Examining Inclusive Language in Clinical Narratives in Medical Biochemistry Textbooks to Model Equitable Patient-Centered Care in Preclinical Undergraduate Medical Education

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Introduction

Harmful language used by healthcare professionals negatively impacts patient care. [1-4] The American Medical Association (AMA) suggests avoiding dehumanizing language, blaming and the use of negative adjectives or verbs when referring to groups of people receiving care or treatment. [5-6] During a student's training there are multiple sources of exposure to harmful language. These include textbooks, teacher behavior, exams, tacit knowledge or supplemental/external resources (Figure 1). For this study, harmful language includes language which either dehumanizes the patient, reinforces a physician held bias or erodes trust between the physician and patient.

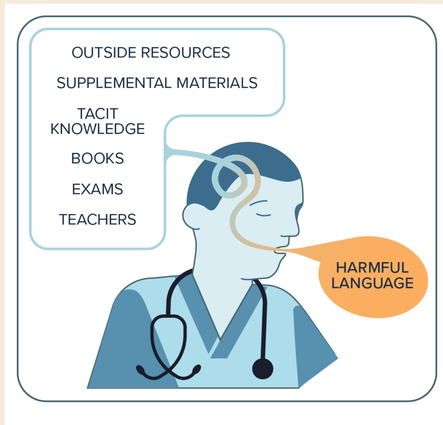


Figure 1. Sources used in training of healthcare professionals which reinforce harmful language.

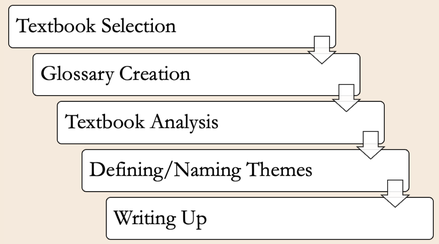
Aims and Objectives

- ❖Identify and quantify harmful language in pre-clinical textbooks (Figure 2).
- ❖Link use of harmful language to impact on patient care.
- ❖Describe examples of harmful language in pre-clinical textbooks (Figure 3).

Methods

This project involved the review and thematic analysis of pre-clinical, foundational biochemistry textbooks for harmful language when describing people and their conditions in an educational setting.

We followed previously published methodology for this evaluation: Familiarization, Coding, Generating Themes, Defining/Naming Themes, Writing Up.[7] We selected the three most recommended biochemistry textbooks within Michigan-based medical schools for further analysis. Books were published between 2017-2019 and at the time of this study, textbooks were the most recent edition. We created a glossary of terms that were established as 'harmful' by previous literature. Then a codebook was developed for analysis using NVIVO. Two authors reviewed the textbooks to identify harmful language and a third was used to reach consensus for any disagreements. Text was evaluated for context rather than searching for individual terms. Final themes were agreed upon by all authors.



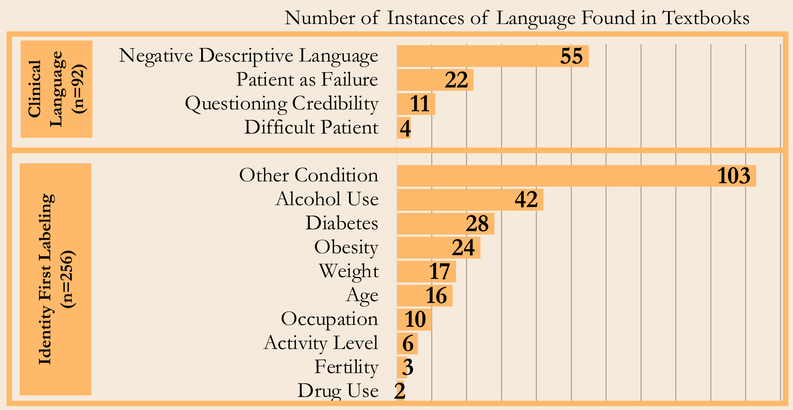


Figure 2. Distribution of Codes and Themes from Harmful Language Analysis. A total of 343 uses of harmful language were documented across all of the selected textbooks. Codes are supported by previous literature: Clinical Language [1,14]; Identity First Language [1, 12, 14-16, 18-24]

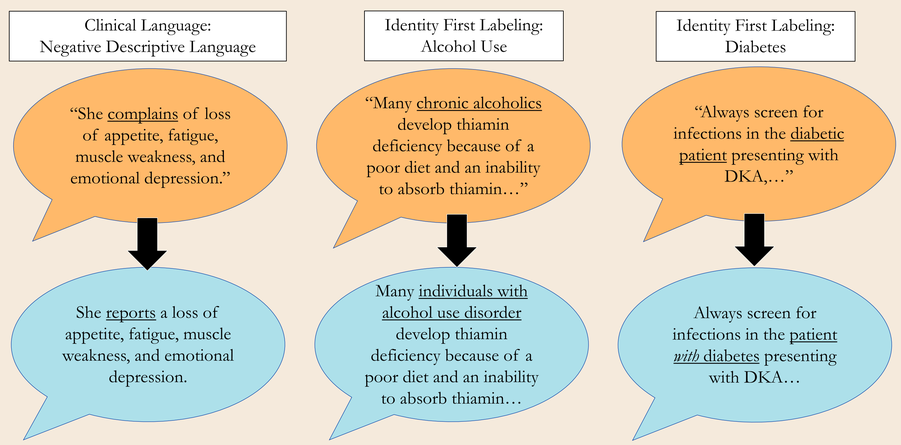


Figure 3. Harmful language examples from textbooks. Examples of harmful language from textbooks by theme/code paired with suggestions for more humanizing language. Codes are supported by previous literature.

Discussion

We identified two main themes of harmful language used to describe people and their conditions in biochemistry textbooks (clinical language and identity first labeling). In order to minimize learning of harmful language, educators need to intervene at an early stage of training, rather than to take corrective action later (Figure 4). Therefore, addressing harmful language in our educational resources serves two purposes: to reduce the burden of unlearning for healthcare providers and to highlight the impact of the basic science educator in promoting instruction that addresses healthcare disparities and inequity (Figure 4).

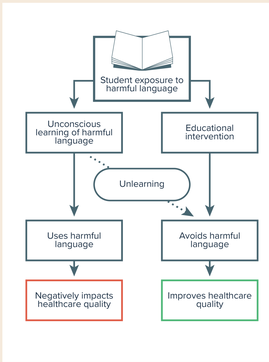


Figure 4. Outcomes from learning Harmful Language in Higher Education

Conclusions

Textbooks used in the basic science instruction contain harmful language. Educators should be aware of the impact of using harmful language when describing a patient to their students. Early learning of appropriate language promotes consistent education leading to humanized care.

Limitations

For this analysis, a limited number of textbooks were screened (3). However, these findings could be applied to other textbooks/materials. Further, we did not generate novel categories of harmful language, meaning that each code had to be previously supported in the literature. Given this, it is possible that other types of harmful language would be undercounted or not yet recognized.

Future Directions

Future work for this project will aim at assessing the use of harmful language in other instructional materials such as commercial resources for standardized testing, instructor generated slides, assessments, and seminars. Further, we aim to design workshops to help instructors and students understand how harmful language is used and how it can be replaced with humanizing language.

Potential Impact

This work has the potential to motivate educators to remove harmful language in preclinical curricula. Reduction of this language will minimize its use by future physicians and improve clinical care by reducing stigma and bias against patients.

References

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