Quality of life and caste discrimination among the tribal population, Chengalpattu, Tamil Nadu, India: A community-based cross-sectional study

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Abstract

Background: According to the 2011 census in Tamil Nadu, out of a total population of 721.47 lakhs, 7.95 lakhs were scheduled tribes (STs), which constitutes about 1.1% of ST in Tamil Nadu and 0.8% of ST compared to the total ST population in India. A brief understanding of India's caste system and its evolution over time was required to determine caste-based discrimination. Hence, they are vulnerable and isolated due to this untouchability in the caste system. This study focuses on the quality of life (QOL) and caste discrimination among the tribal population of Chengalpattu district. Further, it provides suggestions to improve the QOL and to put an end to discrimination. **Methodology:** It is a community-based cross-sectional study, conducted among 300 participants among the tribal population in Chengalpattu district by a systematic random sampling technique. **Results:** The QOL scores were further converted into categorical variables by obtaining the mean score and dividing the group into those who got a score above the mean and those below the mean. They were labeled as good and poor QOL. More than half of them (52.7%) had poor QOL. Almost two-third of the workers had poor QOL in the social relationship (60.7%) and psychological (64%) domains, and nearly half in the physical (52.7%) and environmental (52.7%) domains. Out of 300 participants included in the analyses, 141 (47%) participants reported experiencing discrimination a few times a year/a few times a month. **Conclusion:** This study found that the tribal population in Chengalpattu district has poor social and psychological QOL compared to QOL in the environmental and physical domains. In spite of many government initiatives, a wide range of issues and problems are being faced by the tribals in India. Hence, we recommend strategies to improve the physical, social, and psychological well-being of this vulnerable population through strict legislation. The other component regarding discrimination concluded that caste but not socio-economic class is closely linked with perceived discrimination among the tribal population in Chengalpattu district and their responses to unfair treatment.

Keywords: Discrimination, quality of life, tribal population

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Introduction

The term "scheduled tribes" initially appeared in the constitution of India. Article 366 has defined scheduled tribes (STs) as

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By calculating the mean score and segmenting the group into those who received a score above the mean and those below the mean, the QOL scores were further transformed into categorical variables. In Table 3, they fall into two categories by their good and poor QOL. Poor QOL impacted more than half of them (52.7%). In terms of social relationships (60.7%), psychological domain (64%), and physical (52.7%) and environmental (52.7%) domains, over two-thirds of the workforce had poor QOL.

According to the nine-item everyday discrimination (EDS) used to quantify perceived discrimination, out of 300 participants included in the analyses, 141 (47%) participants reported experiencing discrimination a few times a year and a few times a month, as shown in Table 4.

Table 1: Socio-demographic characters of study population (*n*=300)

Variables	Characters	Frequency	Percentage
Gender	Male	167	55.7
	Female	133	44.3
Age	<45 years	177	59
	>45 years	123	41
Education	Illiterate	127	42.2
	literate	173	57.5
Occupation	Unemployed	116	38.5
	employed	184	61.1
Socio-economic status*	Upper class	19	6.3
	Upper-middle class	13	4.3
	Middle class	40	13.3
	Lower-middle class	153	51
	lower	75	25
Marital status	Unmarried	72	23.9
	Married	228	75.7

*Modified BG Prasad scale (February 2023)

Table 2: Quality of life scores across the domain (*n*=300)

Domain	Poor QOL		Good QOL	
	n	%	*n*	%
Physical	158	52.7	142	47.3
psychological	192	64	108	36
Social	182	60.7	118	39.3
environmental	158	52.7	142	47.3

Table 3: Distribution of QOL (*n*=300)

Domain	Number	Minimum	Maximum	Mean	SD
Physical	300	39.285	71.428	57.71	7.36
Psychological	300	37.5	66.66	50.01	6.89
Social	300	75	50	66.86	7.93
environmental	300	15.6	40.6	28.62	7.22

Table 4: Discrimination scores (*n*=300)

Discrimination scale	*n*	%
Less than once a year	126	42
Few times a month	174	58

Using independent samples *t*-test, we found that the mean physical domain scores were significant (p 0.05) for the age groups of 45 years (58.03 ± 7.68) and >45 years (57.25 ± 6.88), with those under the age of 45 having a higher mean score. Lower-socio-economic-status participants had mean scores of 57.64 ± 7.61, and single individuals had mean scores of 57.69 ± 6.49, which were lower than upper class individuals' mean scores of 58.29 ± 4.73 and married individuals' mean scores of 57.71 ± 7.63.

Similar to that of the psychological domain, high mean scores were found in the feminine gender, educated groups, a lower socio-economic class, and married people. This difference in mean score was statistically significant (P 0.05).

In the social mean domain, there was a statistically significant difference in mean score (P 0.05), with participants who were married, below 45 years, female, educated, and of lower socio-economic status scoring highly.

High mean scores were seen in the unemployed, the lower classes, and married individuals in the environmental domain, where the difference in mean scores was statistically significant (P 0.05) [Table 5].

Discussion

We are all human until caste disconnected us, religion separated us, politics divided us, and wealth separated us. India is the home for a huge group of indigenous people but yet untouchable by life style of the current modern world. In general, the tribal population is considered to be backward when compared to the non-tribal people.[6] India has the second largest tribal population in the world with 8.6% of the total population and 15% of total land area, with around 104 million tribal people (census 2011) and 744 tribal groups, of which geographically most of them reside mainly in Central India and North East India.[7] 89.97% live in the rural and 10.03% in the urban areas. The population of tribal male is 52.5%, and that of female is 47.5%. Madhya Pradesh has the highest number.[8] In the state, there are certain remote tribal communities including Toda, Kota, Kurumbas, Irular, Paniyan, and Kattunayakan, where the population has been either dropping or demonstrating stagnancy.[9] They are economically backward and farm their fields utilizing pre-agricultural technologies. They have fairly low literacy rates as well. They are identified as the particularly vulnerable tribal populations.[10] In our study, the majority of the participants belonged to the Irular community, those who are one among the particularly vulnerable tribal population. The Irulars are Tamil Nadu's second-largest ST. The Tamil term irul, which signifies night or darkness, was used to create the name Irula. While the other tribes speak various dialects, the Irular group only speaks Tamil.[11] According to the study, the percentages of men and women who took part in the study are 55.7% and 44.3%, respectively, out of which 57.5% were literates, which is more when compared to the average literacy rate for tribes in Tamil Nadu, 41.53%, and the average literacy rate of tribes in India, 47.10% (Census, 2011).

Table 5: Association between socio-demographic profile and QOL

Factors	Category	Number	Mean	SD	T statistics	P statistics
Domain 1						
Age	<45 years	177	58.03	7.68	0.892	0.021
	>45 years	123	57.25	6.88	0.910	
Sex	Male	167	56.64	7.53	4.205	0.073
	Female	133	59.64	6.69	4.149	
Education	Illiterate	126	57.25	7.38	-0.916	0.615
	Literate	174	58.04	7.36	-0.916	
Occupation	Unemployed	115	57.88	7.07	0.322	0.150
	Employed	185	57.60	7.56	0.327	
SES	Upper class	31	58.29	4.73	0.463	0.001
	Lower class	269	57.64	7.61	0.668	
Marital status	Unmarried	71	57.69	6.49	-0.024	0.006
	Married	229	57.71	7.63	-0.026	
Domain 2						
Age	<45 years	177	51.69	6.65	5.28	0.376
	>45 years	123	47.5	6.53	5.30	
Sex	Male	167	49.17	7.95	2.48	<0.001
	Female	133	51.06	5.11	2.37	
Education	Illiterate	126	46.36	4.31	-8.73	<0.001
	Literate	174	52.65	7.21	-9.421	
Occupation	Unemployed	115	46.44	3.95	-7.72	<0.001
	Employed	185	52.22	7.39	-8.79	
SES	Upper class	31	46.23	3.29	-3.27	<0.001
	Lower class	269	50.44	7.07	-5.75	
Marital status	Unmarried	71	45.83	3.14	-6.202	<0.001
	Married	229	51.31	7.22	-9.033	
Domain 3						
Age	<45 years	177	66.99	5.98	0.353	<0.001
	>45 years	123	66.66	10.1	0.324	
Sex	Male	167	64.92	8.20	6.531	<0.001
	Female	133	69.92	6.39	6.352	
Education	Illiterate	126	64.15	8.45	-5.251	0.044
	Literate	174	68.82	6.92	-5.087	
Occupation	Unemployed	115	64.27	8.16	-4.6	0.502
	Employed	185	68.46	7.35	-4.48	
SES	Upper class	31	59.13	4.97	-6.056	<0.001
	Lower class	269	67.7	7.72	-8.519	
Marital status	Unmarried	71	61.26	8.46	-7.38	0.008
	Married	229	68.59	6.90	-6.64	
Domain 4						
Age	<45 years	177	30.1	7.03	4.379	0.558
	>45 years	123	26.4	6.96	4.387	
Sex	Male	167	25.18	6.33	11.018	0.080
	Female	133	32.94	5.82	10.915	
Education	Illiterate	126	21.30	3.36	-29.646	0.307
	Literate	174	33.92	3.82	-30.263	
Occupation	Unemployed	115	20.7	2.9	-29.11	0.001
	Employed	185	33.5	4.07	-31.29	
SES	Upper class	31	17.23	1.587	-10.96	<0.001
	Lower class	269	29.9	6.41	-26.23	
Marital status	Unmarried	71	19.05	2.25	-18.93	<0.001
	Married	229	31.59	5.42	-28.01	

Independent t-test applied. P value<0.05 is significant

The highest literacy among tribes was reported in the state of Mizoram and in Lakshadweep, while the lowest was observed in Bihar (28.17) and Uttar Pradesh (35.13). The gap in literacy rate was found to be the highest in Tamil Nadu in 1991 and 2001. When compared to the average literacy rate in India among the general population (80.33%), the literacy rate of the tribal population seemed to be very low.[12] 61% of tribal women in the Nilgiris of Tamil Nadu were illiterate, remaining 23% completed primary school, 12% finished middle school, 4% high school, 1% higher secondary, and 3% graduation (Sathya S, 2006). This

is a crucial indicator of the backwardness of the Irular tribes and their poor socio-economic and vocational life conditions. Despite government initiatives and numerous reserves for tribal members, few respondents have completed high school and obtained a government position. There are schools nearby that provided higher secondary education. We found that according to the four domains such as physical, psychological, social, and environmental domains under WHOQOL, the results implied a higher percentage of poor QOL. The social domain includes support from family and friends, sexual fulfilment, and relationship satisfaction. Their physical score, which takes into account discomfort and pain as well as ability to work, sleep, and rest, is poorer. The burden of disease in tribal populations is tripled actually; it is quadrupled and encompasses both communicable and non-communicable diseases, in addition to malnutrition, mental illness, and addictions that are complicated by poor health seeking behaviors (M Mohan Kumar 2020).[13] An expert group on tribal health has made suggestions in response to growing requirements with the aim of closing the gap in tribal peoples' health status as soon as possible, preferably by the year 2027.[13] Additionally, it is determined that the environmental domain of QOL is highly correlated with marital status, monthly income, and the type of work. The perception that individuals with reasonably good incomes have better access to safety, opportunities for a few leisure activities, a better physical environment, and living conditions, as well as transportation and health services, is one of the possible explanations. Additionally, it is evident that they live in better accommodations and have higher QOL than people with lesser socio-economic levels.

We also found that gender (51.06% female participants), education (52.65% literate), occupation (52.22% employed), marital status (51.3% married), and socio-economic status (50.4% lower socio-economic status) were significantly associated with the psychological domain. The unmarried, divorced, separated, and widowed people reported to experience higher proportions of moderate and severe mental disorders (Siddharth Chowdhury 2023).[14] Female tribal people also contributed larger proportions of mental health concerns. Compared to married people, who reported 0.001% severe cases, the prevalence of severe mental illness is higher among those who are single (0.10%) and separated (0.20%). In our study, we found nearly 58% participants experiencing discrimination a few times a month. Furthermore, we discovered that members of under-privileged castes are more prone to accept unfair treatment as a fact of life and tended to keep their experiences of unfair treatment to themselves. Even after taking into account socio-economic status and other potential confounders, these findings are true. The relationship between socio-economic status and perceived discrimination or retaliation to unjust treatment, on the other hand, is weak or inconsistent. These results highlight the crucial role caste, regardless of the socio-economic status, continues to play in the day-to-day lives and inter-personal relationships of Indian tribes.

In India, the caste system is a sophisticated socio-cultural construct that significantly contributes to discrimination (Deshpande 2003).[15] Our findings show that individuals from lower castes are more prone to accept discrimination as a way of life in addition to being more likely to experience it. Therefore, it appears that the study's lower-caste participants face unrecognized prejudice. Even though caste and socio-economic status are closely related, presuming that they function as interchangeable combinations of health variables could mask some of the short- and long-term dangers faced by those from lower castes. In contrast to class, which may evolve during a person's lifetime, if not across generations, caste is particularly intransigent and carries an ever-present burden of being under-privileged and its related psychological and mental health costs. When attempting to distinguish the unique links of caste and class with perceived discrimination, it is important to take into account the implications for our understanding of the role caste plays in modern India. The administration of reservation systems, in which low-caste individuals are given priority in the provision of social services such as education and employment, is said to be the main objective of the caste classification in India, according to the Indian government (Vaid 2014).[16] According to our findings, caste discrimination still exists in India and may play a significant part in the social structure of contemporary India. Not many studies have been published regarding the QOL among tribal populations in India. Small sample sizes limit the accuracy of point estimates and prevent us from looking at interaction terms. Future research should examine the differences between the levels of discrimination experienced by people of different castes and classes, as well as whether those of lower caste and upper class experience discrimination at a higher rate than those of lower caste and lower class.

Conclusion

In this study, among the tribal population in the Chengalpattu district, on comparison of their QOL in the environmental and physical domains, they have poor social and psychological QOL. The Indian tribal population is dealing with a wide range of concerns and problems despite numerous government initiatives. They lead difficult lives and deal with issues relating to housing, finances, transportation, lack of basic amenities, debt, unemployment, and educational issues. As a result, we suggest methods to enhance the physical, social, and psychological well-being of this vulnerable population through stringent policy management. The other section on discrimination came to the conclusion that caste, not socio-economic status, is strongly related to how the tribal community in Chengalpattu district perceives discrimination and how they react to it. The evidence in this review supports the need for discussions of equity in international policy discussions such as those surrounding the Sustainable Development Goals. It additionally endorses the need for policy innovation, systematic and ongoing orientation programs, and support for the development of indigenous peoples.

Conflicts of interest

There are no conflicts of interest.

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