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Ensuring patient safety: a case report on vigilance and noncompliance with healthcare regulations

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ABSTRACT

In February 2024, over 50 healthcare professionals and 3 health facilities in Kinshasa, Democratic Republic of the Congo (DRC), were sanctioned following a notorious case. This decision marks a historic moment for the city. Compliance with international healthcare standards and vigilance in daily practice are crucial. Global standards on patient safety place a premium on decision-making and communication in the context of patient transfer. The tragic death of a nurse following a delay in decision-making in the care process illustrates this. This paper reminds all healthcare personnel to comply with rules to ensure patients receive safe and respectful care. It analyzes the decision-making and practical process of patient transfer and information sharing in the healthcare continuity chain. The current case report also emphasizes the possibility of healthcare professionals becoming patients and experiencing adverse events. It is essential to remain vigilant and act reasonably at all times and places. To promote compliance with standard regulations and develop vigilance in health care delivery, the system operator needs to train and upgrade health workers at all levels of responsibility in international health management standards adapted to local conditions. In a country of continental dimensions, with little access to the Internet, an insufficient and disorganized road network, and a lack of public emergency medical aid services, the DRC government must implement a system for sharing patient information in real time between hospitals in case of need, while respecting ethical principles, and take the necessary measures to define priority lines and reserves for ambulances.

Keywords: Compliance; Patient safety; Ethics

INTRODUCTION

Healthcare errors and system failures cause significant harm during the healthcare process. Preventable medical errors expose one in 20 patients, and approximately 12% of severe preventable harm or deaths are due to malpractices.[1] Patient safety is one of the top priorities in the global health care industry. Around 40% of individuals encounter adverse events while receiving medical care in primary care facilities and outpatient settings.[2] However, research

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indicates that up to 80% of this harm is preventable, highlighting the need for improved safety measures in healthcare settings.[3]

Following established protocols and guidelines in healthcare facilities is crucial to maintaining the quality and safety of patient care. Adherence to general standards ensures that medical practices are consistent and aligned with best professional practices, which is essential for quality healthcare and patient satisfaction.[4]

The medical dictionary defines vigilance as being attentive, alert, and watchful.[5] A lack of vigilance often leads to medical errors with far-reaching consequences for society. These errors can result in scandals and high-profile cases that impact numerous individuals.[6]

Noncompliance with health regulations causes patient hazards. These errors start as minor and go unnoticed; over time, they become habits that endanger patients. Rules and standards of care are established, recognized, and widely disseminated, yet professionals may still ignore them. Noncompliance and lack of vigilance have severe consequences for patients' lives, ranging from benign complications to potentially fatal ones. These consequences also extend to the economic and social spheres.

Vigilance is crucial in healthcare to ensure patient safety. All healthcare professionals, regardless of their level of responsibility, must commit to constantly assessing the working environment to detect and prevent potential risks. By fostering a safety culture and maintaining constant risk awareness, we can ensure the delivery of safe and high-quality care.

Traditional medical ethics principles, such as non-maleficence, patient autonomy, and justice, are inadequate to ensure patient safety. When addressing ethical issues related to patient safety, it is crucial to consider new elements. Vigilance and compliance with international healthcare standards are crucial today, as more than fundamental principles are required. It is essential to approach this with mindfulness and humility.[6]

International regulations recommend focusing on decision-making and communication in the context of in-hospital and out-of-hospital patient transfer.[7] Annually, over 500,000 inter-hospital patient transfers occur within the United States.[8] It is essential to consider several factors, including the decision to transfer, the effective communication between the initial care unit and the receiving unit, thorough preparation of the patient for transfer, careful determination of the mode of transfer, and selection of the most appropriate means of transfer. Economic and development conditions may prevent the full implementation of international guidelines in some countries, given differences in health systems, availability of qualified personnel, and health and road infrastructures.

The Democratic Republic of the Congo (DRC)'s healthcare system has 3 levels: central, intermediate, and primary. The central level establishes the country's health policy, while the intermediate level guarantees the implementation of decisions made at the national level. The primary level is responsible for delivering primary healthcare and implementing health policies. Hospitals in the DRC are classified into primary, secondary, and tertiary levels, each with specific competencies established by ministerial decree.[9,10]

Ministerial Order of May 15, 2017, standardizes the management tools in healthcare facilities, including the patient circuit and health information management. Although the

full implementation of this law is still pending, it is a crucial step towards improving the healthcare system in the DRC.[11] Considering local circumstances, the lack of well-defined protocols for patient transfers can engender challenges in commencing and sustaining requisite medical treatment for individuals.

The World Plan for Patient Safety 2021–2030 will decrease medical errors and enhance patient safety by introducing proven methods and actions to reduce patient harm.[12] However, the absence of proper facilities and necessary equipment significantly contributes to noncompliance with guidelines and regulations.[13] Therefore, it is crucial to exercise vigilance in routine healthcare practices.

A qualified professional's involvement and input from the patient and their family are essential in making the transfer decision at the appropriate time. This collaborative approach dramatically increases the likelihood of a successful procedure by ensuring information sharing to everyone on the transfer's reasons and intended destination.

Communication between hospitals and within hospitals regarding patient transfer concerns the healthcare system and healthcare professionals.[14] Effective communication within and between hospitals is crucial for ensuring the seamless delivery of care and the coordination of services for patients. Healthcare providers must have efficient communication channels in place to share important medical information and collaborate on patient care. Improved communication can enhance patient safety, minimize errors, and improve healthcare outcomes.

This paper reminds all healthcare personnel to comply with international standards to ensure that every patient receives safe and respectful care. It is essential to remain vigilant and act reasonably at all times and places.

CASE REPORT

The case pertains to a 32-year-old pregnant nurse who had worked for 8 years in Kinshasa, DRC. The case includes an introduction, deciding to transfer the patient, the course of the transfer, and sharing patient information.

The patient initially went to a secondary hospital (H_1), where she worked, complaining of headaches, dizziness, tongue biting, and leg edema. She had previously had a Caesarean section delivery for severe preeclampsia and had never had an abortion. The second pregnancy commenced with the last menstrual period occurring on July 29, 2023, with the probable delivery date scheduled for May 4, 2024, corresponding to a pregnancy of 26 weeks and six days of amenorrhea at the time of admission to H_1. Upon admission, a clinical and paraclinical examination was conducted, which revealed the following: active fetal movements were regular, fetal ultrasound demonstrated a normal-progressive pregnancy, blood group O Rhesus positive, and blood pressure above 150/100 mm Hg. Based on these findings, the healthcare team diagnosed severe preeclampsia in a pregnant woman with a previous uterine scar, requiring additional in-depth paraclinical examinations. The medical team initiated treatment with nicardipine and magnesium sulfate and hospitalized the patient for 2 weeks.

Decisions making regarding patient transfer

The hospital kept the pregnant woman for 2 weeks, where she received treatment mainly involving administering antihypertensive medication. Throughout the entirety of her stay, the examination performed on the fetus indicated no abnormalities or complications. However, persistent elevation of blood pressure and genital water loss marked the evolution. The healthcare professionals made a diagnosis of premature rupture of the fetal membranes with preeclampsia. The medical team finally decided to transfer the pregnant woman urgently to a specialized unit for more appropriate care.

The patient information handoff

The medical team had prepared a transfer note for the tertiary referral hospital, describing the patient's diagnosis and the reason for the transfer without contacting the team receiving the patient. The main reason for the transfer was to care for the newborn baby.

The process for transferring patients

The transfer itself occurred on the evening of February 1, 2024, when the pregnant woman was transported in an ambulance with a medical team to a tertiary hospital (H_2) located approximately 18 km from H_1. However, upon arrival, the pregnant woman was neither received nor examined due to a lack of available space, as reported by the on-site medical team. Regrettably, although the ambulance that transported the woman from H_1 to H_2 had already returned, she was left in a wheelchair at H_2 without being examined throughout the night of February 1, 2024. Meanwhile, the pregnant woman was experiencing uterine contractions and vaginal discharge.

At the family's request, the ambulance returned in the morning to transfer the pregnant woman to another tertiary hospital (H_3), situated approximately 5 km from H_2 and 10 km from H_1. Upon arrival at 6 am on February 2, the staff addressed the limited space issue and admitted her to the intensive care unit. The preliminary examination revealed an elevated blood pressure of 200/100 mmHg, and the fetal heartbeat was not perceptible. The medical team's failure to communicate with the nurses on duty resulted in a critical omission: they failed to classify the patient as pregnant in an emergency and did not perform an ultrasound. At 5 pm on February 2, the medical team decided to perform a Caesarean section after identifying the patient as being in an extreme obstetric emergency, and they performed the procedure at 4 pm on February 3. The procedure revealed a retroplacental hematoma complicated by a stillbirth. The patient experienced anemia during the immediate postoperative period and required a blood transfusion. She received a transfusion after an extensive search for compatible blood in Kinshasa city. However, she passed away at 7 am on February 4. Forensic medicine is currently investigating the cause of her death.

Following a public condemnation on social networking platforms, the authorities promptly implemented measures to shut down facility H_1. Moreover, over 50 healthcare practitioners, comprising the top administrators of hospitals H_2 and H_3, have been suspended for 3 months. Medical boards have also instructed them to undergo regulatory actions. The Ministry of Health is handling ongoing disciplinary cases on an individual basis (**Fig. 1**). What were the main factors that led to this tragic result? How can we prevent similar incidents in the future?

Ethical considerations

The relevant authorities became aware of the present case after a post-mortem report was shared on social media, rendering prior consent unnecessary.

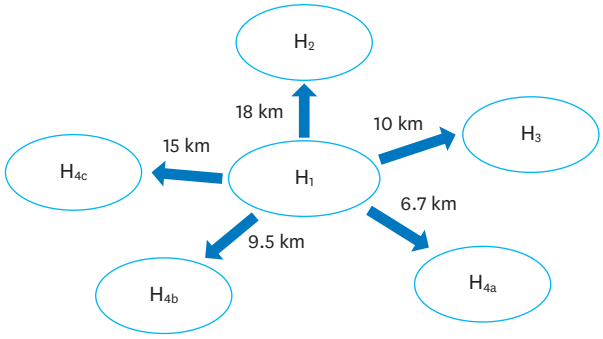

Fig. 1. Location of tertiary hospitals with the patient's secondary referral hospital.
Note: H_1, secondary hospitals; H_2 and H_3, tertiary hospitals 1 and 2; H_4, other tertiary hospitals are eligible for transfer from the secondary hospital area; H_{4a}, Saint Joseph Hospital; H_{4b}, HJ Hospital; H_{4c}, Cliniques Universitaires de Kinshasa.
Source: Google map DRC. Accessed May 30, 2024.

DISCUSSION

The management of this case revealed structural flaws in the healthcare system and attitudes among medical and nursing staff that put the patient in danger, culminating in a terrible outcome. Improving the quality of care and promoting a culture of vigilance and compliance to ensure patient safety in healthcare are essential to preventing such events from occurring again.

The case management exhibits several evident deficiencies, encompassing the decision-making process for transfers, the protocols for transfers, and the transmission of patient information.

The process of making decisions regarding patient transfer.

Adverse events leading to a decline in the patient's condition can often prompt transfers. To ensure the patient's well-being, it is crucial to closely monitor their clinical state and carry out any transfers in their best interest.[15]

International health regulations define a medical examination as the initial assessment of a patient by a qualified doctor to understand the patient's health and take action to keep the patient and others safe.[16]

Three areas influencing patient transfer are the decision-maker, the patient, and the environment.[17]

The medical team at H_1 needed to adhere to the procedural standards outlined in the DRC ministerial decree regarding the competence, organization, and operation of secondary and tertiary facilities. The current decree classifies preeclampsia as 'tertiary hospital cases' and recommends immediate transfer after taking all necessary medical precautions.[9,10] Furthermore, considering the patient's reason for consultation, a more accurate diagnosis would have been eclampsia instead of preeclampsia. This misdiagnosis may have contributed to the delay in decision-making by the medical staff at H_1. In deciding to keep this patient in the hospital, the team needed a full risk assessment, including unforeseeable risks. The medical staff assigned to H_1 demonstrated a lack of respect for international health standards and the national case management guideline, jeopardizing the patient's safety and well-being.

Understanding patients' environments and beliefs about the cause and meaning of their illness is crucial to promoting treatment adherence. Patients who attribute their illness to external factors or circumstances beyond their control may be less inclined to comply with recommended healthcare. Conversely, patients who comprehend the causes of their illness and recognize the significance of their treatment are more likely to be motivated to follow medical recommendations. The patient's workplace being in the exact location of the hospital where she was admitted may have been a factor in the decision to transfer her to a higher-level hospital without delay. The perception that her colleagues in the ward could offer superior care compared to other healthcare professionals is probably one cause of the delay in making the transfer decision. This perception may have resulted from increased confidence in the skills of her colleagues, leading to a reluctance to consider a transfer to another healthcare professional. While they may be familiar with the rules, there may be instances where they believe that the rules do not apply. Healthcare professionals must comply with the established rules to minimize errors and the risk to patients. Transferring the patient as soon as possible could reduce the risk of danger.

Qualified personnel must promptly decide to transfer a patient to ensure the most effective treatment possible. The referring institution's internal limits and capabilities in clinical, technical, and organizational terms are key elements in this decision.

Poor information transmission between providers is the underlying cause of adverse occurrences linked with care transitions.[18]

International Health Regulations recommend that the hospital deciding on the transfer prepare a transfer authorization and a detailed medical report for the receiving hospital and ensure that it has received positive feedback before proceeding with the actual transfer.[16]

In the DRC, the law on the organization of public health considers the medical report as a valid document to justify the continuity of a patient's care in another health facility, if necessary.[19]

A study on the transfer of 335 patients found that incomplete or insufficient patient information caused 42% of errors and adverse events during a patient transfer. The study also indicated that improved documentation correlated with a decrease in mortality rates during hospitalization. These findings highlight the importance of providing detailed information during patient handover to improve clinical outcomes.[20]

The H_1 medical staff wrote a transfer note, mentioning fetal care as the main reason for the transfer, omitting to provide all the details of the gestational carrier's hospital stay. It would have been correct to draw up a medical report to enable the receiving team to better prepare for the arrival, placement, and care of the gestational carrier and fetus. Moreover, they should have bothered to contact the H_2 staff beforehand. Their hurry could explain the H_1 medical staff 's failure to respect the rules, as the hospital was not qualified to manage these situations, and they were probably afraid that the gestational carrier's clinical situation, which was already serious, could worsen. The absence of communication between hospitals represents a lack of vigilance and noncompliance with international standards by the system operators.

The initiating hospital must also communicate with the receiving hospital to share relevant information, ensuring an efficient transition and proper care for the patient. The SBAR tool (Situation, Background, Assessment, and Recommendation) serves as an internationally

recognized standard utilized to communicate essential information concerning a patient's status, or any other matter necessitating the team's attention.

The patient transfer process involves safely moving individuals from one healthcare facility to another, or from one care setting to another within the same facility. The international regulation requires careful coordination and communication between healthcare providers to ensure the patient's safety and continuity of care during extra and inter-hospital transfer.[16,21] It may involve arranging transportation, organizing medical equipment and supplies, and updating patient information to ensure a seamless transition. The H_1 medical staff had yet to contact the H_2 team beforehand to ensure the availability of the service, staff, and space and to ensure the patient's health care continuity. Moreover, once the patient arrived at H_2, the team member needed more vigilance and was content to leave the patient at H_2 without making sure that the patient was being cared for by the team member receiving her. It would have been preferable to be vigilant by talking to the medical staff to find the best solution, such as contacting another hospital if necessary.

Timing the transfer of patients can be a delicate matter, particularly during night shifts when medical staff may already be struggling with internal and external emergencies. Furthermore, the H_1 staff's decision to transfer the patient to H_2, which was 16 km away, instead of the 2 other tertiary hospitals located 2 km and 5 km from H_1, demonstrated a lack of vigilance. The finding is consistent with previous studies that have demonstrated that emergency patients experience poorer outcomes during off-peak transfer periods and when the care team is experiencing a high workload.[22] In addition to the fact that there are no special road lines for ambulances on the DRC road network, night-time transfers of this patient could be explained by the fact that road traffic is very often slowed down by traffic jams due to the lack of road infrastructure in the city of Kinshasa. This sad reality highlights the country's absence of an established inter-hospital medical evacuation system adapted to the local conditions.

Moreover, the H_2 staff was not vigilant enough. Even when there is no available space, it is recommended that the patient be examined and assessed for severity and urgency. This responsible attitude could include planning appropriate measures in case of hospital overflow or organizing an immediate transfer to an approved hospital under the best possible conditions. Implementing and disseminating guidelines can help healthcare workers maintain vigilance while performing their duties.[23]

The healthcare system must define guidelines adapted to local working conditions and ensure that care is provided in accordance with international standards. Vigilance requires a thorough examination of the entire health system environment at different levels to identify possible pitfalls and prevent avoidable hazards.

CONCLUSION

Considering local circumstances, the lack of well-defined protocols for patient transfers can engender challenges in commencing and sustaining requisite medical treatment for individuals. The governmental authority must implement national guidelines on patient transfer to improve patient outcomes. In a country of continental dimensions, with little access to the Internet, an insufficient and disorganized road network, and a lack of public emergency medical aid services, the DRC government must implement a system for sharing

patient information in real time between hospitals in case of need, while respecting ethical principles, and take the necessary measures to define priority lines and reserves for ambulances. In addition, specific patient transfer protocols should be defined and implemented at all levels of responsibility based on local human resources and infrastructure.

However, weak regulations should not prevent healthcare staff from complying with established rules and ethical principles. With appropriate training and support, healthcare staff can confidently navigate regulations adapted to local conditions and deliver high-quality care. Healthcare professionals at all levels must remain vigilant to anticipate and prevent unforeseeable risks, reducing the likelihood of patient harm when providing healthcare services.

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