In the medical environment, patients experience safety issues during the process of treatment. Lack of proper awareness among patients regarding the use of medications and procedures is a serious medical safety. Practitioners must ensure that patients' safety is guaranteed while administering treatments. Patient safety is broad areas that have been considered in the past. It includes wide areas relating to issues that affect the wellbeing of patients in medical facilities. Some of the patient's safety issues include medication errors, Healthcare-associated infections, Antibiotic resistance, Personal protective equipment protocol, Hand hygiene, Health IT issues, Workforce safety, Transitions of care, and Diagnostic errors among others. These issues have continued to affect the medical services provided in many medical facilities. The focus of this paper is to discuss the ethics in safety of patients. The paper will concentrate on medication errors.

Medication error is one of the most famous patients' safety issues. It is a failure in the administration of treatment which has a potential to cause harm to patients. Medication errors occur in contexts like choosing a medicine, which might be the irrational, inappropriate, and ineffective prescription of medications that can lead to under or over prescription. Another context likely to cause an error is writing the prescription where a practitioner or physician miswrites the prescription or illegible. The patient can misinterpret the dosage if the doctor fails to explain the medicine (Leape et al. 2014). Another context of medication error can occur during manufacturing where the drugs made contain contaminants, poor strength, misleading labeling, and improper packaging. The medication can also experience errors while dispensing the formulation by giving wrong medicines, wrong wording, and improper labels. Finally, medication errors can be encountered while monitoring therapy where the practitioner fails to change therapy as required or making errors while changing. Medication failure hints a disregard for a particular safety standard. Medical practitioners must comply with such standards to eliminate or reduce medication errors in the medical environment (Leape et al. 2014). During treatment, physicians should observe measures put forth to ensure that patients receive services that meet standards.

In the research paper, the anticipated questions concerning patients' safety include:

1. What are the effects of medication errors?
2. What is the implication of medication errors to the general safety of patients?
3. How can these medication errors and other related safety issues be prevented?

The research paper will cover the following major sub-topics.

* Adverse events and adverse drug reactions
* Frequency and outcomes of medication errors
* Types of medication error and prevention
* Latent factors
* Detecting and reporting errors

The Adverse events and adverse drug reactions

Adverse effects are abnormal signs, symptoms, tests, or syndromic combination of the abnormalities like the deterioration of an illness occurring when an individual is on medication. The occurrence could be an adverse drug reaction, which is an unpleasant, or harmful reaction caused by an intervention related to medical products. Sometimes, medication errors can cause adverse drug reaction (Kaushal, 2015). However, it is not all medication errors that cause ADR (Alternative dispute resolution). In some occasions, medication errors can result in an adverse event, which may not necessarily be ADR. Medication errors can also cause more severe illness like the case a cannula penetrating a blood vessel resulting in a haematoma. The paper will evaluate both adverse events and adverse drugs reactions caused by medication errors.

Frequency and outcomes of medication errors

The exact frequency of medication errors is not known just like other errors. Probably, most of the medication errors go unreported. In most cases, a medical provider, physician, or a facility notices an error if it causes an ADR (Kaushal, 2015). However, some medical facilities have reported a higher number of errors. The paper will conduct surveys to determine the occurrence of these errors.

Types of medication error and prevention

In this section, different types of medication errors will be elaborated to give a clearer understanding of the medication errors. Classification of medication errors can be contextual, psychological, or modal. The contextual errors are those based on specific place, time, people, or medicine. The modal class of errors involves those that occur due to omission, substitution, or repetition. Finally, the psychological classification is based on human as opposed to the system as the source of errors (Benjamin, 2013). For effective prevention measures, clear identification of the types of errors and their classification will facilitate prevention measures.

Latent factors

These are factors that simplify the occurrence of errors while administering medications. There are system properties that make prescribers susceptible to errors. For instance, when a practitioner becomes exhausted due to working longer hours, poor support, and job insecurity, there is a higher likelihood of making errors. The paper will elaborate on these factors to present a better understanding.

Detecting and reporting errors

People who make errors and learn their actions do not report them because of fear of likely disciplinary action. A blame-free and non-punitive medical environment can help to prevent this scenario (Benjamin, 2013). A medical facility should embrace reporting of errors to enable actions before advancement of the issues to an ADR.

The paper will address the safety issues that occur in medical facilities. Since the area is wide for a single paper, medication errors that influence patients' safety will be discussed.

Annotated Bibliography

Benjamin, D. M. (2013). Reducing medication errors and increasing patient safety: case studies in clinical pharmacology. *The Journal of Clinical Pharmacology*, *43*(7), 768-783.

This source will give the methods that can be used to reduce medication errors and increase patient’s safety. It is a case study that has been done in a clinical pharmacology.

Kaushal, R., Bates, D. W., Landrigan, C., McKenna, K. J., Clapp, M. D., Federico, F., & Goldmann, D. A. (2015). Medication errors and adverse drug events in pediatric inpatients. *Jama*, *285*(16), 2114-2120.

This source will provide the effects of medication errors. These include the adverse drug reactions caused by erroneous administration of drugs.

Leape, L. L., Woods, D. D., Hatlie, M. J., Kizer, K. W., Schroeder, S. A., & Lundberg, G. D. (2014). Promoting patient safety by preventing medical error. *Jama*, *280*(16), 1444-1447.

This source will provide the methods that can be used to promote safety of patients by preventing medical errors.

Lesar, T. S., Briceland, L., & Stein, D. S. (1997). Factors related to errors in medication prescribing. *Jama*, *277*(4), 312-317.

This source will provide the factors that are likely to facilitate medication errors in prescription. It will be used in analysis of latent factors leading to medication errors.