

A study on assessment of physical, environmental and personal hygienic standard in tribal pregnant women of Punjab region

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ABSTRACT

Hygienic standards in pregnant female is of particular concern as it directly affect the outcomes of pregnancy. The objective of the study is to assess the physical, environmental and personal hygienic standard in tribal pregnant women of Punjab region. The interview with structured questionnaire was used to assess the hygienic standard in this group. The present study showed poor personal and environmental hygiene of tribal pregnant women. The majority 128 out of 300 (42.6%) are living in bad physical and environmental hygienic conditions, 139 out of 300 (46.3%) are living in average conditions and only 33 (11%) are living in good hygienic conditions. Study shows that majority 264 out of 300 (88%) followed average personal hygiene practices and 36 out of 300 (12%) showed bad personal hygiene practices. None of the respondent was observed to practice a good personal hygiene. It showed that the respondents need to be aware of better physical, environmental and personal hygiene practices.

Key words: Pregnant women, Tribal, Physical hygiene, Environmental hygiene, Personal hygiene.

INTRODUCTION

Tribal population constitute around 8.6% of total Indian population. Majority of the tribes are identified on the basis of their origin. Each tribes had its own tradition, culture, beliefs, habits and living styles (Kumar et al., 2015). 90% of Indian tribes are living in rural and remote areas. The socio-demographic data shows the poor position of the tribes in comparison to other population of India (Nathan et.al., 2012). The health status of the tribal population in India is very poor due to widespread poverty, illiteracy, malnutrition, absence of safe drinking water, poor personal and environmental living conditions, poor maternal and child health services and ineffective coverage of national health and nutritional services (Ramana et.al., 2014). Tribal pregnant women do not follows the personal and environmental hygienic standard in india, majority of them are living in mud houses. They are not maintaining their personal hygiene for daily activities like washing hands before meal, food preparation, after using latrine, and daily washing of clothes (panda et al., 2021). Tribal groups did not install the toilet system at their homes and they choose open defecation system (Pradhan 2015). Water borne diseases are more prevalent among them as they are using tube well or bore well water for drinking and cooking purpose without any purification (saha et al., 2020). Lack of awareness regarding menstrual hygiene is a main reason for irregular menstrual cycle, genitourinary infections and other complications during pregnancy (Sridhar et al., 2022).

WASH (water, sanitation and hygiene) practice in tribal population is very poor due to absence of safe drinking water, open defecation system and poor hygiene (Reddy et al., 2017). Poor personal and hygienic conditions has direct impact on outcome of pregnancy leading to high rate of infections, miscarriage, abortion, low birth weight baby and maternal mortality (Vadnerkar et al., 2017). Tribal groups prefers home delivery by untrained dai under unhygienic circumstances, making them more prone for complications (begum et al., 2017). Other contributory factors like illiteracy, poor socioeconomic status and poor government policies further worsen hygienic standard of this groups (Ramesh naik 2016).

Objective of the study: To assess the physical, environmental and personal hygienic standard in tribal pregnant women of Punjab.

METHODOLOGY: The research conducted was both qualitative and descriptive. The interview method was used to assess awareness regarding hygienic practices during pregnancy in tribal pregnant women. Total 300 pregnant female were selected for sample population from four different tribes. Sample were selected from Jalandhar, Nakodar and Kapurthala districts. Four different tribes were Mazabi, Gujjars, Sansi and Bazigar. structured questionnaire was used as research tool. Questions were related to hygienic practice such as condition of house, water supply, drainage system, availability of toilet and sewage, pest controls, habits of hand washing and personal hygiene. These questions which were interviewed to pregnant women helped researcher to assess hygienic standard among them. To analyse the data the software used was Statistical Package for the Social Sciences (SPSS 22.0).

RESULTS:

1.Physical & Environmental hygienic standard

This section includes the results related to the physical and environmental hygiene practices that the respondents were following.

Table 1: Frequency and Percentage Distribution of Respondents according to the Availability of the Toilet in their House (n=300)

Availability of the Toilet	Frequency	Percentage
Not Available	274	91.33
Available	26	8.67

Table 1 shows the trend of availability of toilets in the homes. The majority of the respondents 274 (91.33%) did not have toilets in their homes. Around 26 (8.67%) had toilets available at their homes.

Table 2: Frequency and Percentage Distribution of Respondents according to the Availability Sewage Connectivity with their House (n=300)

Sewage Connectivity	Frequency	Percentage
Available	300	100

Table 2 shows the trend of availability of sewage connectivity in their homes. All of the respondents 300 (100%) have availability of sewage connectivity in their homes.

Table 3: Frequency and Percentage Distribution of Respondents according to the Waste Collection Facility in their Area (n=300)

Waste Collection Facility	Frequency	Percentage
Available	300	100

Table 3 shows the trend of availability of waste collection facility in their areas. All of the respondents 300 (100%) have availability of waste collection facility in their areas.

Table 4: Frequency and Percentage Distribution of Respondents according to the Pest Control Facility in their Area (n=300)

Pest Control Facility	Frequency	Percentage
Not Available	267	89
Available	33	11

Table 4 shows the trend of availability of pest control facilities in their areas. The high majority of the respondents 267 (89%) did not have availability of pest control facilities in their areas. Whereas, availability of pest control facilities was there in residential areas of few of them 33 (11%).

Table 5: Frequency and Percentage Distribution of Respondents according to the Drinking Water Facility in their Area (n=300)

Drinking Water Facility	Frequency	Percentage
Not Available	233	77.67
Available	67	22.33

Table 5 shows the trend of availability of drinking water facilities in their areas. The majority of the respondents 233 (77.67%) did not have availability of clean drinking water facilities in their areas. Around 67 (22.33%) had the availability of of the same. The most of the respondents did not have facility of safe drinking water.

Table 6: Frequency and Percentage Distribution of Respondents according to their Habit of Boiling Water before Drinking (n=300)

Boil Water before Drinking	Frequency	Percentage
Always	196	65.33
Never	104	34.67

Table 6 shows the trend of habit of boiling water before drinking. Out of 300 respondents, 196 (65.33%) use practice of boiling water before drinking. 104 (34.67%) respondents don't boil water before drinking. The majority of the respondents have habit of boiling water before drinking.

Table 7: Frequency and Percentage Distribution of Respondents according to the Availability of Chulha/Gas Stove in their House (n=300)

Chulha/Gas Stove in their House	Frequency	Percentage
Available	70	23.33
Not Available	230	76.67

Table 7 shows the trend of availability of Chulha/Gas Stove in their homes. The majority of the respondents 230 (76.67%) don't have the availability of Chulha/Gas Stove in their homes. Around 70 (23.33%) have the availability of the Chulha/Gas Stove in their homes. The majority of the respondents don't have the availability of Chulha/Gas Stove in their homes. Thus, most of them cook food on temporary Chullha prepared by using bricks.

Table 8: Frequency and Percentage Distribution of Respondents according to the Availability of Breathable Air while using Chulha/Gas Stove (n=300)

Breathable Air while using Chulha/Gas Stove in House	Frequency	Percentage
Available	37	12.33
Not Available	263	87.67

Table 8 shows availability of breathable air while using Chulha/Gas Stove. The majority of the respondents 263 (87.67%) don't have the availability of breathable air while using Gas/Stove. Around 37 (12.33%) have the availability of breathable air while using Gas/Stove. The majority of the respondents don't have the availability of breathable air while using Gas/Stove.

Table 9: Frequency and Percentage Distribution of Respondents according to their Location of House (n=300)

Location of House	Frequency	Percentage
Near Industry, Sewage, Waste Dumping Area, Agriculture Farm	300	100

Table 9 shows trend of location of houses. The majority of the respondents 300 (100%) have the availability of location of houses near Industry, Sewage, Waste Dumping Area and Agriculture farm. It indicates that the respondents were living in the vicinity of air, land, noise pollution, that slowly and gradually might affect their physical and mental health both.

Table 10: Frequency and Percentage Distribution of Respondents according to the Smoke in their Kitchen (n=300)

Smoke in Kitchen	Frequency	Percentage
Smoke in Kitchen	196	65.33
No Smoke in Kitchen	104	34.67

Table 10 shows the trend of smoke in their kitchen. The majority of the respondents 196 (65.33%) agrees to have smoke in their kitchen. Around 104 (34.67%) disagrees to have smoke in their kitchen. The reason could be that they might be cooking food outside their

kitchen i.e. outside their shelter, verandah or so on. The majority of the respondents agree to have smoke in their kitchen.

Table 11: Frequency and Percentage Distribution of Respondents according to the Mould on their House Walls and Other Surfaces (n=300)

Mould	Frequency	Percentage
Present	143	47.67
Was Not Present	157	52.33

Table 11 shows the trend of mould on their house walls and other surfaces. The majority of the respondents 157 (52.33%) agrees that they don't have mould on their house walls and other surfaces. Around 143 (47.67%) agree that they have mould on their house walls and other surfaces. The majority of the respondents agrees that they don't have mould on their house walls and other surfaces.

Table 12: Frequency and Percentage Distribution of Respondents according to the Damage in their Home Water System (n=300)

Home Water System Damage	Frequency	Percentage
Damage	167	55.67
Was Not Damage	133	44.33

Table 12 shows the trend of damage in their house water system. The majority of the respondents 167 (55.67%) agrees that they have damage in their water system. Around 133 (44.33%) agree that they don't have damage in their home water system. The majority of the respondents agrees that they have damage in their water system.

Table 13: Frequency and Percentage Distribution of Respondents according to the Presence of Musty/Mouldy Odour in Home (n=300)

Mouldy Odour	Frequency	Percentage
Was not present	39	13
Present	261	87

Table 13 shows the trend of presence of musty/mould odour in their homes. The majority of the respondents 261 (87%) agrees that there exist the musty/mould odour in their homes. Around 39 (13%) agree that the musty/mould odour was not there in their homes. The majority of the respondents agrees that there was presence of musty/mould odour at their homes.

Table 14: Frequency and Percentage Distribution of Respondents according to the Presence of Peeling paint on walls and sills at their home (n=300)

Peeling paint on walls and sills	Frequency	Percentage
Present	278	92.67
Was Not Present	22	7.33

Table 14 shows the trend of presence of peeling paint on walls and sills in their homes. The majority of the respondents 278 (92.67%) agrees that the paint on the walls of their houses were peeling off and sills were also existed there. Around 22 (7.33%) agrees it does not exist at their homes. The sills on the wall increases the humidity in the houses and also exposes to many bacterial infections.

Table 15: Frequency and Percentage Distribution of Respondents according to the Presence of Mice or rats at their home (n=300)

Mice or rats at Home	Frequency	Percentage
Present	122	42.67
Was Not Present	178	57.33

Table 15 shows the trend of presence of mice or rats in their homes. The majority of the respondents 178 (57.33%) agrees that there is no presence of mice or rats in their homes. Around 122 (42.67%) agree there is presence of mice or rats in their homes. The majority of the respondents agrees that there is no presence of mice or rats in their homes. The presence of mice or rats indicates the poor hygienic condition of their house.

Table 16: Frequency and Percentage Distribution of Respondents according to the Presence of Cockroaches at their home (n=300)

Cockroaches at Home	Frequency	Percentage
Present	300	100

Table 16 shows the trend of presence of cockroaches in their homes. All of the respondents 162 (54%) agreed that their homes were infested with cockroaches. These insects spread the bacteria on the surface and are able to infect humans with dangerous diseases.

Table 17: Frequency and Percentage Distribution of Respondents according to the Passive Smoking by them at their home (in Hours) (n=300)

Passive Smoking	Frequency	Percentage
Present	231	77
Was Not Present	69	23

Table 17 shows the trend of presence of passive smoking by them in their homes. The majority of the respondents 231 (77%) agree that they did passive smoking in their respective homes. However, around 69 (23%) of them disagree to the same. The data indicates that the majority of the respondents were consuming tobacco by passive smoking. It might have a bad effect on their lungs and respiratory system.

Table 18: Frequency and Percentage Distribution of Respondents according to the Physical and Environmental Hygiene Condition at their Home (n=300)

Physical and environmental hygiene	Frequency	Percentage
Good	33	11
Average	139	46.33
Bad	128	42.67

Table 18 shows the trend of presence of physical and environment hygiene conditions in their homes. Out of 300 respondents, 139 (46.33%) agrees that there is an average presence of physical and environment hygiene conditions in their homes. Around 128 (42.67%) agree there is bad of physical and environment hygiene conditions in their homes and around 33 (11%) agrees to have good of physical and environment hygiene conditions in their homes. The majority of the respondents agrees that there is an average presence of physical and environment hygiene conditions in their homes.

2. Personal Hygiene Practices

This section throws light upon the personal hygiene practices followed by the respondents. It will include the data regarding the hygiene practices followed to maintain the cleanliness of their body.

Table 19: Frequency and Percentage Distribution of Respondents according to their Vaginal Hygiene Practices (n=300)

Vaginal Hygiene Practices	Always		Never	
	F	%	f	%
Wear cotton undergarments (Panties)	237	79	63	21
Change undergarments one time a day	300	100	0	0
Change undergarments two times a day	0	0	300	100
Wash vaginal area with soaps	300	100	0	0
Wash vaginal area with water only	300	100	0	0
Trim pubic hair with scissors	122	42.67	178	57.33
Trim pubic hair with cream	14	4.67	286	95.33
Trim pubic hair with waxing	0	0	300	100

Table 19 shows the frequency distribution of Vaginal Hygiene Practices. It reveals that Majority of the respondents 237 (79%) wore cotton undergarments (panties). Whereas 63 (21%) never wore cotton undergarments. Moreover, all the respondents 300 (100%) changed undergarments once in a day. It also revealed that none of the respondents changed undergarments twice a day. However all of them washed vaginal area with soap and water. Furthermore, it was found that a little more than forty percent of them trimmed pubic hair with scissors (42.67%) whereas 178 (57.33%) never used scissors to trim the pubic hairs. However, very few of them used cream to trim their pubic hair (4.67%). All of the respondents never used wax to remove pubic hair.

Table 20: Frequency and Percentage Distribution of Respondents according to their Breast Hygiene Practices (n=300)

Breast Hygiene Practices	Always		Never	
	F	%	f	%
Wipe away the fluid discharge	282	94	18	6
Wash breast regularly	300	100	0	0
Wear cotton undergarments (Bras)	272	90.66	28	9.33

Table 20 shows the frequency distribution of Breast Hygiene Practices. It reveals that Majority of the respondents 282 (94%) always wipe away the fluid discharge. Whereas 18 (6%) never wipe the fluid discharge away. Moreover, all the respondents 300 (100%) always washed their breasts regularly. It also revealed that majority of the respondents 272 (90.66%) wore cotton undergarments (Bras), whereas one-tenth of the respondents 28 (9.33%) never wore cotton undergarments (Bras).

Table 21: Frequency and Percentage Distribution of Respondents according to their Oral Hygiene Problems and Practices (n=300)

Oral Hygiene Practices	Always		Never	
	F	%	f	%
Pain in gums	168	56	132	44
Inflammation of gums	264	88	36	12
Brush once a day	286	95.33	0	0
Brush twice a day	35	11.66	265	88.33
Brush thrice a day	0	0	300	100
Gargle after breakfast/lunch/dinner/snacks	300	100	0	0

Table 21 represents the frequency distribution of the oral and dental hygiene of the respondents. Pain in the gums was observed by more than half of the respondents 168 (56%), while 132 (44%) respondents never experienced any pain in the gums. In regards to the inflammation of the gums, majority of the respondents 264 (88%) always feel inflammation in the gums whereas one-tenth of the respondents 36 (12%) never experienced inflammation in the gums. Further, it was found that a high majority of the respondents 286 (95.33%) brushed their teeth once a day. Some of the respondents 35 (11.66%) brushed their teeth twice in a day. It was also revealed that all of the respondents 300 (100%) never brushed their teeth thrice a day. As far as the prevalence of the gargle practice is concerned all of them always gargled after having their meals.

Table 22: Frequency and Percentage Distribution of Respondents according to their Skin and Hair Hygiene Practices (n=300)

Skin and Hair Hygiene Practices	Always		Never	
	F	%	f	%
Using any hair colour for hair treatment	292	97.33	7	2.33
Check if hair colour has ammonia in it or not	0	0	300	100
Use ammonia free hair colour	300	100	0	0
Use mild soaps and shampoos	300	100	0	0

Table 22 shows the data related to the skin and hair hygiene practices. It shows that majority of the respondents 292 (97.33%) always used hair colour for hair treatment. Whereas only 7 (2%) of the respondents never used hair colors for treating hairs. All of the respondents never check if the hair colour has ammonia or not. It also revealed that all of them used ammonia free hair colors. It also revealed that all the respondents 300 (100%) used mild soaps and

shampoos to wash their hair. The data shows that the respondents were partially following the hair and skin hygiene by using soaps and shampoos to wash their hair.

Table 23: Frequency and Percentage Distribution of Respondents according to their Personal Hygiene Practices (n=300)

Personal Hygiene Practices	Frequency	Percentage
Average	264	88
Bad	36	12

Table 23 shows the frequency distribution according to the personal hygiene practices of the respondents. It reveals that majority of the respondents 264 (88%) followed average personal hygiene practices and 36(12%) of the respondents showed bad personal hygiene practices. None of the respondent was observed to practice a good personal hygiene. It showed that the respondents need to be aware of better personal hygiene practices.

CONCLUSION

Hygienic awareness among tribal pregnant women is of particular concern as it directly affects the health status of both mother and children. Poor hygienic practice during pregnancy can lead to various infections and other perinatal and postnatal complications. The majority 128 out of 300 (42.6%) are living in bad physical and environmental hygienic conditions, 139 out of 300 (46.3%) are living in average conditions and only 33 (11%) are living in good hygienic conditions. Study shows that majority 264 out of 300 (88%) followed average personal hygiene practices and 36 out of 300 (12%) showed bad personal hygiene practices. None of the respondent was observed to practice a good personal hygiene. It showed that the respondents need to be aware of better physical, environmental and personal hygiene practices.

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