

## 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

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## 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

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as a means of communication among members but effectively excludes all others.<sup>[1]</sup> 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.<sup>[2]</sup> 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.<sup>[3]</sup> 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.<sup>[4]</sup>

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<sup>rd</sup> 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	<i>n</i> (%)
Gender	
Males	134 (24.4)
Females	415 (74.6)
Designation	
Under graduate students	254 (46.3)
House surgeons	142 (25.9)
Post graduate students	62 (11.3)
Faculty members	91 (16.6)

**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)	Designation $\chi^2=26.69$ $P<0.001$ (HS)
	As it is easy	273 (49.72)	
	For saving time	344 (62.65)	
	Following peers	22 (4)	
	From teachers	210 (38.25)	
How did you get these abbreviations?	From colleagues	392 (71.4)	NS
	From books	89 (16.21)	
	Social media	44 (8.01)	
	Personal info	66 (12.02)	
Where do you use abbreviations?	History	272 (49.54)	NS
	Clinical exam	118 (21.49)	
	Diagnosis and treatment plan	51 (9.28)	
	All of the above	179 (32.60)	
	Standard only	356 (64.9)	
What kind of abbreviations do you use?	My own	16 (3.1)	NS
	Both	177 (32.2)	
	Case history with abbreviations	328 (59.7)	
What are you comfortable with?	Case history without abbreviations	57 (10.4)	Designation $\chi^2=24.55$ $P<0.001$ (HS)
	doesn't matter	164 (29.9)	
	Yes	249 (45.4)	
Do you find any difficulty in understanding abbreviations written by others?	No	300 (54.6)	Designation $\chi^2=21.08$ $P<0.001$ (HS)
	Yes	249 (45.4)	
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)	
Do you use other abbreviations even after knowing that only standard medical abbreviations are permitted in case history?	Yes	280 (51)	Designation $\chi^2=50.85$ $P<0.001$ (HS)
	No	269 (49)	

NS: Not significant; S: Significant; HS: Highly significant

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

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.<sup>[2]</sup>

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.<sup>[5]</sup>

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.<sup>[5]</sup>

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

**Table 3: List of jargons used by the respondents**

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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 <sup>n</sup> : Extraction
PICKLE: Pallor, icterus, cyanosis, clubbing, lymphadenopathy, edema
Yrs: Years
b/w: Between
NRMH: No relevant medical history reported
Δsis: Diagnosis
At: Attrition

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PICKLE: Pallor, icterus, cyanosis, koilonychia, lymphadenopathy, edema

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

this regard. This has, in fact, become a current topic of concern. Various researches conducted in this regard<sup>[6-8]</sup> 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.<sup>[9]</sup>

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.<sup>[10]</sup> 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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