

# Dentists' opinion on the challenges Noma patients encounters regarding health care seeking

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ABSTRACT

**Objective:** A case of Noma anywhere in the world signals neglect and presses a big scar of failure of humanity. Failure of humanity to feed, care, protect, ensure health and maintain the right of offspring. Dentists can champion the prevention and total eradication of Noma since it starts as acute necrotizing ulcerative gingivitis. The objective was to assess the dentists' opinion on the challenges Noma patients encounters regarding health care seeking

**Methods:** This cross-sectional study was conducted among all categories of dentist working in dental center of University of Benin Teaching hospital, Benin City between September and October, 2022. It is part of a larger study on knowledge and awareness of Noma among dental practitioners. The data collection tool was a self-administered questionnaire. The questions analysed for this study were eleven (11) which included three demographic questions (age, gender, professional status) and 8 questions on their options in relations to challenges Noma patients face regarding health care seeking. The response on challenged were in numerical ranging from 0 to 10 with 0 labelled as no impact and 10 labelled as very high impact. Data subjected to analysis using IBM SPSS version 23.0. The result of challenges was presented as mean and standard error of mean. Data subjected to univariate and bivariate analysis using SPSS version 23.0.

**Results:** A total of 84 dentists of different professional status were studied. The challenge with the great impact was lack of financial resources of the family ( $6.65 \pm 0.34$ ) followed by traditional healer that are convinced that hospital cannot cure Noma ( $6.52 \pm 0.32$ ), the stigmatization of Noma patients ( $6.37 \pm 0.32$ ) and community awareness ( $6.15 \pm 0.34$ )

**Conclusion:** Data from this study showed challenges Noma patients encounter regarding health care seeking as reported by the participants were related financial resources of the family, erroneous belief of traditional healer, the stigmatization of Noma patients and community awareness. The application of finding of this study will facilitate early presentation of Noma patients in the reversible stage to dental healthcare setting that will likely lead to cure.

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## INTRODUCTION

Noma is a non-contagious orofacial gangrenous disease with a mortality rate as high as 90%, mainly affecting children between 2-7 years old living in extreme poverty (WHO Regional Office for Africa and NCD regional Programme for Noma control, 2016; Caulfield & Alfvén, 2020).

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It is associated with physical, social and psychological complications yet the affected

individual tendency to seek professional health care services is generally lower than the general population (Burki, 2016). A case of Noma anywhere in the world signals neglect and presses a big scar of failure on humanity; Failure of humanity to feed, care, protect, ensure health and maintain the right of offspring (Azodo & Odai, 2021). Dentists can champion the prevention and total eradication of Noma since it starts as acute necrotizing ulcerative gingivitis. Acute necrotizing ulcerative gingivitis is reversible if treated. However, there is delay in seeking care among patients with dental diseases in Nigeria. The reason could be ascribed to poor knowledge, unfavourable attitude to care, lack of time, ignorance, myths, lack of accessibility problems. Noma is peculiar because the mortality rate is high if untreated and the time course from reversible to irreversible stage is short (Ashok & Tarakji, 2016). Once in irreversible stage, treatment can prevent death but never reverts the patient to the predisease state despite the numerous reconstructive surgeries with attendant cost and morbidities. The cue to success in care of Noma patients is early diagnosis and prompt treatment. Awareness about the condition in prone communities will facilitate community diagnosis and easy referral. Improvement of knowledge of traditional healers and religious leaders will also facilitate early presentation in the hospital with consequent favourable treatment outcome. The objective of the study was to assess the dentists' opinion on the challenges Noma patients encounters regarding health care seeking

#### **MATERIAL AND METHODS**

This cross-sectional study was conducted among all categories of dentist working in dental center of University of Benin Teaching hospital, Benin City between September and October, 2022. It is part of a larger study on knowledge and awareness of Noma among dental practitioners. The data collection tool was a self-administered questionnaire. The questions analysed for this study were eleven (11) which included three demographic questions (age, gender, professional status) and 8 questions on their options in relations to challenges Noma patients face regarding health care seeking. The response on challenged were in numerical ranging from 0 to 10 with 0 labelled as no impact and 10 labelled as very

high impact. Data subjected to analysis using IBM SPSS version 23.0. The result of challenges was presented as mean and standard error of mean. Data subjected to univariate and bivariate analysis using SPSS version 23.0.

#### **RESULTS**

A total of 84 dentists of different professional status were studied. The majority of the participants were aged 31-40 years (51.2%), male (63.1%) and Registrar (48.8%) (Table 1).

The challenge with the great impact was lack of financial resources of the family ( $6.65 \pm 0.34$ ) followed by traditional healer that are convinced that hospital cannot cure noma ( $6.52 \pm 0.32$ ), the stigmatization of noma patients ( $6.37 \pm 0.32$ ) and community awareness ( $6.15 \pm 0.34$ ) (Table 2).

#### **DISCUSSION**

Noma is a sad and horrific disease. This study assessed dentists' opinion on challenges Noma patients face regarding health care seeking and the great challenges reported was lack of financial resources of the family. Financial problems have remained a major hindrance to seeking healthcare solution (Adams et al., 1997) early especially in developing countries where financing for health care is done using out of pocket mode rather than through insurance. A study in Burkina Faso by Kagoné et al. (2022) revealed that noma is a disease that affects economically vulnerable populations and leads to extreme household poverty. This could be due to the fact to poverty is related to noma (Burki, 2016). The next ranked challenge reported was that related to erroneous belief system of traditional healers ( $6.52 \pm 0.32$ ). Traditional healer is one of the early pathways in Health seeking behaviours in Africa. Their closeness in the community, their application of natural remedies and accepting their services charges in cash or kind ends them to the people. The confidence reposed in them can prompt affected individual to seek their attention first thereby delaying time to proper diagnosis and appropriate care. As far as treatment of Noma is concerned, patients tend to turn to practitioners of both traditional and modern medicine (Kagoné et al., 2022). A survey in Mali showed that most traditional healers had a poor knowledge of noma (Baratti-Mayer et al 2019).

Table 1: Demographic characteristics of the participants

Characteristics	Frequency (n)	Percent (%)
<b>Age (years)</b>		
21-30	20	23.8
31-40	43	51.2
41-50	17	20.2
51-60	3	3.6
61-70	1	1.2
<b>Gender</b>		
Male	53	63.1
Female	31	36.9
<b>Professional status</b>		
House officer	12	14.3
Registrar	41	48.8
Senior Registrar	19	22.6
Consultant	12	14.3
Total	84	100.0

Table 2: Dentists' opinion on the challenges Noma patients encounters regarding health care seeking

Challenges	Score Mean ± SEM
The distance to the hospital	5.74±0.31
Transportation means to the hospital	5.67±0.31
Community awareness	6.15±0.34
The no. of hospitals specialised in noma treatment	6.13±0.34
The lack of financial resources of the family	6.65±0.34
Other children at home who cannot be left alone	5.29±0.32
The stigmatization of noma patients	6.36±0.32
Traditional healers that are convinced that hospitals cannot cure noma	6.52±0.32

SEM=Standard Error of Mean

Noma is an ominous stigma of severe poverty Noma survivors face discrimination and stigma in communities (Kagoné et al., 2022). They are often considered cursed, and face exclusion or abandonment as a result. Parents of children infected with Noma sometimes stop feeding them altogether.

Community awareness was ranked as the fourth challenges by the participants. It is rooted on the fact that awareness about the condition in prone communities will facilitate community diagnosis and easy referral.

#### CONCLUSION

Data from this study showed challenges Noma patients encounter regarding health care seeking as reported by the participants were related financial resources of the family, erroneous belief of traditional healer, the stigmatization of Noma patients and community awareness. The application of finding of this study will facilitate early presentation of noma patient in the reversible stage

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