

Knowledge awareness and practice of oral health among health care workers - A cross section institution study

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Abstract

Background: Health care workers form the first step in the health care system. They have an easy access to general population compared to others in the health care structure. Hence they play a major role in major reformation in the society by bringing awareness among general population. **Methods:** A cross sectional study was conducted using 24 well structured questionnaires was distributed among 109 HCW of Koppala Institute of Medical Sciences. **Results:** The answers from the questionnaire were scored and entered into excel sheets and submitted for statistical analysis. The results obtained were presented as cumulative percentile. **Interpretation and Conclusion:** The awareness about oral health of HCW appears to be optimal as they were aware of basic things but the specific and extended details about normal and pathology appeared to be missing. Thus requiring the need to be institute proper oral health knowledge so that it effectively reaches the larger general population

Key Word: Oral Health; Health care workers, KAP module

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INTRODUCTION

Oral health is defined as “a standard of health of the oral and related tissues which enables an individual to eat, speak and socialize without active disease, discomfort or embarrassment and which contributes to general well-being.”¹ Oral disease is a universally prevalent disease and is considered largely as a chronic non-communicable disease.² It has a high impact on public health problem due to their high prevalence and significant social impact as a dental professional is approached only for

symptomatic and curative purposes rather than preventive measures.³ Health Care Centers form the back bone of the health care system and Health care workers (HCW) constitute an integral component of health care system. The health care workers have a relatively easy access to a vast majority of the rural population and can render health care services to the millions.⁴ Health care workers also have a larger access to the general population and thus can influence large communities in extending first hand knowledge on health. It is noted that though the HCW’s were able to successfully extend knowledge on safe drinking water, living environment of people, balanced diet, prevention of communicable diseases like typhoid, leprosy, malaria etc, and the latest avoiding open defecation. But the same HCW’s find oral hygiene tasks unpleasant as they themselves do not have a proper knowledge on oral health and measures for oral hygiene. Thus we plan to first assess and provide the knowledge attitude and practice of oral health and hygiene measures in health care workers so that it can be ultimately be relayed to a larger group of population.

AIM OF THE STUDY

- To assess oral health status and treatment needs of the health workers in Koppal Institute of Medical Sciences.
- To assess the KAP of HCWs
- To explore and suggest best possible method for oral care and education for health workers

MATERIALS AND METHODS

A cross sectional questionnaire based study was conducted to assess the KAP of around 109 HCW in Koppal Institute of Medical Sciences. We selected the sample size using simple random sampling method. The study group of health care workers in our study comprised of staff nurses, technicians, paramedical staff. A descriptive questionnaire contained closed- ended questions with 24 questions in English and Kannada was distributed to the study group. The study group was provided necessary clarification during answering and the questionnaire were collected in few hours.

RESULTS

Our present study to assess the knowledge and awareness of oral health among 109 health care workers was met with a good response and voluntary participation. We used open ended questionnaire based survey comprising of 24 well structured questions in our study. The answers obtained were numerically converted and entered into excel work sheet and submitted to a statistician for further analysis and were expressed as cumulative percent. In this current study we found that 109 HCW, 46 (42.2%) were females and the remaining 63 (57.8%) were males. 70% HCW who participated in this study were aware of presence of 2 sets of dentitions and less than 1% knew there were 32 teeth in permanent dentition. Almost 60.6% of them were aware that teeth needs to be cleansed twice a day and 89% of them knew that teeth can be cleansed well using a tooth paste with 57.8% of them believing that tooth brushing was effective when used with a tooth paste. There seemed to have a mixed opinion (50%) about the technique of brushing teeth and frequency of changing tooth brush. 85.3% of them knew that hard bristle damages gums whereas 77% of them were aware that bristle of tooth brush flare after 3 months. 65% of HCW believe that tooth brushing was mainly to prevent tooth decay and gum diseases but were least aware (7.3%) about aids like dental floss, tooth pick and mouthwash along with brushing. Only 9.9 % of HCW agreed that diseases of tooth affect teeth, esthetics and chewing. 53.4% did not consider sweetened food products to be responsible for dental caries and majority of them 79.3% of them opted that cavity formation was

the earliest sign of dental caries. Only 9.1% of them were aware that fluoridated tooth paste prevents dental caries. 62.4% of the were aware that oral health affects general health; 59.6% felt that dentist only treat and don't prevent dental caries and 68.8% consider visiting a dentist only when there is pain. 99.1% of them felt it is necessary to visit the dentist when there is bleeding from gums. HCW unanimously (100%) agreed that oral cancer is caused by the use of tobacco and gutkha. 97.2 % of them felt that chewing tobacco and gutkha is a bad habit however only 39.4% felt that use of tobacco in any form is a bad habit. 78.3% of them felt that immediate replacement of missing teeth was necessary and 85.3% of them felt that irregularly placed can be corrected.

DISCUSSION

Our nation's health care system is primarily comprised of health care workers who form the first step to approach to a vast majority of rural population usually missed by other health care systems. They have proved to be a major reason for success of mass programs like safe drinking water, balanced diet, breast feeding, rural education programs, cleaner living environment of people, preventing open defecation and mass vaccination programs like poliovirus and latest MMR^{5,6} Our current study was primarily concentrated to assess the knowledge, awareness and practice of oral health among health care workers as they form the back bone of health care system. The HCW of our study participated with high spirits and voluntarily a consistent finding from previous studies.⁷ Knowledge of oral health forms the back bone for the health related behavior and diseases arising or associated with it. It was interesting to note that more than half of the health care workers were aware of presence of 2 sets of dentition but did not know the exact number of teeth present in the permanent dentition.⁸ Most of the HCW who participated in this study felt that disease of teeth affects not only teeth, but also esthetics, chewing and also general health. However, most HCW felt the necessity to visit dentist only in event of pain. The HCW were aware that teeth need to be cleansed twice daily and that effective cleaning was achieved using tooth paste. They also knew that hard bristles not only damages gums but may also damage the teeth. These knowledge and awareness of about oral hygiene measures were found to be better in comparison to the findings of other studies conducted in Brazil and Israel.⁴ Though the HCW fairly knew about oral hygiene measures but they practicing it may not be parallel with knowledge and awareness and remains obscure. Nevertheless there was ambiguity and lack of consensus about technique of brushing, frequency of changing of tooth brush and the role of dentist in prevention of caries. Surprisingly they

had minimal knowledge about aids of brushing like dental floss and mouth wash. Regarding their knowledge and awareness of various treatments that dentist offers they felt that missing teeth needs to be replaced at the earliest and bleeding gums would require a professional intervention. The misconception that dentist only treat not prevent oral diseases needs to be cleared to HCW who would in turn do the same to a larger population.⁹ All the HCW overwhelmingly responded to tobacco and gutkha as the causative agent of oral cancer with majority of them feeling that chewing tobacco and gutkha was a bad habit. However, a small percentage of HCW felt that tobacco when used in other forms apart from chewing was appreciated. It needs to be emphasized to the HCW that tobacco consumption in any form is a deleterious habit with serious health consequences.¹⁰ The intricate details about etiology, early detection and treatment options appear to be lacking among the HCW which mirrors the limitations in the use of audio visual aids used by Government of India to spread awareness on the harmful effects of tobacco in its various forms.¹¹ Previous work of Warnakulasuriya KA and Mathew B have recommended that health care workers can also play an important role in accurately diagnosing early detection and screening of oral cancer and pre cancerous lesions.¹² Around half of HCW were unaware of the exact etiology of dental caries and thought cavity formation was the earliest sign over discoloration and sensitivity. This finding though surprising needs immediate intervention along with emphasis on the etiology of dental caries as it is the commonest disease.¹³ Lack of knowledge of fluoridated tooth paste was also another worthy finding and the HCW needs to be educated about the role of fluoride in prevention of dental caries and motivate them to use these pastes. As per the findings of our study we will encourage and motivate the HCW regarding brushing techniques frequency of brushing with special emphasis on availability and use of various aids for tooth brushing along with periodic. Conducting regular periodic oral health program addressing various topics of oral health should be included in the training curriculum. Though knowledge and awareness seems to be the same in the broader context they seem to be uniquely different based on the fact that knowledge is associated with deep understanding and familiarity acquired through education or experience, whereas, awareness is not associated with deep understanding. Hence their assessment by questionnaire survey may not only help the HCW but will ultimately reach a larger population who usually are directly accessible.

CONCLUSION

The results of our study point out towards the general awareness of oral health among Health care workers it also points out a definitive need for further enlightenment of their existing knowledge so that they can carry the reforming work to the general population effectively. There is a need to incorporate knowledge such as etiologies and presentation among HCW so that they may be able to relay the same to the general population. Hence we emphasize on incorporation of a basic module of oral health in their curriculum during their training period.

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