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Ethical but unprofessional: Using sentiment analysis models and text mining to analyze a nurse's workplace video on social media

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Background: E-professionalism is defined as the attitudes and behaviours of nurses through social media, regardless of HIPAA regulation compliance. Recently, escalated e-professionalism violations have led to a nurse losing her job and having her professional reputation ruined due to public backlash. Aim: Through text mining models of artificial intelligence, the study explores YouTube comments concerning a compliant nurse with HIPAA roles who filmed herself in the workplace being overwhelmed by her patient's death. Method: The present study utilises sentiment and machine learning models to analyze quantitatively and qualitatively unstructured data from 5K public comments, including 120 nurses' comments on the uploaded YouTube video published in July 2022 with 3M views and 13K comments. Result: Neural Network Machine Learning reveals that 69% of the comments were negative. Vader sentiment model shows that the negative comments are 2 times and 2.4 times the positive ones for both the public and nurses, respectively. The Liu-Hu algorithm maintains comparable results to the Vader model for both the public and nurses' samples. The Kernel-density analysis for the Vader algorithm shows that the density of negative public comments is 1.95 times that of positive opinions. The top 10 comments, which have gained over 23K likes from YouTube viewers dislike the nurse's behaviour, which was described as 'attentionseeking', 'self-promoting' and 'unprofessional', and the video as 'cringeworthy'. Conclusion: The majority of the negative opinions about the nurse's behaviour are due to a violation of e-professionalism, not a violation of HIPAA rules. In the current social media era, the introduction of an eprofessionalism curriculum in nursing schools and education modules for nursing practitioners on a global scale is a matter of time.

Recent publications

1. Hassan, M. A., Almowallad, N., Motary, M. A., Alshmemri, M. and Alghabbashi, M. (2021) "Impact of Organisational Climate on Nurses' Commitment at Public Hospitals in Saudi Arabia", Journal of Pharmaceutical Research International, 33(55A), pp. 59-71. https://doi.org/10.9734/jpri/2021/v33i55A33807

2. Al-Motary, M., Almowallad, N., Hassan, M. A., Alshmemri, M., & Alghabashi, M. T. (2022). Impact of Organisational Climate and Commitment among Nurses Job Satisfaction: A Review of Literature. Asian Journal of Medicine and Health, 20(9), 87-95. https://doi.org/10.9734/ajmah/2022/v20i930493

Biography

Magedah Alhassan has a wide clinical and leadership experience with an interest in nursing informatics and text mining.

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