Introduction

For several years, Dentistry had been focused specifically on clinical dental care, both individually and collectively. However, with the so-called “age of information” and the advances in health sciences, this understanding has changed into a common thought that the patient must be seen as a whole and not fragmented, thus showing the need for a connection, an interrelationship among health professions. According to Araujo, it is no longer possible to accept the position adopted for years by Medicine and Dentistry, which consisted in the separation of general health and oral health, and it is necessary to combine the specialties so that health promotion can truly and fully be provided.

Dentistry begins to experience this new approach, where there is an integral care of patients and not only of the aspects related to the mouth, but comprehending their general condition. This paradigm change is verified with the advent of new concepts such as Hospital Dentistry.

Hospital Dentistry can be defined as a practice aiming at the care related to oral alterations, which requires procedures of multiprofessional teams of low, medium or high complexity, with implementation of preventive, educational, diagnostic, therapeutic and palliative actions performed in a hospital environment, improving the general health and quality of life of hospitalized patients and having a direct interference in patient’s full recovery. Pain relief and adequacy of the oral conditions should be considered a priority for the dentist. However, the actual participation of dentists is not a reality in most hospitals in Brazil, and their work is still very limited for not being part of the hospital multiprofessional patient care team. In fact, Hospital Dentistry is still is quite unknown among health professionals. It is necessary to enlighten the other members of hospital staff on how the dentist might contribute to improve the quality of life and systemic conditions of hospitalized patients.

There are few studies addressing Hospital Dentistry and the understanding of health professionals about this subject. For this reason, the aim of this study was to evaluate the opinion of the multiprofessional patient care team of Mestre Vitalino Hospital, Caruaru, PE, Brazil, regarding the importance of the dentist in the hospital environment.

Material and Methods

This is an exploratory, descriptive, cross-sectional study with a quantitative approach, based on the opinion of health professionals about the importance of the dentist in the hospital environment as part of the multiprofessional patient care team.

The research was conducted at Mestre Vitalino Hospital, the only hospital in the rural area of Pernambuco State that has a dental team (dentist and oral health technicians) acting in the Intensive Care Unit (ICU). In the other Hospital sectors, the dental team is involved in patient care only when there is a request from other staff members. The study population consisted of health professionals working at the Hospital, of both sexes, and with high-level education (physicians, nurses, physical therapists, nutritionists and speech therapists) and technical education (nursing technicians). A convenience sample was established and only professionals...
who did not answer the questionnaire properly were excluded.

The data were collected through a non-validated, self-administered questionnaire between June and August 2017, after Hospital authorization and approval by the Research Ethics Committee under number 2,076,408. All participants signed an informed consent form, agreeing with their participation in the research and publication of the results.

The questionnaire (Figure 1) was composed of 11 closed questions to evaluate the knowledge of the Hospital multiprofessional health team regarding the dentist. The answers were based on the experience of the professionals in their area of activity.

The data collected were tabulated in Microsoft Excel® Software (version 2010) database, analyzed statistically in the same program and presented using descriptive statistics as absolute (number) and relative (percentage) frequencies.

Results

The study population was composed of 129 professionals aged between 20 and 48 years (mean age= 31 years ± 6.3). Table 1 presents the characteristics of the participants, showing a larger number of nursing technicians (53%), followed by nurses (19%) and physical therapists (12%).

Table 1. Distribution of respondents according to sex, profession and area of activity

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sex</strong></td>
<td></td>
<td></td>
</tr>
<tr>
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<tr>
<td>Female</td>
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<tr>
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<tr>
<td>Nursing technician</td>
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<td>53</td>
</tr>
<tr>
<td>Nurse</td>
<td>24</td>
<td>19</td>
</tr>
<tr>
<td>Physical therapist</td>
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<td>12</td>
</tr>
<tr>
<td>Physician</td>
<td>10</td>
<td>8</td>
</tr>
<tr>
<td>Nutritionist</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Speech Therapist</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>129</td>
<td>100.0</td>
</tr>
<tr>
<td><strong>Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Intensive Care Unit</td>
<td>60</td>
<td>46</td>
</tr>
<tr>
<td>Other hospital sectors</td>
<td>69</td>
<td>54</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>129</td>
<td>100.0</td>
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Of the respondents, only 0.7% did not consider important the presence of the dentist in the hospital multiprofessional patient care team and only 0.7% answered that the procedures performed by the dentist do not contribute to improve the general clinical conditions of the patients.

When asked whether the dentist should be included in the multiprofessional team, 97% of participants answered that the need exists throughout the hospital environment in different sectors, while 3% answered that this need exists only in the ICU.

Of the professionals who work in the ICU, where a dental team had joined the staff approximately 1 year ago, 95% of the respondents noticed an improvement in the oral health of patients after the inclusion of these professionals in the sector. Figure 2 illustrates the difference in the performance of this procedure by hospital sector.

Figure 1. Self-administered questionnaire used in the study
Importance of the dentist in the multiprofessional team in the hospital environment

Figure 2. Difference in the performance of this procedure by hospital sector

Figure 3 shows that in both the ICU and the other hospital sectors oral hygiene is performed by more than one professional. In the ICU, where the dentist is part of the staff, oral hygiene is performed by the dental team and the nursing technicians. In other hospital sectors, where the dental team is involved in patient care only when there is a specific request, this responsibility lies with the nursing technicians.

According to 83% of the respondents, the dental team (dentist and oral health technicians) is the most indicated for providing oral hygiene to the patients. However, some nurses, nursing technicians and speech therapists said they are also in charge for this task. Figure 4 shows which professionals received instructions on how to perform oral hygiene and, among these, which ones were instructed by a dentist.

As much as 96% of the respondents answered YES when asked in case they were hospitalized in the ICU or other hospital sectors whether they would like a dentist to be part of the multiprofessional patient care team and perform the necessary oral procedures on them.

Discussion

The presence of a dentist in the multiprofessional care team improves the quality of health care offered to hospitalized patients. This professional reinforces the team to improve the interdisciplinary work. The professionals interviewed in this study share the same understanding of the authors mentioned above, as almost all participants (99.3%) affirmed that it is important to have the dentist in the hospital multiprofessional team. The relevance of having dentists working in hospitals, as part of the patient care team, was also demonstrated in study performed in a city of Santa Catarina State, in which the respondents were favorable to the inclusion of the dentist in the hospital staff.

It has been demonstrated that the oral condition affects the evolution and outcome of the medical treatment in the same way that systemic alterations may have oral manifestations. This is also in agreement with the opinion of 99.3% of the respondents of the present survey, who stated that the procedures performed by the dentist contributes to improve the patient’s clinical status and, therefore, consider relevant to have dental care during hospitalization.

General health care is essential to avoid that infections in other organs, not involved in the original problem, might compromise the patient’s condition and recovery. The majority (97%) of the participants consider the presence of the dentist necessary in all sectors of the hospital and not only in the ICU. Hospitalized patients tend to be immunologically compromised, becoming more susceptible to the pathogenic action of microorganisms and consequent development of diseases.

Of the professionals who work in the Hospital ICU, where there is a dental team for approximately 1 year, 95% observed an improvement in both oral and general health of the patients after implementation of dental care in that sector. This result is in agreement with the literature, according to which it is undeniable that the control of oral infections is critical to the recovery of the overall condition of hospitalized patients, reducing treatment costs and shortening hospital stay, not only in the ICU, but also in other hospital sectors.

The actual participation of dentists in the multiprofessional team is not yet established in most hospitals in Brazil and their acceptance is still ongoing. Among the possible causes for this scenario, Marin et al. underscored the insec-
curity of dentists to face the challenge of working in hospitals and the lack of information of health professionals.

In a survey conducted with dentists in the city of Araçatuba, SP, Brazil, the outcomes showed a great deficiency in Hospital Dentistry education during the formation of dental students.\(^\text{10}^\) The hospital is a new environment for the dentist and it is different from the day-to-day practice in the dental office. Dental care for hospitalized patients is complex, especially for those admitted to the ICU. It is important that dentists are well prepared to act in this new field in order to perform dental procedures with efficiency and safety.\(^\text{11}^\)

It has been stated that the little importance given by health professionals to oral health as well as their fear of causing pain or damage, are issues that worsen the oral health of the hospitalized patients.\(^\text{12}^\) In the present study, it was observed the oral hygiene was far more performed in the ICU (59%), where a dentist is present, compared with the other hospital sectors. In those other sectors, where the dentist is only present upon request, the responsibility for the oral hygiene of the patients stays mostly with the nursing technicians (46%).

Of all interviewees, 83% stated that dentists and oral health technicians are the most indicated professionals for providing oral hygiene to the patients. However, some nurses, nursing technicians and speech therapists responded to be responsible for this task; only 53% of these professionals were instructed on how to perform this procedure and only 33% of them received these instructions directly from a dentist. In a research conducted by the Albuquerque et al.,\(^\text{13}^\) similar results were obtained when ICU professionals were interviewed, as the nursing staff was in charge of oral hygiene in 72.70% of the ICUs. On the other hand, 81.82% of the professionals received some kind of instruction on how to perform the procedure, but, again, not from a dental professional. It is important to emphasize that the presence of dentists in the hospital does not require a 24-hour activity, but a proactive daily participation in patient care in order to identify oral infections and lesions, establish an early and accurate diagnosis and treatment plan, and instruct properly the team responsible for oral hygiene, which are the nursing technicians in most cases.

In some private hospitals in São Paulo, SP, such as Sírio-Libanès Hospital and Albert Einstein Hospital, which have implemented their dental programs few years ago, dental care is not yet part of the daily routine in the ICU, but in both facilities, the nursing team in charge for oral hygiene is dully instructed and trained by dentists, who are also requested by the physicians when necessary.\(^\text{3}^\)

Araujo\(^\text{2}^\) criticized the adoption of a rigid oral health standard protocol for all hospitalized patients, arguing that oral hygiene procedures should be planned and provided according to each individual situation. This statement reaffirms the importance of having a dentist in charge for patients’ oral health, because other health professionals may even be well intentioned, but do not have expertise and knowledge in the area.\(^\text{2,3}^\)

The majority of hospitals do not have a dentist in their multiprofessional patient care team.\(^\text{9}^\) Albuquerque et al.\(^\text{17}^\) reported that 100% of the ICUs of Rio de Janeiro State that were included in the convenience sample of their study did not have a dentist as part of their regular staff.

A teamwork has been done in health services and thus health professionals should be aware that all specialties must be interrelated.\(^\text{5}^\) It is important to present to the other members of the multiprofessional team working at hospitals how the dentist can contribute to improve the general health conditions of hospitalized patients,\(^\text{8}^\) and that an interdisciplinary approach increases the likelihood of enhancing the quality of care.\(^\text{7}^\)

It is believed that the positive result obtained in this study is due to the existence of the dental team working at Mestre Vitalino Hospital. It is important to conduct a similar survey in a hospital without a dental team for comparative purposes. The outcomes of this survey also showed that, although different health professionals were in charge of patients’ oral hygiene at the hospital, little more than half received instructions on how to perform this procedure and only a small part of them had been instructed by a dental professional. Therefore, it is proposed that hospitals nationwide increase their investment in their clinical staff by hiring dentists, which will benefit directly the patients with a more comprehensive and integral and effective care.

**Conclusion**

Based on the information obtained in this study, it can be concluded that the majority of professionals had a favorable position regarding the participation of the dentist and the importance of dental care in the hospital environment, in all sectors and not only in the ICU, stating the importance of including the dentist in the hospital multiprofessional patient care team in order to improve the general health condition and quality of life of the patients.
Importance of the dentist in the multiprofessional team in the hospital environment

References


Mini Curriculum and Author’s Contribution

1. Rebecca Julião de Oliveira – DDS. Contribution: conception and design of the study; standardization of the methodology; data interpretation; preparation of the manuscript; writing the manuscript and critical review.
3. Iago Dillion Lima Cavalcanti – DDS and MSc student. Contribution: collaboration of the methodology; preparation of the manuscript; writing the manuscript and critical review.
4. Claudia Cristina Brainer de Oliveira Mota – DDS and PhD. Contribution: conception and design of the study; standardization of the methodology; data interpretation; preparation of the manuscript; critical review and final approval.
5. Danielle Lago Bruno de Faria – DDS and PhD. Contribution: conception and design of the study; standardization of the methodology; data interpretation; preparation of the manuscript; critical review and final approval.

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