


Research Article

The Impact of Medical Jargon on the Daily Communication of Medical Science Students

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Abstract—This study seeks to analyze the impact of medical jargon on the daily communication practices of medical science students. It recognizes medical jargon as the main aspect of both identity and communication within the medical field. By delving into the routine use of specialized terminology, the research aims to uncover how this linguistic practice shapes the effectiveness of communication among students. The study adopts a qualitative methodology, employing interviews with students and scrutinizing the content of their discussions to gauge their perceptions and sentiments regarding the utilization of medical jargon. Through meticulous data analysis, the study intends to elucidate the experiences of students and the extent to which the use of jargon influences their everyday communication. This study aims to shed light on how medical jargon shapes communication among medical students, both as a tool for professional identity and as a potential barrier to clear conversations. By exploring students' everyday use of specialized terminology, the research uncovers the ways jargon influences their interactions. Beyond understanding this dynamic, the study offers practical insights that could help refine communication training in medical education. Unlike previous research, which often focuses on jargon in doctor-patient settings, this study highlights its impact within student interactions—an area that has received little attention. These findings could inspire improvements in medical training programs, helping future healthcare professionals communicate more effectively while maintaining the precision of their field.

Keywords—Medical jargon language, daily communication, medical science students, perceptions and feelings, use of specialized terminology

1. Introduction

In the field of medicine and medical education, the use of specialized language, commonly referred to as medical jargon, is of fundamental importance. This study investigates the contextual aspects of medical jargon within the educational sphere. A review of the relevant literature clarifies the contextual background and highlights the importance of investigating this area. Previous research efforts have examined the impact of medical jargon on both communication and medical education, revealing its complex role in shaping professional discourse and learning environments. The complexity that medical jargon introduces into communication is highlighted, affecting both understanding and interaction among healthcare professionals [1]. Furthermore, statistical data and reports from medical organizations confirm the necessity of deepening this topic, highlighting the widespread use of medical jargon in educational settings. Providing comprehensive data on the

prevalence of medical jargon in medical curricula reinforces the need for further investigation [2].

With a clear understanding of the contextual landscape, this study aims to achieve specific objectives and address the fundamental research questions. Through an analysis of its objectives, the study articulates a compelling rationale for its importance and outlines the expected contributions to the field. Drawing on existing literature, the research formulates questions that aim to bridge the knowledge gap surrounding the use of medical jargon in medical education. Furthermore, the study uses relevant scientific sources and reports to support the selection of research questions, ensuring their relevance and validity. In essence, this introduction lays the foundation for a comprehensive exploration of the impact and implications of medical jargon in medical education.

The introduction of the manuscript, Section 1, describes the contextual framework, the rationale underlying the study, and its objectives. Following this, Section 2 delves into the

broader literature, including discussions on communication paradigms, the importance of language within the medical field, and the ramifications associated with the use of medical jargon in communication. Furthermore, this section reviews previous research efforts regarding the use of medical jargon in communicative contexts. Section 3 elaborates on the methodological approach for conducting this investigation. Section 4 then summarizes the data analysis process, while Section 5 presents the findings and engages in discourse regarding their implications. At the conclusion of the scholarly endeavor, Section 6 provides concluding remarks that summarize the culmination of this research work.

1.1 Concepts of communication and the role of language in medicine

Communication plays a crucial role in medicine, shaping interactions not only between healthcare professionals and patients but also within the broader healthcare system. The way we use language in medical settings impacts everything from diagnosis and treatment to patient trust and overall care quality. Over time, researchers have developed various models to better understand the complexities of communication, one of the most influential being the Shannon-Weaver Communication Model.

Introduced by Claude Shannon and Warren Weaver in 1949, this model provides a structured way to analyse how messages are sent, received, and sometimes distorted. Often called the "mother of all communication models," it has laid the foundation for many other theories in the field.

Communication theories, in general, help us make sense of how we share and interpret information, whether in one-on-one conversations, group discussions, or mass media. They explore key aspects such as the roles of speakers and listeners, the influence of cultural and social factors, and the impact of media on shaping messages. By studying these theories, we gain a deeper understanding of human interaction, persuasion, and how information flows within society. In healthcare, this knowledge is essential for improving doctor-patient communication, reducing misunderstandings, and ultimately enhancing patient outcomes.

The Shannon-Weaver communication model, also known as the Shannon-Weaver information theory model, breaks down communication into several key components, each playing a crucial role in the transmission of information from a sender to a receiver [3].

These components include:

Sender: The person initiating the message, whether through speech, writing, gestures, or other means.

Encoding: The process of turning thoughts into a communicable form.

Message: The actual content being shared.

Channel: The medium through which the message is transmitted (e.g., spoken word, written text, digital media).

Barriers (Noise): Any interference that can disrupt or distort the message, such as background noise, language differences, or emotional distractions.

Decoding: The receiver's process of interpreting and making sense of the message.

Receiver: The intended audience who receives and processes the message.

Feedback: The receiver's response, which helps the sender assess whether the message was understood correctly.

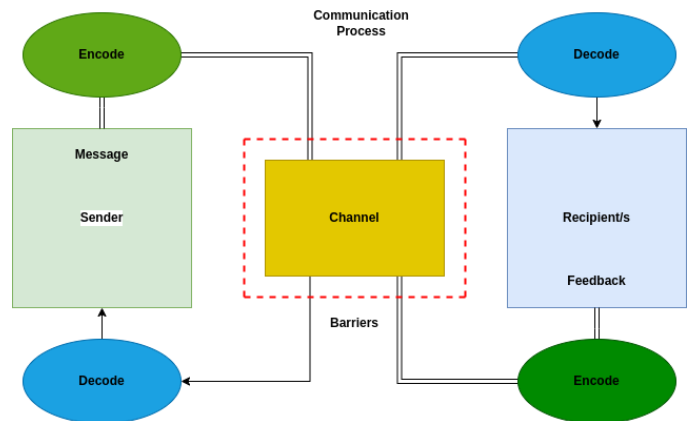


Figure.1

This scheme encompasses all elements of the communication process in a single flow. The sender begins by encoding the message, which is then transmitted through the channel, encountering noise influences. The receiver then decodes the message and responds as necessary, providing feedback to the sender through feedback.

Communication is a vital skill in healthcare, playing a key role in building trust between healthcare professionals and patients. When trust is established, patients feel more at ease, making them more open to receiving treatment and sharing important personal information. This trust helps ensure a better prognosis, as patients believe their provider has their best interests at heart [4].

Healthcare students often face a lot of stress as they juggle deadlines, exams, and practical training. With so many pressures, they might not always realize how crucial effective communication is with their patients [5]. This can lead to unintentional miscommunication, which can affect the quality of care and treatment outcomes [6].

1.2 Other influences of jargon on communication

The impacts of utilizing medical jargon in communication can significantly affect the perception and understanding of medical information by the general public or individuals outside the medical field in several ways:

Confusion and Misinterpretation: Medical jargon often consists of complex terminology that may be unfamiliar to non-medical individuals. This can lead to confusion and misinterpretation of medical information, as individuals may

struggle to grasp the meaning of terms used by healthcare professionals.

Communication Barriers: Can arise when medical jargon is used, making it harder for healthcare providers to connect with patients or anyone not familiar with medical terms. If professionals speak in technical language without breaking it down into simpler terms, patients might feel intimidated or unsure about asking questions. This can lead to misunderstandings and even affect the quality of care.

Reduced Health Literacy: Health literacy is about a person's ability to understand and use health information to make smart choices about their well-being. When medical jargon is used, it can make this difficult, especially for people who don't have a lot of medical knowledge or formal education. If the information is hard to understand, it can prevent them from fully grasping important health details and making informed decisions.

Anxiety and Stress: When individuals encounter medical jargon they do not understand, it can evoke feelings of anxiety and stress, especially when the information pertains to their own health or the health of a loved one. Inability to comprehend medical terminology can exacerbate feelings of uncertainty and fear, hindering effective communication and decision-making.

Empowerment and Autonomy: Clear communication is essential for empowering patients to actively participate in their healthcare decisions and advocate for their needs. When medical jargon is used without explanation, it may undermine patients' sense of autonomy and control over their health, as they may feel disconnected from the decision-making process.

In summary, the use of medical jargon can impede communication, exacerbate misunderstandings, and undermine individuals' ability to understand and engage with medical information. Healthcare providers should strive to communicate in plain language, avoiding unnecessary technical terminology and offering explanations when using medical terms to ensure that information is accessible and comprehensible to all individuals, regardless of their medical background.

2. Previous studies on the use of medical jargon in communication

Previous investigations have extensively explored the utilization of medical jargon in communication within the healthcare domain, shedding light on its advantages and challenges, particularly concerning its influence on interpersonal interactions and patient comprehension of health-related protocols. These studies have delineated the multifaceted nature of medical jargon employment, identifying both its merits and impediments, which are expounded upon as follows:

1. The benefits of jargon in medicine [7].

a. **Efficiency in Communication:** Medical jargon serves as a conduit for expedient communication among healthcare professionals, offering succinct and precise terminology to articulate intricate medical concepts and procedures. This facilitates effective discourse between colleagues and streamlines communication within the dynamic milieu of clinical settings.

b. **Standardization:** The adoption of jargon within the medical realm fosters uniformity in communication, ensuring clarity and precision in documentation, research endeavors, and clinical practice. By adhering to standardized terminology, healthcare practitioners mitigate the likelihood of misinterpretations and errors.

c. **Professional Identity:** Embracing medical jargon cultivates a sense of professional identity and proficiency among healthcare practitioners, affirming their specialized expertise and knowledge within their respective domains.

2. Challenges Associated with Medical Jargon in Medicine [8].

a. **Limited Accessibility:** The esoteric nature of medical jargon renders it inaccessible and bewildering to patients and individuals lacking medical expertise, impeding effective communication and comprehension of health-related information. Such linguistic barriers pose challenges to patient-provider interactions, hindering shared decision-making and patient engagement in healthcare processes.

b. **Miscommunication and Misunderstandings:** Employing jargon devoid of elucidation engenders miscommunication and misunderstandings between healthcare providers and patients, potentially eliciting feelings of apprehension and bewilderment among the latter. Patients may refrain from seeking clarifications or posing queries due to apprehensions stemming from unfamiliar terminology.

c. **Health Disparities:** The utilization of medical jargon exacerbates health inequities, particularly among marginalized or disadvantaged populations with limited health literacy or linguistic proficiencies. It engenders disparities in healthcare access and outcomes by impeding individuals' comprehension of health-related information and navigating the intricacies of the healthcare landscape.

3. Effects on Patients' Comprehension of Health Procedures [9].

Research has shown that patients' understanding of health procedures and treatment plans is influenced by the clarity and accessibility of information provided by health care providers. When medical jargon is used without explanation, patients may struggle to understand the rationale behind recommended procedures, potential risks and benefits, and alternative options.

Using clear language, visual aids, and communication techniques that focus on the patient's needs can help patients better understand their health procedures. These strategies also encourage patients to be more involved in making

decisions about their care. By tailoring communication to meet patients' needs and preferences, health care providers can mitigate the challenges associated with medical jargon and promote patient-centered care.

3. Overview

In general, while medical jargon serves important functions within the medical community, its use must be balanced with efforts to ensure that health information is communicated to patients clearly, accurately, and compassionately. By using patient-centered communication strategies and promoting health education, health care providers can improve patients' understanding of health procedures and empower them to participate actively in their health care decisions.

4. Methodology

A. Description of the method used to collect and analyze the data

In order to collect and analyze the data, a combined method including a qualitative approach was used. This includes individual interviews with medical students to capture their perceptions regarding the use of slang language and its impact on their everyday communication. After the interviews, the data were analyzed through content analysis to identify the main themes and experiences of using medical jargon in students' communication.

B. Study population and participant selection process

The study population includes medical science students of Aldent university. Participants have been selected through a deliberate process, including representatives from all levels of study and ensuring a healthy representation of student experience and perceptions.

C. Procedure for interviewing and data analysis

The interview procedures began with the preparation of structured and open-ended questions, which were developed to deepen the students' perceptions regarding the use of medical jargon. The interviews were recorded and then transcribed for analysis. The data analysis was carried out by identifying the main themes and understanding the impressions and perceptions of the students regarding their communication in the field of medicine.

5. Data Analysis

A. Students' perceptions of slang language use.

1. Identifying the basic perceptions and expressions of students regarding the use of slang language.

- The interviewed students show a high awareness of the use of medical jargon. They use medical terminology initially with patients, but are willing to switch to simpler language to ensure the patient fully understands. This appears in statements such as: "If the patient does not understand, we explain it in everyday language."

- Their perception shows a high importance in clear and effective communication to avoid misunderstandings and help patients feel safe and informed.

2. Analysis of changes in the perceptions of students from different levels of experience and training in the field of medicine.

- Students in more advanced years of study and with more clinical experience demonstrate a greater ability to use medical jargon effectively and to recognize when it is necessary to explain in simpler terms.

- Early learners may feel more uncertain and may need more guidance in using jargon appropriately.

3. Identification of factors that influence students' perceptions regarding the use of medical jargon, such as personal experience, education, and the perception of the need to use jargon to describe certain health phenomena.

- Personal experience and clinical practice are important factors influencing their perceptions.

- Academic education and training also have a major impact, including lessons from lecturers using jargon in lectures and seminars.

- The perception of the need to use jargon to describe certain health phenomena is also a key factor.

B. The impact of jargon uses on students' daily communication

1. Identifying the ways in which the use of slang language affects the communication process of medical students.

- The use of medical jargon improves communication between colleagues and lecturers, creating a common language, increasing the efficiency of technical discussions.

- In communicating with patients, the initial use of medical jargon helps to establish trust and professional appreciation, but requires adaptation to be fully understood.

2. Analysis of students' experiences regarding the effects of using jargon in their interpersonal relationships and in contacts with patients and colleagues.

- In dealing with patients, students have observed that medical jargon can create distance and confusion if not clearly explained. This poses a challenge that requires special care.

- Among colleagues, the use of jargon is useful and improves communication and cooperation, facilitating the exchange of ideas and professional information.

3. Identification of possible challenges resulting from the use of jargon in daily communication and their experiences in the context of school and medical practice.

- Major challenges include the need to explain complicated terms to patients and ensure they fully understand.

- In the context of school and medical practice, students feel that the use of jargon is essential to show their involvement and professional knowledge, but this also requires a careful balance of not alarming patients and families.

C. Themes and experiences identified in data analysis

1. Identification and analysis of key themes and experiences emerging from analysis of interview data and transcripts.

- Main topic: Adapting the language of communication according to the audience. This includes the initial use of medical jargon and switching to plain language as needed.
- Experience: Students have varying experience in using jargon, some feeling more confident using it and others feeling the need for more practice and training.

2. Approaching individual students' experiences and compiling a broad overview of their perceptions and feelings regarding the use of medical jargon.

- Individual experiences vary, but a general overview shows that medical students are aware of the importance of clear and appropriate communication. Their feelings towards the use of jargon are positive when it is used effectively and carefully.

3. Compilation of recommendations and conclusions based on the themes and experiences identified, providing a deeper understanding of the impact of medical jargon on the communication of medical students.

- Recommendations: Increase training in medical communication to help students develop skills to use medical jargon effectively and adapt communication as needed.
- Conclusions: The use of medical jargon is an important element in the formation of medical students, but it requires a careful and adapted approach to ensure that communication with patients is always clear and understandable.

Table1: Summary of student responses on the use of medical jargon

Question	Key Findings	Examples Cited by Students
1. Do you use medical jargon in your everyday life, both in the classroom and in clinics?	Most students use jargon regularly, but more experienced students can better adapt it for patients.	<i>If the patient does not understand, we explain it in everyday language.</i>
2. How does jargon influence the way doctors communicate with patients and colleagues?	Improves professional communication among colleagues but can create barriers with patients.	<i>It helps in technical discussions, but it can be confusing for patients.</i>
3. What are the advantages and challenges of using jargon in medical communication?	Advantages: Increases professional efficiency. Challenges: Creates distance with patients, requires adaptation.	<i>It makes us feel like professionals, but we have to be careful with patients.</i>
4. How can the use of jargon affect understanding and interaction with patients?	Initially builds trust but may cause misunderstandings if not explained properly.	<i>Patients respect us more when we use technical terms, but they can feel lost.</i>
5. What are the most effective ways to improve medical communication by addressing jargon use?	More training on simplifying terminology and practical exercises in courses.	<i>We need more practice in explaining medical terms in simple ways.</i>
6. What is the role of medical communication training in mitigating the negative effects of jargon on doctor-patient relationships?	Essential for balancing technical accuracy with patient understanding.	<i>We should be taught early on how to use jargon without confusing patients.</i>
7. How can newer technologies and methodologies be used to improve communication in medicine by addressing jargon use?	Digital tools, AI for simplifying terms, interactive training.	<i>Apps or AI tools could help explain medical terms better to patients.</i>

Table 2: Student perceptions of jargon use by experience level

Student Group	Uses Jargon Comfortably	Adapts Jargon for Patients	Feels Uncertain About Jargon Use
First-Year Students	40%	30%	60%
Mid-Level Students	70%	50%	30%
Advanced Students	90%	80%	10%

6. Conclusion

A. Conclusions and implications of the study

This study provides an in-depth insight into the use of medical jargon in medical education and communication between health professionals and patients. The main conclusions are:

- Effectiveness of communication: Medical jargon facilitates communication between health care professionals, ensuring a common and efficient understanding of complex medical concepts. This is particularly important in clinical settings where speed and accuracy are critical.
- Communication barriers: However, the use of medical jargon can create barriers to communication between professionals and patients, causing misunderstandings and anxiety among patients. This highlights the need for training that improves the communication skills of medical students to match the knowledge levels and needs of patients.
- Health education: To improve health education and increase patients' awareness and participation in care processes, it is important that health care professionals use clear and accessible language. This can improve quality of care and health outcomes.

B. Research gaps and challenges and suggestions for future work

- Lack of specialized training: One of the challenges identified is the lack of specialized training in the use of medical jargon and clear communication with patients. It is suggested that medical education programs include specific modules that address these aspects.
- Wider studies: The study has a limited scope and includes only Aldent University students. Future studies should include a wider range of institutions and populations to provide a complete and more generalizable picture of medical jargon use.
- Combined methods: Another challenge is the sole use of qualitative methods. Future studies could incorporate quantitative methods to measure the impact of medical jargon on patient outcomes and identify stronger associations between different variables.
- Analysis of changes in experience: Changes in students' perceptions and skills based on their levels of experience and training should be analyzed more deeply to identify the best approaches for training. This will help create a more tailored curriculum that addresses the specific needs of students at different stages of their studies.

This research brings a fresh perspective to the conversation around medical jargon, moving beyond its impact on patient communication to explore how it shapes interactions among

students. The findings suggest that while jargon strengthens a sense of belonging in the medical community, it can also create challenges in everyday discussions. By highlighting this dual role, the study opens up important questions about how medical education can strike a balance—ensuring that students develop a strong professional identity while also communicating clearly and effectively. These insights can serve as a foundation for improving communication training in medical curricula, ultimately helping future healthcare professionals navigate both technical precision and human connection in their practice.

Conflict of Interest

I declare no conflict of interest in this regard study. There was no financial or personal connection Int. J. of Medical Sciences Research and Practice may be perceived as influencing the work reported in this paper.

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Appendix

Questions that were included in the interviews with students of Medical Sciences to understand the impact of the use of specialized terminology in the formation of effective communication in their everyday life:

1. Do you use medical jargon in your everyday life, both in the classroom and in clinics?
2. How do you think jargon influences the way doctors communicate with patients and their colleagues in

medicine?

3. What are the advantages and challenges of using jargon in medical communication?
4. How can the use of jargon affect understanding and interaction with patients in medicine?
5. What are the most effective ways to improve communication in medicine by addressing the use of jargon in medical education?
6. What is the role of medical communication training in mitigating the negative effects of jargon on doctor-patient relationships?
7. How can newer technologies and methodologies be used to improve communication in medicine by addressing the use of jargon?

AUTHOR PROFILE

Dr. Rovena Mera is a dedicated educator with extensive experience in teaching Academic Writing, Research Methodology, and the Albanian language. Committed to fostering a culture of academic excellence and inquiry, she meticulously plans educational sessions and utilizes dynamic materials to inspire critical thinking and creativity among students. Through administering assessments, providing constructive feedback, and mentoring fellow educators, she creates a supportive learning environment tailored to individual needs.



In addition to teaching responsibilities, she actively engages in research and manages various administrative tasks, further enhancing her dedication to educational advancement and student success. Rovena Mera holds a PhD in Applied Linguistics from Tirana University, Albania, and a Master's degree in Pedagogy and Schooling from Tor Vergata University, Roma, Italy. Her academic journey is complemented by numerous conference presentations and published works, underscoring a strong commitment to contributing to the field of education and communication.