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Medication Errors: An Ethical Analysis

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ABSTRACT

Medication errors are defined for this paper as an error (of commission or omission) at any step along the pathway that begins when a clinician prescribes a medication and ends when the patient actually receives the medication (Patient Safety Network, n.d.). This type of error commonly occurs as a result of poor writing, dose miscalculations, poor drug distribution practices, incorrect drug administration, failed communication, and/or a lack of patient education (AMCP.org, n.d.). Thus, this paper will explore the ethical implications surrounding the presence of medication errors as they relate to patient health, healthcare provider responsibilities, and society as a whole.

Keywords: Medication Errors; Healthcare Providers; Challenges with Medication Errors; Ra Donda Vaught Case; Healthcare Workers and Medication Errors

Introduction

Medication errors affect patient health by providing worse health outcomes. Unmitigated medication errors can cause a patient's previous symptoms to worsen or create new conditions that can be either temporary or permanent, such as itching, urticaria, or skin disfigurement (Robertson [1]). Furthermore, 7,000-9,000 Americans die every year from serious complications caused by medication errors out of the 100,000 FDA-reported cases of known medication errors (Robertson [1]). However, patients can help lessen the prevalence of medication errors by alerting primary providers about medications that are currently being taken and that are no longer being taken, bringing medicines and supplements to doctor visits, double-checking prescription orders visually to look for discrepancies, and by making allergies and adverse reactions know beforehand (Robertson [1]). By taking an active role in one's own healthcare, patients are able notice crucial discrepancies and prevent errors. Thus, medication errors can provide negative patient outcomes, but can be alleviated through a patient's own active healthcare management.

Impact on Healthcare Providers

Medicine errors can have drastically negative impacts on healthcare providers by increasing the likelihood of burnout, loss of concentration, poor work performance, posttraumatic stress disorder, depression, and suicide (Robertson [1]). Errors in medicine are inevitable as the amount of patients that need to be seen increases and the amount of time providers spend with any one patient decreases. As the patient population increases, providers have become increasingly reliant on a wide variety of necessary support staff that play a crucial role in a patient's care. Unfortunately, this can often lead to communication errors between healthcare staff. Communication errors, similar to the other causes of medication errors, stem from the same root cause - the complex nature of healthcare treatment (Tingle [2]). Although, healthcare

workers can take an active role in medication error management by verifying orders, double-checking patient barcodes, minimizing clutter, involving the patient, and by tracking medication errors when they do occur (Lieder [3]). Therefore, alongside patients, healthcare providers have negative outcomes when medication errors do occur, but providers can implement proactive measures to reduce the effect of errors.

Case Study

RaDonda Vaught was a former nurse at the Vanderbilt University Medical Center located in Nashville, Tennessee (Kelman [4]). She is currently on trial and awaiting verdict for the 2017 death of 75-year-old Charlene Murphey (Kelman, 2022). The trial examined all of the preventable incidents that occurred up until the fatal accident beginning with Vaught's first day at the hospital (Kelman [4]). In 2015, she, a licensed nurse, began working at Vanderbilt University Medical Center, the largest hospital in Nashville and one of the most respected hospitals in the nation (Kelman [4]). Two years later, in 2017, Charlene Murphey, a long-time resident of the Nashville suburb of Gallatin, checked into Vanderbilt with a subdural hematoma, or bleeding in her brain (Kelman [4]). Two days later, Murphey's condition improved and she was almost ready to leave Vanderbilt. During a final scan in the hospital's radiology department, Murphey was supposed to be given a sedative, Versed, but was accidentally given a dose of Vecuronium, a powerful paralyzing medication by RaDonda Vaught (Kelman [4]). The drug left the patient brain dead. RaDonda alerted her supervisors to the medication error that had occurred, but her supervisors alongside her did not report it as a medication error to both the patient's family and the coroner and Murphey's death was ruled as due to "natural" causes (Kelman [4]).

Analysis of Case Study

This case plays a significant role in the analysis of medical errors in the current healthcare system. The case has been highly ethically controversial for numerous reasons. First, typically medication errors are brought up to hospital supervisors and licensing boards are notified to address the matter; criminal cases are not often placed on healthcare workers for deaths seen as a result of the profession. In this case, Vaught had been criminally indicted on abuse and reckless homicide charges, due to alleged neglect (Norman [5]). Second, all of the charges were brought forth on the basis that Vaught ignored the warning signs that she had given the wrong drug out of the medication cabinet, such as the fact that Versed is a liquid, but vecuronium is a powder (Norman [5]). Also, she failed to read the name of the drug, did not notice a red warning label on the drug, did not monitor the patient after giving the drug to check for an adverse reaction, and did not scan the medication against the patient's ID bracelet (Norman [5]). Amidst the allegations, a new perspective emerges — that of nurses nationwide.

Being a healthcare provider is a difficult profession from the fast-paced work environment to the workforce shortages to the lack of individualized time with each patient (Norman [5]). Furthermore, in an era worsened by the ongoing COVID-19 pandemic, nurses and nursing organizations have taken to social media to express their displeasure regarding the charges brought forth against Radonda Vaught. Nurses nationwide believe that Vaught's conviction will set a "dangerous precedent" for the healthcare industry by making healthcare providers less forthcoming about mistakes, which can have both a detrimental effect on safety and society (Kelman [6]). Moreover, an ethical dilemma presents itself in the form of nonmaleficence versus justice. On one side of the scale is nonmaleficence, nurses are legally bound through licensure to not harm their patients in an unjustifiable manner. RaDonda Vaught, whether intentionally or unintentionally, failed to take the necessary precautions to ensure the safety of her patient when administering a medication and in fact, actively contributed to the death of her patient. Charlene Murphey's life was harmed as a result of Vaught's direct action, but it wasn't her actions alone that should be held liable.

This is the source of another ethical dilemma. Many nurses nationwide believe that Vaught was "scapegoated" to cover up pre-existing problems at the Vanderbilt hospital related to medication dispensing errors and a flawed error reporting system. In accordance with court documents, Vaught attempted to withdraw Versed from the medication cabinet using the brand name starting with "VE" when she should have been looking for the generic name of midazolam, but was unable to find the drug. She then triggered an override function that allowed for more medication to be made available, then searched using the same letters again (Kelman [6]). This time, the cabinet offered vecuronium. As many people of the jury and the prosecutor found the override to be a reckless act, healthcare providers nationwide claim that this is a daily occurrence (Kelman [6]). Furthermore, Vaught claimed that a 2017 upgrade to the hospital's EMR system caused delays to medication cabinets and providers at the Vanderbilt hospital were directly instructed to use overrides to prevent delays and get the necessary medication (Kelman [6]). Moreover, after Murphey's accidental death, Vaught reported the occurrence of the crucial incident to management, but the Vanderbilt hospital took several actions that prevented the mistake from being disclosed to the government or public according to county, state, and federal records. Also, the medical examiner's office was never notified of the true reason for Murphey' death and instead told by hospital officials that it was "natural" rather than accidental. While Vaught directly contributed to the death of Murphey, the harm committed to the patient was not

done by her alone, but was substantially aided by other healthcare workers around her.

This brings forth the ethical dilemma: should Vaught's duty as a nurse to be non-maleficent towards her patients be weighed higher than holding Vaught responsible for the actions of others that allowed the true reason for Murphey's death to go unreported? The answer is — it depends. Some hospital providers lean heavily towards one side of the issue, while members of the public lean towards the other. Nevertheless, the case has spurred endless controversy. Therefore, the RaDonda Vaught case has played a significant role in bringing awareness to the possibility of medicine errors in today's healthcare system and the vital role they can play in a patient's mortality. Society can be greatly affected by the prevalence of medication issues from two main populations: incorrect medication administration as it relates to patients and the administering provider(s). First, incorrect medication administration has the potential to cause harm to a patient, which directly opposes one core ethical principle: beneficence. A patient's well-being is at stake when there is a medication error and the error is not discovered or corrected early on in the patient's care. Second, medication errors can lead to decreased patient satisfaction and cause a growing lack of trust in the healthcare system (Varkey [7]).

This lack of trust can be further exacerbated by a shortage of accountability and the absence of transparency regarding the error. Furthermore, medication errors can negatively impact the society of practicing healthcare providers in the form of the degradation of one's health through burnout, lack of focus, and suicide (Varkey [7]). These impacts can be mitigated through an accessible error-based reporting system within the healthcare field that encourages workers to report incidents, take the initiative to correct the accident, and provides the tools to prevent the incident from recurring in the future. Currently, such reporting systems are heavily stigmatized as they often lead to "scapegoat" situations, as seen in the RaDonda Vaught case, where a singular healthcare worker is held accountable for a lack of incident reporting (Kelman [8]). In the RaDonda Vaught case, she reported the incident to her supervisors, but the hospital officials neglected to report the incident to the local, state, or federal regulators (Kelman [8]). A lack of uniform error-management reporting services in hospitals can lead to negative outcomes for both patients and healthcare providers. Moreover, the RaDonda Vaught case also demonstrated another crucial impact that medicine errors can have on society in the form of nurses quitting their jobs and leaving the healthcare field overall. Typically, medicine, or medical errors, in a hospital setting are reviewed by a hospital or licensing board to determine fault and make corrections and are not regularly handled as a criminal case. Considering that Vaught's incident was handled as a criminal case has shocked nurses nationwide because a lack of support from hospital officials regarding how to both report and address the case demonstrates a "everyone for themself" mentality and does not promote unity. This is a detrimental mentality because healthcare requires teamwork from physicians to lab assistants to janitors, every single person plays a significant role in a patient's care and needs to be able to work alongside each other. Thus, medicine errors and a lack of error-based reporting systems can negatively impact patients, healthcare providers, and society overall.

The core ethical principles of beneficence, nonmaleficence, autonomy, and justice are abundantly present in cases of medicine errors. First, beneficence represents the obligation of the healthcare provider to act towards the benefit of the patient (Olejarczyk [9]). When medication errors are present, the health of the patient is at risk, especially when not mitigated as soon as the error is discovered. This demonstrates an act that opposes beneficence and serves to harm the patient in contradistinction to helping them. Second, nonmaleficence is the obligation of the healthcare provider to not harm the patient (Olejarczyk [9]). Alongside the act of incorrect medication administration, nondisclosure of stated medicine error can also serve as an act that opposes the ethical principle of nonmaleficence. In accordance with the CDC, healthcare providers have an obligation to report when medicine errors are made and take corrective actions to prevent these mistakes from occurring again (Rasool [10]).

One corrective action that the healthcare provider has an obligation to undertake is to inform that patient of such error occurring in their care. While it may be difficult to discuss the presence of errors with a patient, a failure to do so would demonstrate an act that serves to intentionally harm the patient. Healthcare providers have a duty to disclose vital information that pertains to a patient's case to the patient themselves, even in regards to errors. A PBS study in Utah, found that ninety-percent of all hospital mistakes go unreported (Rasool [10]). This demonstrates a lack of accountability and transparency and displays an intention to mislead patients. This behavior present in the healthcare system contributes to the contravention of the ethical principle of nonmaleficence, but can be easily resolved through honesty and disclosure of the mistake to the patient. Third, a patient's autonomy is at risk both when medical errors occur and when they are not disclosed to the patient.

Patients have the right to informed consent on all procedures performed on them, even ones that are done so by mistake. A medication error or an incorrect medication administration is an example of a patient's autonomy at risk because of a lack of informed consent on behalf of the patient. Furthermore, insufficient disclosure of the committed medication error can directly oppose a patient's autonomy by providing the means for a healthcare provider to act on a patient's behalf without the patient's permission, especially when it occurs in a non-emergent situation (Rasool [10]). Fourth,

two crucial perspectives must be considered when exploring the impact that medication errors can have on justice: the one of the patient and the one of the healthcare provider. When a medication error is committed and the error is not disclosed to the patient, it directly opposes a person's right to justice. In this paper, justice is defined as the fair, equitable, and appropriate treatment of people (Robertson [1]). In accordance with the given definition, justice is not present in cases where people are treated unequally or are not equitable for the same reasons as one another. This phenomenon occurs in cases of medication errors when an error occurs and the patient is not notified of such error immediately or as soon as it is discovered. In this case, the patient is not treated the same as every other patient by being given access to the highest level of care necessary for the patient's specific needs. While every patient might not have the same level of needs, every patient should be guaranteed by respective healthcare providers to be assured the same level of care is present in all cases. Simultaneously, another perspective to consider, in terms of justice, is the one of the healthcare provider [11].

In medicine, mistakes are inevitable (Robertson [1]). Healthcare providers should be encouraged to report such mistakes to provide learning experiences for future physicians and to put preventative methods in place to discourage or eliminate such mistakes in the future. Moreover, justice for healthcare providers is signified by an evaluation of critical mistakes and a uniform policy of dealing with such mistakes rather than an analysis of mistakes on a case-by-case basis [12]. Dealing with some medication errors as a criminal case and others as an issue only requiring an evaluation by a licensing board shows clear bias towards medication errors and some healthcare providers. By encouraging a uniform reporting system as well as addressing all medication errors in the same manner can both reduce bias in the healthcare field and promote justice for healthcare providers. Therefore, every core ethical principle has a significant impact on medication errors and can reveal the shortcomings of the current healthcare system [13].

Conclusion

Medication errors play a significant role in the current healthcare system by affecting patients, healthcare providers, and society. The errors directly affect patients by increasing the risk of drug-drug interaction, prolonging the length of a hospital stay, and elevating the risk of mortality. Conversely, healthcare providers are also highly impacted by the abundance of medication errors in that the errors can cause feelings of emotional distress, lack of confidence, and contribute to an increase in burnout. These psychological issues can further cause healthcare providers to continue to make errors in the healthcare field that can cause a revocation of license or a leaving of the medical field overall [14]. The impact that medical errors can have on society is also one that must not be undervalued as it encompasses both the effect that errors can have on patients, albeit on a larger scale, and the long-term effects that errors can have on physicians. When considering the impact that medication errors have on the patients within society, a conclusion can be drawn.

A lack of disclosure of errors committed can lead to a distrust of the healthcare system and hesitancy regarding the proposed competency of healthcare providers. Additionally, the presence of medication errors without support or resources to mitigate errors can lead to frustrations for healthcare providers leading to an increase in workers leaving the healthcare field [15]. A clear example of this phenomenon can be seen in the Radonda Vaught trial where nurses began leaving the healthcare field in droves as Vaught was placed on trial for overriding a medication, as she was taught to do so, and reported the error as it was discovered with no help from her superiors. She was also placed on a criminal trial for the error, as opposed to a recommendation for a licensing board to review the case as is how cases are typically handled. A decrease in nurses, and other healthcare providers, in the field of medicine has many long-lasting impacts on those that remain within the field, such as longer shifts and higher patient-to-healthcare provider ratios leading to a decrease in patient care, fatigue, injury, and stress [16]. Additionally, each affected population can be further broken down into subgroups to determine the ethical considerations that should be made in regards to beneficence, nonmaleficence, autonomy, and justice. In conclusion, medication errors have numerous ethical implications on the ever-growing field of healthcare that should be addressed to better benefit patients, healthcare providers, and society [17].

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