

AWARENESS OF IODINE DEFICIENCY DISORDERS AND RELEVANT PRACTICES AMONG THE HOMEMAKERS IN WARDHA, MAHARASHTRA: CROSS SECTIONAL STUDY

Community Medicine

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ABSTRACT

Introduction: Iodine Deficiency Disorder is the most prevalent disease in India. Lots had already been done to combat the IDD. The gap persists due to low awareness about the IDD and importance of iodized salt. Women mostly looks towards the daily needs of the family members. Therefore, the study was conducted to assess the level of awareness of this homemakers regarding IDD and practice related to it.

Methodology: A cross-sectional study was conducted in village of, Maharashtra with 10 % of total households by systematic random sampling. The structured questionnaire was administered to participants on day of visit.

Result: Out of 121 women only 74 % were aware of IDD of which only 27 knew its effect on children while none were aware of pregnancy outcomes. Very few knew about preventability and curability of IDD. Though most of them were using iodized salt, it does not seem to be of good quality. Cooking practice was also faulty in relation to salt.

Conclusion: Poor knowledge in full spectrum of IDD and practice pertaining to salt usage is affecting the demand generation for iodized salt in community.

KEYWORDS

Iodine Deficiency Disorder, Wardha, women, knowledge, salt

Background:

Iodine deficiency is one of the five micronutrient deficiency in world of public health concern. Prevalence of goitre is estimated to be 12 per cent in world. The at risk population for IDD is estimated to be about 2.2 billion in the world and 200 million in India. ⁽¹⁾ In India the entire population is prone to IDD due to deficiency of iodine in the soil of the subcontinent and consequently the food derived from it. survey conducted by the National Nutrition Monitoring Board (NNMB) in 2000-2001 in rural areas of Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Madhya Pradesh, Orissa and West Bengal, the overall prevalence of total goitre rate (TGR) among six to twelve year old children was about 4 per cent. ² The prevalence of goitre was highest in Maharashtra (11.9%). ² The most important finding is that iodine deficiency not only results in goitre but also mental defects, deaf mutism, still birth and miscarriages, weakness and paralysis of muscles as well as lesser degree of physical and mental dysfunction. ⁽³⁾ The estimated population suffering from IDD is more than three times of goiter. Universal salt iodization is already in full zest. The repeated survey conducted throughout India still shows IDD to be a public health concern. We feel that homemakers who cooks food, buys grocery, looks after the children or special groups in family must be aware of IDD and good practices in usage of salt. With this concern the present study was conducted.

Methodology:

A cross-sectional study was conducted in Wardha, Maharashtra by door to door survey. This is small village consisting of population of 8154 with 1936 households. It was decided to survey atleast 10 % of total households by systematic sampling. Only one women was selected from each household and informed consent was obtained. If no suitable candidate found in household at time of visit, then consecutive household was selected. If the candidate was not present, then attempt was made to visit them in their suitable hours. The structured questionnaire was developed to assess their knowledge and practices with regard to iodized salt and IDD respectively.

RESULTS:

One hundred and twenty-one women were interviewed of which 78 (64.46%) were less than 30 years. Eighty-eight participants (74%) were aware of diseases due to iodine deficiency of which only 27 were aware of its effect on children. While 22 (23%) participants didn't know about the IDD and 5 (4%) had a strong belief that it does not affects health (Fig 1). When asked about curability of IDD only 17 (14%) were aware of it, 12 (10 %) had belief that disorders cannot be cured while rest were not sure. (Fig 2)

Table 1 shows the information related to practice of usage of salt. 91.7 % of participants were using the iodized salt but only 38 % were storing it in air tight container with no moisture in it. 93 % participants usually add the salt before or early during cooking. TV advertisement was the main source of information for use of iodized salt as told by 77.27 % of participants. (Table 2).

Discussion:

Most of the participants were aware of only goiter as an iodine deficiency disorder. They had least knowledge of how iodine affects the brain development of child. Three fourth of study participants are unaware of curability or preventability of disease. They actually perceive only goiter as the IDD and developed attitude that once it shows the symptom it has to be operated. Very few of them know its importance in pregnancy, childhood and adolescent. Many studies ^(4,5) had also depicted poor knowledge of women regarding IDD. Due to universal iodization most of respondents comply for using the iodized salt but on inspection it was seen that the salt was not stored in air tight container and was not free flowing, may be due to moisture or poor quality. When probe into reason for not using the iodized salt most of them responded that it was too costly, no taste and didn't consider it beneficial. The use of iodized salt was more due to unavailability in local stores. There was lack in Knowledge regarding iodine rich food sources among participants. They don't have any knowledge of loss of iodine in presence of moisture or its addition in early period of cooking.

TV was the main source of knowledge but it seems to be insufficient to showing the full spectrum of IDD. There are already many studies done by ICMR, Unicef or others ⁽⁶⁻⁸⁾ that emphasized the deficient iodine nutrition in children and pregnant women. The concentration of iodine in salt was also found to be very low at consumer level. This gap needs to be identified and addressed. Therefore, apart from Universal Salt Iodization, public education initiatives directed to the importance of IDD thereby increase the demand for adequate iodized salt needs to be taken up with due emphasis on homemakers.

Conclusion:

Combination of Poor knowledge regarding full spectrum of IDD and practice pertaining to salt usage is making Mandatory fortification less effective. Also quality iodized salt needs to be distributed through Public Distribution System (PDS) and enable the community to monitor it.

Tables

Table 1 : Practice related to use of salt

Practice	Number of participants (n= 121)	Percent age
Usage of iodized salt	111	91.7%
Storage of salt in proper air tight container	46	38%
Adding salt in early period of cooking	113	93.4%

Table 2 : Source of information

Source	Number Of Participants (n= 88)	Total
Tv Advertisements	68	77.27%
Family And Friends	37	42 %
Awareness Campaigns	23	26.14 %

Fig 1 : Participants Knowledge of iodine deficiency diseases and specifically in children

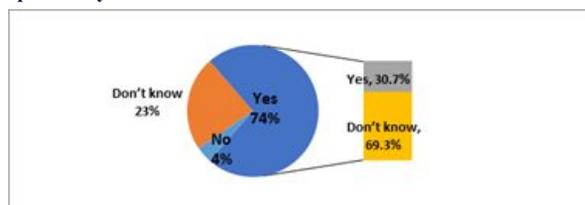
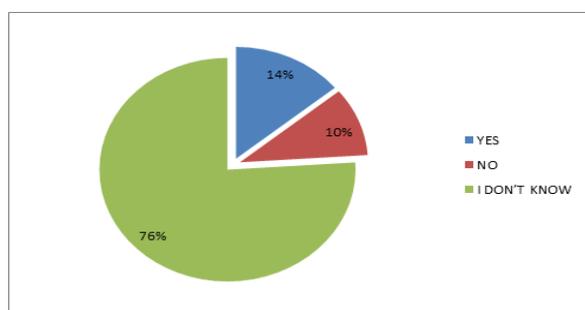


Fig 2 : Knowledge of curability /preventability of IDD



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