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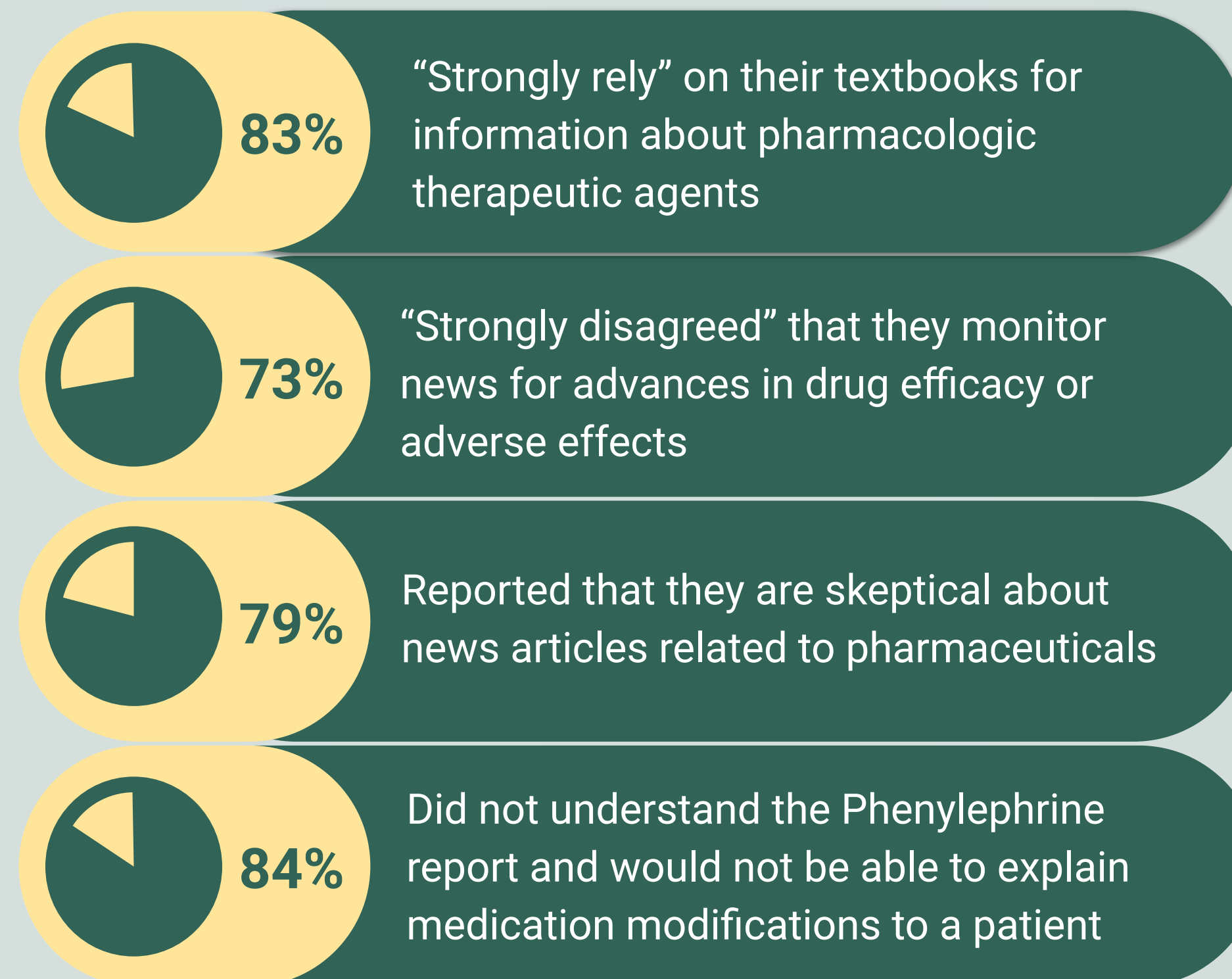
INTRODUCTION

- Phenylephrine is the primary active ingredient in many decongestants including Sudafed and DayQuil which have been on the market for over 75 years
- On September 14, 2023 the FDA concluded that the current OTC phenylephrine dose is not effective because its high first pass metabolism results in markedly low bioavailability
- While this study made headline news, it risks going unnoticed because of publication skepticism, the routine use of the drugs in question, and because of rapid information turnover
- Medical knowledge is said to double every 73 days which makes it difficult for medical students to understand current pharmaceutical advances and their clinical application
- We aimed to identify gaps in medical education regarding current events related to pharmacological therapeutics and understand how medical students currently perceive drug-related news

METHODS

- To evaluate medical students' approach to accessing information about therapeutic agents, 42 students from various medical schools were prompted to complete a 7 statement survey
- Students responded to the statements using a Likert Scale to rate their agreement with statements about the way in which they obtain information about pharmaceuticals and their perception of pharmacological advances in the news cycle
- As a case study, students' understanding of the recent FDA report on oral Phenylephrine was also assessed
- Analysis of survey data allowed for an understanding of attitudes about the credibility of news publications compared to textbooks and other medical school endorsed resources
- The results of the survey data was intended to help form recommendations for better integration of pharmaceutical advances and general current events within the medical school curriculum

SURVEY RESPONSES



RESULTS

- A review of the survey results reveals that 83% of student respondents "strongly rely" on their textbooks and resources including First Aid and UWorld for information about pharmacologic therapeutic agents
- While 73% of respondents "strongly disagreed" with the statement that they monitor the news circuit for advances in drug efficacy or adverse effects, it is likely related to 79% of respondents reporting that they would be highly skeptical about current news related to pharmacology without reading a supporting journal article
- When asked about the recent finding about Phenylephrine, 84% of respondents indicated that they did not understand the report and could not explain how to modify medication use to a patient
- This data supports a need for increased focus on current events for medical school students as there is an apparent gap between the reliance on textbooks and potentially dated resources and the likely warranted skepticism of the media

DISCUSSION & RECOMMENDATIONS

- This survey highlights the primary dependence on textbooks and other similar resources to learn about pharmacological advancements; although these tools are foundational for preliminary learning, they are functionally unable to include new findings
- This is highlighted by the lack of knowledge and comfortability surrounding the Phenylephrine discovery which made headlines across nearly all new publications
- This survey also highlights a challenge with the media; the rapid information turnover, dramatization for the sake of shock-factor, and the overwhelming amount of inaccurate reporting leaves students skeptical
- This disconnect results in students lacking accurate and accessible information about new and existing drugs
- To address this gap, we recommend a supplemental current events curriculum during the preclinical years of medical education which would ensure students understand novel approaches to treatment, reports concerning adverse effects, and new data about efficacy and dose which is critical as students transition from didactics to a patient-centered clinical setting
- A supplemental curriculum would allow students to consider how patients' symptoms may be attributed to newly-reported side effects or how to change drug selection if a therapy is found ineffective
- This supplement emphasizes the importance of life-long learning to better care for patients which is a pillar of medical education as research continues to revolutionize therapies and pharmacological treatment options

REFERENCES

