

A Study to Assess the Point Prevalence of Selected Health Problems among Schooler Children in Tribal Region of Akole Taluka Maharashtra

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Abstract

Introduction: School age children are the common vulnerable group with highest prevalence of infection and health problems. Healthy children are the base for a healthy nation. Children are quite vulnerable at this growing age and hence are prone to fall victim to many diseases, thus affecting their normal growth and development. The aim of the present study was to assess the point prevalence of selected health problems among schooler children and Correlate the point prevalence of selected health problems among schooler children with selected demographic variable.

Methodology: A descriptive study with cross sectional survey approach used in present study. The sample consisted of 100 tribal schooler children's. Sampling technique used for study is simple random sampling technique. A proforma was prepared by expert validation to collect the data. Descriptive statistics were used to analyzed the data according to objective.

Results: Half of children i.e. 51% were between 10.1-12 years of age. Majority of samples were male 57%. Majority of 58% children had good nourishment, 60% good body built, 52% average activity, 41% good personal hygiene, 56% had good attention span and all 100% children's mental status was good. Highest percentage of children 42% had grade-I stunting and 53% had normal nutrition, 33% dandruff, 09% Anemia, 19% Impacted wax, 10% Discharge from nose, 27% Offensive smell, 05% had short neck, 09% cough and wheezing, only 02% have Abnormal chest expansion, 08% abdominal pain, 11% anemia, Iron deficiency and muscle pain, 12% fatigue.

Discussion: The conclusion from this is that the health status of the tribal schooler children was found in good health status except half of children had found in stunting and wasting. It emphasis that, the more concentration should be on Malnutrition prevention.

Conclusion: The burden of health problems like malnourishment, dental caries and dandruff, Anemia, Ear and nose problems are high in school children.

Keywords: Assess, Prevalence, Health problem, Schooler child, Tribal region.

Introduction

The tribal population in India, though a numerically small minority, represents an enormous diversity of groups. They vary among themselves in respect of language and linguistic traits, ecological settings in which they live, physical features, size of the population, the extent of acculturation, dominant modes of making a

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livelihood, level of development and social stratification. They are also spread over the length and breadth of the country though their geographical distribution is far from uniform. A majority of the Scheduled Tribe population is concentrated in the eastern, central and western belt covering the nine States of Odisha, Madhya Pradesh, Chhattisgarh, Jharkhand, Maharashtra, Gujarat, Rajasthan, Andhra Pradesh and West Bengal. About 12% inhabit the North-eastern region, about 5% in the Southern region and about 3% in the Northern States.¹

The Akole taluka situated in Ahmednagar district has more population of Tribes. The population of Akole taluka is 2, 91,950. Out of these 47.86% i.e. 1, 39,730 population of Akole Taluka is Tribal which is distributed in western part of tehsil.²

Material and Method

Research Design: Descriptive cross sectional

Variables:

Research Variable: Prevalence of health problems of tribal schooler children

Confounding Variable: socio demographic characteristics child such as age, gender, class, type of diet of and socio demographic characteristics child's parents such as age, type of family, religion, socio economic status, education and occupation, Income.

Setting of Study: In selected tribal area of Akole taluka (Mutkhel and Shendi village). Approximately 100Km from PIMS Loni.

Population: Selected triable areas, schooler children were the population.

Sample: Selected tribal area schooler children's

Sample size: 100

Sampling Technique: Simple Random sampling.

Method of data collection: A performa was used to collect the data

Construction of tool: A physical examination Proforma for assessing the health status of 6-12 years group for schooler children was used. It with Section A & B

• **Section A:** Socio demographic characteristics of tribal schooler children like age, gender, class, type

of diet and socio demographic characteristics of tribal schooler children's like age, type of family, religion, socio economic status, education and occupation of parents

• **Section B:** It consisted items on general appearance and physical examination of child. It includes anthropometric measurement, nutritional assessment, sign and symptoms, physical examination, etc.

Validity: Validity was established by consulting experts from various disciplines

Data Collection Procedure:

Ethical Consideration: The approval was obtained from the institute of ethics committee (PIMS/CON/R/IEC/PG/003/2018) at Pravara Institute of Medical Sciences (DU) The legal permission was sought from Principal, CON, Loni, Principal of selected schools of tribal region Akole Taluka.

Planned for data analysis: Data was analyzed using descriptive statistics. The analyzed data was presented in the form of table, and figures.

1. Socio demographic data: this was analyzed in terms of frequency and percentage, was presented in diagrams.
2. The point prevalence of selected health problems of tribal schooler children: This was analyzed in terms of frequency and percentage, was presented in tables.
3. Comparison of socio demographic variables with selected health problems: this is analyzed in terms of frequency and percentage, was presented in tables and their comparison

Findings:

Findings related to sociodemographic characteristics of tribal schooler children:

- Half of children i.e. 51(51%) were between 10.1- 12 years
- Majority of samples were male i.e. 57 (57%)
- Most i.e.83 (83%) were Hindu
- Half of children i.e.52 (52%) were from the V and above class
- Majority (73%) of children were from the Joint family

- Majority of children were consumed mixed diet i.e. 78 (78%)
- Higher percentage of father were above 35 age group i.e. 46%,
- One third (34%) of mothers were 31 – 35 age group
- One third 34% of fathers had Secondary education
- Higher percentage (49%) of mothers had primary education
- Majority of fathers (88%) had Agriculture occupation
- Most of mothers (94%) had Agriculture occupation
- Majority (57%) had monthly income 6001-9000 Rs
- Higher percentage 08% of samples had abdominal pain
- Significant percentage 11% of samples had Anemia, Iron deficiency and muscle pain respectively and (12%) of samples had Fatigue

Findings related to association between Prevalence of health problems with selected demographic variables

Findings related to s General appearance of tribal schooler children

- Majority of (58%) children had good nourishment
- Majority of (60%) children had good body built
- Majority of (52%) children had average activity followed by (45%) had good activity
- Significant percentage of (41%) children had good personal hygiene
- Majority of (56%) children had good attention span
- All (100%) of children's mental status was good.

Findings related to physical examination of tribal schooler children

- Highest percentage of children (42%) had Grade – I stunting and (53%) had normal nutrition
- One third 32% of samples had Dandruff
- Mere percentage 09% of samples had Anemia
- Higher percentage 19% of samples had impacted wax
- Higher percentage 10% of samples had Discharge from nose and sign of allergies respectively
- Higher percentage 27% of samples had offensive smell
- Mere percentage 05% of samples had Short neck
- Mere percentage 09% of samples had Cough and Wheezing respectively
- Mere percentage 02% of samples had abnormal chest expansion
- Prevalence of health problem with Age is in 06-08 age group (F =34) the total number of health problems are 145, in 8.1 – 10 year (F=15) health problems are 56, in 10.1-12 years of age group (F =51) 203 total health problems.
- Prevalence of health problem with Gender is in male (F=57) 218 and in female (F=43) 186.
- Prevalence of health problem with Age of fathers is < 21 (F=01) health problem is 01, 21-25 age group (F=03) health problems are 03, 26-30 age group (F=29) health problems are 125, 31-35 age group (F=21) health problems are 101, above 35 years of age (F=46) health problems are 174.
- Prevalence of health problem with Age of mothers is < 21 (F=02) health problem is 09, in 21-25 age group (F=31) health problems are 137, in 26-30 age group (F=25) health problems are 125, in 31-35 age group (F=34) health problems are 101, in above 35 years of age (F=08) health problems are 29.
- Prevalence of health problem with occupation of fathers is in Agriculture is (F=88) health problem is 367, In Private job (F=06) health problems are 17, in Government job (F=01) health problems are 00, in Business (F=04) health problems are 17, in other (F=01) health problems are 03
- Prevalence of health problem with occupation of mothers is in Agriculture is (F=94) health problems are 387, In Private job (F=03) health problems are 04, in Government job (F=02) health problems are 10, in Business (F=01) health problems are 03.
- Prevalence of health problem with Income of Family is in < 3000 is (F=00) health problems are 00, in 3000-6000 (F=00) health problems are 00, in 6001-9000 Rs (F=57) health problems are 252, in >9000 Rs (F=43) health problems are 152.

Discussion

Section A: Description of socio-demographic

characteristics of Schooler children: Half of children i.e. 51(51%) were between 10.1- 12 years. It was consistent with the study conducted by Ransingh R P who noted that majority (46%) of the health problems are 8 to 12 years of age group.³

Majority of samples were male i.e. 57 (57%). Similarly Haritha SK also found male predominance of 54.5% among the children.⁴

Highest frequency and percentage i.e.83 (83%) were Hindu.It was contradictory with the study carried out by Ransingh R P who also noted that 42% of children belongs to were Hindu.³

Half of children i.e.52 (52%) were studying V standard and above class.It was concurrent with the studies carried out by Ransingh R P who noted that 96% of the children under studying II year of class.³

Majority of children were from the Joint family i.e.73 (73%). Similarly Singh AK et al also found that joint family predominance of 59.1% among children.⁵

Majority of children were consumes mixed diet i.e. 78 (78%). It was concurrent with the studies carried out by Javare AI who noted that 63% of children under study were having mixed diet.⁶

Highest percentage of fathers were above 35 age group i.e. 46%. It was concurrent with the studies carried out by Esimai OA who noted that 42% of fathers were from age group 35 to 40 years.⁷

Highest percentage (34%) of mothers were 31 – 35 age group, Similarly Bokmal KR also found that 46% of mothers were highest age group.⁸

Highest percentage 34% of fathers had Secondary education. It was consisted with the study conducted by Das S et al who noted that majority 30% of fathers were educated.⁹

Highest percentage (49%) of mothers had primary education, followed by significant 44% mothers don't had formal education. Similarly Singh AK also found that 43.4% of mothers are literate.⁵

Most of fathers (88%) under study had Agriculture as occupation. It was concurrent with the study carried out by Ransingh RP who noted that 40% of parents were farmers.³

Most of mothers (94%) under study had Agriculture

as occupation. It was in line with the study carried out by Ransingh RP who noted that 40% of parents were farmers.³

Majority (57%) had monthly income 6001-9000 Rs. It was concurrence with the study carried out by Ransingh RP who noted that 48% of parents were getting income in between 5001 to 10000.³

Section B: Description of General appearance of schooler children: Majority of (58%) children had good nourishment. It was concurrent with the study carried out by Ransingh RP who noted that 68% of children were having good nourishment.³

Majority of (60%) children had thin body built. Similarly Ransingh RP also found that 62% predominance of thin body built.³

More than half (52%) children had average activity. Similarly Ransingh RP also found that 54% predominance of average activity.³

Significant percentage of (41%) children had good personal hygiene. It was concurrent with the study carried out by Ransingh RP who noted that 88% of children were having good personal hygiene.³

Majority of (56%) children had good attention span followed by (26%) had excellent attention span, and (16%) had average attention span.

All (100%) of children's mental health status was good.

Section: C- Description of physical examination of schooler children: Highest percentage of children (42%) had Grade – I stunting. It was consistent with the study carried out by Singh AK who noted 57% of children were undernourished.⁵

Highest percentage of children were (53%) normal. It was consistent with the study carried out by Singh AK who noted 57% of children were undernourished.⁵

One third 32% of samples had Dandruff. It was concurrent with the study carried out by Reza Ul et al who noted that 44% of samples were dandruff.¹⁰

Significant percentage 09% of samples had Anemia. It was consistent with the study conducted by Robel T who noted that majority 17% of children were anemic.¹¹

Significant percentage 19% of samples had impacted

wax. It was contradictory with the study carried out by Dr M Ulaganathan who noted that the prevalence of wax impaction was 45% among the children.¹²

10% of samples had Discharge from nose and sign of allergies respectively. It was consisted with the study conducted by Aitken M et al who noted 09% of prevalence of sinusitis in his study.¹³

Significant 27% of samples had offensive smell from mouth along with dental caries in 13%. Similar study conducted by the Mohammad M who noted 78% of children having offensive smell from mouth.¹⁴

Highest 05% of samples had Short neck, lowest percentage of samples had 03%.

Mere percentage 09% of samples had cough and wheezing respectively. It was consisted with the study conducted by Maja Jurca et al who noted 10% of prevalence of cough in his study.¹⁵

Only 02% of samples had abnormal chest expansion and Ankles pitting edema, 01% had Tachypnoea and Dextrocardia respectively.

Mere percentage 08% of samples had abdominal pain .Similar study conducted by Judith JK who noted prevalence for functional abdominal pain disorders was 13.5% in his study.¹⁶

11% of samples had Anemia, Iron deficiency, Muscle pain. It was consisted with the study conducted by Robel T who noted that majority 17% of children were anemic.¹¹

12% of samples had Fatigue. It was consistent with the study conducted by Petersen S who noted 16% of prevalence of fatigue in children in his study.¹⁷

Conclusion

Tribals remain marginalized even in the modernization era owing to challenges of inaccessible health services. This study contributes valuable primary information on point prevalence of health problems among Akole tribal region schoolers. Contrary to the common reports of poor and unhealthy pictures of tribal children, this study observed that tribal schoolers mostly in good health. Using standard performance protocols further assessment confirmed presence of grade I stunting, wasting, dandruff, impacted wax in ear, anemia, iron deficiency, fatigue, offensive smell from mouth, dental caries, discharge from nose, cough, wheezing and

abdominal pain apart from other minor health issues in varying proportions. Further Government programmes, screening and health education activities need to consider the prevailing health spectrum of problems in this region to minimize and prevent morbidity complications.

Conflict of Interest: Yes

Source of Funding: Self

Ethical Clearance: Nil

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