CYBERINCIVILITY AMONG NURSES AND NURSING STUDENTS ON TWITTER

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BACKGROUND

- Millions of health professions students and healthcare providers use social networking sites for personal and professional reasons. [1]
- However, when used carelessly, this can degrade working and learning environments, harm reputations, and negatively affect patient safety.
- Cyberincivility refers to behaviors deemed disrespectful, insensitive or disruptive, and potentially harmful to patients and/or organizations that occur in online environment.
- This study could inform decisions about design of educational innovations and practice changes in the technology-mediated environment.

OBJECTIVES

This study was to examine the prevalence of uncivil tweets and describe patterns and differences in such posts by nursing students and nurses.

METHODS

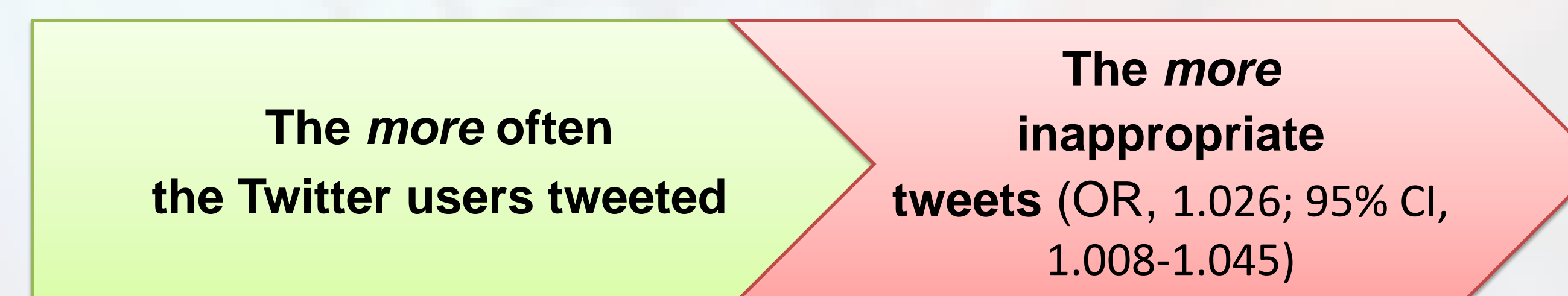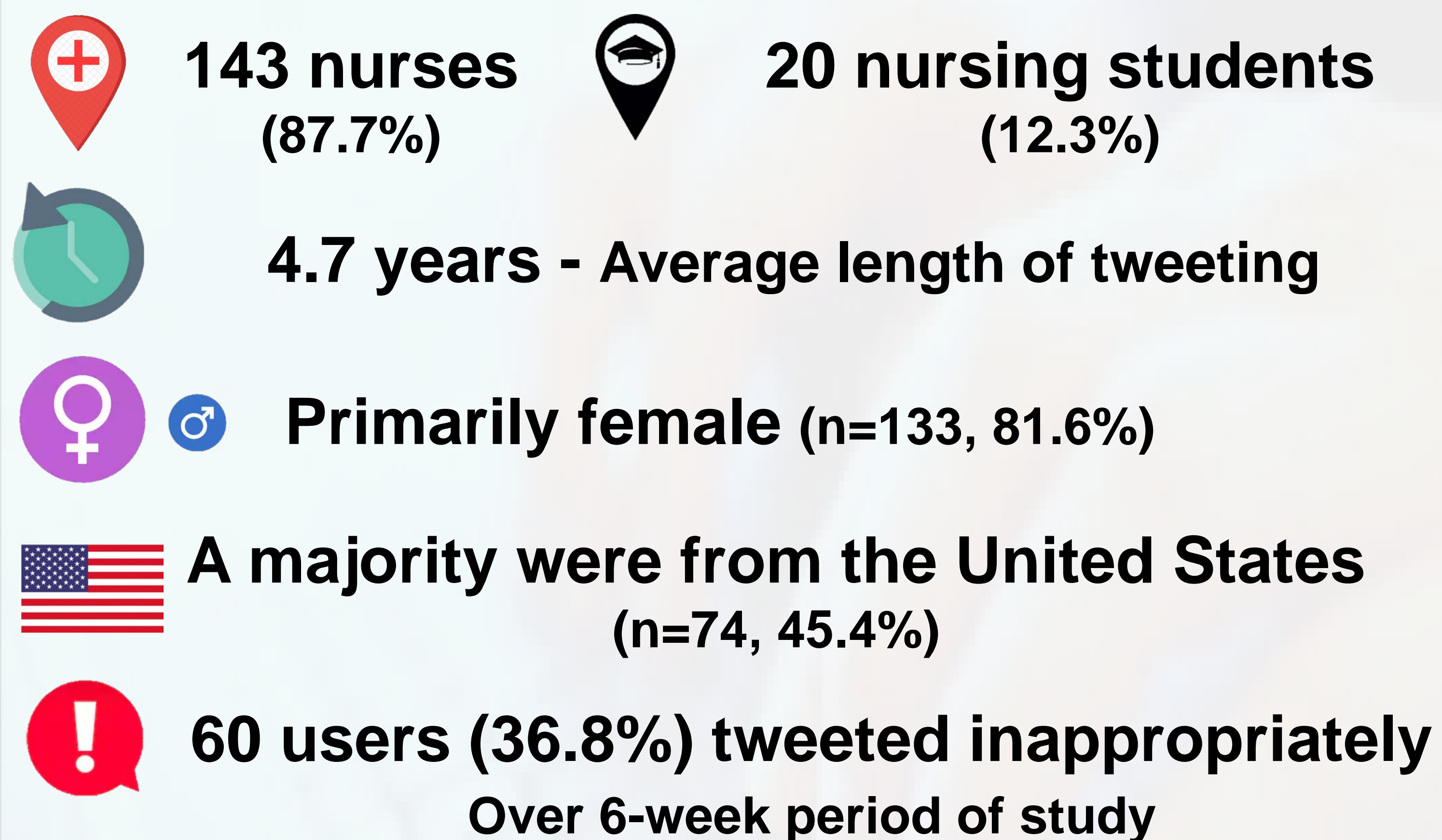**Cross-sectional, mixed method with Twitter data-mining method.**

- Identifying nurse and nursing student Twitter users by searching for hashtags: *#nursingstudent, #nurselife, #registerednurse, #nursepractitioner, #futurenurse,* and *#nurse*.
- 163 eligible user accounts and 8,934 tweets included for analysis.
- Analyzing demographics and Twitter use using descriptive statistics.
- Analyzing the univariate odds of presence of uncivil tweets with logistic regression model.
- Tweet content analysis using qualitative content analysis. [2]

REFERENCES

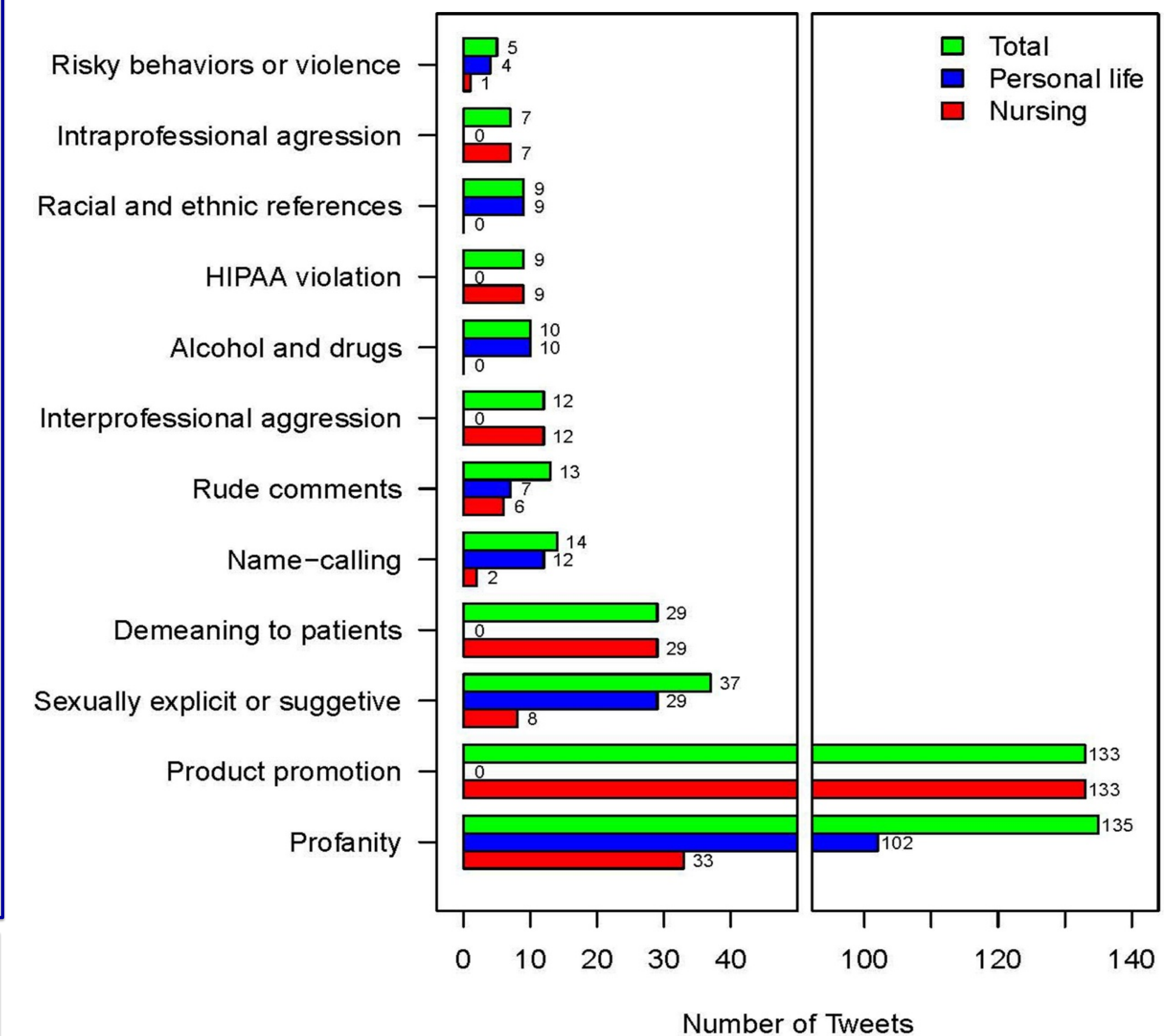1. Von Muhlen, M., & Ohno-Machado, L. (2012). Reviewing social media use by clinicians. Journal of the American Medical Informatics Association, 19(5), 777-781. doi:10.1136/amiajnl-2012-000990
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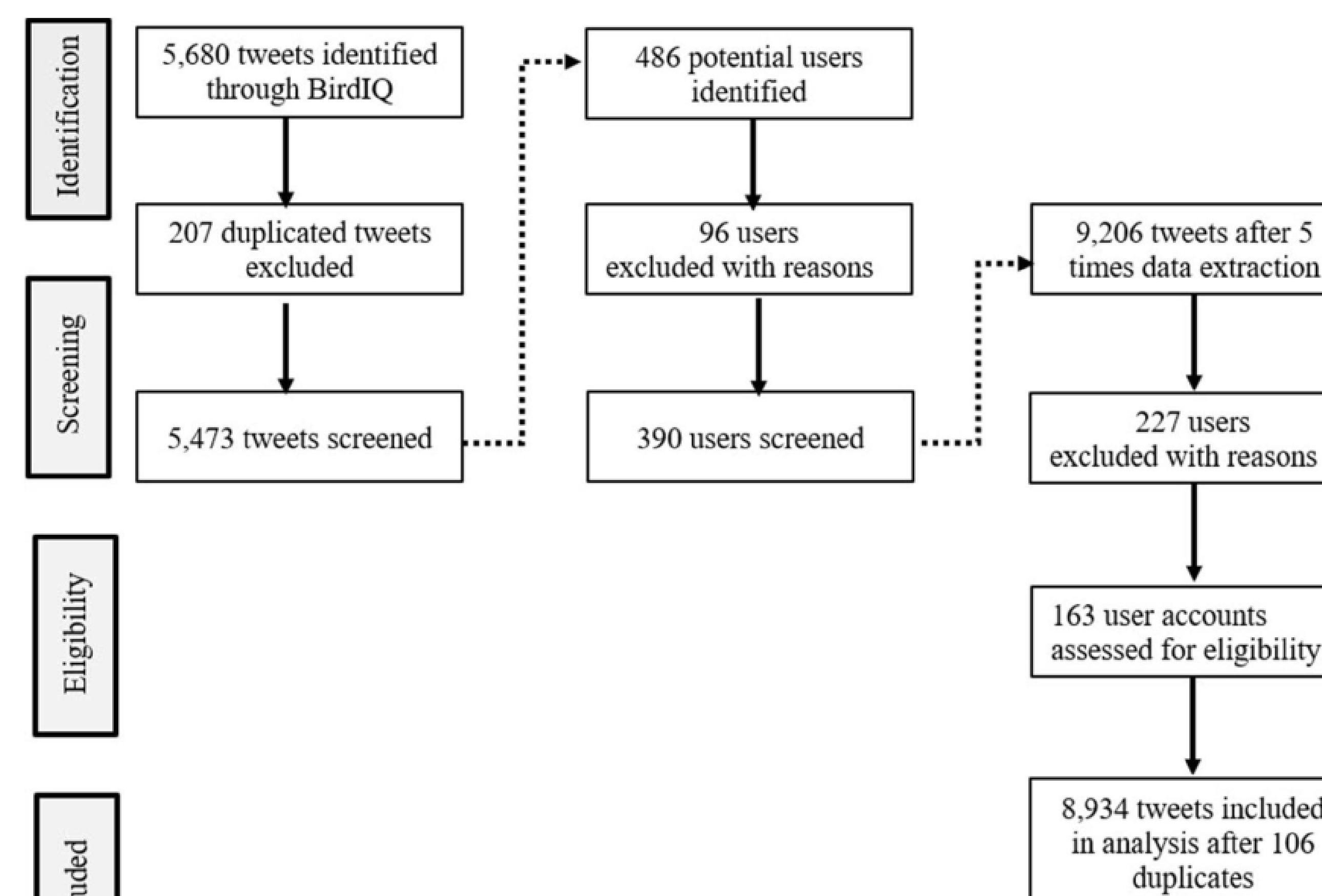
RESULTS

Sample characteristics (n=163)

- **143 nurses (87.7%)**
- **20 nursing students (12.3%)**
- **4.7 years - Average length of tweeting**
- **Primarily female (n=133, 81.6%)**
- **A majority were from the United States (n=74, 45.4%)**
- **60 users (36.8%) tweeted inappropriately** Over 6-week period of study

The *more* often the Twitter users tweeted → The *more* inappropriate tweets (OR, 1.026; 95% CI, 1.008-1.045)

The categories of uncivil tweets in the nursing- and personal-related groups

Category	Total	Personal life	Nursing
Risky behaviors or violence	5	4	1
Intraprofessional agression	7	0	7
Racial and ethnic references	9	9	0
HIPAA violation	9	0	9
Alcohol and drugs	10	10	0
Interprofessional aggression	12	0	12
Rude comments	13		6
Name−calling	14	12	2
Demeaning to patients	29	0	29
Sexually explicit or suggestive	37	29	8
Product promotion	133	0	133
Profanity	135	102	33

Number of Tweets

Data mining and sampling procedure

Identification:
- 5,680 tweets identified through BirdIQ
- 486 potential users identified
- 207 duplicated tweets excluded
- 96 users excluded with reasons
- 9,206 tweets after 5 times data extraction

Screening:
- 5,473 tweets screened
- 390 users screened
- 227 users excluded with reasons

Eligibility:
- 163 user accounts assessed for eligibility

Included:
- 8,934 tweets included in analysis after 106 duplicates

CONCLUSIONS

- This study takes an important step in reviewing and identifying uncivil interaction on Twitter by nurses and nursing students.
- Further research is needed to identify current and future health professionals who put themselves, their profession, and their employers at risk due to uncivil online behaviors on the social networking sites.
- Sentinel events related to misuses of cyberspace and their consequences could be effective to teach health professionals and students.
- The topic of cybercivility should be incorporated into curricula for future health professionals to understand their accountability for their online behavior.