

# REASONS FOR PATIENT'S DELAY AND EFFECT OF TREATMENT AND ADVICE ON THE UTILISATION OF DENTAL CARE SERVICES BY FACTORY WORKERS IN A DEVELOPING COUNTRY

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## INTRODUCTION

A survey on the periodontal conditions of workers in a textile factory was conducted in Morogoro, Tanzania (Lembariti, 1994). The survey per se created treatment demands. In order to meet these demands, a well equipped mobile dental clinic manned with a dentist (LC) and an assistant was installed on the factory's premises. In the first three months of operation nearly all patients, factory workers attending the clinic, sought treatment for relief of toothache. The majority of these patients had delayed their visit. Nearly all patients were advised to revisit the clinic for additional treatment, but it was noticed that the response was poor.

This situation did raise two questions : firstly, what the reason could be of the delayed attendance and secondly, to what extent free access to adequate treatment influences the utilisation pattern of dental services. This study attempted to answer these questions : 1. by recording patient's self-reported reason for patient's delay and 2, by assessing the percentage of patients who revisited the clinic after being advised to return for additional treatment.

## MATERIALS AND METHODS

The factory employed 2800 workers, most of them in the age group of 20 to 29, of which 60 % were male. Except the managing staff they only finished primary school or had no schooling at all.

Morogoro, a semi-industrial city with 120.000 inhabitants, has two dental clinics, one government clinic where treatment is offered for a nominal charge and one private clinic where patients has to pay a fee.

The study began three months after the clinic had been started and continued for a period of 6 months. 207 patients attended the clinic during those 6 months. the motive for a patient's first visit was recorded and the diagnosis determined according to the method described in a previous paper (VAN PALENSTEIN

HELDERMAN & NATHOO, 1990). The reason for delayed attendance was asked when the patient came to the clinic with an advanced stage of disease. 187 patients had to revisit the clinic for additional treatment after being treated for their main complaint. They were informed at the end of the first visit about necessary additional treatment and received an appointment for two weeks later. The additional treatment offered included : extraction, amalgam and composite sealants and fillings, oral hygiene instruction, scaling and cleaning and minor surgery. The sex and age distribution of the sample reflected the population of factory workers. All services were offered free of charge.

## RESULTS

Only 9 % of the patients (n = 207) visited the clinic for the first time with a more or less prevention-directed treatment demand. These patients requested treatment for cosmetic reasons, painless broken fillings or for a check-up. The remaining 91 % of the patients visited the clinic because they were suffering from pain, mainly (76 %) due to caries. 86 % of the patients visited the clinic with advanced stages of disease. The main self-reported reason for delayed attendance was that the pain was endurable and intermittent. Unless the pain became intolerable patients preferred to wait and see (62 %). Another reason for delayed attendance was unsatisfactory previous experience with dental services (22 %). The remaining 16 % of the patients mentioned fear, gave unclear reasons or had used drugs.

**Table I : Self-reported reasons for delayed attendance at the first visit**

Reasons	%
Wait and see	62
Unsatisfactory previous experience	22
Self-care with drugs	6
Fear	4
Unclear reasons	6

Overall 29 % of the patients revisited the clinic for the next appointment after being advised to return for additional treatment. Attendance for additional tooth extractions was poor but for fillings, scaling and cleaning and minor surgery it was somewhat better.

**Table II : Attendance for additional treatment**

Additional treatment offered		Attendance 2nd visit	
	n	n	%
Extraction	34	3	9
Filling	33	11	33
Extraction & filling	99	35	35
Scaling & cleaning	17	4	23
Minor surgery	4	1	25
Total	187	54	29

## DISCUSSION

The high proportion of patients (91 %) in this study visiting the clinic for reasons of pain, mainly toothache, is in accordance with a previous study on treatment demands in the Morogoro government dental clinic (GEMBA et al., 1988). A study among a more representative sample of the Tanzanian population indicated that 86 % of the patients attended the dental clinics with complaints of pain, mainly because of toothache (VAN PALENSTEIN HELDERMAN & NATHOO, 1990).

Another study in Tanzania reported that the awareness of the need for treatment and the use of oral health care services are limited and strongly related to pain experience (MOSHA & SCHEUTZ, 1993). The majority of the demands reflected a need for emergency care and this situation is comparable with that in other developing countries (WARNAKULASURIYA, 1985, RAZAK & JAAFAR, 1987).

The present study showed that 86 % of the patients delayed their visit; A high prevalence of patient's delay has also been reported in studies from other developing countries (WARNAKULASURIYA, 1985, JAAFAR et al. 1992). For this study travelling time, unaccessability and inadequacy of oral health services, work commitments and costs did not hold as reasons for poor utilisation of services and delayed attendance as have

been suggested in the literature (DOUGLASS & COLE, 1979, JAAFAR et al. 1992) since adequate oral health care service were offered free of charge on the work spot. This study did not show clearly that fear could be seen as a reason for delayed attendance nor was it an important factor in a Malaysian population (JAAFAR et al., 1992), but it may have been a background determinant in "unsatisfactory previous experience" and in the "wait and see behaviour". Lack of the awareness of the need for treatment is considered to be the major reason for poor utilisation and patient's delay (COHEN, 1978). In the present study however, it cannot explain the wait-and-see behaviour of patients who had experienced lasting pain.

Self-care may have influenced delayed attendance to some extent, since some patients mentioned the use of drugs before their visit to the clinic. Indigenous dental treatment by traditional healers is seldom practised in Tanzania (SARITA & TUOMINEN, 1993) and therefore it is not likely to be a factor in patient's delay.

Summarising, a wait-and-see behaviour and unsatisfactory previous experiences with oral health care services were the two most mentioned reasons for patient's delay in this study. Lack of interest (obviously not mentioned by the patients) due to competing priorities in every day life in countries like Tanzania, with economical restrictions and constant exposure to life-threatening diseases, may also contribute to patient's delay. These three factors fit in the context of cultural and socioeconomic conditions that have been suggested in the literature as deterring conditions for utilisation of dental services (GIFT, 1984).

The present study showed that only 9 % of the first visits were prevention-directed. This finding is in accordance with a previous observation of a larger and more representative sample of the population (VAN PALENSTEIN HELDERMAN & NATHOO, 1990). Adequate treatment, free of charge and advice to make people aware of their treatment needs showed an effect on patient's behaviour as 29 % of the patients in this study attended the clinic again for more prevention-orientated treatment. However, the above described reasons of patient's delay seem to be determinants predisposing the majority of people to avoid immediate utilisation of oral health care services. In the short period of time of this study the prevailing barriers to an adequate use of oral health care services were not removed for the majority of patients.

**SUMMARY**

Demands for preventive oral health treatment are uncommon, while patient's delay is widespread in Tanzania. The aim of this study was to assess patient's self-reported reason for delayed attendance and to determine to what extent the offering of adequate and free of charge treatment on the work spot and advice on treatment needs influenced the treatment demands of factory workers. A mobile clinic was installed on the premises of a factory. 86 % of the patients (n = 207), factory workers, attended the clinic with a patient's delay. A wait-and-see behaviour and negative appreciation of oral health care services appeared to be the major self-reported reasons for patient's delay in this sample of factory workers. Only 9 % of the first visits to the clinic were prevention-directed. Adequate treatment, free of charge and advice to make people aware of their treatment needs clinic again for more prevention-orientated treatment. However, in the 6 months period of this small scale study the prevailing barriers to an adequate use of oral health care services were not removed for the majority of patients.

**Key-words : treatment demands, patient's delay, utilisation of dental care services, developing countries.**

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