Patient Safety in Primary Health Care in a Brazilian municipality

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Abstract: The adoption of safe practices by health services drives out health harms and preventable deaths at all levels of health care. This study aimed to understand how patient safety actions are organized in the conception of primary health care professionals in a municipality in the state of Bahia. Exploratory research, with a qualitative approach, was performed through in person and online interviews with two Nurses and three Dental Surgeons, with broad knowledge of the researched matter and working in traditional primary care and Family Health teams. Data were analyzed through content analysis. It was perceived that knowledge of the researched topic was insufficient and that there was a need for the matter to become part of the teams’ discussion agenda. The reports point out that, in the interviewees’ view, actions related to patient safety are not yet implemented in the researched location. It was identified the need for structuring actions aimed at preventing adverse events and institutionalizing safety in health care.

Keywords: Patient Safety; Primary Health Care; Organizational Culture; Quality of Health Care.

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Introduction

Every year, millions of patients around the world suffer harms and die as a result of unsafe practices in health services. Specifically in Primary Health Care (PHC), errors related to the use of medications, misdiagnoses and poorly conducted treatments are frequent, as well as problems in communication and in the relationship between health professionals and patients (LAWATI et al., 2018).

A study conducted in Brazil, with PHC nurses and physicians, reported an incident rate of 1.11% in consultations. Of these, 0.09% did not cause any harm to health and 0.91% resulted in harms (also called adverse events). The most common errors were administrative activities (management, structure of units and organization of services), communication, treatment, execution of a clinical task and diagnosis (MARCON, MENDES JÚNIOR; PAVÃO, 2015).

Patient Safety (PS) is conceptualized by the World Health Organization (WHO) as the reduction of avoidable harms associated with health care to a minimum acceptable level (WHO, 2009). It should be highlighted the growing incorporation of technologies, the complexity of health care and also the need for professionalized management of services for greater safety in health care (BRASIL, 2014).

Taking into account the importance of quality and safety in the provision of primary care, the WHO Patient Safety Program held a consultation in 2012 with some of the world’s leading experts in primary care, research and patient safety from eighteen Member-States from the six regions of the world. They discussed the available evidence on harms resulting from errors and identified limited overall understanding of how to intervene to improve the safety of care in primary care environments (WHO, 2013).

Patient safety still begins in PHC, despite concentrating most of the provided services. Hospital care is more complex, and it is understandable that this environment is the focus of these investigations. Nevertheless, there is a need to expand the safety culture at this level of care, with a view to enabling patients and professionals to recognize and manage adverse events, in such a way as to reduce errors and tensions between professionals and the population (MARCHON; MENDES JÚNIOR, 2014). The National Primary Care Policy (PNAB, as per its Portuguese acronym) in force makes all PHC health professionals responsible
for instituting actions aimed to offer patient safety and for adopting measures to reduce risks and adverse events (BRASIL, 2017).

The National Council of Health Secretaries emphasizes its support to all Brazilian states in the adoption of PS in all health services, including PHC, and warns of key points to guarantee PS: permanent training of all professionals; management involvement; guidelines for professional and health care behaviors through the deployment and implementation of protocols; patient co-responsibility; in addition to teamwork, in such a way as to promote innovations and commitments (CRUZ, 2018).

In light of the aforementioned facts, this research focused on the following question: are there actions organized in the scope of primary care, with the aim of offering the patient greater safety in the provision of services? Based on this premise, the study was conducted with the purpose of understanding how patient safety actions are organized in the conception of primary health care professionals in a municipality in the state of Bahia.

Methods

An exploratory study, with a qualitative approach, was performed, with the participation of health professionals, both from traditional Primary Health Care Units (PHCU) and from Family Health Units (FHU), from urban and rural facilities in a medium-sized municipality located in the hinterland of Bahia, a regional hub in the areas of education and health. This municipality is the main reference in health and education in the region where it is located. It has an estimated population of 341,128 inhabitants (IBGE, 2020). Data from the National Registry of Health Facilities pointed to the existence of 1,510 health professionals registered in primary care teams in this municipality (DATASUS, 2020).

The inclusion criterion of the participants employed was to be a health professional from the PHC teams. Interviews were held in person; but, with the beginning of the pandemic, two interviews were held online. The participants were two Nurses and three Dental Surgeons, all public servants chosen by competitive examinations, working for more than five years in the municipality, in the traditional primary health care teams and in the Family Health Strategy teams. Therefore, they are professionals with good knowledge about the operation of municipal primary care. Due to the difficulty of contacting health professionals after the onset of the pandemic, other
categories were not included, such as the physicians. Despite this, the data collected allowed for a good analysis of the researched situation. It should be underlined that the number of interviews carried out met the criterion of theoretical saturation, when there are no new elements inferred from the interviews (FONTANELLA et al., 2011).

The research was conducted by one teacher and two undergraduate students in Dentistry, as part of a Scientific Initiation project. Data collection took place between January and May 2020, after approval by the Research Ethics Committee (REC). The interviews were recorded and the material was transcribed in the Word for Windows text editor, in such a way as to facilitate the analytical phase. Data analysis followed the proposal by Bardin (2011) for content analysis, where the following steps are used: pre-analysis; material exploration and treatment; inference and interpretation. In order to provide the reader with a better understanding, in certain reports, annotations, such as the acronym names, were included in parentheses. In addition, with a view to preserving the participants’ identity, the speech of each one appears followed by the letter “I”, for interview, and a number associated with each interviewee.

Results

The content of the interviews allowed for the construction of six categories of analysis: The professionals’ view about patient safety, knowledge on the topic and continuing health education (CHE) actions; Identification of risks and prevention measures; Work environment and infrastructure of health facilities; Reception and relationship with the population; Institutionalization of patient safety actions and, finally, Potentialities and difficulties related to patient safety actions.

The professionals’ view about patient safety, knowledge on the topic and continuing health education actions

From the participants’ speeches, there are different views about PS, such as mentions of access, infection control, practices adopted in the institution, the notion of law, among others, as shown below: “You have the safety from his (the patient’s reception) access to the health service to the conditions of infection control; thus, there are several aspects” (I2). “[...] it starts from receiving the patient. It is the professional’s behavior to protect the patient and the adopted good practices” (I6).
“It is their right” (I3). In the following excerpt, the report also pays attention to the worker’s health: “We have to be completely safe, not only for the patient, but also for the professional” (I4).

In another speech, it is perceived that the professional sees work at the PHCU as different from what happens at the FHU, and this would distance him from issues related to the topic at stake: “When you work in a unit (referring to the PHCU), the view is different, you usually arrive to serve; of course, when you see situations that will compromise patient safety in terms of infection control, in terms of accessibility that is not being respected or other safety criteria that are not being required, you will logically draw attention and try to solve it, but it is not under the supervision of the dental surgeon” (I2).

The work process and its overload were also questioned, as factors related to the lack of priority with the addressed topic. “The matter (PS) needs to be discussed more, we work in an overloaded way, so the work process is being left aside” (I6).

In addition, the interviews revealed that the PS topic is not part of the CHE routine developed in the units or in events promoted by the Municipal Secretariat of Health (SMS, as per its Portuguese acronym). “[...] specific training for this topic, to be honest, we don’t have it, right?” (I1). “Not, continuing professional education for patient care, not specifically” (I2). “It goes into other topics in a timely manner, I think that the patient and the professional don’t perceive the risk related to assistance in primary care” [...] (I6). “Every year, there is an immunization campaign against the flu, right? Therefore, at the time of this campaign, prevention measures are worked out, which also end up being safety measures for the patient, so we inform about that, but otherwise, I’m not remembering” (I3).

The following statement emphasized the professional’s view in relation to prior knowledge about PS and the motivation for the absence of an educational approach in PS focused on health professionals. “[...] The professional comes from college and must mainly already have a good knowledge of patient safety and infection control, so I believe that, maybe because of that, there are no specific training sessions” (I2).

Identification of risks and prevention measures

In the reports, several risks to patient safety and potential harms to people’s health were identified. It was quite evident that the risk of infection was the most mentioned: “What we try to preserve is to reduce or prevent the risks of infection,
so all the PPE (Personal Protective Equipment) we use, both for our protection and the patient’s as well (I3). “One of the main risks is contamination, biological risk, ergonomic risk, but there is the risk of violence, because you don’t have specific safety (I1). “There are places that we serve where there is no water, so there is a risk of contamination, we carry out a vaccination using alcohol gel”. “I perform preventive, Pap smears for the prevention of cervical cancer; if we stop to think, it would be impossible to perform an examination” (I3).

They also mentioned several risks related to dental care, such as cross contamination. “We handle a lot of blood fluids, saliva, and all these bodily fluids have microorganisms that can cause diseases” (I4). “[...] Not only biological, in the case of a microorganism, but there is a physical risk. Therefore, for example, a restoration, when we are removing it, and it can fall into the patient’s eye, entailing a risk of an injury to the eye, or even a sharp instrument that we work with, our materials are usually sharps, so it can fall into the the patient’s eye, and then the responsibility in the case is ours (I4”).

Interviewees pointed out strategies used to reduce risk related to health care: “very few strategies. “Some strategies that we learn on a daily basis to use with our own experience within the health facility [... it’s through the clinical practice that I have (...)” (I2).

Measures for monitoring sterilization and the low occurrence of infection after tooth extractions were emphasized: “tests, chemical, physical and biological tests are accomplished” (I1). “[...] when you have a situation of low patient defense or little care with sterilization, there are recurrent cases of alveolitis [...]” (I2).

In the same perspective, the following speeches highlighted measures for adequate infection control: “sanitization [...] materials that are autoclavable are exchanged and those that are disposable such as a suction cup, glove, we discard and use a new one for the patient” (I4). “Anything related to dressing, everything is sterile” (I3).

Concerning biosafety measures to prevent infections and accidents with sharps, the following speech reinforced: “I can’t wait for the patient to do this, or ask me to do this, we have to protect and, of course, explain to the patient the reason why he is wearing that, because there are patients, for example, who say ‘ah, why am I wearing this? I already have my prescription glasses’, but then we explain ‘and if this needle that is here falls in your eye, it hurts’; therefore, I think that this is the way we should work on the issue of patient safety” (I4).
The need for new measures in the service was also highlighted due to the Covid-19 pandemic. “Not that what has been done up to now has been bad; in fact, it will have to improve, it will have to enhance the ways, as it will have to work in this current episode. Before, it wasn’t done this way, the care with the service, the removal of apparel, the use of the mask in the room, the surgical mask. We’ll have to do even more. I think that both the look and the attitude of the health professional will change, as well as the look and attitude of the user, I think that both sides will change” (I5).

In the statement below, aspects related to well-conducted nursing consultations were highlighted, as a way to avoid damages to health: “[...] there is precisely this difference, because the nurses have this training to promote health, prevent diseases, control harms and recover health, which, if you observe, it is related to their safety. Therefore, this individualized consultation has this criterion of focusing specifically on the patient’s demand; however, in harm reduction, then, it is a longer consultation in general, there is hardly this technical issue” (I1).

Care procedures in health care were highlighted, prior to the service and the request for additional examinations: “[...] regarding the measurement of BP (blood pressure), the nursing technicians perform in the reception room, both for patients who are waiting for dental care and for other patients who are in the unit to receive nursing care, see a doctor [...]. Regarding the request for additional examinations, blood tests, if we need a hemogram, a coagulogram before a procedure [...] And the collection is done right here at the health unit with specific dates [...]” (I4).

Measures were also highlighted, such as anamnesis and listening to the patient prior to the service, in order to prevent incidents. “The issue of patient safety also goes through the understanding of a good patient interview, you must know the physical conditions, many times even emotional and many times within our reality, even the patient’s daily food intake, because there are patients that come to us for an extraction, but they haven’t even had breakfast and they come from the rural area, understand? So, if you do an extraction procedure on this patient, he can faint on the way out of the office” (I2).

Work environment and infrastructure of health facilities

The interviewees’ speeches showed concern about the physical structure and necessary equipment in the facilities: “I think that if you don’t have the best
physical structure, of course, if you have an organization, you have a project, a planning, a good will, even with bad conditions, you can develop, but like this, it’s a kick start to have a good structure, a place with as few stairs as possible, fewer steps, adequate lighting and ventilation for the patient, physical space for him to be able to sit down with ease […]” (I1).

Another testimony reinforced the structural difficulty, mainly for not having a fixed unit, and the consequence of this in the work organization. “There is a car (like a van); and, in this van, we try to equip everything we will need and we go to the villages [...] we run away from the structure that the Ministry of Health recommends, we would like to have individualized environments to reduce crowding, in order to deprive them of contact; but, unfortunately, the environment we work in does not provide this type of structure, and then it is very hard to actually have a protocol” (I3). [...] it’s a very small and cramped setting, which disfavors the patient’s own safety” (I1).

The concern with infrastructure and inadequate logistical support for basic emergency support was also perceived: “[...] If you have an emergency situation, a cardiac patient, a diabetic patient and several other pathologies, you need to have an adequate structure to assist them, if the patient enters the urgent and emergency situation” (I1). “Accessibility is also an important issue for patient safety; because, if he’s a patient who needs logistical support to achieve access, if he doesn’t have this support, he may have an accident, there may be a problem in this regard” (I2).

Reception and relationship with the population

Aspects related to the reception of people who seek the services were highlighted: “[...] having that qualified listening, they enter the service, they are welcomed for their needs” (I5). “The receptivity of the patient is pretty nice, which, most of the time, the reception or their understanding that it is difficult for us to offer them safety. We offer comfort. If there wasn’t this reception and this understanding, things would be much more difficult for us to be able to work” (I3).

Moreover, the importance of interaction with the population and the profile of the professional to work in the service was highlighted: “[...] we have telephone contact, we get in contact directly with the patient, there is the community health worker, who gets in touch directly, the technicians are also very open, they are a well-prepared team for family health [...] this is important, in order to get to know the whole family and the Community” (I1).
Conversely, in the following speech, some aspects related to participation and communication with the patient were introduced. “We try to guide, although not everyone has this interest, the levels of understanding are different, but some give a good answer and ask questions, trying to find out how they will be treated and how it impacts their health. Some ask, some don’t” (I3).

In this same perspective, the testimonies below reinforced community participation and difficulties for its achievement. “You have to train people; so, sometimes you have a meeting, but people don’t come and it’s an opportunity to criticize and also make suggestions for the system” (I5). “The patient doesn’t know about that, because as he is not in the health area, some have a low level of education, some don’t know that it is necessary to protect, understand? Therefore, I think our role as a health professional is to offer the patient safety, regardless of whether he understands it or not” (I4).

**Institutionalization of patient safety actions**

Regarding the existence of organized actions, the speech below highlighted the lack of knowledge of PS actions and difficulties in implementing them. “I don’t know! My work situation is a little different. Well! I don’t have a health unit, my work is done in an itinerant manner” (I3).

At the same time that the professional understands that the PHCU manages PS, he reveals that there are no institutionalized actions: “in the unit I work, I consider that there is good management [...]”. “I have no contact with protocols” (I2). He also reveals that it is an individual action of the professional, since there are no moments to discuss this matter and adds that the PHC professional ‘is more restricted to issues of the dental office and care’” (I2).

The monitoring of adverse events related to vaccination was reported below: “[...] so, it is one of the places that most applies this investigation, whether in that particular vaccine there was any complication and whether or not this complication is linked to the hygiene condition there, or the application technique. There is this protocol of adverse events for vaccination” (I3).

Concerning the existence of measures for monitoring data related to PS, the speeches illustrated: “we don’t work with specific safety indicators, not” (I1). “In the daily practice of primary care, we don’t do this survey” (I2). Another interviewee
reinforced the lack of knowledge about the possibility of holding monitoring: ‘indicators? I don’t know if there’s any way to measure it’” (I5).

**Potentialities and difficulties related to patient safety actions**

In the following speeches, several difficulties were pointed out: “[...] the challenge in health is to make it possible to have health, social mobilization [...]” (I5). “There are a lot of people that we can’t manage to meet everyone. Another difficulty I have is the issue of specialized care, because the patient is not always able to be served in specialized care, either quickly or it takes too long for some treatments, such as prosthesis, for example, so it’s very difficult for the patient to get a vacancy” (I4). “As for the patient’s access to dental treatment, it really is a little hard, because here, in my unit, there are two family health teams and only one dentist; meanwhile, it’s a population of around ten thousand people, and it’s a little hard for us” (I4).

Conversely, several potentialities were identified, such as the structuring of services. “I think the potential is this network (health care network), but I think this primary care is already an interesting entry point for the user [...] If you didn’t have well-structured primary care, you I would have to solve everything in the medium and high complexity specialists” (I5).

The importance of preventive and educational actions was evidenced: “The great potential of a family health strategy is that you do not only do the clinical surgical care part, because the prevention part is more important than this part of the curative treatment. Therefore, the family health unit, it has this possibility of preventing diseases, through health education [...]” (I4).

In addition to the health team and the municipal management, there were other factors identified as positive points, capable of boosting the organization of PS actions: “Experienced and young team, eager to work, change the context, good management participation” (I1). “There are meetings of the Health Board team, the user can take part, so that he feels safer” (I6).

**Discussion**

The quality of health care and its safety are interrelated elements and must also be understood from the perspective of the citizen’s right, the user of health services. In this regard, the WHO has been making efforts to get governments
around the world to adopt safe health care practices at all levels of care, not just in hospitals (WHO, 2009; WHO, 2013).

From the reports, it can be perceived that the researched municipality still does not have structured PS actions in PHC, despite the existence of some practices aimed at preventing incidents, based on the initiatives of health professionals, according to the individual knowledge and practice. Despite the listed difficulties, especially in the structure of the facilities, accessibility and repressed demand, some potentialities, such as participatory planning and local management, can collaborate so that this matter is included in the discussion agenda of teams, managers and social players, aiming the implementation of the patient safety nucleus (PSN) in each unit or for the set of PHC units, depending on the reality of the municipality (BRASIL, 2013).

Based on the results of this research, a limited understanding of PS can be perceived, as well as the absence of specific training on the topic in the CHE context and the non-institutionalization of PS actions. It is understood that much is due to the fact that discussion and research in PHC are still incipient and that there is still no adequate training of professionals in Brazil, as well as the implementation of a safety culture in PHC in all municipalities, including in the researched municipality (MARCHON; MENDES JÚNIOR, 2014).

The literature shows several strategies for safer care of patients in PHC. Improved communication is the most commonly found solution to mitigate incidents, allow patients and professionals to recognize and manage adverse events, share staff changes, and seek motivation to act towards patient safety through work groups, thus creating solutions to reduce medication errors, which include the implementation of electronic medical records in units, analysis of incidents from the error reporting system and collaborative practices among professionals (MARCON, MENDES JÚNIOR; PAVÃO, 2015).

Several testimonies pointed out risks arising from the services and measures to reduce the possibility of health harms, even in the face of shortcomings related to infrastructure aspects, difficult access to primary services, especially in teams with large population coverage and low capacity to offer procedures. This difficulty in access puts the PS practice, the quality of the service and the health of the population at risk.

In light of the current scenario of the Covid-19 pandemic, in addition to the importance of caring for workers’ health, mentioned in reports, one should consider...
the possibility of a marked increase in the number of patients who can suffer various harms when receiving care and contracting infections in health services. In this context, it should be reinforced the need for implementation of patient and health professional safety actions (KOH, 2020).

As several important mechanisms and spaces for communication between professionals and patients were pointed out, such as meetings, CHE activities, reception at the PHCU, dialogue with management, the implemented care network, good acceptance by the community and support for the team’s work, there are great possibilities for improving communication among health professionals of the teams and between these and those of other reference services, considering that the administrative and communicational aspects, as well as the organization of the service for the implementation of PS actions, are very important for the proper management of incidents and adverse events, according to previously mentioned studies (LAWATI et al., 2018).

PS is established from the creation of an environment favorable to a safety culture, where values are shared, as well as safe attitudes and behaviors are inserted in the daily practice of primary care teams (VERBAKEL et al., 2016).

Final Considerations

Despite the limitation of this study, especially because it does not cover all professional categories of the researched teams, there was the possibility of an adequate understanding of the researched matter. The participants’ perception is that PS actions are not yet instituted in the researched municipality.

Some aspects need to be overcome for the organization of actions aimed at quality and patient safety, such as inserting the topic on the work agenda of teams and managers and, consequently, allowing the organization of strategies, such as the definition of a team to coordinate the process, the preparation of a plan and the monitoring of the defined indicators.

Nonetheless, it should be envisaged the possibility of expanding the safety culture in primary care in the researched location, given the established spaces and possibilities of partnerships with class boards, universities and other existing institutions, since it is an important regional reference center in health and education.

Finally, it should be highlighted the need for a joint effort involving health professionals, managers and social players, in order to implement the PS culture,
in such a way as to improve health care at the primary level, with a focus on quality and patient safety.

References


Segurança do Paciente na Atenção Primária em Saúde de um município brasileiro

A adoção de práticas seguras pelos serviços de saúde afasta danos à saúde e mortes evitáveis em todos os níveis assistenciais. Este estudo objetivou compreender como se organizam as ações de segurança do paciente na concepção de profissionais da atenção primária em saúde de um município do estado da Bahia. Realizou-se pesquisa exploratória, de abordagem qualitativa, por meio de entrevistas presenciais e online com dois Enfermeiros e três Cirurgiões-Dentistas, com amplo conhecimento do assunto pesquisado e atuação nas equipes da atenção básica tradicionais e da Saúde da Família. Os dados foram analisados por meio de análise de conteúdo. Percebeu-se conhecimento insuficiente do tema pesquisado e a necessidade de o assunto entrar na pauta de discussão das equipes. Os relatos apontam que, na visão dos entrevistados, as ações relacionadas à segurança do paciente ainda não estão implantadas no local pesquisado. Identificou-se a necessidade de estruturação das ações voltadas a prevenção de eventos adversos e a institucionalização da segurança no cuidado em saúde.

Palavras-chave: Segurança do Paciente; Atenção Primária à Saúde; Cultura Organizacional; Qualidade da Assistência à Saúde.

Resumo