Student experience in the images' dissemination of dental patients

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ABSTRACT

The ethical implications of social networks use by health professionals have occupied space on the Bioethics' agenda, when considering the rights of patients and the risk of exposing their image. This study aimed to understand the perception of dentistry students about the exposure of patients image in social networks. This is a cross-sectional, quantitative, observational study, with the application of a questionnaire to students of a Dentistry course. It was used the descriptive statistics for tabulating and analyzing the data. The response rate was 73.5% (n=247), all using social networks, and 33.1% (n=82) reported having already taken a patient photograph at the training clinic. Many students are still unclear about the ethical issues surrounding the dissemination of patient images on social media. The ethical implications of social networks use by health professionals have occupied space on the Bioethics' agenda, when considering the rights of patients and the risk of exposing their image.

Descriptors: Bioethics. Social Networking. Confidentiality. Ethics, Dental.

1 INTRODUCTION

The use of the internet has changed recently, especially due to the transformations that took place between the so-called Web 1.0 and Web 2.0. There is not always a clear difference between the sites of these two categories, but it stated that the discrepancies occur in the technological, structural and sociological axes and contribute to greater internet interaction. Social networks exemplify Web 2.0, which, as a general rule, allows the creation of user profiles, with the inclusion of personal information; the formation of connection between users; and the ability to share content, through comments, photos and videos, for example¹.

Thus, the use of the internet and social networks, understood as information and communication technologies (ICTs), can be perceived beyond the use of mere tools as it brings with it characteristics that transform the modes of communication, interaction, and learning. One of the most significant changes place the transformation takes in of viewers/readers/consumers into content producers, with the ability to share information on a large scale².

Associated with this characteristic of Web 2.0 is the popularization of smartphones that allows the creation and sharing of content instantly. Which ignites the discussion about the responsibility of the producers of this information if they bring harm to people and society. Empirical examples can be treated as disclosure cases of patient information on social networks^{3,4} made by professionals in the area.

The problems of the so-called Bioethics of Emerging Situations⁵ related to the moral conflicts that emerge from the advancement and incorporation of technology by society. Especially in the health sector, where it is disclosing in the Brazilian literature⁶⁻⁹ and are part of a context that must be discussed by bioethics' clinic, when the exposure of patient information performed by health professionals in their social networks. Which can cause concerns in the professional-patient relationship, as well as commodification and demeaning of the profession⁶.

In this sense, it is also important to be concerned with the scope of ethical training of health professionals regarding the use of these technologies and patient information. Especially, when considering that most students in undergraduate courses considered "digital natives" and have greater familiarity and use of digital tools¹⁰. Some researchers^{11,12} sought to assess the behavior of health students in their social networks, investigating whether there could be were posts that considered unprofessional attitudes. The present study, on the other hand, sought to know the perception of dentistry students about the exposure of patients images in social networks. Thus, seeking to understand whether the student recognizes the ethical and legal aspects of the profession that are inherent to this practice.

2 METHOD

This is an observational, cross-sectional study of a quantitative nature. From May to November 2015, undergraduates from the research team applied a questionnaire (figure 1) to students of the Dentistry course at Centro Universitário de Anápolis UniEVANGÉLICA. This questionnaire had closed and open questions, related to the context of the patient's images use on social networks. This is a private institution course, with grade 4 in the last Enade assessment, full, with semester admission (60 students on average), offering subjects that address Bioethics, Deontology and Forensic Dentistry, in the axis called professional orientation, from the 1st to the 6th period. The questionnaire started with questions about age, sex, and period attended by the student.

Subsequently, asked the students about their habits on social networks. In which social networks they were registered; if you disclose or have already disclosed information about your academic activities or images of your patients treated at the teaching clinic on these social networks. If yes, what type of image (clinical cases, procedures, "before and after" or complementary exams). Subsequently, the questions were about the perception of these students about the practice of disseminating

| Period you are studying: Age: Gender: () Male () Female 1. Do you have a registration/profile on virtual social networks such as Facebook, Instagram and/or others? () Yes No |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Which? |
| 2. Do you disclose or have you already disclosed information about your academic activities on these social networks? |
| () I have never disclosed () I have already disclosed, but I do not disclose anymore () I rarely disclose () I disclose frequently |
| 3. Do you publish or have you published images of your patients (procedures, "before and after", clinical cases, complementary exams, pose |
| next to the patient, etc.) on these social networks? |
| () I have never disclosed () I have already disclosed, but I do not disclose anymore () I rarely disclose () I disclose frequently |
| 4. If you disclose or have already disclosed, what kind of images have you used/used? |
| () Procedures () Before and after () Clinical cases () Complementary exams (x-rays, CT scans, plaster models) |
| 5. Do you notice the use of patients images on the social networks of your fellow students at UniEVANGÉLICA? |
| () No () Rarely () Occasionally () Often |
| 6. Do you notice the use of opatients images on the social networks of your UniEVANGÉLICA professors? |
| () No () Rarely () Occasionally () Often |
| 7. Do you notice the use of patients images in the social networks of any Surgeon-Dentist? |
| () No () Rarely () Occasionally () Often |
| 8. Regarding the use of patient images on social networks, you: |
| () Truly agree () Partially agree () Neither agree nor disagree () Partially disagree () Totally disagree |
| 9. At UniEVANGÉLICA clinics, have you ever photographed a patient? () Yes No |
| If yes, for what purpose? |
| |
| If yes, what are these standards? |
| () I am not oriented () Lecture () Seminar () Round table () E-mail () Other ways, Which ones? |
| 12. A colleague published on social media a clinical case of implant placement in the mandible in which only the lower third of the patient's |
| face appears, without the possibility of identifying the same. You know that your colleague did not ask for their permission to publish the |
| image. About your colleague's conduct, you: |
| () Truly agree () Partially agree () Neither agree nor disagree () Partially disagree () Totally disagree |
| Justify: |
| 13. Facing an image published on Facebook of a clinical case of prosthetic rehabilitation ("before and after") in maxillary incisors fractured |
| by trauma, with the express authorization of the patient for publication, you: |
| () Truly agree () Partially agree () Neither agree nor disagree () Partially disagree () Totally disagree |
| Justify: |
| 14. From the categories below, list from 1 to 8 which ones you believe are most related to the publication of patient images. (Number 1 is |
| for the highest ratio and so on): |
| () Privacy () Confidentiality () Anonymity () Human dignity () Intimacy () Autonomy () TCLE () Professional obligation |
| 15. If a UniEVANGÉLICA patient complains about an image published on a social network without their authorization, who will be held |
| responsible for it? |
| () Students only () Professors only () Institution and professors () Students and professors () Institution and professors () Institution and students |
| () Institution, students, and professors () Nobody |
| 16. In your opinion, have been using the social network by dental professionals as a publicity tool for their work? () Yes () No 17. Do you think that publications made by dentists on social networks can be supervised by the Regional Councils of Dentistry? () Yes () |
| No |
| 18. If a patient feels harmed by a published photograph, can they file lawsuits against those responsible? () Yes () No |
| If yes, which ones? (check as many as necessary) () Administrative/ethical () Civil () Criminal |
| 19. Do you know of any regulations or laws that relate to the use of images of patients? If yes, comment. |
| 20. Suppose you are now a patient. In a bicycle accident, you had your maxillary central incisor avulsed. After the end of the treatment, the |
| professional, who is part of his network of friends on Facebook and Instagram, published an image with the "before and after" of the |
| procedure. What's your reaction? |
| () It does not bother him, since the image does not identify him. |
| () It doesn't bother him, as he signed a term authorizing the use of the image. |
| () It bothers you, since your friends know that you went through such a procedure and are afraid that they will identify you in the image. |
| () It bothers you, even if your friends don't identify you because it's inappropriate to use the image in such a way. |

Figure 1. Questionnaire used in the research

images by other undergraduate colleagues, course professors and dentists. It was also asked how the student evaluated this type of publication: whether he agreed or not, in general, and in specific situations, in which guaranteed the anonymity, without the patient's consent or without anonymity, but with the patient's authorization. Finally, it was questioned about the knowledge of institutional norms, the profession and Brazilian legislation regarding the dissemination of images of dental patients. The approach of the students happened in the course environment, and the researchers awaited the end of the answers to collect the

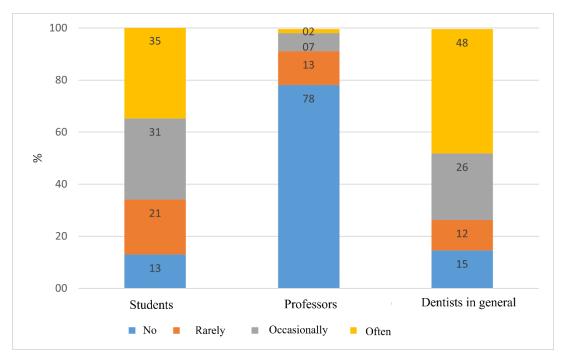
completed questionnaire. Students enrolled in a semester that offered at least one clinical course, with direct patient contact, were included in the study. However, we excluded the students, who participated directly in the research. The approval of the research was by the Institutional Ethics Research Committee (CAEE: 39631814.1.0000.5076. We tabulated our tabulated data and analyzed it using SPSS v. 23.0 (IBM, Armonk, NY, USA). Study variables analyzed descriptively, using absolute and relative frequencies.

3 RESULTS

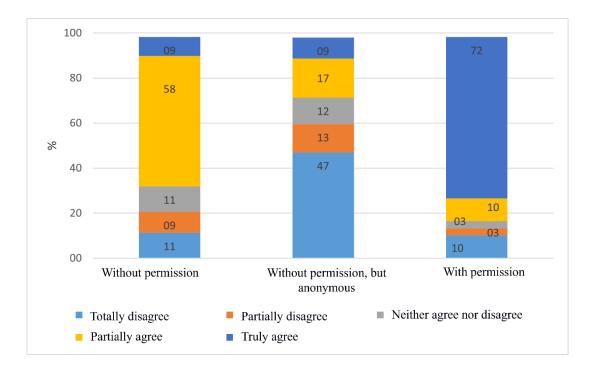
Students who met the research inclusion criteria were those enrolled between the third and eighth period of the course (n=336). Of this total, it was possible to collect information from 247 (73.5% response rate), 52 (21.6%) men and 195 (78.4%) women. The mean age was 21.3 ± 3.9 years, with a minimum age of 17 and a maximum of 50. Most of them, 238 (96.4%), declared to have a profile on at least one social network, being unanimous to have a Facebook account. The following social networks mentioned: Instagram (n=206, 83.4%), Snapchat (n=30, 12.1%), Twitter (n=22, 8.9%), WhatsApp (n=16, 7.7%), Viber (n=3, 1.2%), Kiwi (n=3, 1.2%), LinkedIn (n=2, 0.8%), Flogão (n=1, 0, 4%), Ident (n=1, 0.4%) and Orkut (n=1, 0.4%).Among the respondents, 25.5% (n=63) never used social networks to publicize academic activities, 4.9% (n=12) had already done publicity, but no longer do so and 69.6% (n= 172) rarely disclose or frequently. Specifically regarding the dissemination of images of patients seen at the teaching clinic, 74.8% (n=185) declared that thev had never performed this dissemination and only 0.8% (n=2) performed the practice frequently. About obtaining images from patients in teaching clinics, 33.1% (82) said they had already taken a photographic record, with a wide variation in motivation: clinical case report for course conclusion work or scientific events; teaching material for teachers; whitening follow-up; dissemination on social networks; at the request of the patient; and even affective record to remember the patient. In these cases, it was questioned how the students received guidelines for care and rules for the use of the images obtained. It found that 41.4% (n=34) of those who claimed to photograph patients declared that they had not received any guidance. We asked students about their experiences relating to the use of social networks they have. It appears that students perceive a greater frequency of use of virtual social networks to publish images of patients from dentists in general (graph 1).

When the questions were related to the students' opinion about the publication of patients images on virtual social networks, the highest frequency of agreement occurred when the disclosure was authorized by the patient (graph 2).

Most students of the course (89.5%) understand that virtual social networks have been using as an advertising tool in Dentistry and 85.8% believe that publications of patient images are subject to inspection by the Regional Council of Dentistry. 97.6% of the students understand that the teaching clinic patients can file a lawsuit because they feel harmed by the publication of their image. Nonetheless, only 33 (13.3%) recognize that liability may demand in the civil, criminal and ethical/administrative spheres, and most perceive that the process would only be possible in the ethical/administrative sphere (137; 55.4%).



Graph 1. Students' perception of exposure of patient images performed by different actors



Graph 2. Students' perception of patient images exposure on virtual social networks, as authorized

Regarding whom would respond to these processes, 168 (68%) recognize that the responsibility for publishing images of patients

from the teaching clinic can be shared between students, professors, and the institution. Even so, 43 (17.4%) stated that this responsibility lies solely with the professors and institution. Finally, we asked the students to put themselves in the role of dental patients and were asked how they would react if, in this role, images of their treatment published on virtual social networks of a hypothetical dental surgeon. Most students (145, 58.7%) reported that they would not be bothered with the publication as long as they had signed a consent form authorizing the disclosure. While 39.7% (98) expressed that they did not care about unauthorized publication if the images to ensure their anonymity.

4 DISCUSSION

This descriptive research revealed that many students of a Dentistry course are still not clear about the ethical issues that involve the image/data dissemination of patients on social networks. This reveals the importance of sticking to this topic in Brazilian undergraduate dentistry courses.

Examining the professionalism of Dentistry and Dental Hygiene students through the evaluation of Facebook profiles, Henry and Molnar¹² identified that among 239 students, 2.5% (6) displayed in their profiles situations that represented a potential breach of patient privacy. Such as, for example, photographing patients in the Dental chair or marking the patient's name in a post. In addition, in some profiles, it was also possible to identify negative comments about patients. A similar study that evaluated the behavior of medical students revealed that in 13% of the faculties studied, there was at least one case of violation of patient confidentiality¹¹.

Although, in this study, the content posted by students did not specifically evaluate, it is possible to state that the 74.5% of students, who admitted to having posted the patient's images at least once may also have breached the privacy of the information. If they did not inform and request their authorization to carry out the publication.

It is worth mentioning that if we post any patient information, made outside the academic or scientific environment, can consider as an ethical breach, by the Code of Dental Ethics (CDE)¹³ in force in the country. However, since January 2019, Resolution 196/201914¹⁴ of the Federal Council of Dentistry that allows the dissemination of patients images on social networks, as long as they are authorized by the patient and in specific contexts. This regulation has been criticizing, especially due to the differences that confront the CEO¹⁵.

A study in Brazil, which evaluated 263 students of Medicine and Dentistry, found that 44% (n=115) of the participants declared that they had already photographed or filmed patients. Though, among these students, 37% (n=43) did not request any authorization from their patients to obtain images, while only 23% (n=26) requested it in writing and 90% did not record the authorization in medical records¹⁶.

The greater perception of the patients posting images on social networks by dentists when compared to those of professors and other students may be due to the commercial nature of these publications. The students understand that publicity has been a form of publicity. A study evaluating publications in profiles of dentists and dental clinics on Facebook and Instagram identified that of the 257 profiles analyzed, 46.3% (119) used patients images in the "before and after" category¹⁷. Another research focused only on the social network Facebook evaluated profiles of dental clinics and found that of the 102 profiles evaluated, 31.4% (32) used "before and after" images and that 7.8% (8) offered free service and 5,9% (6) announced payment methods and offered prizes and discounts¹⁸.

However, in this training context, people often use images for pedagogical and scientific purposes. Currently, smartphones have great

technology and high-quality cameras, so it is common for these images to be taken and stored on students' devices. It can raise questions about the security quality and privacy of the information collected, even when the students do not post on social media. Furthermore, the results show the need to establish an institutional policy that expresses norms and the behavior of students expected relates information from patients treated at the teaching clinic, including relating to photographs. The specific absence of such norms has already been reported in other contexts¹¹ and is expected since this phenomenon is new and happens at an accelerated speed, always allowing not assimilation and response at the same speed by educational institutions.

In addition, a significant number of students said that they did not receive guidance on ethical care about the collected images.

This fact may be related to the way of approaching the contents and skills necessary for the ethical training of students. As the disciplines related to Bioethics, Deontology, and Law are predominantly theoretical, and also offered outside the clinic. Students may not remember or make the connection between these environments. A study evaluating 274 dentistry students observed that 67.9% (186) of them stated that the most significant activities and that most contribute to learning are practical activities¹⁹.

It shows the need to be worked the ethical dimension of training on throughout the course, being reinforced by the professors of laboratories and clinics and not just within the theoretical disciplines. Regard to teach ethics in undergraduate courses, Finkler and Negreiros (2018)²⁰ point to a "necessary dialogue also with the other, expanding our perspectives, favoring the understanding of other points of view that can relativize ours, thus improving sensitivity

and moral competence".

Some authors have discussed whether social networks should be used in the context of training dentistry students. On the one hand, this use can contribute to improving learning, communication between peers, interprofessional engagement and contributing to the development of safer mechanisms of communication with the patient. Those who argue against it raise ethical issues such as, for example, the risk of violating the privacy of patients during this use, in addition to contributing to the excessive use of these technologies²¹.

The high approval rate relating to the posting of a patient's image when authorized by the same reveals that the students in this research consider the most important issue of this practice: respect for the dignity and autonomy of patients, the most fragile and vulnerable part of the relationship. Even so, when the student puts himself in the patient's shoes, it is clear that many of them would not like to have their privacy exposed on social networks, even when guaranteeing anonymity. In this sense, the incorporation of the empathy principle in the teaching-learning process can collaborate with the development of the moral dimension of students. As they would allow themselves to put themselves in the patient's understanding the importance shoes, of respecting privacy and confidentiality²².

The results that pointed out the students' lack of knowledge about the scope of responsibility for their acts are worrying, especially about legal aspects. It noticed that many have the notion of ethical responsibility, but many are unaware of important legal aspects such as the duty to indemnify upon proof of damage (civil liability), and the law that criminalizes the disclosure of professional secrecy. These results are similar to the study mentioned above, in which most of the medical and dental students, who answered the questionnaire (73%), were also unaware of Brazilian legislation – namely, the Federal Constitution, Civil and Penal Codes, with regard to respect for to the right of the patients' image¹⁶.

This study main limitation is on the focus on a single Dentistry course. Thus, it may be indicative of other courses offered in similar realities. In addition, the response rate was high, the data collected in 2015—in the digital world, changes are happening very fast. This indicates that new research should be carried out periodically in the light of current legal and ethical requirements

Eventually, this exploratory study points out the importance of academic discussion about patient exposure to social media, with its associated moral issues. On the importance of undergraduate courses instituting policies to protect patients' rights in teaching clinics. And that students get involved in this construction and discussion process, emphasizing issues related to the use of social networks and patient image. This is an emerging situation arising from technological development.

5 CONCLUSION

The use of social networks by the students was unanimous, with the majority stating that they do not post patients images seen at the teaching clinic. Despite photographing patients for different purposes, most of them declared that they did not receive guidance regarding the ethical care of this practice. Most students perceive the use of social networks as a tool for advertising dental work, with the dentist being the actor who most publishes patients images in this context. The majority showed concern with principles related to the patient's will, expressed by the authorization for use of the image.

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RESUMO

Experiência de estudantes na divulgação da imagem de pacientes odontológicos

As implicações éticas do uso de redes sociais por profissionais da saúde têm ocupado espaço na agenda da Bioética quando se considera os direitos do paciente e o risco de exposição de sua imagem. Este estudo buscou conhecer a percepção de estudantes de Odontologia sobre a exposição da imagem de pacientes em redes Trata-se de estudo observacional sociais. transversal, quantitativo, com aplicação de questionário a estudantes de um curso de Odontologia. Os dados foram tabulados e analisados por meio de estatísticas descritivas. A taxa de resposta foi de 73,5% (n=247), todos utilizando redes sociais e 33,1% (n=82) declararam já ter realizado fotografia de paciente na clínica de ensino. Muitos estudantes ainda não têm clareza sobre as questões éticas que envolvem a divulgação de imagem de pacientes em rede social. Isso revela a importância de se ater a esse tópico nos cursos brasileiros de graduação em Odontologia.

Descritores: Bioética. Rede social. Confidencialidade. Ética odontológica.

REFERENCES

- Cormode G, Krishnamurthy B. Key differences between Web 1.0 and Web 2.0. First Monday. 2008 [Cited July 12, 2019). Available from: <u>https://journals.</u> <u>uic.edu/ojs/index.php/fm/article/view/2125/</u> 1972.
- Herreros MC. La Web 2.0 como red social de comunicación e información. Estudios sobre el Mensaje Periodístico. Rev Cient

Complut. 2008;14:345-61.

- Enfermeira é demitida por fazer vídeo da chegada de Neymar a hospital. Globo Esporte [Internet]. 2014 [Cited Jan. 30, 2019]. Available from: <u>http://globoesporte.</u> globo.com/ce/copa-do-mundo/noticia/2014 /07/enfermeira-e-demitida-por-fazer-videoda-chegada-de-neymar-hospital.html.
- Miranda G. Médicos expõe pacientes em redes sociais. Folha Digital [Internet]. 2014 [Cited Jan. 30, 2019]. Available from: https://www1.folha.uol.com.br/equilibrioes aude/2014/08/1503001-medicos-expoempacientes-em-redes-sociais.shtml.
- Garrafa V. Reflexões bioéticas sobre ciência, saúde e cidadania. Rev Bioét. 2009;7(1):1-6.
- Martorell LB, Nascimento WF, Garrafa V. Social networks, privacy, confidentiality and ethics: exhibition of pictures of patients on Facebook. Interface (Botucatu). 2016;20(56):13-23.
- Martorell LB, Nascimento WF, Prado MM, Silva RF, Mendes SDSC. O uso de imagens em redes sociais e o respeito ao paciente odontológico. J Health Sci. 2016;18(2):104-10.
- Martorell LB. Uso de mídias sociais: um caso de urgência e emergência para profissionais da saúde. Rev Bras Odontol Leg RBOL. 2017;4(1):122-30.
- Martorell LB, Finkler M. Carta de Natal em busca da alforria para a utilização de imagem de pacientes em redes sociais. Rev Bras Odontol Leg RBOL. 2017;4(3):117-23.
- Xavier AC. Letramento digital: impactos das tecnologias na aprendizagem da Geração Y. Calidoscópio. 2011;9(1):1-12.
- Chretien KC, Greysen SR, Chretien JP, Kind T. Online posting of unprofessional content by medical students. JAMA. 2009;302(12):1309-15.

- Henry RK, Molnar AL. Examination of social networking professionalism among dental and dental hygiene students. J Dent Educ. 2013;77(11):1425-30.
- 13. Conselho Federal de Odontologia (CFO). Resolução nº 118/2012. Revoga o Código de Ética Odontológica aprovado pela Resolução CFO-42/2003 e aprova outro em substituição. Diário Oficial da União [Internet]. 1º jan 2013 [Cited Jan. 30, 2019]. Available from: <u>http://www. normaslegais.com.br/legislacao/resolucaocfo-118-2012.htm</u>.
- 14. Conselho Federal de Odontologia (CFO). Resolução nº 196, de 29 de janeiro de 2019. Autoriza a divulgação de autoretratos (selfie) e de imagens relativas ao diagnóstico e ao resultado final de tratamentos odontológicos, e dá outras providências. Diário Oficial da União [Internet]. 31 jan 2019]; 22:seção 1.p.91. [Cited Jan. 30, 2019]. Available from: <u>http://bvsms.saude. gov.br/bvs/saudelegis/cns/1996/res0196_10</u> <u>10_1996.html</u>.
- 15. Martorell LB, Prado MM, Finkler M. Paradoxos da resolução CFO nº 196/2019: "eu tô te explicando, prá te confundir". Rev Bras Odontol Leg RBOL. 2019;6(1):74-89.
- Leal MCB, Barreto FSC, Flizikowski EBS, Nascimento WR. O conhecimento dos estudantes sobre direito de imagem do paciente. Rev Bioét. 2018;26(4):597-605.
- 17. Lima AIC, Cruz RA, Silva RA. Análise dos perfis de clínicas odontológicas e de cirurgiões-dentistas em duas redes sociais quanto aos aspectos éticos, de propaganda e publicidade. Rev Bras Odontol Leg RBOL. 2016;3(2):66-73.
- 18. Garbin CAS, Ortega MM, Garbin AJI, Saliba TA. O uso das redes sociais na odontologia: uma análise dos aspectos éticos de páginas de clínicas odontológicas. Rev

Bras Odontol Leg RBOL. 2018;5(1):22-9.

- Zaroni FM, Strujak G, Magrin GL, Assunção LRS, Lima AAS, Fernandes A. Experiências de aprendizagem mais efetivas segundo acadêmicos de Odontologia. Rev ABENO. 2015;15(3):80-7.
- Finkler M, Negreiros DP. Formação x educação, deontologia x ética: repensando conceitos, reposicionando docentes. Rev ABENO. 2018;18(2):37-44.
- Peralta TL, Farrior F, Flake NM, Gallagher D, Susin C, Valenza J. The use of social media by dental students for communication and learning: two viewpoints. J Dent Educ. 2019;83(6) 663-8.
- 22. Bark MM, Posanski M, Oliveira KV, Brancher JÁ, Kriger L, Gabardo MCL. Alteridade e empatia: virtudes essenciais para a formação do cirurgião-dentista. Rev ABENO. 2018; 18(2):104-13.

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