

Conclusion and Recommendations

The literacy rate of the respondents is 59.82% among those 12.66% have gone above matric. The population have 17.46% SC, 35.94% ST, 31.71% OBC and the rest General caste. While enquiring about the respondents occupation we found that 23.75% are household labours, 39.92 agriculture other categories being insignificant percentage. 61.87% of the population of the area are below poverty line. Due to poverty and deprivations of essential needs, the tribal people's living condition is very poor.

While enquiring about the KAP level of the respondents on malaria we found that 100% heard about the disease called malaria. About signs and symptoms of malaria Most of Them Identified Fever followed by Headache and body ache. When asked about the test that needs to be done to detect malaria about 76.76% said, "Blood test" and most of the rest said "Don't know". About cause of malaria majority said "mosquito bite" and most of the rest do not know the cause. About mode of transmission 71.89% said "Mosquito bite and most of the rest did not know the mode of transmission. About knowledge of treatment about 39.41% said "Chloroquine" and 35.56% said "Medicine". About place of treatment 67.52% preferred institutional treatment. About action of people to prevent malaria in the area majority have no action followed by very few cases of sanitary measures, use of mosquito nets etc. About place of availability of malaria medicine 54.17% said Government Health Facility. About Frequency of Health Workers visit we found that 49.68% never visit followed by 27.98% visit in 0-15 day intervals.

Knowledge of malaria is moderate but the malaria prevention activity by people is very poor. The malaria workers/health workers often never visits and if visits, does so occasionally.

Further it can be concluded that the situation of malaria, its extent and magnitude is quite deplorable in the area. The reason may be attributed to various factors. Low level of educational status, rampant ignorance about the cause, treatment and prevention of malaria, poor socio economic background contributes a lot to the cause of malaria. Besides this indifferent attitude towards health care services provided by Government, which is absolutely negligible for the public compounded the situation dramatically. Inadequate health care services that added by people's ignorance with socio economic instability makes the disease more infectious in the region. The KAP study indicates that in the study villages the services provided by Govt. is quite dismal.

The study compels us to devise a good number of suggestions in strengthening the actions and interventions for control of malaria. Regular and periodic intervention in the form of health education to bring an attitudinal and behavioural change and provision of better health care services in the study villages can only bring about a qualitative change in control of malaria in the study region.

It is basic knowledge for dissemination to all that man mosquito contact is to be avoided and vector mosquitoes should be prevented to breed in water for arresting their proliferation. This can easily be achieved through personal protection by making breeding places unsuitable for mosquito breeding by the local bodies or project

authorities by elimination. Covering, modification, introduction of biological control agents or treatment with larvicides and by making facilities available for an early treatment of malaria cases will be useful. Educating people, training of officials that engaged in developmental activities and incorporation of health component in all developmental projects by all concerned could do this.

Providing water supply and disposal should be done. Improvement of rainwater drainage is a must. Source reduction of peri-domestic water bodies by drainage will help tremendously in decreasing of mosquito breeding. Indoor spray of chemicals should be done in and around the village. Weekly anti-larval measures should be done.

Apart from the above, the following measures can also be useful. Door to door visits by the health workers in the malaria endemic areas should be encouraged to impart education to the family. By the help of traditional folklore and street plays community should be imparted education. School children with school health programmes should be imparted knowledge on malaria.

Voluntary organisations of the area can take up presumptive treatment of cases with or without infrastructural support. Clearly acceptable and accurate message should be developed by the organisations realising custom and cultures of the community to help educate the community in malaria control.

Apart from these vector control activities can also be useful. Voluntary organisations can take up anti-larval measures and environmental sanitation. They can also promote environmental measures. Work in co-ordination and collaboration with Government will help in successful intervention of the programme.

Nowadays the malaria control strategy is more or less primary health care oriented approach. So as to ensure the linkages and involvement of the community in building up the first line of health care is of inescapable necessity.

To make the malaria control activities more effective and result oriented the following suggestions are made.

- The community must be accepted at all levels of control strategy as an active partner.
- Community leaders should be involved in planning and organisation of activities.
- The focus of the activities should not be confined only providing package of services but empowering them to participate in the decision making process.

Empowerment of the community is essential in control of malaria. To facilitate community capacity building the following measures will be useful.

- Providing knowledge on malaria, its cause, treatment and prevention.
- Stressing the importance of early diagnosis and treatment.

- As the PF% is quite high the malaria control measures should take into account the above fact.
- It is quite difficult for Government alone to achieve good result in control and prevention of malaria. So Government should find suitable ways of involving NGOs of the area in the activities of control and prevention of malaria.
- NGOs of the area should take initiative in starting malaria control and prevention activities.
- Mosquito net use should be promoted among the population.

People in some places are dependent on quacks for treatment of malaria that could not cure the disease. Often incomplete doses are taken for malaria. Once fever subsides people often stop taking medicines.

- To aware people more.
- To change the attitude of people for check up and blood testing by qualified doctors.
- To promote immediate treatment
- To take complete doses
- Accumulation of wastewater should be stopped.
- As we have not tested the DDT response in the area so it can be used as first choice. If it is not effective then other chemicals can be sprayed.

OVHA Special Report on Malaria in Orissa

Malnutrition in Orissa quite appalling

100 maternal deaths out of every 1000 and 20 infant deaths out of every 1000 live births has resulted in due to malnutrition and under nutrition. During last five years One of the basic causes of infant and maternal mortality is attributed to malnutrition and under nutrition in some of the study areas of Orissa, being conducted by OVHA.

OVHA Special Report

SUMMARY OF FINDINGS

Most situational analysis come up against many difficulties, how one can possibly summarise the conditions and context of the lives of mother, children and adolescent in the operational areas of such size and with wide differences make geographic, social, economic and cultural is a difficult task. Thus whenever we present statistics we have tried to portray the range of

diversity taking a holistic view to analysis. In order to prepare a subjective yet objective analysis we have chosen a middle path.

The following are the important findings of the study.

The age of mother interviewed is mostly between 18-28 years (81.2%). We could find 0.8% (2) mothers below the age of 18. The mothers of age 29 year and above are also comparatively less i.e. 18.00% (45 mothers).

Not surprisingly we found 59.2% of them having no education. 17.2% and 11.2% have education up to 5th standard and 6-8 standard respectively. Only 10.8% have education 9-10 standard. A very low percentage of 1.6% have education above 11 standard. This shows the educational status of these mothers is very low. This could have resulted in poor KAP of those mothers about childcare practices and hence could have resulted in poor nutritional status of the child.

95.6% mothers are found to be Hindus followed by 4.4% Muslims. The study subjects are thus are predominantly Hindu by religion. We found out that 11.6% of mothers are SC, 22.8% are ST, 11.6% are OBC and 54.0% are of General caste.

We found that 22.4% mothers have Gravida 1, 29.2% have Gravida 2. 17.6% have Gravida 3 and 30.8% have Gravida 4 and above. This shows there is practice of being pregnant for more than 2 times in 48.4% cases. Even in other cases where the Gravida is 1 or 2 there is still chance to be pregnant in future. We have found that 24.8% have para 1, 29.6% have para 2, 18.4 have para 3 and 27.2% have para 4 and above. We found that living is 1 for 29.2% cases, 2 for 30.4% cases and 3 and above for 40.4% cases.

This annual family income is below Rs. 11,000 in 14.8% cases and is between Rs. 11,001 to Rs. 40,000 in 83.2% cases. It is above 40,000 in 2.0% cases. So the percentage of mothers living below poverty line is 14.8%. We found family size of 1-5 in 70.0% cases followed by 6-10 29.6% cases and only one family (0.4%) the family size is 11 and above.

The age of children we came across the study is between 0-28 days in 2.0% cases, between 29 days to 12 months in 46.4% cases and between 12 months one day to 24 months in 51.6% cases.

During the study we came across 53.2% male and 46.8% female under-two-year old child. The number of male child is more than the number of female child. The sex ratio is 954.89.

The universally accepted cut off point for nutritional assessment of population is (median – 2 SD). Here we find that 110 children out of total 250 children studied fall below this cut off point and hence have less length for age, which is 44% of the total sample taken. Out of these 110 children, 61 (55.45%) are boys and 49 (44.55%) are girls. These children suffer from nutritional dwarfing/ stunting.

Here we find that 122 children out of total 250 children studied fall below this cut off point and hence have less weight for age, which is 48.8% of the total sample taken. Out of these 122 children, 67 (54.92%) are boys and 55 (45.08%) are girls.

Here we find that 48 children out of total 250 children studied fall below this cut off point and hence have less weight for length, which is 19.2% of the total sample taken. Out of these 48 children, 22 (45.83%) are boys and 26 (54.17%) are girls. These 48 children suffer from wasting/acute malnutrition.

According to Waterlow's classifications we find that 108 children (58 boys and 50 girls) are normal children. So only 43.2% of children are normal which is low. 32 children (14 boys and 18 girls) have only less weight for length. So they are suffering from only wasting/acute malnutrition which is 12.8% of the total number of children studied. 94 children (53 boys and 41 girls) have only less length for age. So they are suffering from only stunting/nutritional dwarfing, which quite alarmingly 37.6% of the total child studied. 16 (8 boys and 8 girls) children have both less weight for length and less length for age. So they are suffering from both stunting and wasting or acute/chronic malnutrition, which is 6.4% of the total number of child studied.

The Mean Gravida is 2.84 with a standard deviation of 1.66. The mean Para is 2.71 with a standard deviation of 1.54. The mean living is 2.39 with a standard deviation of 1.33.

When we asked about when mother's milk should be started, 26.8% said that it should be started within one hour of birth and 32% said it should be started between 1-3 hours of birth. Another 10% said it should be started between 4-24 hours of delivery and 26.8% said that it should be started after 24 hours of delivery. 4.4% of the mothers said that they do not know the answer. This shows that Knowledge on when breast milk should be started is low.

24.4% started mothers milk within one hour of birth followed by 34% between 1-3 hours of birth. Another 11.6% started mother's milk between 4-24 hours of birth and 30% started mother's milk after 24 hours of birth. This shows that practice on starting mother's milk is wrong in most cases.

When asked what should be the first feed for the baby, 45.2% said mother's milk, 54% gave wrong answer and 0.8% said they do not know the answer. This shows that the knowledge on first feed to the baby is poor.

The mothers of the study area gave the following first feed. 10.8% gave boiled water, 18% gave Mishri Water, 26% gave honey water, 1.6% gave animal milk and 4% gave other food. Only 39.6% gave mothers milk to the baby. This shows that the practice on first feed is wrong in most cases. 48.8% mother's thought that Cholostrum is essential for the baby and 35.6% thought that it is not essential for the baby. 15.6% did not know the answer.

Among the mother's who thought that Cholostrum is essential, 73.77% thought that it is essential because it is good for health and 21.31% thought that it builds immunity in the child. 4.92% did not know the answer.

Among the mothers who thought that Cholostrum is not essential for the baby, 19.1% thought that it is not good for the baby and 80.9% did not know the answer. 44.4% said that the colour of cholostrum is yellowish white. 4.8% mentioned other colours and 50.8% said that they don't know the colour of cholostrum.

47.6% gave colostrum to the baby and 52.4% not gave colostrum to the baby. The practice is thus not right among more respondents.

When asked about for how long exclusive breast feeding should be given to the baby we find that 46.4% said up to 4/5 months and 48% said up to 6 months and above. 5.6% did not know the answer. The knowledge is thus not right among more mothers. 45.2% had given exclusive breast feeding for 4/5 months, 53.2% had given exclusive breast feeding up to 6 months and above. 1.6% are still continuing breast-feeding.

When asked about for how long should breast milk be continued in addition to supplementary feeding, we gather that 10% said up to one year, 57.6% said 1-2 years and 27.6% said two years and above. 4.8% did not know the answer. 42.8% fed the baby less than 5 times a day, 49.6% feed the baby 5-10 times a day and 7.6% feed the baby more than 10 times a day. 88.8% continue breast feeding when child is ill and 11.2% do not continue breast feeding when child is ill.

The following answers came when we enquired about the types of food mothers add to baby's diet after 4 months. 7.2% add Sagu, 11.6% add Chuda Gunda, 33.2% add Rice and Vegetables, 23.2% give packed baby food, 15.2% give cake, bread and biscuits and 11.2% add other foods. 18% are still continuing breast-feeding and hence classified as not applicable.

Mother's milk should be continued with supplementary feeding. 87.6% mothers know it and it is unknown to 6.8% mothers. 5.6% did not know the answer.

Mothers make the baby food tasteful by adding the following items. 9.2% add sugar, 18% add salt, 1.2% add cow milk, 12.4% add other items. 44.8% did not know the answer and 18% are in not applicable category. 53.2% use iodised salt to prepare baby food and 28.8% do not use it. 18% are in not applicable group. 7.2% mothers reuse leftover food prepared for the baby and 74.8% do not reuse it. 18% are in not applicable category. 83.2% mother's thought that use of packed food is essential for baby and 10% mothers did not think so. 6.8% do not know the answer. 58% give packed food to the baby and 42% do not give packed food to the baby. 10% mothers thought that 2 year old child should eat $\frac{1}{2}$ of the mother's diet, 3.2% thought that he/she should eat $\frac{1}{3}^{\text{rd}}$ of the mothers diet and 53.2%

thought that he/she should eat $\frac{1}{4}$ of the mothers diet. 33.2% said that they do not know the answer. 80.4% thought that expensive food is always more nutritious than cheaper food and 13.6% thought that expensive food is not always more nutritious. 6% mothers did not know the answer.

8.4% mothers know the baby is growing properly by increase in his/her weight, 51.6% know it by observing his/her action and 4.4% know by observing the child for glaze. 10% mothers use other methods for this. 25.6% did not know the answer.

Mothers use various methods to know the child gets satisfactory food at each feeding. 3.6% know it when child stops crying, 44% know it when baby do not eat more, 20% know it when child plays and 32.4% use other methods.

Mothers use various methods for maintaining hygiene during preparations and feeding of the baby food. 11.2% use hot food. 55.2% clean the utensils, 12% clean hand, 3.6% clean nipple and 11.2% use other methods. 20.8% do not maintain any hygiene measures.

Mothers are found to avoid different food for the baby during illness. 11.2% avoid everything, 1.6% avoid only packed milk food, 44.8% avoid everything except mothers milk and 42% do not avoid anything.

Considering all the above it can be concluded that the nutritional status of the child in the area is poor. The KAP of mothers regarding different aspects of infant feeding is also poor.