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Social networks, privacy, confidentiality and ethics: exhibition of pictures of

patients on Facebook

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This investigation aimed to study exhibition of patients on Facebook promoted by doctors and dentists. Data were gathered between the months of August and September 2013, through retrospectively selecting 39 images that had been published by 17 professionals. In these images, it was possible to identify situations of breach of confidentiality and/or privacy. The principle of respect for individuals' privacy and confidentiality forms part of the main international documents relating to the field of ethics. Both the State and professional bodies have an obligation to protect victims from exhibition of images that compromise the inalienable right to privacy. This study emphasizes that such exposure has negative consequences for patients, healthcare professions and society. It is recommended that this issue should be addressed by all teachers across their institution, with discussions stimulated and guided by the

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## Introduction

In 2013, the world was shocked with the revelations made by the computer specialist Edward Snowden, who accused the United States (US) government of maintaining a secret program for data collection from telephone calls and the internet<sup>1</sup>. The journalist David Price argued that, in that country, espionage of telephone calls began during the First World War and, recently, has received increasing approval from the American public, given that the "fear of widespread terrorism and the promise of respect for the rights of the 'innocent' have become more important that the aspirations towards private life and civil right protection"2.

This case has reignited the discussion regarding access to and use of insider information that some states, institutions, organizations or people can obtain from other members of society. In the field of healthcare field, when thinking specifically about information accessed by professionals while performing their duties, one of the most common associations relates the Hippocratic thinking: "All that I see or hear, professionally or privately, that refers to human intimacy and must not be disclosed, I shall maintain secret and tell no one."3. This commitment, often sworn during public graduation ceremonies from healthcare courses, is also an expectation from patients.

In professional ethic codes, items referring to the relationship between healthcare professionals and patients usually bring confidentiality of information as a right of the patient; ensuring this right is the professional's duty. In certain situations in which the healthcare professional feels intimidated or coerced to reveal a secret, such as in the case of labor subordination or hierarchical relationships, respect for confidentiality can also be mentioned as a right of this professional.

Some authors<sup>4,5</sup> believe that certain contexts contribute to more frequent disregard for such duties, such as in the cases of large hospitals or the private healthcare system, in which many people have access to medical files, test requests and other patient data. More recently, healthcare sector computerization has also constituted situations with potential risk of information confidentiality breach, due to the increase in the number of electronic tools available and internet data transfer.



However, such computerization is not restricted to the healthcare sector; many aspects of daily life have been virtualized and intermediated by electronic tools, such as computers and mobile phones. In this regard, there is growing popularization of the use of virtual social networks among healthcare professionals, who then use such tools to publish information on the internet regarding their professional routines. In doing do, they end up, in many situations, risking breaches of the confidentiality that they owe to their patients.

Social networks on the internet can be defined as web-based services that allow individuals to create a public or semi-public profile within a limited system, link to lists with other users with whom they share a connection, and view and roam through their own list of connections and lists other users within the system<sup>6</sup>. Currently, the social network Facebook is the most popular among internet users. According to data from the company itself, "one in every three people in the United States - over 128 million people - visit Facebook daily and around 24 million in the United Kingdom do the same"7. In Brazil, according to measurements made in March, 2013, the number of users who possessed a profile in this tool had reached 73 million, a high number when considering that the country has 94 million people with internet access, i.e. people who have the means to access the web from home, even if they might not have made use of it.

The present study aimed to identify potential situations of confidentiality or privacy breaches instigated by healthcare professionals by means of publication of images on the social network Facebook regarding situations relating directly or indirectly to their patients.

# Methods

To obtain research data, the social network Facebook was used as the reference, precisely because it is the social network with highest popularity amongst Brazilian internet users. In this network, by means of its profiles, users can share information (texts, images, videos, web links) through private or public messages. This



network also has the possibility of activating configurations in which users can define who has access to information relating to their profiles.

The information evaluated in the present study was obtained from access to images extracted from users' "albums". For this, the sample included the profiles of physician or dental surgeon users who are close to the authors of the present article or have friends in common with them in this social network. Thus, the inclusion criterion was that the profiles needed to belong to healthcare professionals and to have the possibility of accessing photo albums that were not blocked. The professionals excluded did not have photos in their albums or did not allow access to them.

Thus, for this qualitative study, intentional selection of the sample was the method chosen, thus allowing data collection with higher potential for contributing towards "enhancing the researcher's understanding of the issue and the research question"8. The profiles initially evaluated were those of people who the authors remembered having identified previously as having published photographs of patients. Following this, healthcare professionals ("key-informants") who might be able to indicate colleagues who had also undertaken publication of this nature were contacted. In either of these cases, if publication of a patient's image was identified, a search was made through all the photos published within the user's profile, in order to check for the existence of other images that also might exposed patients. In this manner, each user's profile was only visited once, but with a search through all the images with public access.

Besides the photographs, the title given to the image by the user who published it, the number of people who "liked" the picture and the number of comments that the image received were also part of the analysis.

The data analysis was performed using speech analysis techniques, which seek the possibility of interpretation from social reality and for this "propose understanding at a discursive level, through linking language and society, interspersed by ideological context"9.

# **Results**



## From the images

The numerical descriptions of some of the results found are presented first, to better characterize the analysis dataset used, even though the nature of this work was not quantitative. During the months of August and September 2013, images were retrospectively selected. These images had already been published and were stored in the "albums" of 17 different healthcare professionals, of whom 12 were dental surgeons and 5 were physicians. In total, 39 images were accessed: 27 published by dental surgeons and 12 by physicians. Up to the final date for data-gathering, the 39 images had received a total of 310 comments and 800 "likes". It is worth mentioning that in presenting and discussing the titles and comments relating to the images, these are transcribed exactly as they appear in the original text, with the translation as faithful as possible, despite inadequacies regarding the rules of the Portuguese language. The only alteration made by the authors of the present paper was to omit the name of the patient or professional when mentioned in any way.

In a first group, 11 images from which it was possible to directly identify the people involved in these photos were selected for observation. Seven of these cases were individual images in which it was possible to fully identify the people's faces. The other four cases showed groups of patients doing healthcare education/preventive activities or making complaints about healthcare units working over the maximum capacity of the system. In this first group, images with children were identified in three of the individual shots and in one of the group shots, in which it was possible to identify the faces of 11 children.

In 15 images gathered into a second group, parts of the faces of people in surgical centers or consultation offices could be seen, with the possibility of relative identification. In the subgroup of images published by physicians, there was one case of an image of a scalped patient, possibly a victim of a traffic accident. In the sub group of images published by dental surgeons, photographic shots of smiles were frequent, in some cases including "before and after" images, referring to dental



interventions made by a professional who was a user of the social network. There were also cases with dental implant placement and tooth extractions. Also in this subgroup, in the profile of an oral and maxillofacial dental surgeon, there were a pre and transoperative photographs of a surgical intervention, which showed an extensive incision in the mandible. Another professional of the same specialty also published a picture in which it was possible to partially identify the face of a child undergoing suturing due to an injury caused by a dog bite.

In 11 photographs, which were methodologically gathered into a third group, in turn, other specific parts of patients were exposed, such as teeth, fatty plaques and hands and arms being punctured. Among the images published by physicians, one image stood out, in which it was possible to see a major injury caused by lacerative cutting of the neck and back of the neck and an aneurysmectomy procedure on the brachial artery, which allowing identification of an extensive surgical incision in the patient's arm.

Finally, completing the 39 exhibits selected for the present study, two photos showing images from complementary examinations were listed.

### From the titles and commentaries

One of the complementary examination images presented a digital x-ray examination, with exposure of the patient's complete name in two instances: in the image of the examination and in a comment by the physician responsible. With the patient's name revealed, the title given to this image was: "Image challenge: what is this in the chest of Mrs. [patient name]?". The case was a chest x-ray photograph with an unusual radiolucent image, which included a chaplet that the patient forgot to remove for the examination, as the physician revealed later on. With this challenge launched, there were 26 comments for the picture, of which we highlight two: "Wow! First, she has cardiomegaly... birdshot????"; "Wow... exposing the poor thing like that... even with the last name... I thought it was birdshot too... naughty lady who likes to kill birds".



Regarding titles given to the images, besides the ones mentioned above, the title of an image of an extracted fatty plaque stands out, in which the physician wrote the following: "chouriço in CD". Chouriço, in the Portuguese language, means "pork sausage in which the pork filling is mixed with blood and smoked"10. In another image, in which a female technical assistant is drying the physician's forehead, it was possible to observe the face and body of a patient lying on the bed, with the following title: "[name of assistant] taking advantage of the fact that I was wearing gloves when removing the introducer from [first name of patient]". Also regarding image titles, in seven situations the authors made reference to the location where the photograph was taken, such as the name of the hospital.

In relation to the authors of the comments published under the images, there is predominance of professional colleagues or family members congratulating the professionals for their technical capacity in the cases presented. Some examples are: "Dr. [name of dental surgeon] is the best I know!! I am living proof that a smile can be recreated!"; "You're bringing it on, uncle!"; "With such high level professionals there is no way this work wouldn't be perfect! Congratulations!"; "Beautiful clinical case!!!"; "[name of dental surgeon], dental prosthesis specialist, you are doing beautiful work. I already knew you had great skill, dedication and lots of will to do the best. Congratulations. Carry on the good work, stay grounded, pay attention to details and a bright future will be waiting for you. Strong hug. From your friend...". In a "before and after" picture, a comment showed frustrated expectations from a patient in relation to her own treatment: "Why didn't mine look good like this? Why didn't you take my picture?".

Comments mocking or ridiculing patients were also found, such as in an image of a smile of a patient who had a moustache: "Where is the lighter to set fire to this moustache?!!!". In the image of the chest x-ray previously mentioned, there was the following comment: "well, well... difficult, huh? Last time I saw anything like this was in the abdomen, and it was a bag of cocaine balls...". In another photograph, in which there was an extensive injury caused by lacerative cutting of the neck and back of the neck, the following comments were observed: "Wow, just the lowest of the low!";



"what's this, son!!! They tried to take the necklace from this person's neck?"; "Playing with the electric saw?!"; "The best part is the patient asking 'I'm okay, right?"".

Comments from other users demonstrating discomfort with and disapproval of inappropriate use of images on social networks were also observed in this last image mentioned: "Brother, don't put these things on Facebook! Gee!"; "Wow, that's ugly!!!!". In another image showing a dental implant placement procedure on a patient, the following comments were observed: "What is this disgusting thing???"; "Gee. Ugly."; "I lost my appetite"; "I don't know what's worse, the pins or the exposed nostrils". And, in the image with the scalped patient, there was the following comment: "This is awful! Facebook is going to block you, hahaha".

### Discussion

The principle of respect for privacy and confidentiality has been part of the main international documents relating to the field of ethics since the last few decades of the past century, culminating with the enactment of the Universal Declaration on Bioethics and Human Rights by UNESCO11 (United Nations Educational, Scientific and Cultural Organization), in 2005. Article 9 of this Declaration states that:

> The privacy of the individuals involved and the confidentiality of their information must be respected. With maximum protective effort, this information must not be used or revealed for purposes other than those for which it was gathered or agreed, in line with international law and, in particular, with the international legislation regarding human rights.

Both the State, by means of legislation and other legal mechanisms, and professional entities, with their ethics codes and normative resolutions, have the obligation to protect people who become victims of exposure and/or publicizing of images that compromise the inalienable right to privacy.

Sacardo used the collective subject discourse analysis method and found that among the words of hospitalized patients or even of visitors who had never been hospitalized, there was the concern regarding information confidentiality and the need to establish limits for their use<sup>12</sup>. In England, a pilot study on 29 patients showed that 72% of them trusted professionals in relation to confidentiality and 80% understood that information could not be disclosed without their consent. However, 37% of these patients agreed that there are situations in which breaches of confidentiality would be acceptable, for instance in cases of child abuse or in cases in which confidentiality could harm others 13.

In the Netherlands, a study developed among 139 patients and 153 healthcare professionals had the objective of identifying the manner in which these players used social networks. The evaluation on the questionnaire responses revealed that the majority of healthcare professionals use the social network Facebook (43%), with the following motives for using it: professional-patient communication (14%); marketing (20%); and communication with colleagues (22%)14. Other studies have shown that healthcare professionals have used social networks to spread messages related to health promotion, medical education and publicizing of conferences<sup>15</sup>.

Considering the empirical results provided by the present study, some of the initial questions that can be asked are: what has been these healthcare professionals' evaluation regarding non-respect for their patients' right to privacy and confidentiality? Is there any ethical principle that can sustain public exposure of their patients? What is the harm that this practice could cause to the individuals involved and to society?

The 17 healthcare professionals evaluated in the sample analyzed here could firstly be asked about patient autonomy, i.e. whether the patients were given proper explanations and whether they were in agreement both with having photos of their bodies taken and with publication of these images on a social network. It is of concern that many of the photos expose vulnerable people who are incapable of making an autonomous decision in relation to the use of their images, such as in the case of exposure of children, thus leaving the uncomfortable doubt relating to whether the



parents had or had not given authorization for these images to be taken and disseminated.

Considering the negative repercussion on healthcare professionals' work in relation to society, certain images taken in surgical centers also cause concern: for example, when the patient is unconscious and the professional is posing for the picture, doing a thumbs-up sign. These are identified as surgical emergency care situations and it is hard to imagine that consent for this had been previously given by the patient. For users accessing these images, not only may there be visual discomfort (since, in many cases, human bodies with extensive injuries are exposed), but also there may be general discomfort, in which individuals see themselves as potential patients of that emergency care unit who might also be subjected to exposure in a future situation, when in need of care. Situations of this type cause breaches of trust and disrespect towards healthcare professions, given that society may see that in cases with complex invasive clinical procedures or even life-threatening situations for the patient, healthcare professionals have the habit of temporarily interrupting their activities and diverting attention to pose for photographs. Another complicated factor in this context relates to biosafety: if these images were made by one of the professionals within the surgical staff, by means of a mobile phone, there might be doubts regarding whether the protocols for avoiding contamination are being respected, for example.

One issue within professional practice that is directly related to the traditional bioethics principle of not doing any harm is that healthcare professionals are expected to refrain from performing actions that might cause any negative consequence to their patients. From the data analysis, it could be seen that the professionals forming the sample missed the opportunity not to cause harm through publication, since in many cases underage individuals were exposed. These individuals might, for example, be vulnerable to improper use of their images by pedophiles accessing the social network. Within the same context, in other situations, patients' names were identified, with obvious harm to their public image, such as the case of the patient who, through exposure of her x-ray examination, then became associated with the stereotype of a



cocaine user or dealer. Thus, in addition to the compromised ethics of the action simply due to its existence, there is also the capacity for extensive damage, since this is a lay social network, within which images are accessed by users without adequate information and much less training in that field, who frequently interact with images by means of pejorative and disrespectful comments.

In this regard, trivialization of routines, practices and even the human figure can occur without any possible control from the professional posting the image, which can precisely be exemplified by the user who stated the wish to set the dental surgeon's patient's moustache on fire. Thus in an asymmetrical relationship, in which there are patients who are vulnerable exactly because of their condition of being patients, the practice of exposing them publicly may intensify this asymmetry even further. This could also stigmatize health conditions and would discourage other people in similar situations from seeking the services of healthcare professionals within that field, thus clearly disfavoring the ideas of preventive healthcare and health promotion.

Another point that requires analysis is the constant publication of clinical cases on the profiles of dental surgeons, including "before and after" pictures of treatments, which generally consist of dental rehabilitation and/or esthetic treatment. It firstly needs to be noted that the Brazilian Dentistry Ethics Code (DEC)16, which was recently altered and has been in force since January 2013, categorically states in the chapter about professional confidentiality that making reference to identifiable clinical trials in environments other than academic settings (teaching or scientific publication) is an ethical infraction, even if the patient has given authorization for this. Here, it can be noted that the Dentistry Councils were concerned with regulating actions beyond the professional-patient relationship, through taking the view that publication of images, even if authorized by the patient, can be classified as irregular because this does a disservice to the profession and might even constitute unfair competition. This concern also appears in DEC, in the chapter about professional announcements, advertisements and publicity, in which publication of clinical cases that include the stages relating to dental procedures is considered to be unethical because it



constitutes a form of advertising to gather customers. Nonetheless, this prohibition is not recent: it has been in place since the 1960s, through publication of the law that regulates professional dentistry practice, which already stated that dental surgeons were prohibited from exposure through "public dentistry work"17.

However, regarding the specific content of the Brazilian DEC, a critical study on its previous version (2006), which was not much different in essence in relation to the current version, showed that more than 70% of the context of the code is centered on the professionals' image, thus leaving patients in a secondary role, as the object of their practice<sup>18</sup>. Although the first historical version of DEC, drawn up several decades ago, referred to patients as "the reason and goal of all dental science", an updated reading of the code leads towards a different conclusion, through noting the predominance of technical and legal items relating to the professionals' work: "instead of focusing on the patient as the center and subject of attention of oral health, DEC focuses on the professionals, and predominantly towards legal and corporative issues"18. In other words, the fact that the profession's own code does not have the patient as the center and main subject of attention might be leaving space and possibilities, to a greater or lesser degree, for stimulating occurrences of the distortions pointed out in the results of the present study. It is appropriate to point out, however, that the professional code is created by peers within dentistry and, in this sense, the content described in these rules could also be interpreted as a reflection of the professional category's behavior.

Another example from the sample studied should be mentioned: the comment made in the profile of a professional who posted a "before and after" clinical case, from another patient who asked about her own treatment result. Placement of images from clinical results generates expectations among social network users who are already patients or could become patients. This type of image placement on Facebook is nothing more than an unethical marketing strategy that has the goal of showing the professional's skill, thus characterizing an offering to consumers of health-related merchandise. Based on the Consumer Protection Code<sup>19</sup>, it is accepted that the advertising that is displayed forms part of the contract that will be agreed between the



parties. Therefore, professionals who have the habit of placing these types of images in social networks not only violate the ethics code for both of the above reasons, but also may leave themselves open to legal action for not performing work in accordance with what was presented in advertisement. The use of images, through generating expectations in relation to the final result, naturalizes the obligation to produce results in accordance with what was announced<sup>20</sup>.

Although no medical professionals were identified as publishing "before and after" images of procedures or images of a clearly commercial nature, the Medical Ethics Code (MEC)<sup>21</sup> also considers that references to identifiable clinical cases, exhibition of patients or their portrayal in any type of lay publication to be an ethical transgression.

In addition to the MEC, the Federal Medical Council (FMC) has regulated this matter through a resolution that aimed to establish guiding criteria for medical publications<sup>22</sup>. In this document, it can clearly be seen that physicians are prohibited from exposing their patients through social networks as means of publicizing techniques, methods or treatment results. In an attempt to make the matter clearer, the document organizes an attachment in which professionals can read the most frequently asked questions, which include: "Is use of pictures of patients to show treatment results or for any other professional purposes allowed?"22. The response leaves no doubts, through clarifying that use of images outside of the academic context is always prohibited: "No. The use of images of patients is expressly prohibited, even with their authorization"22.

One point that needs to be clarified in the present discussion is in relation to the possible positive association that can be made between an image of a partially exposed patient who could not be identified, and maintaining their privacy. The fact that an image is conveyed in a way in which the person cannot be identified does not mean that this action cannot be considered to be an affront to privacy. After all, privacy refers to a "set of information about someone that the individual can decide to keep under his exclusive control, or to divulge, and can decide the extent of this disclosure and to whom, when and under what conditions"4. Thus, the impossibility of



identifying the individual from the exposure of a tooth or an arm does not excuse the healthcare professional from requesting authorization to obtain information and for its possible use.

The legal aspects of patient image exposure can be found: a) in the Brazilian federal constitution, which determines citizens' right to privacy, i.e. "individuals' intimacy, private life, honor and image are inviolable, with assurance of the right to indemnification for material or moral damage caused by such violation"23; b) in the Brazilian civil code<sup>24</sup>, which determines, among personality rights, that "exposure or use of individuals' images can be prohibited, at their request and without prejudice to the indemnification that may be applicable, if honor, good name or respectability are besmirched, or if destined for commercial purposes"; and c) in the Brazilian criminal code<sup>25</sup>, which specifically mentions "violation of professional confidentiality".

Thus, laws that protect individuals' identity, private life, image and privacy do exist. Breaking these laws can lead to legal repercussions for whoever promotes the action, including healthcare professionals who decide to make such publications in social networks. More clearly, healthcare professionals who publish patient images in social networks assume liability for their actions, including, if this is the case, indemnification for patients when damage is found to have occurred. From a criminal point of view, a penalty of detention for a period of three months to a year, or a fine, is provided for in cases of violation of professional confidentiality. It concerns: "Revelation of an individual's confidentialities, without cause, that the perpetrator is aware of through his function, ministry, occupation or professional, which may cause damage to that other person"25. This interpretation can be inferred in many of the cases found in the present study.

Besides this, the matter has already been dealt with in international publications, such as the Universal Declaration of Human Rights (1948) and, as mentioned earlier, the Universal Declaration on Bioethics and Human Rights (2005).

Even if there are well-intentioned arguments about informing the population through publishing a wide variety of healthcare events, possible preventive measures or even stimulation of healthy behavior and other matters, exposure of patients



through social networks must be analyzed at all times and with care, before such exposure occurs. In these situations, it is always wise for the professional concerned to consider the ethical and legal context relating to the specific features of each situation and to the circumstances within which this practice is performed, in the sense of whether this action is providing something that is really useful and necessary for patients' and society's wellbeing, in consonance with respect for universal human rights.

## Final remarks

Healthcare professionals need to pay special attention to publications that they wish to share in social networks, especially those in which private information about their patients can be identified. Publications made on social networks do not provide reasonable justification for healthcare professionals to relativize their duty to respect privacy and confidentiality regarding their patients.

Professional marketing with the ultimate aim of gaining profit from services in different healthcare fields can be considered to be one of the motivations that lead professionals to inappropriately expose the image of their patients in social networks. This is no more than self-promotion of the professional's image as a specialist capable of dealing with complex healthcare situations in which other people depend on this professional's knowledge and skills. On the other hand, it is essential to note that well-intentioned initiatives aimed at motivating and informing the population in relation to certain health conditions should be applauded and stimulated, provided that they are properly published.

The present research suggests that future studies should be developed with the aim of enabling deeper comprehension of the reasons why many healthcare professionals take on very unethical behavior through unduly exposing their patients on social networks. Such exposure can have negative repercussions for the entire profession, for patients and for society, besides directly infringing universal human rights that have been consolidated over many decades through international law, with



approval through the United Nations Organization (UNO). Professional councils overseeing different healthcare professions need to be aware of the virtual conduct of their enrolled members and need to develop continuing activities both for orientation and for investigation of possible ethical transgressions. Considering that the use of social media is a recent phenomenon, it is also important that professional healthcare courses in universities and other higher education institutions should incorporate discussions on the publication of patient images on the internet. This should be led through the discipline of bioethics, thus prioritizing transversal interdisciplinary discussions over the entire duration of student training.

#### Collaborators

The authors worked together in all the stages of the production of the manuscript.

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