



A PILOT STUDY TO ASSESS EMOTIONAL DISTRESS AND QUALITY OF LIFE AMONG TRANSGENDERS IN SOUTH INDIA

P Maithreyi and Nambi

*Corresponding Author Email: maithreyipoguri@yahoo.com

ABSTRACT

Background and aims: Transgenders face several social disadvantages in the Indian cultural context, and often live on the fringe of the society. Presence of adverse life circumstances predisposes them to have psychological morbidity. In the absence of previous systematic evidence, this pilot study aimed to assess emotional distress and quality of life among transgenders attending a clinic in south India. Methods: This hospital based cross-sectional study assessed transgenders attending a specialized multi-speciality clinic. Participants were assessed for relevant demographic and clinical information. Anxiety and depression were assessed using Hospital Anxiety and Depression Scale (HADS), while General Health Questionnaire (GHQ) was used to assess for general emotional distress. WHOQOL Bref was used to assess quality of life. Results: The pilot study included 15 transgenders with a median age of 30 years. All the participants had experienced sexual abuse in childhood, and 11/15 (73.3%) had a lifetime suicide attempt. The median HADS anxiety, HADS depression and GHQ scores were 9, 14 and 8 respectively. About 66.7% of the sample had significant anxiety symptoms while 100% had significant depressive symptoms as per HADS cut-off. The quality of life scores were particularly low for the 'social' domain. Conclusion: Transgenders experience considerable emotional distress and have poor social quality of life. Medical professionals need to be sensitive to the health-care needs of transgenders to improve their psychological well being.

KEY WORDS

Transgender, India, anxiety, depression, quality of life

INTRODUCTION

Transgender is the state of one's gender identity or gender expression which does not match with ones assigned sex ("GLAAD Media Reference Guide - Transgender Issues," 2011). Recent estimates suggest that there are at least 490,000 transgenders in India (Nagarajan, 2014). Though ancient Indian texts document the presence of transgenders since antiquity their present social circumstances are deplorable and are considered at a disadvantaged minority position (O, 2009). Transgenders are quite often made to live on the fringe of the society, and are referred with derogatory labels like 'hijras' (Kalra, 2012; Nanda, 1986). The societal outlook, as well as acceptance of transgenders has been quite different in India than the western cultures.

Transgenders are subjected to many social adversities. They often face discrimination in education, housing, health, employment and official bureaucratic dealings

(Bradford, Reisner, Honnold, & Xavier, 2013; Kosenko, Rintamaki, Raney, & Maness, 2013). They are often required to tend to jobs below their intellectual capacity. Many generate income from petty extortion, performing at ceremonies, through begging and sex work (Abdullah et al., 2012). Violence against transgenders, especially towards sex workers, is common and occurs in a variety of settings (Moran & Sharpe, 2004; Witten & Eyler, 1999). Many transgenders have experienced abuse during childhood, and the rates of sexual abuse has been reported to be higher in transgenders than those with other gender orientations (Friedman et al., 2011). These adverse life circumstances are likely to have adverse psychological impact on transgenders. Moreover, access to health care services are reported to be more adversarial towards transgenders, which may result in their health concerns not being addressed fairly (Beattie et al., 2012).

Research on transgenders from India has remained constrained to mainly to ethnographic account of lifestyle or as a risk factor for sexually transmitted diseases (Hernandez et al., 2006; Sahastrabuddhe et al., 2012). Since transgenders are faced with considerable psycho-social adversity and social exclusion, it is likely that they suffer from emotional distress and poor quality of life. In the unique cultural context of transgenders in Indian society, this pilot study was conducted to evaluate the symptoms of anxiety and depression and quality of life among transgenders who are treated in a tertiary care hospital.

METHODS

Setting and procedure

The present cross-sectional descriptive study was conducted at specialized transgender clinic at a tertiary care teaching hospital in south India. The hospital caters to patients from in and around Chennai. The hospital provides free consultation services and the many of the investigations and medications are provided at subsidized rates. The clinic for transgenders in the hospital is multidisciplinary and caters to a range of health concerns of the transgender population. The clinic was started to emphasize the need for health care among them.

The present study was conducted among transgenders enrolled in the clinic between June 2014 and July 2014. After obtaining informed consent from the participants, information was gathered using a structured proforma by one of the investigators (Psychiatrist). Data was gathered about the socio-demographic details and other pertinent data. Specific questions were asked about the age when gender dysphoria was felt, when the person left home, about experience of sexual abuse in childhood, acceptance by parents and peers and other relevant aspects of living as a transgender. General Health Questionnaire (GHQ) was used to identify minor psychiatric disorders. When screened positive Hospital Anxiety and Depression Scale (HADS) was used to assess the anxiety and depression symptoms and WHO Quality of Life Scale Bref (WHOQOL Bref) was used to assess

quality of life of the participants enrolled in the study. The study had institutional ethics committee approval.

Instruments

Hospital Anxiety and Depression Scale (HADS) (Bjelland, Dahl, Haug, & Neckelmann, 2002; Zigmond & Snaith, 1983): This is a 14 item self rated instrument to assess for symptoms of anxiety and depression. Seven of the questions relate to anxiety and seven questions relate to depression. Each of the questions is scored as 0, 1, 2 or 3 with greater scores reflecting higher grades of anxiety and depression. This instrument has been quite useful for hospital based population as it does not lay much emphasis on somatic symptoms.

General Health Questionnaire (GHQ) (Goldberg et al., 1997): This is a 12 item screening instrument to assess for symptoms of distress. The questions are rated on a 4 point likert scale. The sum of the scores elucidates the presence of clinically significant symptoms of psychological distress and warrant further assessment. The scale has been widely used in the literature in clinical samples to screen for anxiety and depression.

WHOQOL Bref (Skevington, Lotfy, & O'Connell, 2004; WHOQoL Group, 1998): This is a 26 item self-rated questionnaire which is used to assess for various facets of quality of life. The scale comprises of 4 domains i.e. physical, psychological, social and environmental, each tapping into certain aspects of quality of life. The questions are rated on 5 point likert scale and the domain scores are transformed into 0 to 100 ratings, higher scores reflecting better quality of life.

Statistical analysis

The statistical analysis was carried out using SPSS version 17 (Chicago, IL). Since the present study was a pilot study, primarily non-parametric descriptive statistics were carried out. Median and range were used for continuous data while frequencies and percentages were used for nominal data. Kruskal Wallis test was used for comparing quality of life across various domains. Spearman correlation was used to find the association between different continuous variables in this small population. Mann Whitney U test was used to compare continuous variables across two groups to assess for significant differences between the groups. Missing value imputation was not done and a p value of 0.05 was considered as significant.

RESULTS

The study was conducted among 15 participants recruited from the transgender speciality clinic. All the participants in the present study had transgendered from being male to being female. The demographic characteristics of the sample are shown in Table 1. Only one of the participants was married and lived in a nuclear family, while all others were not married and lived in special homes/hostels. Occupation wise, 6 were in formal gainful employment (2 physiotherapists, 1 counsellor, 1 social worker, 1 beautician and 1 priest) while 5 were sex workers and 4 resorted to begging.

Table 1: Demographic characteristics of the sample

Variable	Median (Range) or frequency (percentage)
Age	30 (25 to 36)
Marital status	
Married	1 (6.7%)
Not married	14 (93.3%)
Education	
Up to 10 th grade	7 (47.7%)
Above 10 th grade	8 (53.3%)
Occupation	
Formal gainful employment	6 (40.0%)
Sex Worker	5 (33.3%)
Begging	4 (27.7%)
Religion	
Hindu	14 (93.3%)
Christian	1 (6.7%)
Family type	
Nuclear family	1 (6.7%)
Living in a home/ hostel	14 (93.3%)

The transgender lifestyle and emotional distress related characteristics of the sample are depicted in table 2. Though gender dysphoria started at a median of 11 years in the sample, the participants suffered for a median period of 8 years before disclosing it to their family members. The participants left home at a median age of 20 years. Thirteen participants (86.7%) underwent surgical or cosmetic changes at a median of 24 years. Though none of the participants had

parental acceptance for becoming a transgender, no participants regretted the decision becoming a transgender. All the participants reported childhood sexual abuse and 11 (73.3%) had attempted suicide in the past. Substance use disorder was reported in 86.7% participants, most common being tobacco followed by alcohol and cannabis. The median HADS anxiety, HADS depression and GHQ scores were 9, 14 and 8 respectively. The HADS scores were above the

cut-off of 8 for anxiety and depression subscales for 10 (66.7%) and 15 patients (100%) respectively. The HADS anxiety and depression scores correlated well with each other (Spearman $r = 0.800$, $p < 0.001$). The GHQ scores also correlated well with HADS anxiety and depression scores ($r = 0.764$, $p = 0.001$ and $r = 0.963$, $p < 0.001$ respectively). The median quality of

life domain scores ranged from 50 to 63, the lowest being for social quality of life and highest for environmental quality of life. The quality of life scores are depicted in figure 1. The quality of life varied across the groups (Kruskal Wallis $\chi^2 = 8.515$, d.f. = 3, $p = 0.036$).

Table 2: Characteristics of the patients

Variable	Median (Range) or frequency (percentage)
When started to feel that did not belong to biological gender	11 (9 to 14)
Years suffered in silence	8 (5 to 12)
Age at which left home	20 (17 to 23)
Underwent cosmetic/ surgical changes	13 (86.7%)
Age at which cosmetic/ surgical change made	24 (20 to 28)
Duration between starting of gender dysphoria and cosmetic changes	12 (9 to 19)
Parental acceptance	0 (0.0%)
Regrets about change	0 (0.0%)
Experienced childhood sexual abuse	15 (100%)
Attempted suicide at least once	11 (73.3%)
Substance of abuse	
Tobacco	10 (66.7%)
Alcohol	7 (46.7%)
Cannabis	4 (26.7%)
None	2 (13.3%)
HADS Anxiety Score	9 (6 to 16)
HADS Depression Score	14 (9 to 19)
GHQ Score	8 (4 to 10)
Quality of life domains as per WHOQOL Bref	
Physical	56 (13 to 69)
Psychological	56 (38 to 75)
Social	50 (25 to 69)
Environmental	63 (13 to 81)

GHQ General Health Questionnaire; HADS Hospital Anxiety and Depression Scale, WHOQOL Bref WHO Quality of Life Bref Questionnaire

When the symptoms of emotional distress (as per HADS anxiety score, HADS depression score and GHQ) were compared to quality of life domains, it was seen that physical and psychological quality of life was significantly related to the all distress scores ($p < 0.001$ using spearman correlation). However, social and environmental quality of life domains did not show significant relationship with distress scores ($p > 0.05$ for all associations). Symptoms of emotional distress did not correlate with the age of the patient,

the age of start of gender dysphoria or the age of leaving home. The relationship of type of work with other variables is shown in table 3. The type of work did not have association with age, the age of start of gender dysphoria and the age of leaving home. However, scores of anxiety, depression and general distress (as per GHQ) were higher in those involved in begging and being a sex worker. On the other hand, physical, psychological and environmental quality of life was worse among those in formal gainful

employment. The social quality of life did not differ between the groups. Comparison of educational attainment (up to 10th grade versus above) did not show differences across age, symptoms of emotional

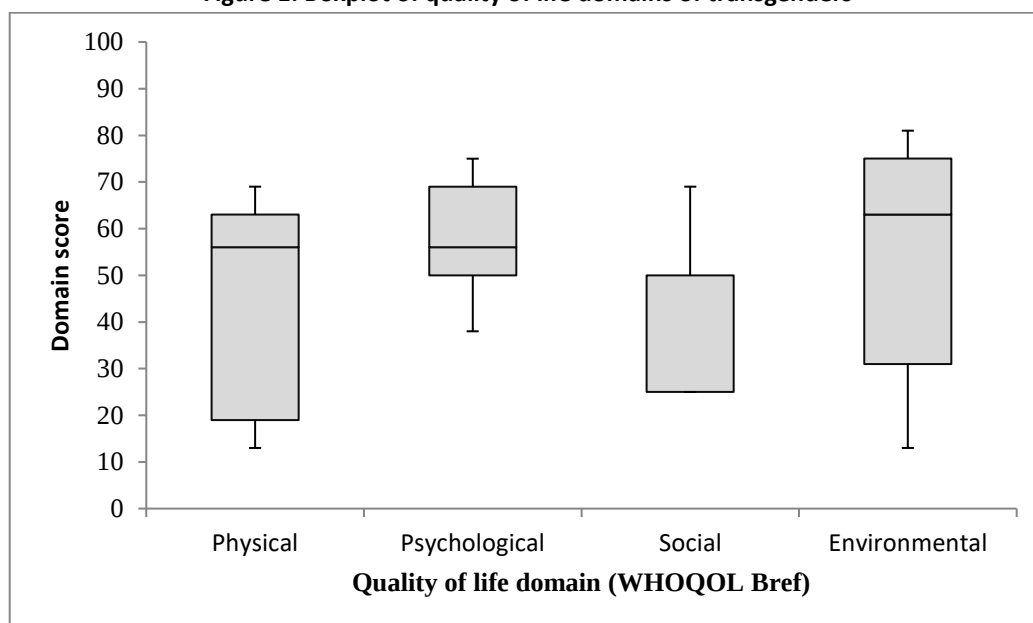
distress and quality of life except environmental quality of life where those with higher education had better environmental quality of life (Mann Whitney U = 3.5, p = 0.002).

Table 3: Relationship of type of occupation and other variables

Variable	Formal gainful employment (n = 6)	Other employment † (n = 9)	Comparison using Mann Whitney U (p value)
Age	30 (25 to 31)	32 (26 to 36)	17 (0.272)
Age of start of gender dysphoria	11 (9 to 12)	12 (10 to 14)	17 (0.272)
Age of leaving home	21 (17 to 22)	19 (17 to 23)	19 (0.388)
HADS Anxiety Score	8 (6 to 9)	13 (7 to 16)	6.5 (0.012)*
HADS Depression Score	11 (9 to 15)	17 (10 to 19)	6.0 (0.012)*
GHQ	7 (4 to 8)	9 (4 to 10)	9.0 (0.036)*
Quality of life domains			
Physical	16 (13 to 56)	63 (19 to 69)	7.5 (0.018)*
Psychological	50 (38 to 63)	69 (38 to 75)	9.0 (0.036)*
Social	38 (25 to 50)	50 (25 to 69)	21.0 (0.529)
Environmental	25 (13 to 56)	69 (63 to 81)	0.0 (<0.001)*

Shown as median (range), * p <0.05, † includes begging and being a sex worker

Figure 1: Boxplot of quality of life domains of transgenders



DISCUSSION

The present study suggests that about two-thirds of the transgenders experience significant anxiety symptoms, while almost all such persons have significant depressive symptoms. The symptoms of anxiety and depression often occur together. Previous literature from elsewhere suggests that transgenders are likely to experience greater rates of distress, anxiety and depression as compared to the general population (Bockting, Miner, Swinburne Romine, Hamilton, & Coleman, 2013; Budge, Adelson, & Howard, 2013). The increase in rates of anxiety and depression can be accounted by many factors including stigma, discrimination, lack of peer support, as well as other stresses like victimization and adverse economic circumstances.

The quality of life among transgenders is lower especially with relationship with social quality of life. Previous studies from elsewhere using different instrument for assessment suggested psychological quality of life to be particularly impaired among transgenders (Motmans, Meier, Ponnet, & T'Sjoen, 2012; Newfield, Hart, Dibble, & Kohler, 2006). The reasons for poorer social quality of life of transgenders in India can be manifold. Being on the fringe of the society, with difficulty in inclusion for regular economic pursuits may lead to social devaluation, stigma and discrimination which lead to poor social quality of life. All the participants in the present study had been rejected by their parents and peers which could be a source of social isolation and poor social supports. The participants had to often live in special homes housing groups of transgenders which are quite isolated from the regular community dwellings.

The study suggests that may resort to begging and being a sex worker to sustain themselves economically. Such occupations may be associated with greater rates of anxiety, depression and emotional distress. It may be intuitive that engagement in occupations of begging and sex work are promote poor self esteem, and are resorted to for survival when other opportunities are not easily accessible. There lies the usefulness of ensuring equitable opportunities and social inclusion of

transgenders. The Supreme Court of India has taken cognizance of the plight of transgenders and has made efforts to recognize the rights of transgenders (Mahapatra, 2014). Strangely, the formal gainful employment was associated with poorer physical, psychological and environmental quality of life. Probably, the lower quality of life reports might have stemmed from regular interaction with other non-transgendered individuals and finding the participant's own circumstances not as optimum as other's.

In the present sample, all the participants had experienced sexual abuse during childhood. Previous studies also have reported greater rates of childhood sexual abuse among the transgendered population (Friedman et al., 2011). Whether the transgendered role occurs as a consequence of sexual abuse is not resolved yet and requires prospective follow-up studies for definitive answers. The need for ensuring safety of children and preventing child sexual abuse remains, as such abuse can independently lead to symptoms of psychological distress including depression and poor coping (Shapiro, Kaplow, Amaya-Jackson, & Dodge, 2012). The study also documents high rates of substance use disorders in this population, as has been found elsewhere (Benotsch et al., 2013; Nuttbrock et al., 2014). This raises the need for clinicians to address the consequences for substance use and initiate counselling for harm reduction. High rates of attempted suicide in the past also suggest for the presence of psychiatric disorders and failure of coping coupled with adversity, and hence the need for clinicians to be sensitive to needs of the transgender population (Clements-Nolle, Marx, & Katz, 2006; McCann, 2015).

The findings of the study need to be interpreted in the context of strengths and limitations. The strengths of the study include systematic assessment for depressive and anxiety symptoms as well as quality of life in a rather 'hidden' population. Also, the relationship of anxiety, depression and quality of life with various facets of experience of being a transgender was evaluated. The limitations of the study include a limited sample size from a general hospital, absence of a suitable control group, assessment based upon self-report and absence of a

standardized instrument to make a psychiatric diagnosis.

To conclude, transgenders in India suffer from significant levels of anxiety and depression, and have impaired quality of life primarily in social domains. The cause of emotional distress and poorer quality of life can be manifold, including stigma, discrimination, isolation, lack of employment opportunities and victimization. This pilot study provides a base for further research into systematic evaluation of the change in psychological distress with social empowerment of transgenders, and the assessment of unique felt needs of transgender population in accessing medical and psychiatric healthcare.

REFERENCES

- Abdullah, M. A., Basharat, Z., Kamal, B., Sattar, N. Y., Hassan, Z. F., Jan, A. D., & Shafqat, A. (2012). Is social exclusion pushing the Pakistani Hijras (Transgenders) towards commercial sex work? a qualitative study. *BMC International Health and Human Rights*, 12, 32. doi:10.1186/1472-698X-12-32
- Beattie, T. S. H., Bhattacharjee, P., Suresh, M., Isac, S., Ramesh, B. M., & Moses, S. (2012). Personal, interpersonal and structural challenges to accessing HIV testing, treatment and care services among female sex workers, men who have sex with men and transgenders in Karnataka state, South India. *Journal of Epidemiology and Community Health*, 66 Suppl 2, ii42–48. doi:10.1136/jech-2011-200475
- Benotsch, E. G., Zimmerman, R., Cathers, L., McNulty, S., Pierce, J., Heck, T., Snipes, D. (2013). Non-medical use of prescription drugs, polysubstance use, and mental health in transgender adults. *Drug and Alcohol Dependence*, 132(1-2), 391–394. doi:10.1016/j.drugalcdep.2013.02.027
- Bjelland, I., Dahl, A. A., Haug, T. T., & Neckelmann, D. (2002). The validity of the Hospital Anxiety and Depression Scale: an updated literature review. *Journal of Psychosomatic Research*, 52(2), 69–77.
- Bockting, W. O., Miner, M. H., Swinburne Romine, R. E., Hamilton, A., & Coleman, E. (2013). Stigma, mental health, and resilience in an online sample of the US transgender population. *American Journal of Public Health*, 103(5), 943–951. doi:10.2105/AJPH.2013.301241
- Bradford, J., Reisner, S. L., Honnold, J. A., & Xavier, J. (2013). Experiences of transgender-related discrimination and implications for health: results from the Virginia Transgender Health Initiative Study. *American Journal of Public Health*, 103(10), 1820–1829. doi:10.2105/AJPH.2012.300796
- Budge, S. L., Adelson, J. L., & Howard, K. A. S. (2013). Anxiety and depression in transgender individuals: the roles of transition status, loss, social support, and coping. *Journal of Consulting and Clinical Psychology*, 81(3), 545–557. doi:10.1037/a0031774
- Clements-Nolle, K., Marx, R., & Katz, M. (2006). Attempted suicide among transgender persons: The influence of gender-based discrimination and victimization. *Journal of Homosexuality*, 51(3), 53–69. doi:10.1300/J082v51n03_04
- Friedman, M. S., Marshal, M. P., Guadamuz, T. E., Wei, C., Wong, C. F., Saewyc, E., & Stall, R. (2011). A meta-analysis of disparities in childhood sexual abuse, parental physical abuse, and peer victimization among sexual minority and sexual nonminority individuals. *American Journal of Public Health*, 101(8), 1481–1494. doi:10.2105/AJPH.2009.190009
- GLAAD Media Reference Guide - Transgender Issues. (2011, September 9). [Text]. Retrieved January 29, 2015, from <http://www.glaad.org/reference/transgender>
- Goldberg, D. P., Gater, R., Sartorius, N., Ustun, T. B., Piccinelli, M., Gureje, O., & Rutter, C. (1997). The validity of two versions of the GHQ in the WHO study of mental illness in general health care. *Psychological Medicine*, 27(1), 191–197.
- Hernandez, A. L., Lindan, C. P., Mathur, M., Ekstrand, M., Madhivanan, P., Stein, E. S., ... Jerajani, H. R. (2006). Sexual behavior among men who have sex with women, men, and Hijras in Mumbai, India--multiple sexual risks. *AIDS and Behavior*, 10(4 Suppl), S5–16. doi:10.1007/s10461-006-9129-z
- Kalra, G. (2012). Hijras: the unique transgender culture of India. *International Journal of Culture and Mental Health*, 5(2), 121–126. doi:10.1080/17542863.2011.570915
- Kosenko, K., Rintamaki, L., Raney, S., & Maness, K. (2013). Transgender patient perceptions of stigma in health care contexts. *Medical Care*, 51(9), 819–822. doi:10.1097/MLR.0b013e31829fa90d
- Mahapatra, D. (2014, April 15). Supreme Court recognizes transgenders as "third gender." *The Times of India*. Delhi.
- McCann, E. (2015). People who are transgender: mental health concerns. *Journal of Psychiatric and Mental Health Nursing*, 22(1), 76–81. doi:10.1111/jpm.12190
- Moran, L. J., & Sharpe, A. N. (2004). Violence, identity and policing The Case of violence against transgender people. *Criminal Justice*, 4(4), 395–417.

- Motmans, J., Meier, P., Ponnet, K., & T'Sjoen, G. (2012). Female and male transgender quality of life: socioeconomic and medical differences. *The Journal of Sexual Medicine*, 9(3), 743–750. doi:10.1111/j.1743-6109.2011.02569.x
- Nagarajan, R. (2014, May 30). First count of third gender in census: 4.9 lakh. *The Times of India*. Delhi.
- Nanda, S. (1986). The Hijras of India: *Journal of Homosexuality*, 11(3-4), 35–54. doi:10.1300/J082v11n03_03
- Newfield, E., Hart, S., Dibble, S., & Kohler, L. (2006). Female-to-male transgender quality of life. *Quality of Life Research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, 15(9), 1447–1457. doi:10.1007/s11136-006-0002-3
- Nuttbrock, L., Bockting, W., Rosenblum, A., Hwahng, S., Mason, M., Macri, M., & Becker, J. (2014). Gender abuse, depressive symptoms, and substance use among transgender women: a 3-year prospective study. *American Journal of Public Health*, 104(11), 2199–2206. doi:10.2105/AJPH.2014.302106
- O, S. (2009). Transgenderism: Facts and fictions. *Indian Journal of Psychiatry*, 51(1), 73–75. doi:10.4103/0019-5545.44917
- Sahastrabuddhe, S., Gupta, A., Stuart, E., Godbole, S., Ghate, M., Sahay, S., ... Mehendale, S. M. (2012). Sexually transmitted infections and risk behaviors among transgender persons (Hijras) of Pune, India. *Journal of Acquired Immune Deficiency Syndromes (1999)*, 59(1), 72–78. doi:10.1097/QAI.0b013e318236bd6f
- Shapiro, D. N., Kaplow, J. B., Amaya-Jackson, L., & Dodge, K. A. (2012). Behavioral markers of coping and psychiatric symptoms among sexually abused children. *Journal of Traumatic Stress*, 25(2), 157–163. doi:10.1002/jts.21674
- Skevington, S. M., Lotfy, M., & O'Connell, K. A. (2004). The World Health Organization's WHOQOL-BREF quality of life assessment: psychometric properties and results of the international field trial. A report from the WHOQOL group. *Quality of Life Research*, 13(2), 299–310.
- WHOQoL Group. (1998). Development of the World Health Organization WHOQOL-BREF quality of life assessment. *Psychological Medicine*, 28(03), 551–558.
- Witten, T. M., & Eyler, A. E. (1999). Hate crimes and violence against the transgendered. *Peace Review*, 11(3), 461–468.
- Zigmond, A. S., & Snaith, R. P. (1983). The hospital anxiety and depression scale. *Acta Psychiatrica Scandinavica*, 67(6), 361–370.

***Corresponding Author:**

P.Maithreyi and Nambi

Email: maithreyipoguri@yahoo.com