Research Paper

Public Health



A Qualitative Exploration of the Perception of School Teachers About Goiter and Its Implications

*J S Meena ** Ankur Joshi ***Saket Kale **** Ram Kumar Panika

* Assistant Professor, Department of Community Medicine, Gandhi Medical College, Bhopal.

** Assistant Professor, Department of Community Medicine, Gandhi Medical College, Bhopal.

*** Resident, Department of Community Medicine, Gandhi Medical College, Bhopal.

**** Resident, Department of Community Medicine, Gandhi Medical College, Bhopal.

ABSTRACT

Context: The prime position rendered to teachers by School Health Services (SHS) and the close companionship of a teacher with students for their intellectual and social development generates the need to understand their perception toward illness. Aim: This naturalistic approached study aims at exploring the perception and attitude of school teachers of children about goiter and its implication on the development of children. Methods: 12 school teachers who have a child with visible goiter in their class were interviewed face to face, in their naturalistic setting i.e., school; using semi- structured interview assisted by field note. Results: Six themes emerged after Content and discourse analysis of the data collected. This analysis revealed teachers' experiences, awareness, belief, perception and the need of awareness woven around the prevention, treatment & rehabilitation of goiter affected child.

Keywords : school teachers, perception, goiter, naturalistic

Introduction

Thyroid disorders holds a unique place among all other metabolic disorders on account of its higher prevalence, association with micronutrient deficiency, ease of diagnosis, availability of treatment options and opportunity for prevention at both individual and community level (Unnikrishnan& Menon, 2011). Among the whole spectrum of thyroid disorders; lodine Deficiency Disorders (IDD) in children deserves special mention in Indian context which refer to all the effect of iodine deficiency on human growth and socio-intellectual development ranging from visible/palpable midline swelling to subnormal intelligence, delayed motor milestones, hearing and speech defect to severe mental retardation(Park,2013). Epidemiological assessment of IDD among representative samples taken from India detected 23% prevalence of IDDs in children even in post-iodization era (Marwaha, et al,2003). Further standard text books endorse that virtually no state of India is free from Goiter (Park, 2013). The profound and grave implications of goiter and related disorder such as IDD among children coupled with its high burden even after the availability of easy remedial options; demands to access the level of involvement of stakeholders in terms of readiness, awareness and perceptual correctness. The notion behind the argument is that, as with all community based interventional programs, the planning, implementation, utilization and acceptance of IDDs/goiter control program depends on interplay of complex factors (like political, cultural, socio-economic, behavioral etc.) among stakeholders. These interactions may be comprehended by qualitative exploration of various behavioral/experiential dimensions up to certain extent.

School Health Service (SHS) on a conceptual plane is considered as economical yet effective tool for lifting the 'total health' of children in which utmost emphasis is given to the nutrition of a child(Central Health Education Bureau, 1965;Park, 2013). As goiter may present as one of the manifestation of undernourishment and nutritional deficiency besides its remarkable association with iodine deficiency which plays a critical role in physical and mental development of a child, this aspect must be taken care by SHS.

The teacher enjoys the immediate, continuous care-givers' position for his students; apart from a 'key' stakeholder in SHS. He can detect, appearance and behavior divergence from normal at earliest, and can help the parents to decide the further course of actions. This is particularly important in Indian context, where there is a deficiency of dedicated heath care forces. Being an educator, he is not merely a source of the health facts but also encourages children to pose health related question and participate actively in finding a health solution. School teacher may also set examples for pupils through their health promoting practice behavior, consult appropriate person from health related field and approach parents and community cooperatively. ("Health Education Program Planning and Implementation, 2000) With the context mentioned above this study was planned to grab the perception of a key stakeholder (teacher), on a crucial health issue (goiter), to understand and assimilate the multifaceted interactions; the outcome of which can be a decisive factor for determining the burden and outcome of disease (goiter), both at individual and community level.

Methodology

This study was conducted in a district, south- west area of the central state, of India with a varying terrain and community including tribal populace. The study was conducted by a team of four researchers, during visit to this district for the purpose of iodine deficiency disorder survey, in the month of July- august, 2013.

Participants were selected purposefully from school of various blocks of the district and of different age and gender and number of years in service. A total of 12 participants, 9 female and 3 male teachers were interviewed who consented for the interview with age ranging from 25-60 years and teaching experience ranging from 5-30 years.

Semi-structured interviews were conducted by first and second author, a total of twelve interviews, six interviews each. Purpose of interview was explained to the teachers prior to the interview, oral consent was obtained before the interview and confidentiality was assured. Free expression of the thought and belief was encouraged and probing was done for obtaining more information and expression leading to understanding and browsing of deeper concepts. The interviews were conducted in the natural setting of the teacher i.e., in their school preferably in the ambiance of their workplace. The interviews were tape recorded and notes were jotted down for additional understanding and information about the natural setting and the discourse of the interview. The interview tape was transcribed & translated on the same day of conducting the interview and also analyzed by reading and rereading the transcribed script to include some more probes and questions in the next interviews. All the interview data was transcribed and translated before leaving the field.

Results

All interviews were analyzed by two authors separately resulting into six emerging themes of teacher's perception, which they agreed after discussion between them. The analysis of the content of the text translated and transcribed created out of the verbatim and field notes were done. Analysis of the discourse of the teacher's emotions while they were in the process of being interviewed was considered and noted to help understand the perception of the teachers.

Theme1: Awareness/Perception of appearance of goiter:

Almost all of them know and aware of the goiter in the local or English language. All of the participants were aware that goiter can be detected by inspection and palpation of the neck region but none of them pointed out or expressed how to palpate even on probing about it. Majority of them also state that they have seen only few children in their entire career with goiter. Furthermore; they revealed it to be prevalent in the adult population in the district. Some of them uttered of observing children with goiter in the tribal area.

"There is swelling in the neck" majority of the interviewee express about the appearance with a neutral factual expression. They do assert it to be of growing nature with increasing age. "The neck s are really thick to watch as that of rhinoceros" few of the teacher express with an awed look face as if they were recapturing that view. One of the oldest and most experienced teacher said that she had came across a lady with "Knots" dangling of her neck she tell this with a heaviness in her accent. She swallowed "That was very unsightly figure". Couple of male teachers described it as protuberance in a tentative manner, "something abnormal protrudes from the neck region".

Theme2: Established views of lodine deficiency as chief cause of goiter with skeptical / some view regarding other cause:

Most of the teacher were unshakable in their assertion that it is the iodine deficiency that causes goiter and no other idea came to their mind despite deep thinking about it "I don't think there is any other thing which may cause it" in a thoughtful manner. Couple of participants firmly expressed that it is the inheritance from either of parents which causes this appearance; one of them express it in a dry manner "The parents are responsible for it, I have seen many people suffering from goiter not taking proper treatment and control of disease having children developing same condition", Other simply said it is "genetically inherited", when probed for what he means, he replied plainly "it is transmitted from suffering parents to the child"

One of the younger female participant mentioned in a hesitant way "I think that it is some vitamin deficiency or something

lacking in water which may cause goiter". A teacher who was also vice-principal of the school does point out many direct or indirect causes of she knows other than iodine deficiency "it is the thyroid gland dysfunction associated with micro nutrient deficiency and low socio-economic status which causes it". She added "I have a sister with thyroid dysfunction and goiter".

Theme3: Wide and varying beliefs about the medical and physical implication due to goiter:-

Majority of the teacher express of not having a definite knowledge of the implication but they do express what they have perceived by their observation and experiences of dealing with such a child. Most of them state it to be causing compression of the throat and leading to difficulty in swallowing or of having difficulty in breathing. A senior teacher said factually "The appearance of goiter goes with the difficulty of child to speak breath and swallow". One of the male teachers also pointed out curiously that some of the children with goiter that he came across in his career as a primary school teacher had protruding eyes, swelling in abdomen and locomotor difficulties. Couple of young teachers expresses their wonder of finding skin related problems, weakness in bones and vision problems in goiterous children which they positively think to be due to goiter, one of them claimed "I strongly think that the underlying causes of goiter, including iodine and micronutrient deficiency are the cause of condition of my children; as these deficiency may affect whole body as well"

Theme4: Stigma of self and surroundings:

Almost half of the teacher mentioned about the stigma related with the appearance of child in the general populace. One teacher expressed it sympathetically "It is rather viewed as bad thing by the people who see such a child wandering around railway station and they try to shoo them away with a disgusting look at their face".

Another teacher expressed her empathy with the child in her class with visible goiter-"I really think that if i would have been in the place of child, i would be having a poor self-image, i can't understand what has happened to me; why my friends are trying to avoid me". The teacher who express that there is stigma in the public, family and peer group of children with goiter were in agreement about the major concerns about the future of child stigmatized by their family in addition to public and peers. "You can't imagine the horror of being isolated by your own family at such a tender age, only god knows what this will do to the self-esteem of already downcast child" – expressed in a hopeless manner by a senior teacher.

Theme5: Sketchy view about the mental and developmental handicap due to goiter:-

The perception of most teachers about the development and mental implication were rather contradictory or vague. Some teachers argued that when they see a child with goiter they do "feel" that there is something abnormal with the child but not to the point of any considerable mental handicap. "I don't think there is direct developmental problem with the child but it is due to vision and difficulty in speaking due to swelling in neck which may pose some problem during study".

Some of the other teachers have unconfirmed favor for the possible educational and developmental problem as a result of goiter related disorders. A male teacher expressed in a skeptical way about inattentiveness of some of child with goiter-"He is seldom attentive in class, he has problem grasping simple issues, I suspect that whether it is due to goiter". A senior teacher did gave a knowing look when probed and said that she knows that goiter causes mental and developmental delay "Yes I know that it is goiter and associated indine deficiency are at the root of these children's retarded intellectual level beyond repair".

Theme 6: An Arsenal of Strategies of prevention and treatment & rehabilitation:

The teachers mentioned various tactics most of them em-

phasizing the iodized salt as the most important preventive strategy against goiter. A senior middle school teacher said emphatically "lodized salt is must for preventing goiter and its related complications". Many of them pointed that consumption of green vegetable, balanced diet, hygiene and parental sensitization will be very good preventive strategy. A young female teacher expressed enthusiastically "I must say diet, hygiene and parental counseling that all we need and it won't even happen, as the saying goes- prevention is better than cure".

Most of the teachers were in accordance with the immediate approach to the doctor when a child is suspected and should be treated. Some of them do express mildly that parental sensitization about the cause and effect can be used as a screening tool. A male teacher said tersely "Parents should be sensitized about the cause and effect". All of them agreed factually that it is early diagnosis which matters.

Couple of senior teachers express while looking engrossed in the conversation that community participation including family is the key to success in managing the condition and the rehabilitation of the child. One of them expressed in a hopeful manner the way they help those child who suffer from developmental and mental retardation-"We try to provide assistance to these child by providing them extra classes in evening with peer group help. Additionally we device some more interactive methods like role playing and audio-visual devices to teach them in these classes"



Figure 1- Expressions embedded in discourse of School teachers' perception

Discussion

As also mentioned above; a teacher may be visualized as immediate influential health care provider and educator under the umbrella of school health services (SHS). His ability to communicate, intellectual status, acquaintance with the socio-demographical determinants of students and opportunity for steady contact grants him the position of more than the "Proxy" of designated health care workforce. Hence perception and opinion analysis of the school teachers may provide an insight to understand the need and trends of health care delivery at doorsteps. The themes that are emerging through this content and discourse analysis can be interwoven in a common thread.

In this study teacher seems to be aware about the existence of the disease in a "fragmented" manner may be an offshoot of Information Education and Communication (IEC) activities organized by the government. But this disjointed & scrappy information may not enforce these intellects owing to inability to connect this split information into logical actionable knowledge. Moreover, this sub-community (school teachers) is a part of larger community (general public) as well. The imprints of general public about goiter (unsightly, surprise, ignorance) can also be appreciated from this study. What is required to establish a methodical training program designed for school teachers in order to bestow them a wholesome knowledge of the issue.

In addition to above; in post iodization era several other causes are also emerging as possible culprit for goiter apart from lodine Deficiency alone. Clinically, it is difficult to differentiate a non-nutritional goiter from a nutritional goiter; this makes their early diagnosis more difficult. Teachers being a key stakeholders and seemingly unaware about these causes need to be addressed. Furthermore, this sub-community (school teachers) visualizes the whole phenomenon in a sympathetic manner. They do show their consensus about the prevalent stigmatization in larger community (general); but they feel themselves helpless to address the issue, may be, because of their own "limited" acquisition of knowledge & prevalent power dynamics in society.

The Ominous consequences of goiters are of paramount importance in educational field per se. Although teacher perceived the pressure effect of the goiter may be the result of innate logical thinking, they were not able to appreciate the possible socio-developmental & educational grave outcomes of the disorder. Unless and until they perceive it, they cannot link themselves to the urgency to prevent it. This fact again emphasizes the need of thorough sensitization rather than to provide patchy and split information.

Teacher do endorse iodized salts as preventive strategy against goiter which is indeed a welcome sign being their position as immediate information givers. Their belief in early diagnosis as key to cure coupled with need of rehabilitation of such children can also be counted as a reflection of general awareness but only few of them were actually experience as to how to rehabilitate a child vocationally. This is again an area of concern as teachers play fundamental and most important role in the vocational rehabilitation of a school child.

They have an optimistic attitude for the sufferers despite speculative views about its causes. Their belief in early diagnosis as key to cure coupled with the need of rehabilitation of such children can also be considered as a reflection of general awareness but only few of them were actually had experience in developmental & vocational rehabilitation of such children. This is again an area of concern as a teacher is a fundamental facilitator for developmental rehabilitation of students.

To the best of the authors' knowledge this study is the pioneer in Central Indian setting which explores selectively the perception of school teachers from 360° angles on goiter. Another similar study conducted in Zarkhand focuses on the knowledge and perception of school teachers about lodine and implication of the deficiency (context differs from visible goiter alone) and detected the inconsistent knowledge status of the teachers same as this study (Patro, et al, 2008). Several other studies on teachers' perceptions about Epilepsy, Autism, Childhood Obesity and Oral health around the globe do emphasize the need to raise awareness level among teachers in order to communicate a shared positive health with students. (Bloedow, 2002; Bordoni, del, Cadile, Sotelo & Squassi, 2006; Fernandes, et al, 2007; Syriopoulou-Delli, Cassimos, Tripsianis & Polychronopoulou, 2012). Some other qualitative studies from India do access the awareness and perception of IDD (not generic goiter) among stakeholders (other than teachers) focusing on consumption of non-iodized salt (Kalra, Kalra & Sawhney, 2013; Pandav, et al, 2010).

This study although conducted with full rigor required for a qualitative research; does not claim generalization of the findings; for the reason that, it is neither a 'multicentric one nor focusing on a 'participants' in a similar socio-demographic environment. With this innate limitation of the qualitative research the strength lies in the fact that it does provides a context to visualize the challenge of still rampant 'post-iodination goiter' from one of the 'key-stakeholder' perceptions(teacher); about whom little was explored till now in spite of holding the position of major facilitator to promote positive health in children.

REFERENCES

Bloedow, W. J. (2002). Teachers' Attitudes and Beliefs about Childhood Obesity In the Schools. Retrieved from http://www2.uwstout.edu/content/lib/thesis/2002/2002bloedow.pdf. | Bordoni,N., del, M., Cadile, C., Sotelo,R., Squassi, A.(2006). Teachers' perception of oral health status: Design and validation of an evaluation instrument. Acta Odontol. Latinoam, 19:67-74. | Central Health Education Bureau. (1965). Report of seminar on school health services. New Delhi: Govt. of India. | Fernandes, P.T., Noronha A.L., Araújo, U., Cabral, P., Pataro, R., de Boer, H.M., Prilipko, L., Sander, J.W., Li, L.M.(2007). Teachers' perception about epilepsy. Arq Neuropsiquiatr,65:28-34. Health Education Program Planning and Implementation. (2000). In School Health and Nutrition. Retrieved from http://www.unesco.org/education/educprog/ ste/projects/health/planning.htm. | Kalra, S., Kalra, B., Sawhney, K. (2013). Usage of non-iodization phase: Iodine status, thiocyanate exposure and autoimmunity. Clin Endocrinol,59:672–81. | Pandav, C.S., Krishnamurthy, P., Sankar, R., Yadav, K., Palanivel, C., Karmarkar, M.G.(2010). A review of tracking progress towards elimination of Iodine deficiency disorders in Tamil Nadu, India. Indian J Public Health,54:120-5. | Park, K. (2013). Park's textbook of preventive and social medicine. Jabalpur: Bhanot. | Patro, B.K., Saboth, P., Zodpey, S., Shukla, A., Karmarkar, M.G., Pandav, C.S. (2008). Tracking Progress Toward Elimination of Iodine Deficiency Disorders in Jharkhand, India. Indian J Community Med, 33:182-85. doi: 10.4103/0970-0218.42061. | Syriopoulou-Delli, C.K., Cassimos, D.C., Tripsianis, G.I., Polychronopoulou,S.A.(2012). Teachers' perceptions regarding the management of children with autism spectrum disorders. J Autism Dev Disord, 42:755-68. doi: 10.1007/s10803-011-1309-7. | Unnikrishnan, A.G., Menon, U.V.(2011). Thyroid disorders in India: An epidemiological perspective. Indian J Endocrinol Metab. doi: 10.4103/2230-8210.83329. |