Human Factors That Contribute To Medication Errors

Busy days and increased workloads can place any individual in a higher risk to make errors. In a healthcare setting, the increasing workload for the nurses or physicians can cause them to make errors in medication administration. These may sometimes not cause any adverse effects on the client while on the other hand it can also cause issues in clients which can also lead up to their deaths. Lack of sleep, stress, and inadequate nutrition are also a few factors that contribute to medication errors. It is a sign that the brain needs the rest it needs and it is the body's natural way of telling you that you need rest. People often also misunderstand the acronyms or the short forms that are used for medication.

In an article that was published in August 2018, the acronym SWFI which originally stands for sterile water for injection was misunderstood for sterile water for irrigation by the practitioner. The reconstituted solution was again diluted in a minibag that contained saline was administered to the client. Although the patient was not harmed, this incident was reported to the ISMP. It has also been reported that there have been instances that this acronym (SWFI) was also mistaken for salt water for injection. The practitioner used 0. 9% of sodium chloride injection and reconstituted a drug that had required sterile water instead. This was a serious mistake that was done that led the patient to further complications.

The human factor of error contributed to this case because it was the different ways that an acronym was used. This occurred due to a lack of knowledge as well because there should be a standardized way that SWFI should be used and the practioners should also know what should be done. And if there is an instance where you aren't sure, you should always use the privilege of asking your colleagues. Cognitive errors can also contribute to medication errors. Individuals can read the dosage incorrectly and administer the medication to the client either through the incorrect medication or through the incorrect route or sometimes even both.

In a case study done by the authors of the book: Nursing standard (2014), they discuss about an error that was made with morphine administration which led to the death of a client. A morphine administration of 25mg was given subcutaneously instead of 2. 5mg. The nurse said that she incorrectly read the ampoule strength and administered a higher dose. This example also shows that as nurses, we need to recognize if the dosage that we give is incorrect and make sure to double check again. If we still think that is an overdose, we need to ask a fellow colleague and question the order.

Based on the article The Impact of Abbreviations on Patient Safety, they show us the different ways that medication errors could happen while writing it. One among that is the abbreviation

for the International Units (IU). The studies have shown that individuals within the healthcare sector mistake IU to be IV (intravenous) or even for the number 10. Another common mistake that they have pointed out is the trailing zeros after the value or the lack of a leading zero. The decimal points are often missed and could also lead to a medication error. Both the articles mentioned above are examples of how human factors can also lead to medication errors. Sometimes we misread them for something else and it could also be with the lack of knowledge of the proper drug dosage and the inaccuracy of checking.

As mentioned in the articles above, the ways to minimize medication errors can be to create a rule that would restrict us from using certain short forms. The article The Impact of Abbreviations on Patient Safety, the Joint Commission created a “Do Not Use” abbreviation list. This would be a useful tool if it got standardized among all the institutions. This would bring a significant decrease in the number to errors that had occurred in the past due to individuals mixing up the short forms and what they actually stand for. For example, the Joint Commission recommends writing out the short forms for what they actually mean like writing out “International Unit” for IU and “daily” for QD. If this practice is followed in every institution, the rate of errors would decrease. The institutions can provide a periodic training for all the staff to familiarize themselves with the dosage, abbreviations, and the routine practices.

If the workload for the staff is reduced or equally distributed, the incidence of errors can be reduced. When the workload increases, stress increases and we tend to rush the things that we have to do. We tend to not check the medication dosage, or even think if you are giving a higher dose or the correct dosage to the client. This is because you have a lot of things to think while attending to the client so then it becomes harder for you to focus. The best way to minimize this is to equally divide the work between co-workers depending on their competencies and their abilities to perform the given task. If you are having a bad day in general as well, it is best to take a day off rather than coming to work because you could also potentially place other individuals at risk as well.