem and high social interaction anxiety. Almost 35.4% of youth experience body dissatisfaction, and the percentage is not different for trans genders, although the sources could have different implications concerning various psychiatric comorbidities (CDC, 2008).

The third hypothesis stated a significant difference in study variables concerning occupation among the transgender community as people with respectable jobs are more accepted and led a comfortable life. Still, the results are inconsistent with previous studies. The reason is that accepting the trans community is very difficult for many cultures due to their biased stigmas; they were always given the spot of minorities and were not identified as independent human beings. (Virupaksha, Muralidhar & Ramakrishna, 2016).Their identity remains anonymous; that's why they don't get any chance to avail themselves opportunities, and if they are determined enough to make their way, they always face bullying and discrimination, which will affect their physical and mental health (Simbar et al., 2012)

 It was hypothesized that there exists a significant difference concerning income level and the analysis of variance showed no difference, meaning income or lifestyle did not determine the mental health of the transgender community. It didn't matter if the transgender were earning well; they would still be maltreatment and hate crime victims. Many studies showed that money does buy happiness because the priority of the trans community is acceptance, as, from a very young age, they suffer discrimination and loneliness from their family members. According to Maslow's hierarchy of needs, love and belongingness are a person's basic fundamental needs. If those basic needs are not satisfied, a person cannot move towards the higher order needs. So, deficit in these needs causes stagnation and creates a barrier between the higher order needs, making it difficult to achieve (White et al., 2015).

CONCLUSION

In light of current findings, it can be concluded that body dissatisfaction significantly mediates the association between quality of life and suicidal ideation. Similarly, body dissatisfaction significantly mediates the association between quality of life and social interaction anxiety. No significant difference exists in study variables (body dissatisfaction, quality of life, social interaction anxiety, and suicidal ideation) concerning profession and income in trans genders.

LIMITATIONS AND SUGGESTIONS

Some of the limitations of the current study are as follow. First, the method used in the study is cross-sectional; thus, causal relationships cannot be examined. Second quality of life was measured by WHOQOL-BREF, which denotes the participant's evaluation of the quality of life. Thus, it is not an objective measure, and the researcher has no idea of the actual functioning of the individuals. Third, the sample does not represent the general population as only trans genders are taken. Future research could include cisgenders for an in-depth analysis.

Implications of the Study

There is a clamant need for rehabilitation of the trans community in our society. Government should provide special attention to their enrollment in the educational field as well as in the professional field. Awareness regarding this gender is very crucial nowadays because of their non-conforming gender identity. This awareness will help the community witness the health and structural challenges they face. It will also highlight the struggles and abuse they suffer from the very beginning. The government should take steps to eradicate these obstacles to make their lives meaningful.

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