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International Journal of Current Research
Vol. 7, Issue, 03, pp.13948-13953, March, 2015

INTERNATIONAL JOURNAL OF CURRENT RESEARCH

ISSN: 0975-833X

RESEARCH ARTICLE

HEALTH ASPECTS OF IRULA TRIBES

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ARTICLE INFO

Article History:
Received 17th December, 2014
Received in revised form
20th January, 2015
Accepted 25th February, 2015
Published online 31st March, 2015

Key words:
Alcohol,
Tobacco,
Psychological health,
Irular.

ABSTRACT

Background: Health aspects of the tribes in general and Irular tribe in particular were less studied.
AIM: To study the health aspects of the Irular tribes. METHODS: 44 households were selected through census method from Devathanam pet and Poondhamalli village, Senji taluk, Villupuram dist, Tamilnadu.
Results: Few (15%) felt anxious often, 18% had sleep related problems often and 66% were currently using alcohol and tobacco.
Conclusion: Substance abuse is major public health concern among irulars.

INTRODUCTION

Proceedings of national seminar on tribal health in India (2013) reported common health problems of tribes were anemia, maternal and infant mortality rate, malnutrition, underweight among preschool children, kyasannur forest disease, poor immunization, inadequate spacing between children, delivery assistance by untrained persons, consanguineous marriage, sickle cell disease, difficulty in accessing, affording health care, manpower, poor hygiene, sanitation and poor health seeking behavior (Shruthi, 2013). She documented few communicable, tropical and non-communicable diseases as well in tribes of South India. Health indicators of these tribes were below national average. As per Census 2011, there are 10.43 crore (8.6%) tribes in India occupying 15% of geographical location. Tribes witnessed 23.66% growth rate in population during 2001-2011. Tribespresent in all over Tamilnadu, however they were largely concentrated in 12 districts spread across 2860 villages in 63 blocks. Tamilnadu has less than one percent (0.76%) of tribes (7,94,697) its total population in that 4,01,068 were males and 3,93,629 were females. There is sharp decline in the percentage of tribal population in the state when compared to census 2001 (1.04%) and 1991 (2%). In Tamilnadu, 6,60,280 tribes live in rural area their sex ratio is 981 which is lower than national average tribal sex ratio (990).

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Literacy rate of tribes in Tamilnadu is 54%. As per Census 2001, Salem district has the largest tribal population in Tamilnadu (1,03,921), followed by Thiruvannamalai (72,760) and Vizhupuram (63,920) and Pudukotai has least tribal population in the state (792). Though Nilagiri district has less than half of the tribal population of Vizhupuram district (28,373) but it occupies 3.72% of Nilagiri's total population (Census, 2001). Malayali are largest tribal population in Tamilnadu constituting 47.6% (3,10,042) of tribes followed by irulars 1,55,606 (24%). Irulars population growth during 1991-2001 was 12.1%.

Concept of health among tribes

Karevakkalu tribes in Karnataka believe that both physical and mental illness occurs when there is imbalance between natural and supernatural components of earth (Hegde, 2013). They believe that mental illness is caused by wrath of deity, evil spirit, witchcraft, evil eye. During 'Karevakkalu nota' sessions, process of counseling takes place which is effective in treating persons with neurosis.

Hygiene

As per census 2011, less than one-fourth (22.6%) of tribes have latrine facility at home and 77.7 defacte in open space, 17.3% of them have bathing facility at home, 87.5% of them use firewood for cooking. Access to health information: less than one-third of them have access to health information because only few of them have television (21.9%) and telephone

(31.1%). Hence it is difficult to extend health awareness. Few (19.7%) tribes get drinking water within in their premises. Nearly half of them (46.28%) do not drink fully treated water.

General Health of Tribes in India

Infant mortality rate(IMR) among tribes is 62.1, neo-natal mortality rate 39.9, child mortality rate 35.8, ANC checkup 70.5, 17.7% institutional deliveries, full immunization 31.3%, prevalence of anemia in women is 68.5% and very few (2.6%) households were covered by health insurance scheme. One-fourth (25.4) of them receive assistance by skilled person during delivery (NHFS, 2006). Few (2.8%) had cesarean delivery which was less compared to other communities this may be because of 82.3% of the tribal women deliver at home. Percentage of IMR among tribes is very high in Andhra (94.1), Gujarat (86), MP(95.6), Jharkhand (93), Chhattisgarh (90.6) and very less in Sikkim(28.9), Assam (59), Karnataka (45.8), J&K(34.3) when compared to general population(Census, 2011). In Tamilnadu, IMR among tribes is 61 (56M; 67F)(Census, 2001). Planning commission (2009-10) report on below poverty line status of tribes (47.4%)is complete hogwash. Similarly, it stated that more urban tribes (17.6%) live under below poverty line than tribes in rural areas (11.5%) of Tamilnadu which is absurd. Tribal ministry does not classify irulas as tribes with low literacy rate (<30%).

High prevalence of periodontal disease, poor oral hygiene, shallow periodontal pockets and deep pockets were found in Bhil tribes of Rajasthan (Kumar 2009). High sugar consumption between meals, dental fluorosis (12-23%), poor oral hygiene, and untreated dental disease were present in 5-12 year old koraga tribal children in Udupi district (Abhinav, 2011; Peter 2011). Tribal children showed a better oral health status than urban children (Rao 1993). Prevalence of hypertension (65%) and anemia 73%) was high among elderly langia tribes of Orissa. Goiter, hearing and visual disabilities, locomotor impairments were also found in considerable numbers and Asthma, TB and leprosy were less in them (Kerketta 2009). Obesity and alcohol induced liver dysfunctions were reported in koraga tribes (Vanisree, 2013). Common reason for mortality among gudalur tribes were cardiovascular diseases (34.3%) and suicide (8.2%). Out of 12606 samples, 28 had mental disorder (0.22%). Common admissions were owing to respiratory diseases and 44 new cases of Tuberculosis were detected in 2005 and 3.49% had TB (Aditi, 2009).

Highly significant difference found between males and females totos tribes with respect to psychiatric morbidity. It was found that out of 1021 totos 50 individuals were affected in which 35 were females and 15 were males. Overall psychiatric morbidity rate per one thousand was 49, out of which 31.28 for females and 28.30 for males. Total morbidity of the totos tribes was fairly high compared to the tribals living in the plains. Nandi *et al* (1977) found psychiatric morbidity in Lodha tribes were 32/1000, munda tribes 44.6/1000 and in urbanized tribes it was reported to be 42.9/1000 (Nandi *et al.,* 1992). Tribal studies so far have shown no significant difference between the rates of psychiatric morbidity among men and women (Nandi *et al*., 1977, 1980, 1992). But many studies on non-tribal communities living in different parts of India have found statistically significant difference in the rates of psychiatric morbidity between men and women (Reddy & Chandrasekar, 1998).

Significant differences were noted in totos tribes with regard to age and psychiatric morbidity. Persons with 35–45 (126/1000) and 45-59 (236/1000) years of age were found to be most vulnerable to psychiatric morbidity. One-third of the persons aged above 60 years were reported to be psychiatrically morbid (333/1000). The same trend was reported by Nandi *et al* (1977). Nuclear families had high rate of morbidity in general population (Reddy *et al.,* 1998) and similar trend was found in tribal population (Ghosh *et al*., 2004).

Health status of Irulars in Tamilnadu

Elderly tribal women of Kanchipuram district found to have hypertension (22%), followed by arthritis (17%), diabetes (10%), anemia, skin problems (12%), vision problems (18%) (Santhosam 2013). This is the first study on irula elderly woman which reported the health problems. The study also reported that 4% of irulars were Christians, 13% were widows. Fertility rates, death rate, birth rate, infant mortality rate of Irular in isolated area were higher than that of the Irular of exposed areas. Anomalies, disabilities and illness were higher in isolated group (55%) than exposed group (11%) (Saheb 2011).

Irulas face inadequate health care facilities, many do not have community certificate, patta for their residence. Other psycho-social problems such as poor housing condition, poor sanitation, early marriage, school dropout and alcoholism were common in kayarambedu village of kanchipuram district (Deepak kumar 2012). Prevalence of anemia and thinness among irula adolescent girls in thiruvallur district was 58% and 63.5% respectively and severity of both increases with age (Saravanakumar *et al.,* 2014). Other health problems such as typhoid (8%), HIV(3%) were reported in Irulars of Marakkanam (Gnanasekaran 2012). Studies found that prevalence of Syphilis among irulars in Gummidipundi (4%), Marakknam (10%) (Kanthesh, 2004; Gnanasekaran, 2012). Prevalence of syphilis in Kolli hill tribeswas 7% (Kalaivani *et al.,* 2001).

Overview of Tribal Ministry's health programmes (2013-2104)

MDI, Gurgaon carried out a comprehensive evaluation study in 10 states to assess the impact of NSTFDC assisted schemes. Study revealed upsurge in annual family income, access to health care. Tamilnadu, Andhra, Kerala did not participate in this study. 36 mobile dispensaries were sponsored in 15 States benefiting 3.5 lac tribes and 27 hospitals funded in 06 States benefiting 3 lactribes during 2013-14. From 2012, every year Rs. 23,30,550 is given to GMAI NGO in Poonthottam village of Coimbatore to run 10 bedded hospital and mobile dispensary. Twelfth five year has given strong focus on Nutrition supplementation to Vulnerable Tribal Group under conservation-cum development plan. Under progammes for promotion of voluntary action grant-in-aid is given to NGO's to enhance the reach of welfare schemes of Government and

fill the gaps in service deficient tribal places in education and health. Under revised scheme following categories were considered for funding; mobile dispensaries, ten bedded hospital, preventive health and sanitation programme, old age homes. A Coordination Committee has been set up under the Chairmanship of Secretary (Tribal Affairs) with Ministry of Health & Family Welfare representatives to ensure adequate investment in various schemes/programmes being implemented by them in particular relating to basic amenities for overall development of ST's. Grant from GOI would be given to support to Government hospitals in tribal areas under Art 275 (1). The development is envisioned in terms of providing basic facilities and services such as safe drinking water and health care under special central assistance programmer. High level committee was set up in 2014 to prepare report on health status of tribes in India. Regional consultation was held at Bhubaneswar on Sept 2013 focusing health aspects under tribal sub-plan.

Comparison of Budget allocation for Tribes under Tribal Sub-plan

MINISTRY/ DEPARTMENT	Budget 2012-13 TSP (in cr)	Budget 2013-14 TSP
Health & Family Welfare	1804	2391
AYUSH	13.40	21.38
AIDS Control	144.28	146.37

Crime against schedule tribes

In India, Kerala has the highest 25.58 and Tamilnadu has least crime rate against tribes (3.4/lac) in southern India. Number incidence of crime against tribes in high in Rajasthan (1351), Madhya Pradesh (1218), Odisha (688), Andhra (666). Goa (0.67), Himachal Pradesh (0.77), Manipur(0.22) has less than 1% and Uttarkhand (1.03), Arunachal Pradesh (1.04), West Bengal(1.72), Sikkim(1.94) has 1-2% crime rate and there is no crime against tribes in Assam, Meghalaya, Mizoram and Jammu (Annual Report, MoTA, 2014).

Need for the study

Vilupuram is the third most backward district in Tamilnadu next to Pudukotai, Tiruvannamalai. It has third largest tribal population (63,920) in the state. Though tribes constitute 2.16% of total population of the district their number is almost double the tribal population of Nilagiri district. Tribes were present in 30 district of Tamilnadu (Census, 2001). Among the tribes in Tamilnadu, Irulars occupy second largest tribes after Badugas (Bharathi and Mani, 2014). They were classified as one of the primitive tribe along with other five tribes in Tamilnadu. Tribes who live hilly terrain and remote areas have difficulty in accessing primary health care centers. Though there were 173 PHC's and 611 health centres serve in tribal areas, only 1-2% of tribe access hospitals for their health care need. There is paucity of literature regarding health aspects of irula tribes. In this given context, an attempt was made to study the health aspects of irula tribes in devathanam pet village, Senji taluk, Vilupuram district.

MATERIALS AND METHODS

Aim: To study the health aspects of the Irular tribes.

Objectives: To study the common health related problems with special insinuation to mental health. Descriptive research design was used. Study was community based and cross-sectional in nature. Expected sample size was 50. Study place: Devathanampet and Poondhamalli village, Senji taluk, Vilupuram district, Tamilnadu.As there were only 28 irula families residing in Devathanampet village; the researcher had included all the 16 households in another tribal settlement called Poondhamalli village, which is 6 km away from the main study place. Yet, researcher could get expected sample size, final sample size of study was 44 households. Data was collected from the one adult family member available during the time of household survey. Researcher made home-visit to collect the data. Observation and in-depth interview was used to collect data. Socio-demographic data sheet, Semi-structured interview schedule on health aspects were used as tools for data collection. Participants were explained about the study purpose and oral informed consent was obtained. The study was conducted during June 2001-Feb 2002 as a partial fulfillment of Master degree in Social Work. Descriptive statistics such as frequency and percentages were used for analyzing the data.

RESULTS

Table 1. Silhouette of Irulars

Sl. No	Silhouette of Irular tribes	Classifications	N	
			F	%
1	Oldness	< 25 years	03	07
		25-35	11	25
		35-45	12	27
		45-55	8	18
		55-65	07	15
		Above 65 years	03	8
2	Sex	Male	32	73
		Female	12	27
3	Schooling	No formal schooling	29	66
		Primary	04	09
		Middle	09	20
		High school	02	05
4	Vocation	Cultivation	19	43
		Construction work	08	21
		Snake catching	03	07
		Coolie	04	09
		Others	08	18
		unwaged	02	05
5	Earnings in Rs	< 1000	23	52
		1000 – 2000	11	25
		2000 – 3000	05	11
		3000 – 4000	03	07
		5000 above	02	05
6	Household Type	Nuclear	11	25
		Joint	31	70
		Extended	02	05

Table 1 describes the profile of the Irula. More than half of participants (52%) were in the age group of 26-45 years and have monthly income of Rs. <1000. Majority (66%) were illiterates, 43% were engaged in agricultural work. Majority (70%) were live in Joint family. All of them were live in exposed areas and practice Hinduism. Irular tribes were in harmony with other community people in the villages. 60 years before, they were lived in isolated areas (in mountains and below the mountains). Later migrated to exposed areas.

Table 2. Health Status of Irula Tribe

Sl No	*Health related problems in the last one month…*	Categories	Respondents	
			f	%
1	Feeling Anxious	Often	07	15
		Sometimes	16	36
		Never	21	49
2	Sleep related problems	Often	08	18
		Sometimes	24	55
		Never	12	27
3	Substance use	Tobacco use	13	29
		Alcohol use	09	20
		Alcohol & Tobacco	07	17
		Non- users	15	34
4	Common health problems	Fever	06	14
		Head ache	13	29
		Body ache	11	24
		Skin related	02	05
		No health problem	12	28
5	Preference of treatment	Allopathy	21	48
		Country Medicine	13	29
		AYUSH	04	10
		Others	06	13

Table 2 reveals health aspects of Irula Tribes: 72% of them faced common health problems such as fever, body ache, skin disease. 48% of them preferred allopathy treatment, remaining 52% preferred Indian medicine (AYUSH), religious prayers, country medicine and other form of traditional healing methods. 98% of them satisfied with their health condition. Present study showed 51% felt anxious sometimes or often, 18% of them faced sleep related problems often, 55% faced problems in sleep sometimes, and majority 66% of the Irula tribes were using alcohol and tobacco in the last one month.

DISCUSSION

This study revealed that alcohol and tobacco is major public health threat among irulas. This finding was in concordance with Sutapa (2005), she reported that chewing tobacco commonly found among Irula tribal women. 57% of tribal women were using substance (22% use tobacco, 31% use alcohol and 3% smoke). Seema (2008) found that 68% of them smoke beedi and cigarette, 44% of tribes consume alcohol regularly (Dhurva 2013). Sreeraj *et al*. (2013) reported that severity of alcohol dependence was significantly more among tribals and family history alcohol dependence was higher among tribals than non-tribals. Tribals significantly scored high in the reasons for drinking domains such as coping with distressing emotions and social enhancement.There was no significant difference between tribals and non-tribals with respect to mean age at onset of alcohol dependence, duration of dependence. Studies done on special populations such tribals, slum dwellers and migrant populations yielded a high prevalence rate of psychiatric disorders (Badamath *et al*., 2007). Present study revealed only one-third prefers country medicine such as herbal and indigenous medicines. This may be because of many irulars live in exposed areas hence they tend to assimilate belief systems and health care practices of neighbourhood. Tribal culture is rich is indigenous medicine, many studies were conducted in Tamilnadu about irulars indigenous medicinal knowledge. Tribal ministry need to introduce schemes to preserve irulars indigenous knowledge about medicine. Seema *et al*. (2008) found that nearly half of the tribals (41%) prefer herbal treatment, 28% allopathy, 20% home remedy and 15% witchcraft. Present study showed that common health problems of tribes were head ache (29%), followed by body ache (24%) and fever (14%). Similar findings were reported in beda tribes in literature their common health problems were head ache (18%) and body pain (55%) (Dhurva *et al.* 2013). There were no studies in literature which reported the sleep disturbance, anxiety and depression among tribes. More than half of them (55%) were having sleep disturbance sometimes, few of them (18%) were having often. This was the study which explored the sleep related problems among tribes. Sleep disturbance and feeling anxious may be attributed various psychosocial aspects and their pathetic living conditions.

In 1969, Lokur committee defined 'scheduled tribe' as indicative of primitive traits, distinctive culture, shyness of contact with the community at large, geographical isolation and backwardness. 'Shyness of contact' may not be applicable to tribes in present scenario. Owing to acculturation, modernization and globalization their distinctive culture is fading. Moreover as a result of urbanization, tribes migrate to urban areas for livelihood; in near future geographical isolation may not be their distinctive feature. By 2020, we need to come out with new definition of tribes, considering the rate of social change occurring in and around them; one cannot stick to the existing definition in forthcoming years. Efforts are been made to integrate them into mainstream of community life but by constitutional definition one anticipates to them to be shy, to be geographically isolated, to have primitive traits thereby we ourselves indirectly differentiate them.

Though Tamilnadu received president's notification of scheduled tribes order in September 1950, there were not many welfare schemes for tribes in Tamilnadu as compared other tribal areas such UP, Nagaland, Sikkim and Jammu Kashmir which received in president's notification in 1967, 1970, 1978 and 1989 respectively. After 1989, president did not notify scheduled tribes order to other states.

Some Observations

In the study area most women had institutional deliveries and there were only 7 deaths and no infant mortality reported in the last 35 years. There were incidence of multiple disabilities such as hearing, visual disabilities & seizure in a female who died at the age of 25 years. One person had oral cancer, he had history suggestive chewing tobacco who died at the age of 70 years, there was one incident of mortality under the age of five. There were incidences of self-selected marriage within & outside the community. Few Inter-caste marriages in them may be attributed to migration. Male youth who migrated to Chennai for employment had selected their female partners from other community. Primary health centre is situated in Gengavaram which is 6 km away and taluk hospital is 18 km away, district hospital is 56 km away and nearby tertiary care hospital is JIPMER which is situated 80 km away from their settlement. After 30 years of struggle, in the year 2013, irulars received their community certificate. When government officials come to examine the tribal status of irulas to issue

community certificate, they ask them to dance, to sing songs related to irulas and so on. No one was found to have poliomyelitis or other disabilities such as locomotor, leprosy, mental retardation, severe mental illness, terminal illnesses such as cancer, HIV/AIDS during the study period. Health seeking behavior is influenced by the community

Suggestions

Direct cash transfer of all tribal welfare schemes, health insurance would pave long way in improving health aspects and overall development of tribes. Implementation social welfare schemes should be equal to all the tribes in India, instead of focusing on particular tribes, because of their presence in large density and percentage.

Conclusion

It is observed that substance abuse is widely prevalent among irulas. Public health intervention is much needed in tribal settlements to address the psychological health and physical health care needs. Extreme poverty and low literacy level among irula could be attributed to their unaddressed health needs. Tribal ministry should give more emphasis on tribal health than their socio-economic development. Without addressing their health needs, their socio-economic development would be a mirage As saying goes, "health is wealth", tribal health is their wealth too.

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