



A Cross Sectional Study To Assess The Quality Of Life And It's Determinants Among Transgenders In Kannur And Kasargod Districts Of Northern Kerala

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ABSTRACT

Background

Transgenders face discrimination, exploitation, suffer from depression and are at risk of STIs and HIV. Aims/Objectives: To assess quality of life (QOL) and factors affecting it among transgenders in Kannur and Kasargod districts of North Kerala.

Methodology

We did a cross sectional study and collected data using WHOQOL-BREF questionnaire, Multi-dimensional Scale of Perceived Social Support (MSPSS) and Perceived and Enacted Stigma Scale. Data were presented as percentages, mean±SD and tested with t-test and chi-square test using SPSS software v. 20. P value <0.05 was considered significant.

Results

Total transgenders were 72. QOL score was 202 ± 41 . Social domain was most satisfactory (64%) and environmental domain was least satisfactory (35%). Higher QOL was significantly associated with age, no suicide attempt, family support and higher MSPSS score. Significantly better physical health domain was associated with family support, TG ID card, income, and MSPSS score. Significantly better psychological health domain was associated with family support, rural area, age, never attempted suicide and MSPSS score. Significantly better social relations domain was associated with never faced stigma, and higher MSPSS score.

Conclusions

QOL among TG's in Kerala is low and is associated with social support, income, stigma and TG ID card.

Key-words: Transgender, QOL, Kerala, WHO-BREF, MSPSS, TSS

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INTRODUCTION

Transgender describes people whose gender identity and/or gender role do not conform to their gender at birth. There are 490,000 transgenders in India of which 3900 reside in Kerala.^{1,2} In 2013, 72% of LGBT homicide victims were transgender women, according to the National Coalition of Anti-Violence Programs.³ The literacy level of transgenders in India is 46% compared to 84.6% in Kerala.² In schools, they are teased, bullied, and vulnerable to all kinds of exploitation. Many are sexually abused by family members, others, or teachers. Some try to adjust and seek some form of medical treatment such as counseling, hormone therapy, electrolysis, and reassignment surgery. Others, however, do not pursue any form of medical treatment because of their age, medical condition, lack of funds, or other personal circumstances.⁴

Lack of proper education prevents them from securing a sustainable job. Due to stigma, many can't retain jobs. Those who do, are physically, sexually or mentally abused. Poverty forces many to sex work. They have a high HIV prevalence (12% to 30%) and sexually transmitted infections.⁴ When they lose family support, they go through a lot of psychological distress. Many become addicted to alcohol and drugs. This drives them to anti-social activities and sex work. Some of them join groups that operate like gangs that are into organized begging and crime.³

In India, the proportion of those working in the transgender community is low (38%) and among them only 65% of them are main workers.² In 2014, the Supreme Court pronounced a landmark judgement, recognising transgender people as the 'third gender'.⁵ In 2015, Kerala became the first Indian state to pass a Transgender Policy envisaging to end the societal stigma and ensure them non-discriminatory treatment.⁶ World Health Organisation (WHO) has defined QOL as an individual's perceptions of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns.⁷

Not much research has been done among transgenders in Kerala. The State Transgender Policy, 2015 brought about an awareness about their problems. Measuring the QOL and its

determinants will help in devising the appropriate intervention regionally. Thus, this study was conducted to assess the quality of life and its determinants among transgenders living in Kannur and Kasargod, the northern districts of Kerala.

OBJECTIVES

- 1) To assess the quality of life (QOL) among transgenders in Kannur and Kasargod districts of North Kerala.
- 2) To assess the selected factors affecting their quality of life.

METHODS

Study design

A cross-sectional study was conducted among transgenders in Kannur and Kasargod districts of North Kerala for a period of one year (July 2017- June 2018).

Inclusion criteria

Age above 18 years who are willing to participate in the study.

Exclusion criteria

Transgenders with known psychiatric illness.

Sample size

Sample size of 60 was calculated with the formula for sample size for frequency in a finite population available from OpenEpi, Version 3

Sample size $n = [DEFF * N p (1-p)] / [(d^2 / Z^2_{1-\alpha/2} * (N-1) + p*(1-p)]$

After substituting,

$Z_{(1-\alpha/2)} = 1.96$

Population size for finite population (N) = 250

Confidence limits as % of 100 (absolute +/- %) (d) = 11%

% frequency of outcome factor in the population (p) = 56.9%

$p = 56.9\%$ was taken from the study done by Naskar P et al.⁹

Considering a non-response rate of 20%, 72 participants were included in the study.

Sampling method

The Kerala State AIDS Control Society (KSACS) has tied up with Healthline NGO in order to carry out its Suraksha Project - Targeted Intervention

among transgenders, in Kannur – Kasargod Zone. Out of the 250 registered transgenders in Healthline, study participants were selected randomly using random number tables till the required sample size of 72 who gave consent was obtained.

Ethical considerations

The study was started after obtaining ethical clearance from Institutional Ethical Committee, Kannur Medical College, Anjarakandy (Ethical Clearance Number – KMC/PO/Ethics Cert/Crs-17-03-05) No objection certificate from Healthline was obtained. Informed written consent from each participant was taken in local language (Malayalam).

Data collection technique

After obtaining informed written consent, data was collected from the members attending Healthline events using a self-administered, semi structured questionnaire which consist of basic socio demographic details, WHOQOL-BREF questionnaire Malayalam translation,⁸ Zimet et al.'s The Multidimensional Scale of Perceived Social Support⁹ and Perceived and Enacted Stigma Scale (modification of the Stigma Scale developed by Logie C and Earnshaw V¹⁰) in the local language (Malayalam) after validation.

Tools

1. WHO QOL BREF questionnaire

The WHOQOL-BREF is an abbreviated 26-item version of the WHOQOL-100. It is scored in four domains:

- Domain 1: Physical health,
- Domain2: Psychological,
- Domain 3: Social relations and
- Domain 4: Environment.

It also includes two general questions covering global QOL and general health. Each item uses a 5-point Likert scale. Items inquire 'how much', 'how completely', 'how often', 'how good', or 'how satisfied' the respondent felt in the last 2 weeks. Domain scores were calculated from the mean score of items within the domain. The scores are transformed on a scale from 0 to 100 to enable comparisons to be made between domains composed of unequal numbers of items. For the individual domains score ≥ 50 and total

QOL score ≥ 200 was considered as satisfactory QOL score. For the individual domains score < 50 and total QOL score < 200 was considered as poor QOL score.

2. Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS is a brief, easy to administer self-report questionnaire. It includes 12 items directly addressing social support, divided into factor groups relating to the source of the support i.e. Family, Friends or Significant Other. Each of these Groups consisted of four items. A 7-point Likert type rating scale ranging from very strongly disagree (1) to very strongly agree (7) was used.

3. Perceived and Enacted Stigma Scale

The Sexual Stigma Scale Adapted for Lesbian, Bisexual and Queer Women included twelve items, five in the perceived stigma sub-scale and seven in the enacted stigma sub-scale. A 4-point Likert-type scale ranging from never (1) to many times (4) used.

4. Semi-structured questionnaire to collect socio-demographic data.

Data Entry and Analysis: Data was entered in Microsoft Excel and analysed using SPSS version 20. Descriptive statistics in the form of frequencies, percentages, means and standard deviations were calculated. To test the association between quality of life and factors affecting quality of life, independent t test and chi-square test was used and p value < 0.05 was considered as statistically significant.

Results

A total of 72 transgenders participated in the study. All the participants were Male to Female transgenders. The mean age of the participants was 33.36 years \pm 8.75. Most of the participants were single (68%). All of them were literate with most of them having secondary education (47%). Most of them were unemployed resorting to either begging or sex work (53%) while among the employed, most of them belonged to the unskilled category (24%). Only 20 of them had family support when they revealed their transgender status (28%). Most of them had to undergo

counselling for being a transgender (85%). 24 participants admitted to attempting suicide because of being a transgender (33%). Most of them had to resort to sex work at some point to support themselves (83%). Most of them were victims of abuse during their childhood (72%). 19 participants have faced stigma from the medical side (26%). Only 18 of them possess a government issued transgender identity card (25%). The total WHO and individual domain scores, Satisfactory

(≥50%) & Poor (<50%) Qol among individual domains and total Qol scores were shown in table 1. The Total Sexual Stigma Score & Multidisciplinary Social Support Score divisions are shown in table 2. The association between QOL And selected factors using Chi-Square Test is given in table 3. Comparison Of Mean Scores Of MSPSS, TSS with the individual domains as well as Total QOL using Independent T-Test are shown in table 4.

TABLE 1 – Total who and individual domain scores, satisfactory (≥50%) & poor (<50%) qol among individual domains and total qol

DOMAIN	MEAN ± SD	SATISFACTORY QOL n (%)	POOR QOL n (%)
Physical domain	51.5 ± 11.7	41(56.9%)	31(43.1%)
Psychological domain	49.1 ± 11.7	36(50%)	36(50%)
Social domain	54.4 ± 13.4	46(63.9%)	26(36.1%)
Environmental domain	47.4 ± 12.8	25(34.7%)	47(65.3%)
Total qol	202.6 ± 41.4	43(59.7%)	29(40.3%)

The highest score was in the social relations domain while the lowest score was in the environmental domain. Social domain had the highest (64%) while environmental domain had

the lowest (35%) percentage of participants with satisfactory QOL. All the other categories had more than 50% of the participants with satisfactory QOL.

TABLE 2 - Total sexual stigma score & multidisciplinary social support score divisions

	Mean	Std. Deviation
Total sexual stigma score	32.60	8.036
Perceived sexual stigma score	13.92	3.789
Enacted sexual stigma score	18.68	5.466
Multidisciplinary scale of perceived social support score	51.43	18.273
Score for significant other	18.11	6.948
Score for family	15.03	7.995
Score for friends	18.29	7.002

Above table shows the mean scores and standard deviation of the Total Sexual Stigma Score,

Multidisciplinary scale of Perceived Social Support Score and its subscales.

TABLE 3 –To find the association between qol and selected factors using chi-square test

QOL	FACTOR	CATEGORY	POOR n (%)	SATISFACTORY n (%)	Chi square value (p VALUE)	
1	Total	Age	Upto 30 years	20 (69%)	15 (34.9%)	8.053 (0.005)
		ABOVE 30 years	9 (31%)	28 (65.1%)		
2	Total	Ever attempted suicide	Yes	17 (58.6%)	7 (16.3%)	13.973 (<0.001)
			No	12 (41.4%)	36 (83.7%)	
3	Physical	Family response to being a tg	Supportive	5 (16.1%)	15 (36.6%)	3.682 (0.005)
			Not supportive	26 (83.9%)	26 (63.4%)	
4	Physical	Possess tg id card	Yes	4 (12.9%)	14 (34.1%)	4.249 (0.035)
			No	27 (87.1%)	27 (65.9%)	
5	Psychological	Age	Upto 30 years	22 (61.1%)	13 (36.1%)	4.503 (0.034)
			Above 30 years	14 (38.9%)	23 (63.9%)	
6	Psychological	Family response to being a tg	Supportive	6 (16.7%)	14 (38.9%)	4.431 (0.035)
			Not supportive	30 (83.3%)	22 (61.1%)	
7	Psychological	Ever attempted suicide	Yes	18 (50%)	6 (16.7%)	9.00 (0.003)
			No	18 (50%)	30 (83.3%)	
8	Social	Ever faced stigma from medical side	Yes	3 (11.5%)	16 (34.8%)	4.620 (0.032)
			No	23 (88.5%)	30 (65.2%)	
9	Environmental	Age	Upto 30 years	27 (57.4%)	8 (32%)	4.230 (0.04)
			Above 30 years	20 (42.6%)	17 (68%)	
10	Environmental	Ever attended counselling for being a tg	Yes	43 (91.5%)	18 (72%)	4.789 (0.029)
			No	4 (8.5%)	7 (28%)	

There is statistically significant association between age and ever attempted suicide with Total QOL. There is statistically significant association between family support and possession of TG ID card with Physical QOL. There is statistically significant association between age, family support and ever

attempted suicide with Psychological QOL. There is statistically significant association between ever faced stigma from medical side with Social QOL. There is statistically significant association between age and ever attempted counselling for being a TG with Environmental QOL.

TABLE 4–Comparison of mean scores of mspss, tss with the individual domains as well as total qol using independent T-test

Domain	Category	N	Mspss score	T value (p value)
Physical health	Poor	29	41.52 (18.76)	3.763 (<0.001)
	Satisfactory	43	58.12 (14.7)	
Psychological health	Poor	31	42.87 (18.71)	2.551 (<0.001)
	Satisfactory	41	57.9 (15.18)	
Social relations	Poor	36	46.14 (17.7)	4.194 (0.013)
	Satisfactory	36	56.7 (17.4)	
Environmental	Poor	47	46.94 (18.6)	3.021 (0.004)
	Satisfactory	25	59.88 (14.5)	
Total qol	Poor	26	40.6 (16.8)	4.200 (<0.001)
	Satisfactory	46	57.54 (16.2)	
Total qol	Poor	26	32.5 (8.8)	0.515 (0.91)
	Satisfactory	46	32.7 (7.6)	

Table shows the comparison of mean scores of MSPSS, TSS with the individual domains as well as total QOL. There is statistically significant difference in mean scores between poor and

satisfactory QOL in all the domains as well as Total QOL. There is no association between TSS score and QOL.

DISCUSSION

The mean total QOL found in the study was 202.59 ± 41.45 . The individual domain wise mean score of physical health, psychological health, social relationship and environment were 51.56, 49.15, 54.4 and 47.4 respectively. This QOL is lower compared to similar studies done nationally and internationally. In a study conducted by Naskar P et al. to assess quality of life of transgender adults in an urban area of Burdwan district, West Bengal the mean score of total QOL was 221.1 and individual domain wise mean score of physical health, psychological health, social relationship and environment were 56.1, 54.6, 47.4 and 63.0 respectively.¹¹ In a study conducted by Poguri M et al. to assess Emotional Distress and Quality of Life among Transgenders in South India the mean

score of total QOL was 225 and individual domain wise mean score of physical health, psychological health, social relationship and environment were 56, 56, 50 and 63 respectively.¹² In a study conducted by George et al. to assess Quality Of Life of Transgender Older Adults the mean score of total QOL was 266.09 and the individual domain wise mean score of physical health, psychological health, social relationship and environment were 69.70 ± 17.48 , 64.8 ± 18.51 , 66.53 ± 11.73 and 65 ± 13.84 respectively.¹³ In a study conducted by Gomez-Gil et al. to assess determinants of quality of life in Spanish transsexuals attending a gender unit before genital sex reassignment surgery the individual domain wise mean score of physical health, psychological health, social relationship

and environment were 63.51, 56.09, 60.35 and 58.81 respectively.¹⁴ The lower QOL could be due to the fact that in the present study most of the study participants were in the younger age group while the other studies had older transgenders who were better adapted to their situation. Also despite the better educational conditions in Kerala, the general attitude towards transgenders is unfortunately steeped in prejudice making it impossible for them to avail their rightful opportunities which invariably brings down the QOL.

In the present study the highest individual wise mean score is for social relationship with a score of 54.44 ± 13.39 . The social relations domain includes questions related to personal relationships, social support, sexual activity and social inclusion. The lowest individual wise mean score is for environment with a score of 47.44 ± 12.83 . The environment domain contained questions regarding physical safety and security, home environment, financial resources, health and social care: accessibility and quality, opportunities for acquiring new information and skills, participation in and opportunities for recreation or leisure activities, physical environment (pollution/ noise/ traffic/ climate) and transport. The remaining domains in their decreasing order of mean scores are physical health domain and psychological health domain. The higher score in the social relationship domain suggests a better social support in the state. In a study by Thompson et al. 'Quality-of-Life Measurement: Assessing the WHOQOL-BREF Scale in a Sample of High-HIV-Risk Transgender Women in San Francisco, California' the mean environmental domain score ($M = 59.54$, $SD = 17.74$) reflected the lowest score and the lowest standard deviation. The mean psychological domain score ($M = 67.39$, $SD = 17.84$) was highest while physical health and social relationships fell between the high and low scores and had higher standard deviations.¹⁵ In both Naskar P et al. and Poguri M et al. the lowest individual wise mean score was for social relationship while the highest was for environment.^{11,12} But in both Gomez-Gil et al. and in a study by Basar K et al. to assess Perceived Discrimination, Social Support, and Quality of Life in Gender Dysphoria the lowest individual wise mean score was for psychological health while the highest was for physical health.^{14,16} The low scores on specific domains such as environmental quality

of life may enable health planners and providers to better assess what type of interventions (e.g., free transportation to the HIV clinic or a public transit pass) may be needed at the community program level. The diversity in results both nationally and internationally suggest that the problems faced by transgenders in different places differ according to the social and cultural aspects of that particular area.

In Total QOL among the demographic factors, a higher mean score was significantly associated with a higher age category. This could be due to the healthy coping mechanisms of the transgender older adults. This is in contrast to the finding by Motmans et al. in their study 'Female and Male Transgender Quality of Life: Socioeconomic and Medical Differences' in which transgender persons that were older had significantly lower QOL scores.¹⁷ Among the social factors, a higher mean score was significantly associated with never attempted suicide and supportive family response. Also a higher mean score was significantly associated with a higher MSPSS score. This is comparable to the findings by Simons L et al. in the study 'Parental Support and Mental Health among Transgender Adolescents' in which parental support was significantly associated with higher life satisfaction, lower perceived burden of being transgender, and fewer depressive symptoms.¹⁸ Also in the study by Gomez-Gil et al. having family support was associated with a better QOL for all transsexuals.¹⁴ Friedman et al. in their study 'A Meta-Analysis of Disparities in Childhood Sexual Abuse, Parental Physical Abuse, and Peer Victimization Among Sexual Minority and Sexual Nonminority Individuals' found that sexual minority individuals were on average 3.8, 1.2, 1.7, and 2.4 times more likely to experience sexual abuse, parental physical abuse, or assault at school or to miss school through fear, respectively.¹⁹ The higher rates of abuse experienced by sexual minority youths may be one of the driving mechanisms underlying higher rates of mental health problems, substance use, risky sexual behaviour, and HIV reported by sexual minority adults. There was no statistically significant association between Total QOL and TSS score. In the study by Hyun-Jun Kim et al. 'Race/Ethnicity and Health-Related Quality of Life among LGBT Older Adults' a higher lifetime LGBT-related discrimination was linked to a decrease in physical

and psychological HRQOL.²⁰ In the present study there was no association between total QOL and education, occupation or income. This is in contrast to the finding by Motmans et al. in which transgender persons that were low educated, unemployed and had a low household income had significantly lower QOL scores.¹⁷ This limitation of this study is that it does not capture the changes in QOL over a longer duration. The study has not compared QOL of transgenders with the general population.

CONCLUSION

The study found out that QOL among TG's in Kannur and Kasargod districts of Kerala was lower as compared to transgender populations in other states in the country as well as internationally. The determinant factors for QOL were found to be varying in each domain. QOL was found to be associated with social support, income, stigma from medical field and possession of TG-ID card in

the present study. QOL was also associated with age, family response to being a TG, ever attempted suicide, ever attended counselling for being a TG and residence in rural area. The results of this study demonstrate that the general health of respondents is related to vulnerabilities that are unique for transgenders and include history of stigma from medical field and not possessing TG-ID card, in addition to well-known health determinants such as income, age and social support. Strategies to eliminate discrimination against transgender people in health care context will improve the overall health and quality of life of transgenders.

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