# Social Media as an informative and educational channel. An opportunity to build bridges.

Álvaro Herrera<sup>12</sup> [0009-0007-4861-2144], Romina Pulgar<sup>1</sup> [0009-0003-2417-5374], Faviana Montalvo <sup>1</sup> [0009-0001-9975-3541], Carla Jiménez <sup>1</sup> [0009-0008-6080-0209] y Sofía Blanco <sup>1</sup> [0009-0001-1125-8395]

<sup>1</sup> Universidad de Chile, Independencia, Av. Independencia 1027, Santiago, Chile. <sup>2</sup> Universidad San Sebastián, Providencia, Lota 2465, Santiago, Chile levarito@uchile.cl

Abstract. Social media have transformed communication, learning and information exchange. Therefore, it is necessary to deepen research to determine the real education value. The following longitudinal observational study sought to evaluate the impact of the Instagram account of the medical school of the Universidad de Chile. This was done through a questionnaire and seven interactive questions through the platform. Among the results, the questionnaire highlights that 55% of the followers received important information about the career from the platform, and 49,3% were educated on health issues. Similar results were obtained from the interactive questions, in addition to the fact that 98% of respondents stated that LGTBO+ respect and inclusion were promoted and 90% considered that the initiative helped first-year students. From the above, the importance of creating a common student-teacher narrative through collaborative work on informational and educational strategies is discussed, concluding that the importance of this research lies not only in the need to disseminate information, but also in the construction of safe and respectful spaces.

Key Words: social media, Medical Schools, Medical student, Health Education.

### 1 **Introduction**

University student are digital natives, i.e., those who were born and raised using the "digital language" of computer games, video, and internet (Prensky, 2001). The massive use of smartphones, with a daily average of  $7.8 \pm 2.2$  hours of use (Osailan, 2021) and constant technological innovations, have provided new functions and diverse mechanisms for transmitting information. This provides the opportunity to choose appropriate methods to inform and educate the community.

In the digital era, social media sites (SM) have transformed communication, learning and information exchange, enabling knowledge sharing and promoting health education (Latif et. Al., 2019). Likewise, there are SM created with relational eagerness, which present a variety of content and interactions. Instagram is one of the most used platforms worldwide, with 1.9 billion active users of which 31% are 18-24 years old (Aslam, 2022). As an educational platform, it has been useful to optimize the learning of medical students (Essig y cols, 2020; Ganjoo et al., 2021; Nguyen et al., 2021), which derives in an opportunity to constitute free educational spaces open to the community, worked between students and academics.

#### 2 Theoretical Framework

The use of SM in education has been a topic of interest in recent research. According to social learning theory, people learn through observing and modelling others. Information diffusion theory refers to how information spreads through SM. Both provide a theoretical foundation for understanding how Instagram can be leveraged as an educational tool by enabling mass dissemination of content (Latif et al., 2019). In medical education (ME) context, this can be particularly useful for sharing the latest medical research and techniques (Sutherland Jalali. & There are experiences in ophthalmology, were SM are used to disseminate scientific knowledge and generate research (Nguyen et al., 2022). However, there is a paucity of empirical studies evaluating the impact of SM in ME. Existing ones tend to assess affective outcomes, not links to performance outcomes. Given this potential, further research is needed to determine the real educational value (Sutherland & Jalali, 2017).

#### 3 **Method**

An observational longitudinal study was conducted with the aim of analysing the impact of the Instagram account of the medical school of the Universidad de Chile on its followers during a specific period. We used tools such as questionnaires in Google Forms ® platform and direct questions on Instagram, always ensuring informed consent and privacy of information. In sum, a questionnaire was applied, and seven questions were asked on the platform, compiling all responses in a database. Subsequently, a descriptive and longitudinal analysis was carried out to determine the impact of the strategy.

#### 4 Results

In the first three months, the school of medicine's Instagram account gained 1,054 followers. Of these, 45% were between 18 and 24 years old, 50,9% were female, 49% were male and 85% lived in the capital city, Santiago. On October 13, 2022, a Google Forms ® survey was administered to medical students at the Universidad de Chile. This survey, answered by 92 students from 7 academic levels, included 5 dichotomous questions and 1 multiple-choice question. Seventy-five percent were aware of the account and 92,8% were followers. Of these, 55% received primary career information through the profile and 49,3% were informed about health issues.

On June 14, 2023, the community was consulted via Instagram stories, receiving 101 responses. Of these, 79% were informed about academic processes, 85% obtained news through Instagram before institutional mail, 70% learned about activities in which they then participated, 84% consider that the account enhances learning, 75% complemented their studies with the information shared, 98% feel that respect and inclusion towards LGTBQ+ community is promoted and 90% think that the account facilitates the integration of new students to the university.

#### 5 Discussion

The use of Instagram as a collaborative tool between students and teachers has shown a significant impact on the university community. This platform, by facilitating rapid dissemination of information, underlines its relevance in education interventions in the field of medicine.

Our results agree with previous studies highlighting the transformation induced by social networks in communication and learning (Latif et a., 2019). Specifically, in the educational domain, social networks have proven to be powerful platforms for sharing advanced research and techniques, as observed in fields such as ophthalmology (Nguyen at al., 2022). However, it is crucial to address the long-term implications of these platforms in education. As social media consolidate as educational tools, it is imperative to ensure their ethical use, promoting constructive and safe interactions.

#### 6 Conclusions

In today's digital era, social medial have become an essential tool in our daily lives. Platforms such as Instagram have transcended their initial purpose of entertainment, becoming crucial channels for dissemination and communication in various communities, including academic ones. The establishment of the school of medicine's Instagram account has not only optimized communication between different university levels but has also emphasized the importance of creating safe and respectful spaces for interaction. This initiative has strengthened the link between the university and its student community, demonstrating the education and community potential of social media in the university context.

## 7 Limitations and future research lines

Among the limitations we find the lack of a control group because it is an experience, the lack of certainly as to whether the respondents belong to the educational community. In this spirit, the total number of responses obtained was significantly lower than the total number of medical students at out university.

#### References

Aslam, S. (2022). Instagram by the numbers: stats, demographics & fun facts. Omnicore Agency. <a href="https://www.omnicoreagency.com/instagram-statistics/">https://www.omnicoreagency.com/instagram-statistics/</a>

Essig, J., Watts, M., Beck Dallaghan, G. L., & Gilliland, K. O. (2020). InstaHisto: Utilizing Instagram as a medium for disseminating visual educational resources. Medical Science Educator, 30(3), 1035–1042. <a href="https://doi.org/10.1007/s40670-020-01010-2">https://doi.org/10.1007/s40670-020-01010-2</a>

Ganjoo, R., Schwartz, L., Barzani, Y., & Firmani, M. (2021). Exploring Instagram to promote student engagement in an online didactic environment. Journal of

Microbiology & Biology Education: JMBE, 22(1). https://doi.org/10.1128/jmbe.v22i1.2587

Latif, M. Z., Hussain, I., Saeed, R., Qureshi, M. A., & Maqsood, U. (2019). Use of smart phones and social media in medical education: Trends, advantages, challenges and barriers. Acta Informatica Medica: AIM: Journal of the Society for Medical Informatics of Bosnia & Herzegovina: Casopis Drustva Za Medicinsku Informatiku BiH, 27(2), 133–138. <a href="https://doi.org/10.5455/aim.2019.27.133-138">https://doi.org/10.5455/aim.2019.27.133-138</a>

Nguyen, A., Tsui, E., & Smith, J. (2022). Social media and ophthalmology: A review. Clinical & Experimental Ophthalmology, 50(4), 449-458.

Nguyen, V. H., Lyden, E. R., & Yoachim, S. D. (2021). Using Instagram as a tool to enhance anatomy learning at two US dental schools. Journal of Dental Education, 85(9), 1525–1535. https://doi.org/10.1002/jdd.12631

Osailan, A. (2021). The relationship between smartphone usage duration (using smartphone's ability to monitor screen time) with hand-grip and pinch-grip strength among young people: an observational study. BMC Musculoskeletal Disorders, 22(1), 186. https://doi.org/10.1186/s12891-021-04054-6

Prensky, M. (2001). Digital Natives, Digital Immigrants. On the Horizon, 9(5), 1-6. <a href="https://www.marcprensky.com/writing/Prensky%20-">https://www.marcprensky.com/writing/Prensky%20-</a>

%20Digital%20Natives,%20Digital%20Immigrants%20-%20Part1.pdf

Sutherland, S., & Jalali, A. (2017). Social media as an open-learning resource in medical education: Current perspectives. Advances in Medical Education and Practice, 8, 369-375.