

Teething myths among nursing mothers in a Nigerian community

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ABSTRACT

Background: Many symptoms had been associated with teething in children with the possibility of overlooking potentially fatal condition. Symptoms that had been associated with teething include diarrhoea, fever, vomiting and cough. The possibility that any of these symptoms could have been due to other causes call for thorough investigation of the child before concluding that it is only “teething”. **Objectives:** The study was carried out to assess the beliefs of nursing mothers concerning symptoms that are associated with teething among children and to identify those that would seek medical treatments in case of their children having such symptoms during teething. **Materials and Methods:** Two hundred and ninety nursing mothers whose children had erupted at least a tooth were interviewed in the immunisation clinics of the University College Hospital and Adeoyo Maternity Teaching Hospital, both in Ibadan, Nigeria, on their beliefs and practice concerning teething in children. **Results:** One hundred and eighty-eight (64.8%) of the mothers associated symptoms such as fever, cough, catarrh and diarrhoea with eruption of teeth in their children. Over half of the women agreed that a child having either fever (51.0%), ear infection (57.6%) or cough (50.3%) should be promptly taken for medical consultation and not be tagged “teething”, while for other symptoms such as gum pain (74.5%), sleepless night (56.6%), vomiting (51.4%) and diarrhoea (51.7%), over half of the mothers believed that the symptoms will resolve following the eruption of the teeth. **Conclusion:** The study demonstrated that mothers in the study attributes several symptoms to teething, which could be detrimental to the survival of their children as the symptom could have been due to other causes. There is, therefore, need for public enlightenment to create awareness on the possible effect of presumptuous belief that childhood diseases are due to teething process.

Key words: Community, mothers, myths, nursing, teething

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INTRODUCTION

Teething can be defined as the eruption of primary teeth in infancy, which usually begins around 4-10 months after birth with further eruption progressing at the rate of approximately one new tooth per month. The full complement of the twenty deciduous teeth is almost always completed in a 30-months-old child.¹ The normal sequence of eruption of deciduous teeth is that the central incisors first erupt, followed by the lateral incisors, first molars, canine and lastly the second molars. The process

of eruption is under strong genetic control with minor influence from environmental factors.² Teething is one of the major milestones in the development of the child with many cultures having different perspective of the variations that is encountered in the process of teething. For example, ‘old wives’ tale’ considers precocious eruption as a sign of great intelligence in some culture,³ while a traditional ceremony is organised to celebrate the eruption of the first tooth in another culture. The celebration is based on the belief that teething is a developmental indicator for the child.¹

The issue of symptoms associated with teething had been controversial with some authorities claiming that specific symptoms are associated with teething while others claimed that the contrary is true.³⁻⁶ Traditional believes also strongly associate specific symptoms with periods of teething in children. Some symptoms that had been associated with teething in children include fever, diarrhoea, general irritability, drooling of saliva/sialorrhoea,

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sleep disturbance, and ear infection.⁷ Others include pain, inflammation of the mucous membrane overlying the tooth, facial flushing/circumoral rash, gum rubbing/biting/sucking, constipation and loss of appetite/alteration of volume of fluid intake.⁶ Many parents and even some health care givers still associate teething with one symptom or the other with the possibility of overlooking a potentially fatal condition simply because the condition is labelled as “teething”.⁶⁻¹⁰ Therefore, it is advisable that other organic causes need to be excluded in a child who is ill enough to be admitted to hospital, this will enhance the proper management of such a child.¹¹ The association of teething with some symptoms by parents and health workers must have encouraged the use of “teething medicaments” for children of certain age.^{7,10} In order to avoid missing a more life-threatening condition, it is advised that health care givers should regard teething as a diagnosis of exclusion to be made with caution. It is, therefore, advisable that if a child is ill enough to be admitted to hospital, other organic causes need to be excluded so that the child can be properly managed.¹¹

The present study was carried out to assess the beliefs of nursing mothers concerning symptoms experienced by their children, which they believed was due to teething. The study was also used to assess the willingness of the mothers to seek medical treatment in case of any of those symptoms that are commonly associated with teething. The authors hope that the knowledge of the beliefs of the nursing mothers concerning teething will contribute to policy formulation towards proper management of children rather than tagging many childhood diseases as being due to teething.

MATERIALS AND METHODS

A cross-sectional study of 290 nursing mothers was undertaken at the immunisation clinics of the University College Hospital and Adeoyo Maternity Hospital, both in Ibadan, Nigeria. The children were examined to be sure that they have erupted at least a tooth and this served as the inclusion criteria to enrol the mothers into the study. The choice of mothers whose children had erupted at least a tooth was based on the need for them to have recently observed a child passing through the experience of tooth eruption. A 31-item semi-structured interviewer administered questionnaire was used to assess among other things, the gender of the child, the age at the eruption of the first tooth in months, how the mother got to know that the child was erupting a tooth and the symptom(s) seen in the children that the women attributed to teething. Questions were also asked on those symptoms that the mothers perceived as not significant enough to seek medical treatment for a child during teething. Informed consent was obtained verbally from the mothers by asking them whether they agreed to participate in the study or not after a thorough explanation of the study. The study was approved

by the joint University of Ibadan/University College Hospital Institutional Review Committee (UI/UCH IRC).

The data generated was entered into a personal computer and analysed using Statistical Package for Social Sciences (SPSS Inc. 2005) version 14. Chi-square analysis was done to determine the differences among the age groups with respect to their belief concerning the association between the process of teething and the various symptoms. Level of statistical significance was set at $P < 0.05$.

RESULTS

A total of 290 nursing mothers were seen and the age of their children ranged from 4-27 months with a median age of 9.0 months. There were 174 (60%) males and 116 (40%) females among the children. One hundred and eighty-eight (64.8%) of the mothers believed that eruption of teeth in their children was accompanied by one symptom or the other. Some of the symptoms that the mothers attributed to teething process in their children include fever (82.1%), diarrhoea (44.8%), cough (52.8%) and vomiting (32.8%). Many of the women reported more than one symptom in their children during teething [Table 1]. The women held diverse opinions on the issue of taking their children to the hospital in case of symptoms in their children during teething. Some of them had the opinion that the symptoms were due to teething and will resolve spontaneously and that the child should be taken for medical treatment only if the symptoms persist, while others believed that the child should be taken to the hospital for treatment as soon as possible. Some of the symptoms that majority of the women agreed that the children should be promptly taken to hospital for include fever (52.0%), ear infection (57.6%) and cough (50.3%) [Table 2]. There was a statistically significant difference in the relationship between the age of the mothers and their attributing symptoms to teething in their children as a greater percentage of the younger mothers tend to ascribe the symptoms in their children to teething [Table 3]. There was also statistically significant difference when the socio-economic status of the women

Table 1: Prevalence of symptoms in the children attributed to teething process by their mothers

Symptoms	Number of mothers	Percentage
Fever	238	82.1
Diarrhoea	130	44.8
Cough	153	52.8
Rash on the face	40	13.8
Catarrh	184	63.4
Vomiting	95	32.8
Irritability	175	60.3
Loss of appetite	141	48.6
Ear infection	17	5.9
Constipation	13	4.5

The percentage is not adding up to 100% because of the multiple symptoms by many of the subjects

were compared with their attributing symptoms to teething as more of those in the lower socio-economic classes tend to attribute symptoms to teething than those in the higher classes ($P < 0.008$) [Table 4].

Table 2: Willingness of the nursing mothers to take their sick children to hospital during teething

Symptoms	I will take the child to hospital (%)		Total (%)
	Yes	No	
Gum pain	74 (25.5)	216 (74.5)	290 (100)
Sleepless night	126 (43.4)	164 (56.6)	290 (100)
General irritability	88 (30.3)	202 (69.7)	290 (100)
Biting on hard object	38 (13.1)	252 (86.9)	290 (100)
Drooling of saliva	46 (15.9)	244 (84.1)	290 (100)
Diarrhoea	140 (48.3)	150 (51.7)	290 (100)
Fever	148 (51.0)	142 (49.0)	290 (100)
Ear infection	167 (57.6)	123 (42.4)	290 (100)
Loss of appetite for solid food	84 (29.0)	206 (71.0)	290 (100)
Vomiting	141 (48.6)	149 (51.4)	290 (100)
Constipation	108 (37.2)	182 (62.8)	290 (100)
Rashes on the face	137 (47.2)	153 (52.8)	290 (100)
Cough	146 (50.3)	144 (49.7)	290 (100)
Running nose	111 (38.3)	179 (61.7)	290 (100)
Loss of appetite for liquid food	121 (41.7)	169 (58.3)	290 (100)
Sucking of finger	33 (11.4)	257 (88.6)	290 (100)

Table 3: Relationship between ages of the nursing mothers with their likelihood of attributing symptoms to teething

Age group (years)	Presence of symptoms (%)		Total (%)
	Yes	No	
20-25	60 (81.1)	14 (18.9)	74 (100)
26-30	70 (62.5)	42 (37.5)	112 (100)
31-35	41 (54.7)	34 (45.3)	75 (100)
>35	17 (58.6)	12 (41.4)	29 (100)
Total (%)	188 (64.8)	102 (35.2)	290 (100)

$\chi^2=12.73$; $P=0.005$; Likelihood ratio=13.50

Table 4: Relationship between the socioeconomic statuses of the nursing mothers with their likelihood of attributing symptoms to teething

Socioeconomic status	Presence or absence of symptoms (%)		Total (%)
	Yes	No	
Professionals	3 (1.6)	5 (4.9)	8 (2.8)
Civil servants	31 (16.5)	32 (31.4)	63 (21.7)
Skilled labour	27 (6.9)	7 (14.4)	34 (11.7)
Unskilled labour	120 (63.8)	55 (53.9)	175 (60.3)
Students	7 (3.7)	3 (2.9)	10 (3.5)
Total	188 (100)	102 (100)	290 (100)

$\chi^2=13.727$; $P=0.008$; Likelihood ratio=13.566

DISCUSSION

The issue of teething in children is controversial as many parents and some health care providers still believed that the process is accompanied by many symptoms.^{1,6-8,12} This belief persists despite the availability of contrary reports.^{5,13} The result of this study shows that many of the mothers associate different types of symptoms to teething in their children, which is in agreement with previous studies that reported that parents associate various symptoms with teething in their children.^{1,5,7} Fever was the symptom mostly associated with teething by the mothers as over 80% of the mothers claimed that their children had fever while teething. This finding is in line with the findings by Wake *et al.*,^{12,13} who reported that most of the parents claimed that there were associated symptoms with the periods of teething in their children. However, the objective findings in the study by Wake *et al.*,¹³ contradict the general consensus of the mothers in that there was no evidence suggestive of temperature rise among the children during the period of teething.

Another symptom that had been widely associated with teething in children is diarrhoea^{8,14,15} and 44.8% of the subjects in this study claimed that they got to know of their children tooth eruption as a result of loose stool. The mothers believed that the diarrhoea that is associated with teething is peculiar to this period and requires no treatment. Some of the mothers claimed that the diarrhoea is a "cleansing" procedure in which the child cleanses the whole of the body system. The finding in this study is in agreement with that of Ene-Obong *et al.*,¹⁵ who reported that 28.8% of the mothers in their study attributed the diarrhoea being experienced by their children to teething and that there is nothing that anyone can do to resolve it until the teething is over. The danger in this is that the mothers are neglecting possible causes and effects of diarrhoea in children. The fact is that poor personal and environmental hygiene practices can contribute to the incidence of diarrhoea in the children,¹⁵ while the diarrhoea can eventually be life-threatening if not promptly attended to. Diarrhoea that is associated with teething is given local names in many part of the country, which makes it difficult to dissociate the mind of the people from this belief.

Quite a number of the women believed that the symptom will generally resolve on its own following the full eruption of the teeth and this informed their decision whether or not to take the child for medical care when they noticed symptoms in their children during teething. It was only in the case of fever, ear infection and cough that over 50% of the women agreed that they will take their child for prompt medical attention, while in the case of other symptoms, over 50% will first observe the child for sometime hoping that the symptom will subside [Table 2]. This can jeopardise the lives of these children because of the possibility of late

presentation with fatal illnesses that was initially termed “teething” by the mothers. More of the younger women tend to associate symptoms with their children teething, which may be due to the fact that the older women are more likely to have had experiences with their previous children. Therefore, there is the need for a study into the effect of previous child birth by the mothers on their perception of teething process in their children.

CONCLUSION

The study demonstrated that Nigerian mothers still attribute several symptoms to teething, which could be detrimental to the survival of their children. There is, therefore, great need for public enlightenment to create awareness on the possible effect of presumptuous belief that childhood diseases are due to teething process. It is also advisable that possible causes of symptoms be fully ruled out before labelling it as being due to teething so as not to jeopardise the lives of the children.

REFERENCES

1. Baykan Z, Sahin F, Bayazova U, Ozçakar B, Baykan A. Experience of Turkish parents about their infants' teething. *Child Care Health Dev* 2004;30:331-6.
2. Llyod S. Teething in babies: Separating fact from the fiction. *Prof Care Mother Child* 1996;6:155-6.
3. McIntyre GT, McIntyre GM. Teething troubles? *Br Dent J* 2002;192:251-5.
4. Ashley MP. It's only teething... A report of the myths and modern approaches to teething. *Br Dent J* 2001;191:4-8.
5. Macknin ML, Piedmonte M, Jacobs J, Skibinski C. Symptoms associated with infant teething: A prospective study. *Pediatrics* 2000;105:747-52.
6. Wake M, Hesketh K. Teething symptoms: Cross sectional survey of five groups of child health professionals. *BMJ* 2002;325:814.
7. Sarrell EM, Horev Z, Cohen Z, Cohen HA. Parents' and medical personnel's beliefs about infant teething. *Patient Educ Couns* 2005;57:122-5.
8. Sodemann M, Jakobsen MS, Mølbak K, Martins C, Aaby P. Maternal perception of cause, signs and severity of diarrhoea in a suburban west African community. *Acta Paediatr* 1996;85:1062-9.
9. Bankole OO, Denloye OO, Aderinokun GA. Attitude, beliefs and practices of some Nigerian nurses toward teething in infants. *Odontostomatol Trop* 2004;27:22-6.
10. Denloye O, Bankole OO, Aderinokun GA. Teething myths among community health officers. *Odontostomatol Trop* 2005;28:19-22.
11. Tighe M, Roe MF. Does a teething child need serious illness excluding? *Arch Dis Child* 2007;92:266-8.
12. Wake M, Hesketh K, Allen M. Parent beliefs about infant teething: A survey of Australian parents. *J Paediatr Child Health* 1999;35:446-9.
13. Wake M, Hesketh K, Lucas J. Teething and tooth eruption in infants: A cohort study. *Paediatrics* 2000;106:1374-9.
14. Coreil J, Price L, Barkey N. Recognition and management of teething diarrhoea among Florida paediatricians. *Clin Pediatr (Phila)* 1995;34:591-6.
15. Ene-Obong HN, Iroegbu CU, Uwaegbute AC. Perceived causes and management of diarrhoea in young children by market women in Enugu State, Nigeria. *J Health Popul Nutr* 2000;18:97-102.

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