A Design of Intervention for the Communication and Assistance Improvement in a Dental Public Cabinet

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Abstract: *In public dental cabinets patients often miss their appointments which may cause dead time, resulting in material and personnel costs. The time lost estimated in a dental clinic from the Andalusian health service in Spain has an average of 27 minutes a day. This time is often employed in the treatment of patients who attend without an appointment, categorized as an 'emergency' (70 patients per month in 2011, quoted time spent 38 minutes a day). 67% of these were patients who had not attended to their previous appointments. We analyzed surveys concerning patients´ satisfaction and complaints carried out in public health centers, the reasons why patients were attending without an appointment or for 'emergencies', as well as the communication channels between patient vs. dental care professional, and patient vs. appointment administration personnel. As a result, the process designed involves all the professionals, beginning at reception where patients will be reported concerning the way to cancel or postpone an appointment. The increase of the consultation time scheduled, will achieve an acceptable waiting time less than a week. Posters designed give detailed information with reference to office hours, how to cancel appointments, the 'criteria' and specific schedule for attending without an appointment. Specific schedule to attend emergencies, will take advantage to educate patients on schedule adherence, providing them with another appointment in the shortest time possible. A design for the implementation of the communication between patients and professionals will improve the daily dynamics of the dental office.*

Keywords: *dental emergencies, organizational changes, patient's satisfaction, total quality management.*

1. Introduction

Despite the fact that the information provided to patients in the centers of primary health care is becoming more complete, and health education is greater than a few years ago, there are still shortcomings in the organization of care to patients attending health centers seeking for dental treatments. Healthcare tends to be organized according to criteria of quality (Shaw, 2000), which includes first and as a major axis to the customers (Brampton, 2000; Jung, Wensing and Grohl, 1997); i.e. the needs and expectations of the patients, trying to provide patients "what they want" (Feigenbaum, 2002), at a time considered acceptable, with the best facilities and best trained professionals. The way to make possible the long-awaited patient satisfaction is through proper design of interventions, including the necessary organizational changes (Miller, 1998; Illes & Sutherland, 2001; Bazzoli, Dynan, Burns and Yap, 2004).

In public dental cabinets patients often miss their appointments which may cause *dead time* or loss of time in dental surgeries, resulting in material and personnel costs, *id est*: open cabinets that are empty, where professionals are wasting their time and, consequently, the public health system money. The reasons for not attending to the schedule tend to be 'fear of pain' (Berggren & Meynert, 1984; Arntz, Van Eck and Heijmans, 1990; Liddell & Locker, 1997), forgetting the meeting, having attended a private dentist or because they ignore how the mechanism to cancel or change the appointment works and, in a smaller proportion, there arise other particular causes that cannot be postponed.

It has been estimated the time lost in a dental clinic from the Andalusian Health Service in Spain, the data taken into account were those obtained from the year 2011, considering the working days, the time assigned to each patient who did not attend, and an average of 27 minutes a day was determined. This time is not always unproductive since it was often employed in the treatment of patients who attend without an appointment or categorized as an 'emergency'; it has been quoted that the time spent to treat patients who come without an appointment is 38 minutes a day.

The number of patients attending without an appointment is about 70 per month (average of the statistical data obtained in the year 2011). When the patients were asked for the reasons for their request, the most often answers obtained were severe pain (57%) and aesthetic problems (9%). When we analyzed the medical history of the patients

who attended in the last year with no appointment or caused by an 'emergency' to the public health dentist cabinet it was noticed that a 67% of them were patients who had not attended to their previous appointments.

2. Project objective

In order to meet the patients´ expectations and to improve the daily dynamics and organization of time in the dental cabinet, the aim of this work is to design a strategy to improve communication with the patient, clarifying and making unambiguous the steps to follow in order to facilitate the access to the dental service, to change or cancel the appointments when they cannot attend, reducing the waiting list and avoiding that some of the patients attend when it is unnecessary.

3. Methods

With these purposes, we analyzed surveys concerning patients´ satisfaction and complaints, which were carried out in public health centers, the reasons why patients were attending without an appointment or for 'emergencies', as well as the communication channels between patient vs. dental care professional, and patient vs. appointment administration personnel.

In the health centers of the Andalusian Health Services surveys concerning patients' satisfaction are made each year and are available online in the official web page of this institution. Complaints are answered in no more than 15 days, asking the health professionals involved in the treatment of those patients about their knowledge regarding the situation that made them complaint. We analyzed the complaints related to those patients who attended without an appointment and were dissatisfied with the attention given, the waiting time or the waiting list, looking for a satisfying solution for their problem. These complaints and satisfaction surveys are taken into account to improve health services and organization.

The reasons for attending to consultation are registered by health professionals who often see these patients. Moreover, reasons for attending to dental cabinet without a date were analyzed, and included in the categories showed in the table 1.

Severe pain (infectious and inflammatory diseases)	Pulpitis Periodontal/periapical abscess Cellulitis Pericoronitis Primary herpetic gingivostomatitis Necrotizing ulcerative gingivitis
Hemorrhagic diseases	Ginvititis Bleeding after dental extraction
Dental trauma	Tooth fracture Tooth luxation/avulsion
Approaches to Derivation to Oral and Maxillofacial Surgery Service	Trismus Dysphagia Fever
Joint disease	Temporomandibular disorder
Others not justified	Unknown of scheduling system, incompatibility between their appointment and their work schedule…

Table 1. Categories of reasons for attending dental cabinet without a date.

Triage assessment at the reception desk, assertiveness and communication skills of the reception staff were evaluated as well as the perceptions, proposals and viewpoints of these professionals. Dentists and general practitioner's suggestions were also taken into account. A brainstorming was held and proposals were selected following a decisional matrix.

4. Results

The reasons obtained for attending without a date were: pain, bleeding, trauma, joint disorder or others not justified like unknown of scheduling system, incompatibility between their appointment and their work schedule, or because they were

at the healthcare center and came to the dental cabinet for asking about their dental problems.

The reasons for not attending to their dates were: forgetting the date, facing something they could not postpone, severe dental pain fear, absence of dental pain, preference for private dentist instead of a very long waiting list in the public alternative, or lack of information on the system to cancel their date.

Reception staff requested specific training in assertiveness, knowledge of the system of appointments and schedules clearly and simply, and easy of communication with dentists. Dentists asked for a clear triage, transparent information given to patients at the reception desk and a system with a specific scheduling time for "emergencies". The solutions proposed by Brainstorming are specified in table 2.

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What can we do to improve the dynamics of the dental practice?
➔ Reduce the waiting list one week ➔ More hours of dental surgery ➔ Specific schedule to meet the emergency dental ➔ Inform the population of the criteria for emergency dental ➔ Proper triage at reception ➔ Signs and posters informing of changes ➔ Training for managing conflict situations according to our skills

Table 2. Solutions proposed by Brainstorming.

As a result we have designed a process that involves all the professionals, beginning at reception when the patient requests an appointment, where he will be reported concerning the way to cancel or postpone it, and making him aware about the importance of this procedure that will let another person to attend to the dental cabinet, reducing the waiting list.

Additionally, as there is a waiting list of more than two weeks, we have decided to increase the consultation time scheduled, estimating an acceptable waiting time if less than a week. We have also designed posters (Figure 1) which give detailed information with reference to office hours, how to cancel appointments, the 'criteria' for attending without an appointment and a specific schedule for those patients, which will be treated only in case of pain. Moreover, as it will be provided a specific schedule to attend emergencies, these appointments will take advantage to inform and educate patients on schedule adherence, providing them with another appointment the day they complete the symptomatic treatment and in the shortest time possible.

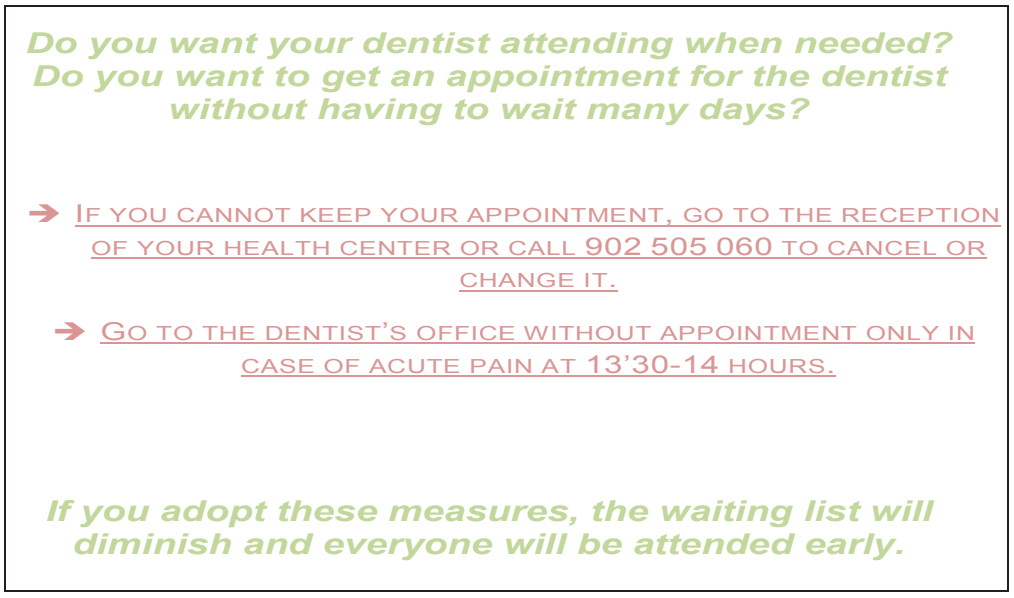

Figure 1. Informative boards that will be placed in the health center for the patients awareness.

Health professionals and reception staff will be trained in an accredited program of the Andalusian Health Service in communication skills.

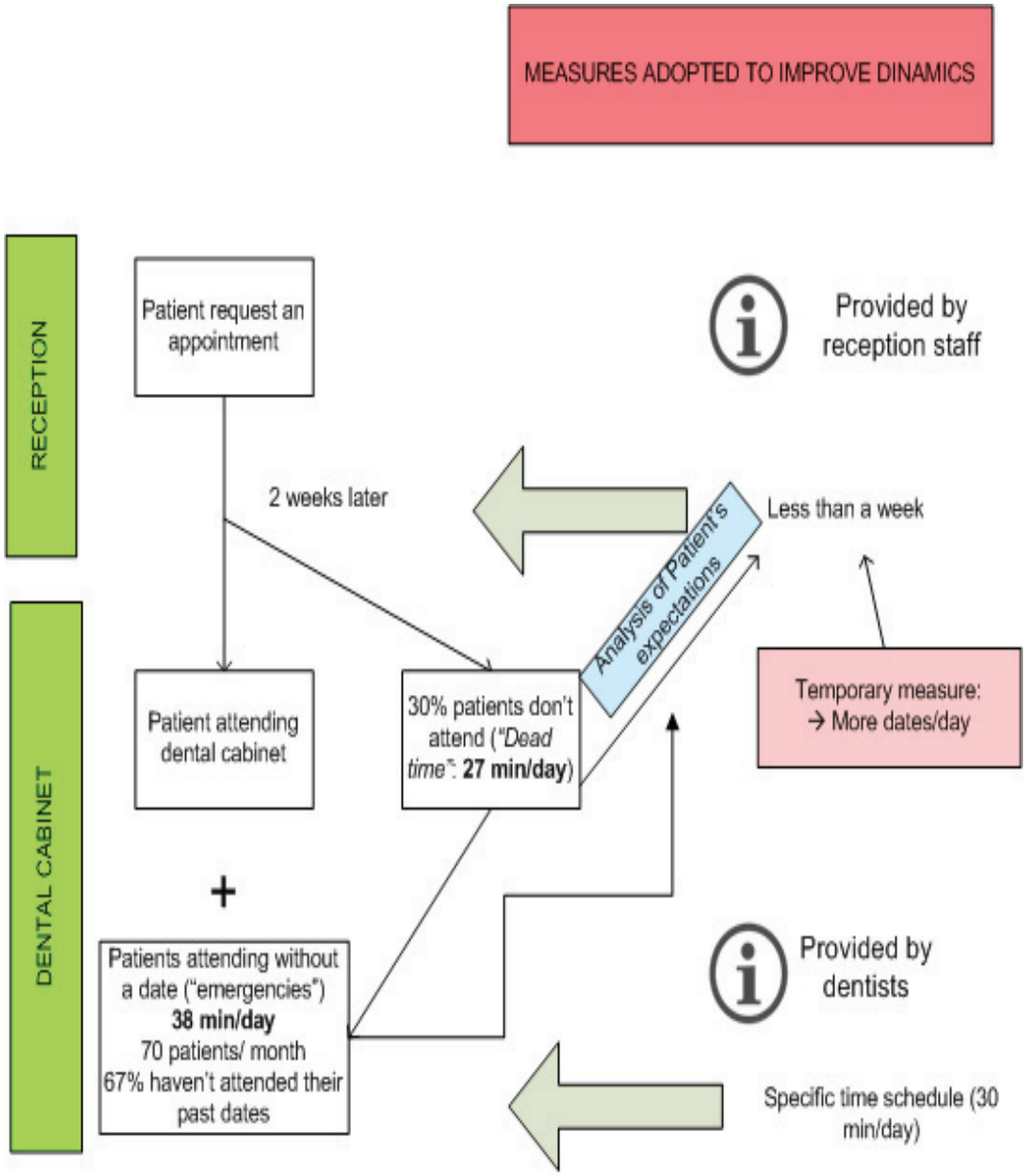

Figure 2. Measures adopted at reception and dental cabinet levels to improve health dynamics.

5. Discussion

Some authors (Lindh & Pooler, 2010, p. 244) have hypothesized with the ideal of "practice-based schedule", in this system, times assigned to each procedure are monitored, and time scheduling is adapted to these procedures. In our case, this system cannot be selected, because the time assigned to each patient is variable, depending on the difficulty of the procedure related to patient's characteristics. It has been estimated an acceptable time when it is 10 minutes for the "caries" procedure; in most cases this period of time cannot be assigned because of the service needs.

Regarding the concept of quality in health services, total quality (Feigenbaum, 2002) has been the goal to be achieved, taking into account dimensions related to patient satisfaction (Frederikson and Bull, 1995); i.e. accessibility, equity; as well as those related with the health professionals (internal customer). Grumbach and Bodenheimer (2004) defined how health care teams can improve primary care practice through a similar system of communication and organization.

From the standpoint of the patient is interesting to analyze the so-called fear of the dentist and their relationship to dental pain. Armfield, Stewart and Spencer (2007) described a vicious circle in which he demonstrated how the fear of

going to the dentist causes a worsening of dental pathologies causing more pain and more fear to come to the dental office. Probably in the case described in this study, there is a high percentage of patients with dental fear and just go in case of acute pain, but do not attend dental appointments. It is part of the work of health professionals to change this harmful image harmful that some patients have of dentists.

Austin et al. (2009) considered that friends and family remain as an important source of information about accessing emergency dental service. The present study has a retrospective view and involves the design of activities to facilitate the dynamics´ improvement at dental cabinets. The results obtained by the measures adopted will be monitored to achieve their effectiveness. Consequently, the organizational changes will involve also friends and family as a mentioned source of information. Satisfaction surveys, complaints and health professionals´ questionnaires will also be analyzed in a program of continuous improvement and implementation.

6. Conclusion

The design obtained for the implementation of the communication between patients and professionals will improve the daily dynamics of the dental office.

The measures adopted will avoid unnecessary waiting lists, improving patients' knowledge of the dynamics of the consultation and saving time and money to health care.

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