Original Article

Jargon: A barrier in case history taking? - A cross-sectional survey among dental students and staff

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ABSTRACT

Background: The use of jargon has become very common in the healthcare field, especially in medical/dental records. Although the use of standard medical jargon can be seen as professional, efficient shorthand, a lack of awareness regarding the standard medical abbreviations and incessant and overzealous use of slang among the healthcare professionals can act as a barrier to effective communication and understanding among patients and peers. The aim of this study was to assess the acceptance and use of jargon in case history taking among clinical dental students and dental teaching faculty members of dental colleges in Ernakulam and Idukki districts of Kerala.

Materials and Methods: A cross-sectional questionnaire-based survey was carried out, consisting of 15 questions, to assess the objectives of the study. The study was conducted among clinical dental undergraduate students, house surgeons, postgraduate students and teaching faculty members of five dental colleges in Ernakulam and Idukki districts, Kerala. The results were expressed as a number and percentage of response for each question and Chi-squared test was used for inferential statistical analysis.

Results: All the 549 respondents used jargon in case history taking. Approximately 22.4% of the respondents admitted that they always used jargon and 55.8% admitted of using jargon only when there was a lack of time. The majority of the respondents (71.4%) learned the jargon from their colleagues. Approximately 50% of the respondents admitted use of jargon in a history section and about 32% of the respondents in all the sections of case history taking. Approximately 74% were of the opinion that abbreviations should be permitted in case history taking.

Conclusion: This study showed widespread use of jargon/abbreviations in case history taking among the respondents. There is a lack of knowledge regarding standard medical abbreviations. Although the majority of the respondents were comfortable with the use of jargon, the majority of the postgraduates and faculty members felt the use of jargon should be stopped.

Key Words: Abbreviations, case history, dental students, jargon

INTRODUCTION

Jargon is defined as “the language, esp. the vocabulary, peculiar to a particular trade, profession, or group; medical jargon, plumber’s jargon.” All the professions use this linguistic shorthand that serves...
Subramaniam, et al.: Acceptance and use of jargons in case history

as a means of communication among members but effectively excludes all others.\(^1\) It is very useful in a community sharing a common interest as it removes much information redundancy. At the same time, it represents a barrier to those unfamiliar with it.\(^2\) Communication failures created by jargon are specially plentiful and pernicious in healthcare.

Medical/dental records consist of information kept by doctors, healthcare centers, community health clinics, or local hospitals, detailing what the doctors or other bodies know about the medical condition and history of patients.\(^3\) They consist of case history, details about medical/dental examinations, treatment planning, treatments rendered, medications prescribed, etc.

Like every profession, the use of jargons has become very common in the healthcare field as well, especially in medical/dental records. Although use of standard medical jargons, in its most positive light, can be seen as professional, efficient shorthand, a lack of awareness regarding the standard medical abbreviations and incessant and overzealous use of slangs, mistaking them for jargons, among the health-care professions can act as barriers in effective communication and understanding among patients and peers. Moreover, communication barriers often go undetected in healthcare settings and can have serious effects on the health and safety of patients.\(^4\)

Hence, this study was conducted to assess the acceptance and use of jargons in case history taking among clinical dental students and dental teaching faculty members of dental colleges in Ernakulam and Idukki districts, in Kerala.

**MATERIALS AND METHODS**

This study was a cross-sectional questionnaire-based survey. The target population was the dental students with clinical exposure (3\(^{rd}\) year and final year BDS), house surgeons, postgraduate students and the teaching faculty members of five dental colleges in Ernakulam and Idukki districts of Kerala. A prefabricated validity-tested questionnaire was administered to the target population. After the assessment of face validity, content validity was assessed using the Content Validity Index, and the value was found to be 0.87. The questionnaire was divided into two parts. The first part consisted of questions on personal and professional data, including age, gender and designation. The second part contained 15 questions on the acceptance and use of jargon in dental case history taking. Two of the 15 questions were open-ended. Informed consent was obtained from the respondents.

Ethical clearance was obtained from the Ethics Committee of the institution. The questionnaires were distributed by the faculty members of the Department of Public Health Dentistry and house surgeons posted in the department. The respondents were asked to answer and return the questionnaire immediately. The respondents present on the day of data collection in each institution were included in the study. Informed consent was obtained from the respondents. With a response rate of 100\%, a total of 549 subjects participated in the study.

All returned questionnaires were coded and analyzed. The results were expressed as number and percentage of response for each question and were analyzed using the SPSS 17 (Chicago: SPSS Inc). Chi-squared test was performed to compare the response in relation to gender and designation, and the level of statistical significance was set at \(P = 0.05\).

**RESULTS**

**Respondent’s profile**

Of 549 respondents, 24.4\% (\(n = 134\)) were male. Approximately 46.3\% (\(n = 254\)) were undergraduate students, 25.9\% (\(n = 142\)) were house surgeons, 11.3\% (\(n = 62\)) were postgraduate students, and the rest (16.6\%) (\(n = 91\)) were teaching faculty members. The profiles of the respondents are presented in Table 1.

**Acceptance and use of jargon among respondents**

The responses to questions asked regarding the acceptance and use of jargon in dental case history taking are outlined in Table 2.

All the respondents used jargon in case history taking. Approximately 22.4\% of the respondents admitted

| Table 1: Respondent’s profile |
|-------------------------------|
| **Variable**                  | **n (%)** |
| Gender                        |           |
| Males                         | 134 (24.4)|
| Females                       | 415 (74.6)|
| Designation                   |           |
| Undergraduate students         | 254 (46.3)|
| House surgeons                | 142 (25.9)|
| Post graduate students        | 62 (11.3)|
| Faculty members               | 91 (16.6)|
that they always used jargon and 55.8% admitted they used jargon only when there was a lack of time. Approximately 62.6% used abbreviations as it saved time and approximately 49.2% used it as it was easy. The majority of the respondents (71.4%) learned the jargon from their colleagues, and 38.25% reported they learned it from their teachers.

Almost half of the respondents used jargon in a history section and almost 21% in clinical examination. However, approximately 32% of the respondents used abbreviations in all the sections of case history taking (personal information, history, clinical examination, diagnosis and treatment). Although only half of the respondents reported that they were aware of the standard medical abbreviations, approximately 65% reported that they used standard abbreviations only. Approximately 60% of the respondents reported that they were comfortable with case history with abbreviations and only 10.4% had discomfort in using abbreviations while recording case history. More than

| Table 2: Response to questions regarding the acceptance and use of jargons |
|---------------------------------------------------------------|
| **Question**                  | **Options**                  | **Response (%)** | **Inferential statistics** |
|-------------------------------|------------------------------|-----------------|---------------------------|
| Do you use abbreviations while taking case history?          | Yes                          | 549 (100)       | NS                        |
|                               | No                           | 0               |                           |
| When do you use these abbreviations?                         | Always                       | 123 (22.4)      | Gender \( \chi^2 = 17.14 \) \( P < 0.001 \) (HS) |
|                               | Occasionally                 | 426 (77.6)      |                           |
|                               | Never                        | 0               |                           |
| Do you use abbreviations only when there is a lack of time?  | Yes                          | 306 (55.8)      | Gender \( \chi^2 = 6.411 \) \( P = 0.041 \) (S) |
|                               | No                           | 243 (44.3)      |                           |
| Why do you use abbreviations?                                 | As a habit                   | 53 (9.6)        | NS                        |
|                               | As it is easy                | 273 (49.72)     |                           |
|                               | For saving time              | 344 (62.65)     |                           |
|                               | Following peers              | 22 (4)          |                           |
| How did you get these abbreviations?                         | From teachers                | 210 (38.25)     | NS                        |
|                               | From colleagues              | 392 (71.4)      |                           |
|                               | From books                   | 89 (16.21)      |                           |
|                               | Social media                 | 44 (8.01)       |                           |
| Where do you use abbreviations?                              | Personal info                | 66 (12.02)      | NS                        |
|                               | History                      | 272 (49.54)     |                           |
|                               | Clinical exam                | 118 (21.49)     |                           |
|                               | Diagnosis and treatment plan | 51 (9.28)       |                           |
|                               | All of the above             | 179 (32.60)     |                           |
| What kind of abbreviations do you use?                       | Standard only                | 356 (64.9)      | NS                        |
|                               | My own                       | 16 (3.1)        |                           |
|                               | Both                         | 177 (32.2)      |                           |
| What are you comfortable with?                              | Case history with abbreviations | 328 (59.7)  | Designation \( \chi^2 = 24.55 \) \( P < 0.001 \) (HS) |
|                               | Case history without abbreviations doesn't matter | 57 (10.4)  |                           |
|                               |                               | 164 (29.9)      |                           |
| Do you find any difficulty in understanding abbreviations written by others? | Yes                          | 249 (45.4)      | Designation \( \chi^2 = 21.08 \) \( P < 0.001 \) (HS) |
|                               | No                           | 300 (54.6)      |                           |
| Do you think the use of abbreviations should be permitted in case history taking? | Yes                          | 405 (73.8)      | Designation \( \chi^2 = 10.28 \) \( P = 0.016 \) (S) |
|                               | No                           | 144 (26.2)      |                           |
| Are you aware of standard medical abbreviations?              | Yes                          | 273 (49.7)      | Gender \( \chi^2 = 16.39 \) \( P = 0.001 \) (HS) |
|                               | No                           | 276 (50.3)      | Designation \( \chi^2 = 50.85 \) \( P < 0.001 \) (HS) |
| Do you use other abbreviations even after knowing that only standard medical abbreviations are permitted in case history? | Yes                          | 280 (51)        |                           |
|                               | No                           | 269 (49)        |                           |

NS: Not significant; S: Significant; HS: Highly significant
half of the respondents had difficulty understanding abbreviations written by others.

However, a vast majority of the respondents (74%) were of the opinion that abbreviations should be permitted in case history taking.

The jargon used by the respondents is given in Table 3.

**DISCUSSION**

Clearly, the world has become “smaller” due to the use of information and communications technologies. Effective communication requires the parties involved share a clear understanding of various definitions and parameters and decide which information and data are being exchanged – in other words, are we talking about the same thing?

Here, language and in particular, jargon, plays a key role. Even assuming that all the parties have a reasonable command of a common language – for example, International English – the same words may have significantly different meanings to people from different parts of the world. Jargon is an abbreviated form of language that encompasses tacit knowledge.[2]

As medical students, house surgeons and residents, we pick it up from our peers and from attending physicians who should know better. We hear it at lectures and conferences. We read it in journals and textbooks. Eventually, we become inured to it, and we no longer recognize how ugly it is and how often it impairs effective communication.[5]

Medical jargon is often justified on the grounds that it constitutes a kind of medical shorthand, allowing more efficient communication when time is short. These examples illustrate that jargon is often less informative.[5]

Although studies assessing the impact of jargon used by healthcare providers on the patients have been reported in the literature, not even a single study was found in the available electronic literature that assessed the impact of use of jargon among the healthcare personnel. As stated above, with the world becoming much smaller and with great developments in the field of communication, there needs to be uniformity in recording and reporting of medical data. Although there exists a definite set of standard medical jargon, there is a serious lack of awareness regarding the same, and there is a prolific use of abbreviations in case history taking, mistaking them for standard medical jargon. This often can result in a lack of effective communications among the colleagues and patients. With case history deserving a great importance as a medical record presently, uniformity needs to exist in the documentation of medical records. Hence, this study was conducted to assess the use of medical jargon among dentists and their impact on the peers.

A very significant observation in this study was all the 549 respondents of the study used jargon in their case history taking. Moreover, only 56% of the respondents admitted to using jargon only when there was a lack of time. This habit is significantly greater in students compared to house surgeons and faculty. This highlights the fact that use of jargon/shorthand has become an integral component of writing for a significant proportion of the population. The growing and overzealous use of short messaging service and social media may have a significant role to play in

| Table 3: List of jargons used by the respondents |
|-----------------------------------------------|
| Pt: Patient                                    |
| U/L: Upper/lower                               |
| #: Fracture                                    |
| d/d: Differential diagnosis                    |
| ca/cb/cw: Cervical abrasion                     |
| Mo/Mob: Mobile                                 |
| O/E: On examination                            |
| c/o: Complains of                             |
| s/t: Stains                                    |
| st: Stains                                    |
| NAD: No abnormalities detected                 |
| h/o: History of                               |
| irt: In relation to                            |
| LA: Local anaesthesia                          |
| h/t: Hypertension                              |
| p’tis: Periodontitis                            |
| C/E: Clinical examination                      |
| t/t: Treatment                                 |
| gen: Generalized                               |
| wrt: With respect to                           |
| ↓: Under                                       |
| cal: Calculus                                  |
| chr: Chronic                                   |
| RS: Root stump                                 |
| Lt/Rt: Left/right                              |
| X: Extraction                                  |
| PICCLE: Pallor, icterus, cyanosis, clubbing, lymphadenopathy, edema |
| Yrs: Years                                     |
| b/w: Between                                   |
| NRMH: No relevant medical history reported     |
| Δsis: Diagnosis                                |
| At: Attrition                                  |

PICKLE: Pallor, icterus, cyanosis, koilonychia, lymphadenopathy, edema
this regard. This has, in fact, become a current topic of concern. Various researches conducted in this regard\(^\text{[6-8]}\) indicate the influence of texting on English language. Although the results are debatable, there is clear preference for the present generation to use abbreviations over full forms everywhere. Thus, the observation that about half the respondents used jargon as they find it easy. Over 70% reported learning the jargon from their colleagues, which is again matter of concern. Yet another important observation is that about 65% of the respondents believed that they use standard medical jargon only. However, in reality, as per this study, the vast majority of the jargon used is not standard. Moreover, an institution-wise comparison of the jargon used by the respondents, revealed a definite variation among institutions in the same geographical area. Even more important is the fact that there were abbreviations, the use of which was restricted to a single institution, which the respondents in the neighboring institutions were unaware of, clearly ascertaining the fact that these abbreviations are created according to one’s convenience. This accounts for the lack of uniformity in the jargon used, as reported. Ironically, only c/o, h/o, and w.r.t among the abbreviations reportedly being used by the respondents can be described as standard medical jargon.\(^\text{[9]}\)

It is noteworthy that over 60% of the respondents used jargon recording to patient’s personal information and history section. Guidelines in case history taking indicate that that these sections demand the use of a language the patient can comprehend.\(^\text{[10]}\) With case history record serving as important legal evidence in medicolegal cases, uniformity needs to be strictly maintained in its recording.

Furthermore, despite 55% reporting difficulty in understanding the abbreviations used by their colleagues/students, this is significantly greater among faculty members. Approximately 60% felt they were comfortable with the use of abbreviations in case histories. This was significantly higher among undergraduate students. However, the majority of the postgraduate students and faculty members opined that they were comfortable with case histories without abbreviations. Although about 50% of the respondents claimed that they were aware of standard medical abbreviations, it was found to be false. This indicates a lack of adequate knowledge regarding the same. Most importantly, with about 85% opining that there is no need to stop the use of abbreviations, there is a clear reflection of the attitude of the respondents towards the same. A statistically significant difference in this regard between students and faculty members revealed that faculty members supported giving up the use of abbreviations.

This study thus throws light on an issue which demands serious action. Furthermore, this study warns us that this practice is leading to damage to the use and purpose of medical recordkeeping, which can have a serious impact in the long run.

**Recommendations**

With the lack of awareness being one of the most common reasons for this observation, efforts are recommended to improve the awareness by incorporating the same in the curriculum. The faculty members have a major role to play in this regard by ensuring that the students record case histories without abbreviations/jargon.

**CONCLUSION**

This study revealed a widespread use of jargon/abbreviations in case history taking among the clinical dental undergraduate students, house surgeons, postgraduate students, and faculty members in dental colleges in Ernakulam and Idukki districts. There is a lack of knowledge regarding standard medical abbreviations. Although the majority of the respondents were comfortable with the use of jargon, the majority of postgraduate students and faculty members believed that use of jargon should be stopped.

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**Conflicts of interest**

The authors of this manuscript declare that they have no conflicts of interest, real or perceived, financial or nonfinancial in this article.
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