

Health Status of Tribal Women of Bhadradi Kothagudem District in Telangana State

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ABSTRACT

Context: The district Bhadradi Kothagudem in Telangana has maximum number of tribal population. Highest burden on women's health is faced by rural India particularly tribal women due to gaps in access to health care services and triple burden of diseases.

Aims: To identify the health status of tribal women, their access to health care services and thereby throw a light on needs required for improving their health and wellness.

Settings and Design: Cross-sectional study was conducted in tribal communities of Koya in Dummugudem, Banjara in Burgampadu and Kondareddi in Dammapeta villages of Integrated Tribal Development Agency, Bhadrachalam in Bhadradi Kothagudem district, Telangana.

Methods and Material: Tribal women of reproductive age 15-49 years selected using stratified random sampling. Data collected through structured questionnaire from WHO demographic Health Survey (2018) and analysed using Statistical Package for Social Sciences (SPSS) version 25 and MS Excel 2010.

Statistical analysis used: Proportions, Pearson correlation coefficient and chi-square test.

Results: 75.8% tribal women have not diagnosed of any chronic illness, 35% women have general health issues. 80% women face hindrance in transport to reach health facility. 71.6% married women had vaginal type of deliveries and 70.8% had tubectomy method of contraception. More than 70% women have no knowledge on vector-borne diseases.

Conclusions: Low prevalence of chronic illness observed in older women. Regularly visiting RMPs were preferred over government health facilities. ASHAs play a major role in disseminating health information to tribal women.

Key-words: Health Status, Koya, Kondareddi, Banjara, RMPs, ASHAs.

INTRODUCTION

The Telangana State constitutes highest tribal population in Southern India-the district Bhadradi Kothagudem is a tribal belt with maximum number of tribal population in the State. ^[1] Influx of migrants, Left Wing Extremism, poor economic status, illegal liquor production, lack of access to amenities and education contributes to the increasing triple burden of diseases among tribal communities. ^[2] Highest burden on women's health is faced by rural India particularly tribal population due to gaps in access to health care facilities

and services, low quality infrastructure, lack of trained health workers. ^[3]

Health and well-being of women requires special attention as their health status is dependent majorly on socio-demographic issues like low-income, no proper education, early marriages, improper diet and lack in decision making. ^[4] Women particularly of reproductive age groups 15-49 are more prone to health challenges like high risk pregnancies, anemia, malnutrition, sexually transmitted diseases and other chronic illnesses. Women health status has direct impact on the child development and family health due to their traditional roles. ^[5]

As per District Fact Sheet of National Family Health Survey-4, majority of women in rural areas found anaemic and obese; early pregnancies found below age of 18 years. [6] The district has 29 primary health centers with area hospitals and big hospitals, yet more than 70% use private facilities. [7] Rural Health Statistics report, 2017 finds huge gap in health infrastructure and resources in tribal areas. [8] Sample Registration System survey finds drop in Maternal Mortality Rate to 81 from 92 in Telangana from 2011-2013. [9] But, there is near complete absence of data on disease conditions among tribal women of different communities.

Tribal women are at risk of early child births due to early marriages. [10] Nutritional intake and dietary practices among tribal pregnant women are comparatively very low to the national recommended standards. [11] Tribal population in the district rely on traditional practices of healing not just for general health issues but also for chronic illness. [12] Changing lifestyle patterns among tribal people is contributing to triple burden of diseases. Therefore, identifying current health status of tribal women and understanding their health seeking behaviour is significant in providing insights to policy makers, health officials for improving condition of tribal women in availing access to quality health care services.

OBJECTIVES

GENERAL OBJECTIVES

To analyze health status and health care needs of tribal women of Bhadradi Kothagudem district in Telangana State.

SPECIFIC OBJECTIVES

1. To identify the health problems of tribal women in the district.
2. To assess the health services for tribal women in the district and to identify any gaps in health service delivery.
3. To inquire their health seeking behavior towards common diseases or ailments.

4. To make appropriate recommendations for improving condition of tribal women in terms of health and wellness.

METHODOLOGY

STUDY DESIGN

The cross-sectional study design was used in the study.

Dependent Variable

1. Health status
2. Health care needs

Independent Variable

1. Health seeking behaviour
2. Access to health care services
3. Socio-demographic factors

STUDY AREA

The study has been conducted at the Dummugudem, Burgampadu and Dammapeta villages of Integrated Tribal Development Agency, Bhadrachalam in Bhadradi Kothagudem district, Telangana.

STUDY POPULATION

The study population included tribal women ageing 15-49 years residing in villages of Integrated Tribal Development Agency, Bhadrachalam in Bhadradi Kothagudem district, Telangana.

SAMPLE SIZE

The sample size for this study was 120 participants belonging to different tribal groups of study area.

INCLUSION CRITERIA

1. Tribal women aged 15-49 years from densely populated Koya tribe from Dummugudem, Banjara tribe from Burgampadu and Kondareddi tribe from Dammapeta villages were selected.
2. Health professionals like ASHAs, ANMs and women sarpanch leaders among study areas were included.

EXCLUSION CRITERIA

1. Minority tribal communities Yerukula and Yanadi were excluded.
2. Migrant tribes from neighboring states were excluded.
3. Tribal women above 49 years were excluded.

SAMPLING TECHNIQUE

The tribal women were selected using stratified random sampling technique.

Tribe	Tribal village	Sample Size (120)
Koya	Dummugudem	55
Banjara	Burgampadu	55
Kondareddi	Dammapeta	15

DATA COLLECTION METHODS

The following tools and techniques were used:

1. Primary data was collected through structured interview schedule, using questionnaire from WHO demographic health survey (DHS,2018)
2. Few questions were added based on secondary data like, state specific initiatives in health service delivery in study area.

The questionnaire categorized into three parts:

1. **Socio-demographic status:** Birth place, age, occupation, income, marital status and number of family members.
2. **Medical history:** Number of children, pregnancies, births, type of delivery and contraception method.
3. **Health seeking behaviour:** Dietary habits, accessibility to healthcare services and met and unmet health care needs.

DATA ANALYSIS

Data entry and analysis was done using SPSS version 25 and MS Excel 2010

ETHICAL CONSIDERATION

Permission to conduct study was taken from ITDA Bhadrachalam Project Officer, Assistant Project Officer and District Medical Health Officer. Consent from the study participants was taken while conducting study.

RESULTS & FINDINGS

We found that tribal women received 800-1200 rupees as incentives by government for tubectomy. In some women sarees, steel water pots were gifted to promote tubectomy.

Table 1: Socio-Demographic Status of Study Participants (N=120)

Variables	N	Percentage
Age		
15-19	25	20.8
20-24	15	12.5
25-29	19	15.8
30-34	8	6.7
35-39	21	17.5
40-44	11	9.2
45-49	21	17.5
Education		
No schooling	59	49.2
Elementary school (1-8)	16	13.3
Higher education (9-12)	34	28.3
College/University	11	9.2
Marital Status		
Unmarried	29	24.2
Married	91	75.8
Average Monthly Income (in rupees)		
1000-2000	2	1.7
2000-4000	23	19.2
4000-6000	24	20
More than 6000 rupees	71	59.2
Occupation		
Agriculture	18	15
Farm labour	52	43.3
Government employee	5	4.2
Private employee	2	1.7
Unemployed/Housewife	19	15.8
Student	24	20

Table 2: Medical History of Study Participants (N=120)

Variables	N	Percentage
Type of delivery		
Vaginal	63	52.5
Caesarian	15	12.5
Caesarian Birth After Vaginal (CBAV)	10	8.3
Not applicable (Unmarried/Recently married)	32	26.7
Contraception Method		
Tubectomy done and money received	12	10
Tubectomy done but money not received	43	35.8
None	37	30.8
Not applicable (unmarried women)	28	23.3

Table 3: Dietary habits of Study Participants (N=120)

Diet	N	Percentage
Milk		
Fresh	8	6.7
Packed	53	44.2
None	59	49.2
Beverages		
Buttermilk	24	20
Finger millet malt	58	48.3
Cool drinks/Others	2	1.7
None	36	30
Grains		
Rice	75	62.5
Wheat	1	0.8
Both rice & wheat	13	10.8
Other grains	9	7.5
All of them	22	18.3
Fruits		
Yes	89	74.2
No	31	25.8
Leafy vegetables		
Yes	116	96.7
No	4	3.3
Meat (Chicken, mutton, dried fish & prawns)		
Yes	118	98.3
No	2	1.7
Eggs		
Hen	112	93.3
Duck	3	2.5
Both hen & duck	5	4.2
Foods made from beans, peas, lentils, pulses		
Yes	117	97.5
No	3	2.5
Type of oil/fat		
Sunflower oil	71	59.2
Palm oil	17	14.2
Cottonseed oil	17	14.2
Mustard oil	13	10.8
Alternative usage	2	1.7

We noticed that finger millet malt is consumed as summer drink by all three tribal women. Few women in Kondareddi

tribe mentioned about ravi tree leaves used for cooking and also consume deer and pig as meat.

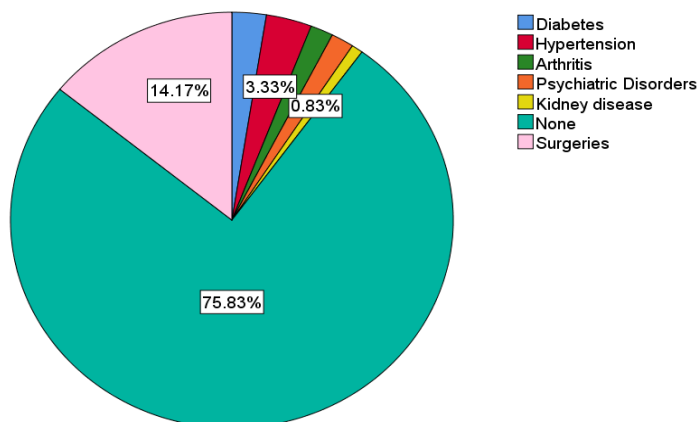


Figure 1: Medically diagnosed chronic illness of study participants

The study participants mentioned major surgeries undergone in thyroid, gynecological, knee, stomach and piles.

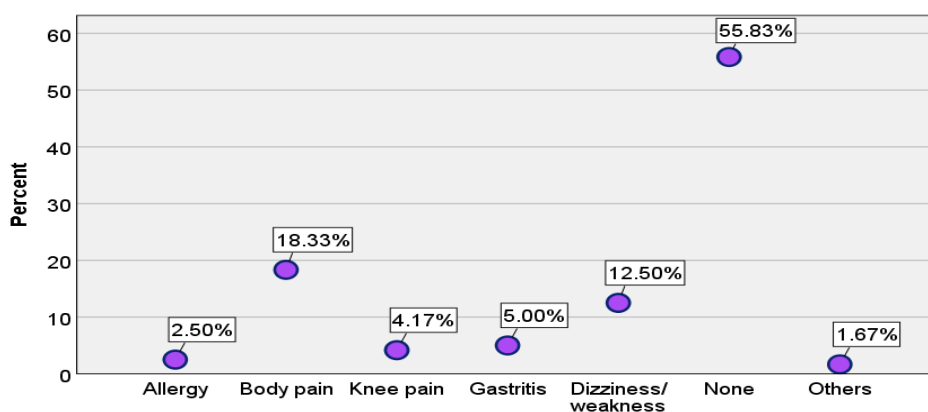


Figure 2: General health issues of study participants

Other health issues among study participants include ear pain, palpitations and bumps on head, waist, and neck besides knee pain, gastritis, and allergy.

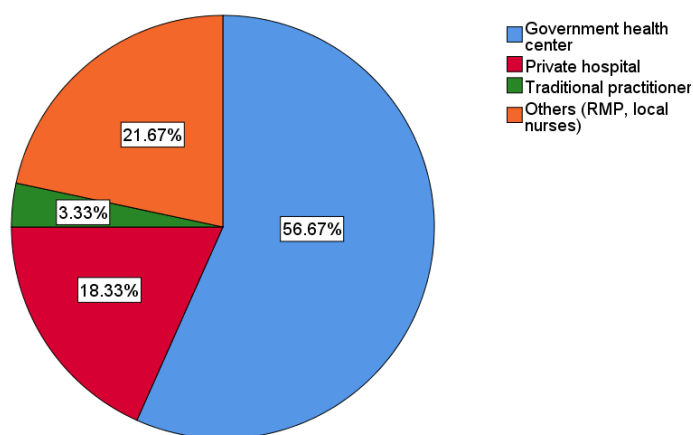


Figure 3: Health service preference of study participants

We noticed that, Registered Medical Practitioner visit tribal villages frequently and charge minimal fees for health services and medicines.

Health care service delivery gaps faced by study participants

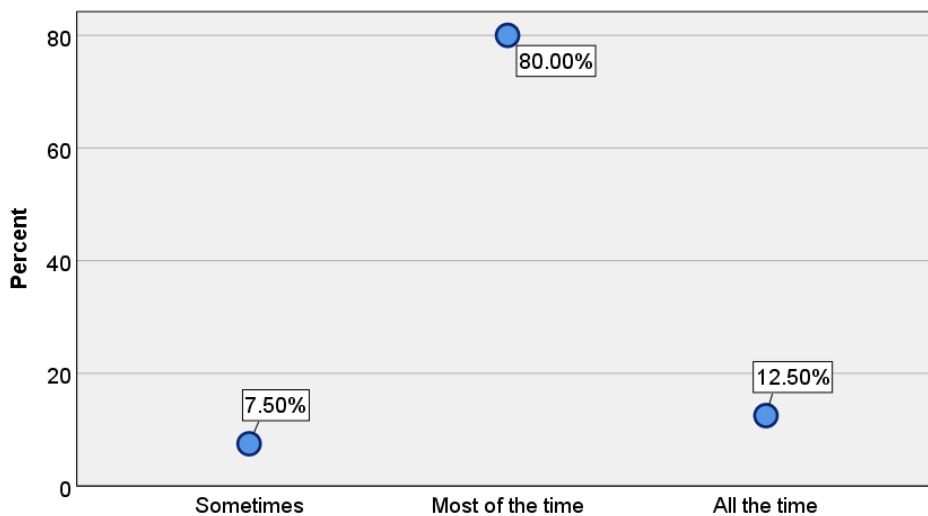


Figure 4: Health information received by study participants through health care providers

Figure 4 shows 80% of study participants usually receive health information from health care providers while rest receives occasionally. We observed that ASHAs were the primary source of health information providers at the village level.

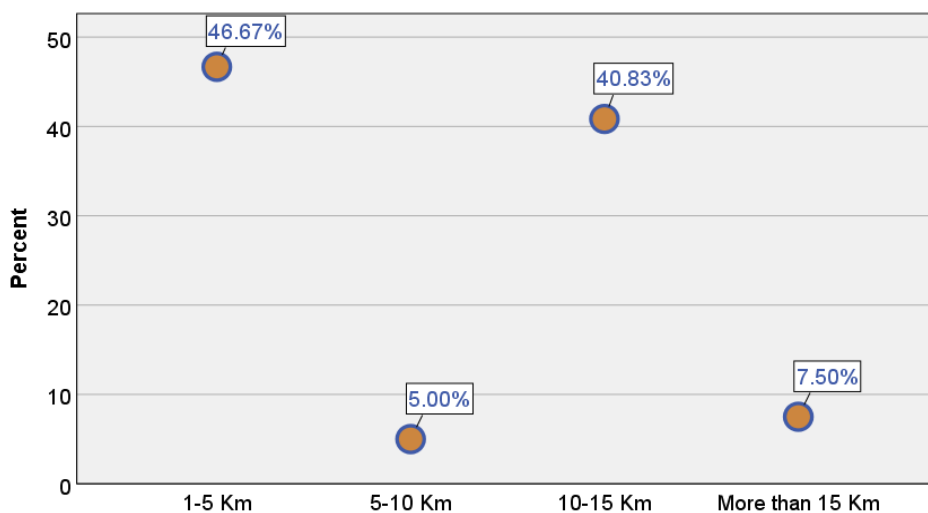


Figure 5: Travel distance to health care facility from study participant's homes

We noticed that tribal women reside in remote villages of Dummugudem and Dammapeta where bullock carts were used as a mode of transport though few two wheelers were found. Participants from Dammapeta mentioned about vehicle provided by ITDA for transport to health facility which was non-functional. In Burgampadu ANMs husband's auto was source of transport during any emergency.

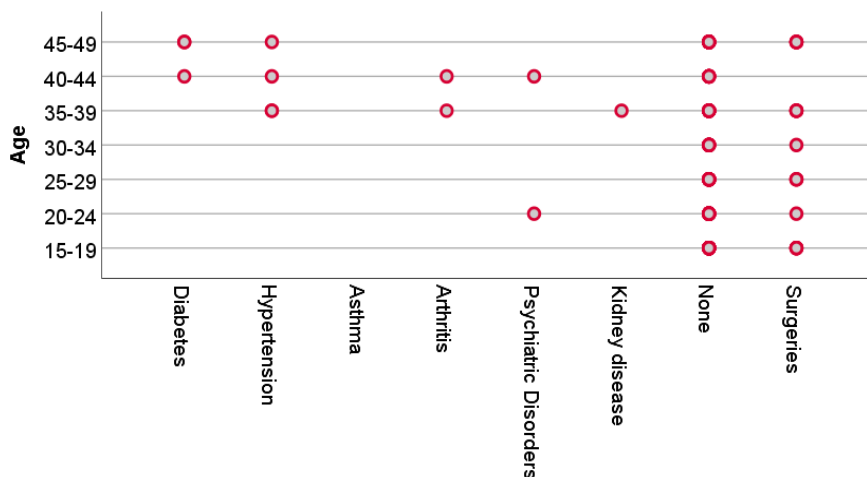


Figure 6: Correlation between medically diagnosed chronic illness and age groups of study participants (N= 120)
 ** Correlation is significant at the p= 0.01 level (2-tailed)

A Pearson product-moment correlation coefficient was computed to assess the relationship between medically diagnosed chronic illness and age groups of study participants. There was a positive correlation, $p= 0.003$

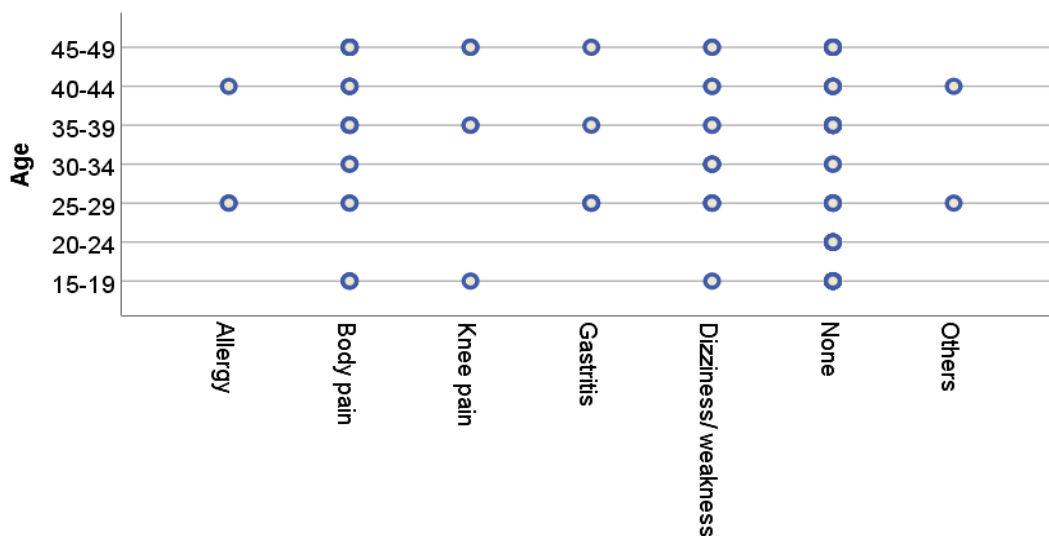


Figure 7: Correlation between general health issues and age groups of study participants (N= 120)
 ** Correlation is significant at the p= 0.01 level (2-tailed)

A Pearson product-moment correlation coefficient was computed to assess the relationship between general health issues and age groups of study participants. A correlation was found, ($p= 0.001$).

Table 4: Association between general health issues and dietary habits of study participants

Dietary habits	Milk
General health issues (P- value)	0.003

** Asymptotic significance at the $p<0.05$ (2-sided)

Pearson chi-square test was performed to assess association between general health issues and dietary habits of study participants and the results show highly significant association, $p=0.003$ for milk diet.

Association between health service needs and health service gaps

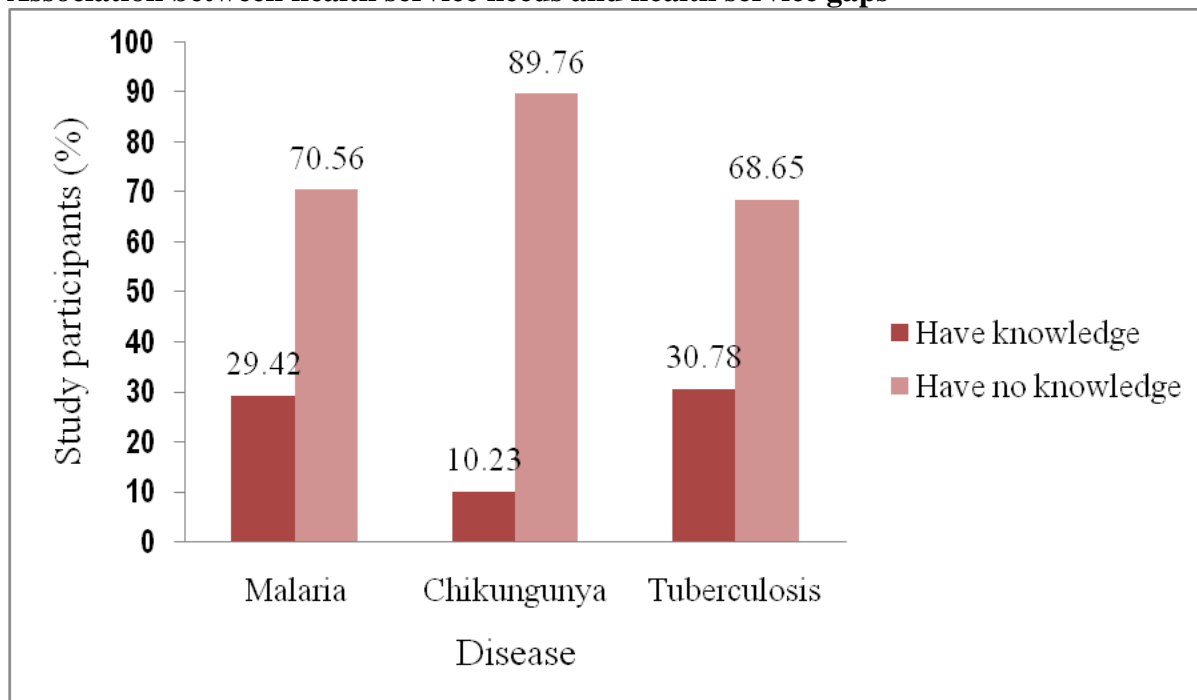


Figure 8: Knowledge of study participants on symptoms, causes and prevention of Malaria, Chikungunya, tuberculosis

DISCUSSION

A study conducted in 9 states consisting of tribal population has found out high prevalence of hypertension among tribal women. [13] The present study shows low prevalence of hypertension, diabetes, arthritis followed by psychiatric disorders and kidney diseases. (Figure 1) The present study correlates with the study in Central India where majority of health issues related to surgeries. [14] A positive correlation was observed in this study on chronic illness increase as age increases. (Figure 6)

A study conducted in 800 tribal households of Bhadrachalam in Telangana State has found out Chronic Energy Deficiency in tribal women as compared to tribal men suggesting further investigation. [15] This study also signifies the tribal women suffering with body pains, dizziness and weakness besides knee pain and gastritis as other health issues. (Figure 2) This study found a correlation between health issues like knee pain increase as age increases but, general health issues like body pain, dizziness and weakness observed in almost all age groups. (Figure 7)

Household healthcare utilization and expenditure in Telangana State shows 70% of rural population in Khammam district, prefer private health facilities over area hospitals, PHCs. [7] This study reveals tribal women, majorly prefer government facilities followed by local RMPs and private hospitals. (Figure 3) Another study in selected households in Villages of Rajasthan have found tribal people preferred traditional practitioners as first preference. [16] The present study shows a huge drop in tribal population seeking traditional healing methods of health care. Similar situation was observed in a study conducted in Central India where tribal people preferred to approach PHCs and CHCs over traditional methods. [17] The present study found an association between preference choices of health service among tribal women with the distance from home to health facilities. The study observed significant association with majority tribal women availing services from nearby PHCs or Sub-Centers compared other tribal women whose homes located more than 10km away from health facility.

A study based on tribal health inequity observed, primitive tribes in India lacked motivation to visit health facilities due to low income and lack of transportation. [18] Another study on PVTGs in Tamil Nadu also revealed health seeking behaviour of these tribes depended on inaccessibility and out of pocket expenditures. [19] The present study found an association between less monthly income earned by tribal women and ignoring follow up appointment as compared to slightly higher amount and visiting follow up appointment.

The report of the Comptroller and Auditor General of India on general and social sector reported, Telangana State with 45% caesarean method of birth deliveries being highest in the country. [20] This study shows majority of tribal women had normal deliveries over caesarean and CBAV. (Table 2) An association was found between medical history and age groups of study participants where caesarean and CBAV deliveries comparatively high in 15-34 over 35-39 age groups.

A cross sectional study on women choice of contraception conducted in Government Maternity Hospital, Tirupati, Andhra Pradesh found out 94% of women preferred tubectomy method of sterilization and found lacking in knowledge of vasectomy, decision making power, concern of husband's health. [21] Another study on knowledge of contraceptives in tribal people of centrally hilly states found that knowledge of temporary contraceptive use is low among them adding to unmet need for family planning. [22] The present study observed 45% of women preferred tubectomy and it is the only method of sterilization known to these tribal women. (Table 2)

In a study on milk consumption association with bone health have found out significant relationship of reduced Osteo Arthritis progression among women suggesting for further findings. [23] In this present study an association between general health issues like body pain,

dizziness and knee pain and milk consumption found significant relationship where percentage of non-milk consumers over milk consumers found to suffer with these health issues. (Table 4)

A study conducted in tribal population in Madhya Pradesh found out tribal people had knowledge on Malaria compared to Tuberculosis- The study confirmed majority of health information received by them is through health functionaries. [17] The present study found an association between knowledge on symptoms, causes and prevention of Dengue with the type of health education received by the tribal women. It is observed that 66% tribal women have no knowledge though received health education. This study also found an association between knowledge on Dengue with number of times health information received through health care providers. This study also found majority of tribal women are not aware on knowledge of Malaria, Chikungunya and Tuberculosis. (Figure 12) The study suggests health care providers are main disseminators of health information and type of health information received have an impact on knowledge of communicable diseases.

CONCLUSION

The findings suggest, though low prevalence of chronic illness yet majority of disorders from hypertension, diabetes, arthritis to psychiatric disorders persists among tribal women.

Majority of tribal women belonging to different age groups have in common - body pains, knee pain, dizziness and weakness as general health issues.

A major observation on drop in tribal women seeking traditional methods of healing and rise in seeking services through government health facilities.

ASHAs role of dissemination of health information at grassroots level has a significant effect on tribal women health condition and knowledge of vector borne diseases like Dengue, Malaria and

Chikungunya and decision making in family planning.

Recommendations

1. Screening of major non-communicable diseases could prevent tribal women from chronic illness like diabetes, hypertension, arthritis and kidney diseases.
2. Intake of proper nutritious diet could decrease general health issues among tribal women.
3. ANMs could be skilled as they are familiar with the tribal people and contribute in providing better health care and access.
4. ASHAs could be trained from time to time to enhance their knowledge on disease condition, prevalence and prevention methods to promote health information and educate tribal women.

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How to cite this article: Chandana KR, Kumar R. Health status of tribal women of Bhadradi Kothagudem district in Telangana state. *Int J Health Sci Res*. 2020; 10(1):53-62.
