



Article original

Oral hygiene practices of teachers of basic schools of Commune III of Bamako

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Résumé

L'hygiène buccodentaire (HBD) est un ensemble de pratiques permettant d'éliminer la plaque dentaire. Nous avons mené une étude descriptive transversale à visée prospective sur une période de 6 mois (Juin à Décembre 2017). L'objectif de l'étude était d'évaluer les connaissances, les attitudes et les pratiques des enseignants face à l'hygiène buccodentaire. Etaient inclus tous les enseignants des écoles fondamentales y compris ceux des jardins d'enfants de la commune III. L'étude a concerné 300 enseignants (57% d'hommes pour 43% de femmes) avec des tranches d'âge de 21 à 59 ans (42,5%) dont 56% avaient moins de 10 ans d'expérience.

La majorité des enseignants avaient une information sur l'hygiène buccodentaire soit 94%, et moins de la moitié soit 39% n'avaient pas encore enseigné un module sur l'hygiène buccodentaire. Tous les enseignants (100%) se brossaient les dents et environ 45,3% effectuaient deux fois par jour, et seulement 19,3% avaient une bonne technique de brossage.

Cette étude souligne donc la nécessité d'adopter le conseil en SBD, plus spécifiquement sur la pratique d'HBD des enseignants.

Mots-clés : hygiène buccodentaire, connaissances, attitudes, pratiques, enseignants, Bamako.

Abstract

Oral hygiene (HBD) is set of practices for removing plaque. We conducted a transversal descriptive study with a prospective aim over a period of 6 months (June to December 2017). The aim of the study was to assess the knowledge, attitudes and practices of teachers with regard to oral hygiene. Included were all teachers in basic schools including those in kindergarten in commune III. The study involved 300 teachers (57% male versus 43% female) with age groups from 21 to 59 (42.5%), 56% of whom had less than 10 years of experience.

The majority of teachers had information about oral hygiene (94%), and less than half (39%) had not yet taught a module on oral hygiene. All teachers (100%) brushed their teeth and about 45.3% performed twice a day, and only 19.3% had good brushing technique.

This study therefore highlights the need to adopt SBD counseling, more specifically on teachers' HBD practice.

Keywords: oral hygiene, knowledge, attitudes, practices, teachers, Bamako.

Introduction

Oral hygiene (OH) is a set of practices that eliminate

plaque. A good OH thus contributes to our health and well-being; her disability can affect her appearance and self-esteem, making it difficult to chew and digest food [1].

The WHO ranks oral diseases third after cancer and cardiovascular diseases [2]. In Africa, the prevalence of oral diseases varies between 54.28% and 73.70% through some epidemiological studies showing their recrudescence [3]. Mali is no exception in the high incidence and prevalence of tooth decay and periodontal disease in its population, especially among schoolchildren [4,5]. In order to help address the paucity of oral disease data in children, to reduce the high prevalence among schoolchildren, a multidisciplinary approach is needed for effective dental education of children.

The school being a place where the training and education of children should continue. The integration of hygiene education and oral health promotion will greatly contribute to improving the health of learners.

Patients and methods

We conducted a cross-sectional descriptive study with a prospective aim going from June to December 2017 (6 months). Three hundred (300) teachers from basic schools including those from the kindergartens of the Center for Educational Animation (CAP) of the commercial center of commune III of the district of Bamako were collected. Before the study, a correspondence was addressed to the Academy of Education on the left bank of Bamako which directed us to the commercial CAP. The list of schools was provided by the CAP director. The schools (53 public, 12 private) were drawn randomly and concerned the first cycle and second cycle of education. Were included All teachers who agreed to participate during our visit and were not included any absent person and refusing to participate. As a study based on a mixed approach (quantitative

with semi-directive questionnaires and qualitative as a focus group). Seven focus group interviews focused on knowledge, attitudes, and oral hygiene best practices were completed. The verbal consent of each participant was previously acquired before inclusion and informed of the progress of the study. Data entry and processing was done by Microsoft office Word 2016.

Results

Quantitative study

Three (300) teachers participated in this study (57% of men and 43% of women) between 21 and 59 years old.

Teachers had information on oral hygiene with 94% of cases and the source was TV in 40.6%. 54.3% of teachers said that children were the most exposed to poor oral hygiene. Dental caries was the result of poor oral hygiene, which is the most frequently mentioned in 94% of cases. They were affected by oral diseases in 50% of cases due to poor HBD. Less than half (39%) had not yet taught a module on oral hygiene. About 45.3% of teachers brushed twice a day and with soft toothbrushes used in 62.2% of cases. They used toothpastes in 98%. The toothbrush change rate was 2 months in 44.9% of cases. Teachers in 20% had not talked about oral health issues especially about oral hygiene at school.

Qualitative study

The people most exposed to bad HBD, the most evoked were: children (nibbling ++), old men, those who do not brush their teeth. The vast majority of teachers were unaware of the proper brushing technique. They evoked more horizontal technique as the most practiced. In our extensive individual interviews, most teachers reported that they usually change toothbrushes only when they are worn or misplaced.

*Knowledge on oral hygiene***Table I :** Distribution according to the level of information on oral hygiene

| Oral Hygiene Information | Effective | Frequency |
|--------------------------|-----------|-----------|
| Yes | 283 | 94,3 |
| No | 12 | 4,0 |
| I do not know | 5 | 1,7 |
| Total | 300 | 100 |

Teachers had information about oral hygiene with 94.3%.

Table II: Distribution according to the information source on oral hygiene.

| Information source on oral hygiene | Effective | Frequency |
|------------------------------------|-----------|-----------|
| Television | 115 | 40,6 |
| Documents | 96 | 33,9 |
| Agents of health | 86 | 30,4 |
| Radio | 74 | 26,1 |
| Friends | 29 | 10,2 |

Approximately 40.6% of information were given by television.

Table III: Distribution according to the people most exposed to bad oral hygiene

| Most exposed to bad HBD | Effective | Frequency |
|-------------------------|-----------|-----------|
| Children | 163 | 54,3 |
| Those who do not brush | 123 | 41,0 |
| smokers | 30 | 10,0 |
| Old people | 28 | 9,3 |
| Poor | 21 | 7,0 |
| Women | 11 | 3,7 |
| Men | 6 | 2,0 |
| Rich people | 6 | 2,0 |
| Other | 4 | 1,3 |

* Other: Handicapped (1), Everyone (1), No idea (2)

The teachers with 54.3% said that the children were exposed to a bad oral hygiene.

Table IV: Distribution according to the consequences generated by a bad oral hygiene

| Consequences of a bad oral hygiene | Effective | Frequency |
|------------------------------------|-----------|-----------|
| Dental carie | 282 | 94,0 |
| Halitose | 40 | 13,3 |
| Gun disease | 32 | 10,7 |
| Abcess | 24 | 8,0 |
| periodontitis | 19 | 6,3 |
| Oral Cancer | 17 | 5,7 |
| Named (noma) | 12 | 4,0 |
| Others | 6 | 2,0 |

Others: Abdominal pain (3), Wounds in the mouth (3). The dental carie was the consequence of a bad oral hygiene the most evoked in 94% of the cases.

Table V: Distribution according to the prevention of the oral diseases by complying with the good rules of hygiene

| Prevention of the oral diseases | Effective | Frequency |
|---------------------------------|-----------|-----------|
| Yes | 286 | 95,3 |
| I don't no | 14 | 4,7 |
| Total | 300 | 100 |

The prevention of the oral affections by the compliance with the rules of oral hygiene was possible with 95.3%.

*Attitudes on oral hygiene***Table VI:** Distribution according to the impairment of oral diseases due to bad oral hygiene

| Achievement of oral diseases | Effective | Frequency |
|------------------------------|-----------|-----------|
| Yes | 151 | 50,3 |
| No | 141 | 47,0 |
| I do not remember | 8 | 2,7 |
| Total | 300 | 100 |

The teachers in 50%des case had already had oral diseases due to an bad oral hygiene

Table VII: Distribution according to the teaching of a bearing module on oral hygiene

| The teaching of oral hygiene | Effective | Frequency |
|------------------------------|-----------|-----------|
| Yes | 177 | 59,0 |
| No | 117 | 39,0 |
| I don't remember | 6 | 2,0 |
| Total | 300 | 100 |

Less than half soit39%on' had not taught a bearing module yet oral hygiene.

Table VIII: Distribution according to the benefit of a formation on oral health

| Benefit of a training on the oral health | Effective | Frequency |
|--|-----------|-----------|
| Yes | 54 | 18,0 |
| No | 244 | 81,3 |
| I don't remember | 2 | 0,7 |
| Total | 300 | 100 |

A majority is 81.3% of the teachers had not profited from a formation of educational par on oral health.

Practices on oral hygiene

All the teachers (100%) brushed the teeth

Table IX: Breakdown according to the number of daily brushing

| Number of brushing | Effective | Frequency |
|--------------------|-----------|-----------|
| 1 | 34 | 11,3 |
| 2 | 136 | 45,3 |
| 3 | 113 | 37,7 |
| More than 3 | 17 | 5,7 |
| Total | 300 | 100 |

Approximately 45.3% of the teachers were brushed twice a day.

Table X: Distribution according to the Technical brushing

| Technical brushing | Effective | Frequency |
|--------------------|-----------|-----------|
| Vertically | 58 | 19,3 |
| horizontally | 98 | 32,7 |
| Both | 144 | 48,0 |
| Total | 300 | 100 |

Only 19.3% had a good brushing technique

Table XI: Distribution according to the quality of the brush with tooth used

| Brush type | Effective | Frequency |
|------------|-----------|-----------|
| Flexible | 183 | 62,2 |
| Tough | 59 | 20,1 |
| Medium | 52 | 17,7 |
| Total | 294 | 100 |

The flexible toothbrushes were used with 62,2% .

Table XII: Distribution according to the use of toothpastes

| Use of toothpastes | Effective | Frequency |
|--------------------|-----------|-----------|
| Yes | 294 | 98 |
| No | 6 | 2 |
| Total | 300 | 100 |

The majority of the teachers either 98%utilisaient the toothpastes.

Table XIII: Distribution according to the quality of toothpaste used

| Quality of paste den-frice | Effective | Frequency |
|----------------------------|-----------|-----------|
| Fluorinated | 241 | 81,97 |
| Nofluorinated | 18 | 6,12 |
| I don'tno | 35 | 11,91 |
| Total | 294 | 100 |

Table XIV: Distribution according to the rhythm of change of brush with tooth

| Rhythm of change | Effective | Frequency |
|------------------|-----------|-----------|
| Every month | 5 | 1,7 |
| 2 months | 132 | 44,9 |
| 3 months | 76 | 25,9 |
| 4 months | 61 | 20,7 |
| When it's worn | 19 | 6,5 |
| I do not know | 1 | 0,3 |
| Total | 294 | 100 |

The rhythm of change of brush with teeth was 2 months in 44,9%des case.

Table XV: Distribution according to sensitizing on oral hygiene at the school

| sensitizing | Effective | Frequency |
|------------------|-----------|-----------|
| Yes | 216 | 72,0 |
| No | 60 | 20,0 |
| I don't remember | 24 | 8,0 |
| Total | 300 | 100 |

The teachers in 20%n' had not spoken about the oral health problems particularly on oral hygiene at the school.

Table XVI: Distribution according to importance given to oral hygiene

| Importance | Effective | Frequency |
|--------------------|-----------|-----------|
| No importance | 1 | 0,4 |
| A small importance | 9 | 4,2 |
| Does not matter | 24 | 11,1 |
| Great importance | 162 | 84,3 |
| Total | 216 | 100 |

Of 216 respondents who spoke about oral health problems in school, 162 among them or 84.3%

placed great importance on oral hygiene

Table XVII: Distribution according to non-awareness of oral hygiene at school

| Reason | Effective | Frequency |
|-------------------------------|-----------|-----------|
| Lack of time | 18 | 30,0 |
| Do not leave of my discipline | 16 | 26,7 |
| Not in the program | 10 | 16,7 |
| Lack of information | 8 | 13,3 |
| Already trained students | 8 | 13,3 |
| Total | 60 | 100 |

Lack of time, do not leave my discipline and is on the program were the reasons listed by teachers who did not often talk about oral health problems especially oral hygiene in respectively 30%, 26.7%, 16 , 7 cases.

Discussion

In our study we found 57% of male teachers with a sex ratio of 1.34 in favor of men with an age range of 30 to 40 (45.70%). Most teachers had less than 10 years of teaching experience, or 56%. These data are similar to that of Ahmed MS in Saudi Arabia in 2015 [6] who had obtained a male predominance of 57% and an age range of 31 to 40 years, 68% were between 31 and 40 years of age. experience in teaching and SY A. in relation to the male sex [7].

In our study, 94.3% of teachers had information on oral hygiene. These results are comparable to those of Ibrahim et al in Tanzania [8] that they found in their studies that the main source of information on the SBD was the textbook and dental clinic and Paul Lang et al. [9] dentists' offices, magazine and books at 74%.

Prevention of oral diseases by compliance with the rules of oral hygiene was possible with 95.3%. Paul Lang et al [9] in America reported that teachers considered the prevention of tooth decay as the most important reason for good HBD.

In our survey, 50.3% of teachers had had oral diseases due to poor oral hygiene. In Tanzania, in Ibrahim et al's study, a significant proportion of

teachers also reported having dental problems [10]. This shows that emphasis needs to be placed on prevention methods.

81.3% of the teachers had not yet received SBD peer educator training. So here shows an urgent need for teacher training in the teacher training institute (the IFM) on HBD.

In our study, compared to brushings, all teachers (100%) brushed their teeth, most (45.3%) brushed twice daily, after meals in 52.7% of cases. The toothbrush was the most used brushing tool by teachers with 67.7% accompanied by toothpastes (97.7%).

The prevalence of brushing and the use of toothpaste was similar to that of other studies [11, 12.6] Except for the study [11] of which very few 3% had cleaned their teeth after meals.

The toothbrush change once every three months had been performed only by 25.9% of the cases. Amith H V et al in India [12] reported that this change had only been practiced by 84% of teachers.

Conclusion

The study showed that teachers had good knowledge, attitudes and practices on hygiene and oral diseases. The integration of modules on the prevention and promotion of oral hygiene at the level of teacher training institutes and in schools will contribute to strengthening their skills in order to reduce oral diseases at home and among learners.

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