



# PATIENT SAFETY

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## **Introduction and theoretical background**

Patient safety has improved significantly since the last 10 years. It has progressed from being a relatively insignificant topic to having a high position on the annals for providers of health care, policy makers in health care, and managers in health care as well as the public in general (4). It is, at present, essential in health care (1, 2, 3).

“Patient safety is the absence of preventable harm to a patient during the process of health care.” (4). The regulation of patient safety, according to healthcare system, is to prevent harm from happening to patients (4). The ambition of healthcare system is to provide maintenance, protection and promotion of secure care to the general public (1, 5, 6, 7). If treatment and health care are not delivered safely, then the aim of health care is not attained and much needs to be done (1, 4, 8).

According to WHO, in developed countries, about 1 out of 10 patients is estimated to be harmed during health care delivery (9). Many of health care associated harms can be prevented. Minor errors may be made by some physicians when providing health care services to patients. Not necessarily, all these errors would have harmful results. During the delivery of health care services, some forms of harm that may be encountered cannot be associated with errors. Such harms are complications from surgical procedures, nosocomial infections (hospital acquired infections) or adverse reactions of medications administered. To some possible extent, many patients may be ready to adapt to errors that may happen to them during health care delivery. Patients are most worried about harm. They wish for no harm to fall upon them while receiving health care (10, 11).

Some developing countries lack the good medical equipment and facilities in their healthcare sectors and hospitals compared to developed or industrialized countries. As such, there is higher probability of patients from developing countries being harmed in hospitals than patients in developed countries with good hospital facilities (9).

This seminar paper focuses on common errors and mistakes in primary health care and hospitalisation of patients.

**a. Primary health care**

Primary health care in the healthcare system provides medical care to people in a community. General practitioners provide these primary health cares. In primary health care delivery, General practitioners attend to many patients and need to document all problems and complains given by the patients. Common errors such as patient's imprecise description of their health problem would lead to wrong diagnosis of illness, incorrect prescription of medications and, in some cases, failure to monitor drug dosage of patients through blood tests occur in primary health care (10).

In primary health care, medication prescription is the most common and vital form of health care delivery (12, 19). A Study carried out found error in about 1 out of 20 prescriptions given by General practitioners in England. Larger numbers of these prescriptions written by General Practitioners are without errors and adequately being monitored (10, 12). Information on drug dose is very important and should be monitored through blood testing. Missing information on the drug dose or incorrect prescribing of drug dose errors are more common in elderly

patients and patients taking multiple drugs. High complications of medical care, treatment of the elderly and health compromised patients have increased the challenges of drug prescription. The probability of benefit has to balance the risk of harm for each decision taken in prescription. Taking into consideration the patient's view, the general practitioner must apply the bodies of evidences, rules and guidance by using his clinical knowledge when taking prescription decision. (20). Pharmacological harm may happen to such patients. Pharmacist should always inform Physicians when they come across such errors in drug prescription receipts. Physicians are recommended to train well in prescribing drugs and use up-to-date computer systems; to research drugs that are still in use and drugs that are withdraw from the market due to their severe adverse effects (10, 12).

**b. Hospitalisation (hospital admissions)**

Errors during administration of medications are quite common in hospital admissions (10, 13, 14, 15). Errors may be associated with improper prescription or improper method of administrating drugs to patients. Some medications maybe omitted, dose may incorrect (increased or decreased) or may not be prepared correctly. Route of administration may be wrong, the labelling or arrangement of the drugs may be wrong and therefore, the drugs may be given to the wrong patient. If health care providers are distracted or interrupted while administering medications to patients, such errors may occur. These may lead to or may not lead to probably unexpected harm to these patients (10, 13, 14, 15).

Nosocomial infection (hospital acquired infection) is one of the most common complications that patients who are hospitalised encounter. Most common infections found consist of pneumonia (possibly from ventilators), bloodstream infections (possibly from catheters and

cannulas), urinary tract infections (possibly from the use of toilet facilities or catheters) and surgical wound sites (10, 16). According to National Patient Safety Agency 2007, about 5-10% of the total number of patients hospitalised get affected in the United Kingdom (UK) (10, 17).

These complications may not be as a result of errors but malpractices by the healthcare professionals such as improper hand washing while handling patients, not disinfecting hands in between physical examination of individual patients or unsuccessfully identifying and treating of infections due to contamination of specimen. Complications may not occur immediately after a medical procedure or medical care but days to weeks later. All these complications extend the stay of patients at the hospital and cause potential harm to them (10). In comparison to some developing countries, the hazard in hospital associated infections is much higher than industrialized countries (9).

Thoughtful concerns for patients, families and hospital administrators in the hospital care include falls and fall injuries. Among hospitalised patients, falls quite frequent and in some situations, repeatedly (21). According to research, factors that contribute to falls are complex, multifactor and interrelated. Falls are major problem to elder people. In the United state, research shows that older people over the age of 65years account for about 70% of bed days in the hospitals (21, 22). Among the most common undesirable adverse events in the older hospital patient admissions are fall injuries. In comparison to the community hospitals and long-term health care facilities, evidence of effective prevention is still narrow (23). Of those who fall, statistics show that 28% have bruises and minor injuries, 11.4% suffer severe soft tissue wounds and about 5% have fractures. Around 2% suffer head traumas which could lead to subdural hematoma or death (21, 24, 26). Impairment of function, pain (mild, severe or extreme) and distress can develop in patients as a result of the injuries (21, 27).

## **Discussion**

Patient safety can be greatly improved if we learn from all the incidents that happen (10). In primary health care, it is important for General Practitioners (Physicians) and patients to establish a bond of trust, understanding and good communication. Communication is critical factor for achieving enhanced patient safety. If there is improper communication between physicians and patients, wrong information may be carried across and diagnosis may arise. General Practitioners (Physicians) should pay much attention when listening to patients. They must be observant. They should be able to communicate both verbally and nonverbally.

A General Practitioner's office should provide a comfortable and relaxing ambiance for patients. Patients should also be encouraged to open up to their physicians as they know much about their own health conditions. They should be encouraged to follow the medication doses prescribed to them. General Practitioner (Physicians) should educate patients on the adverse effects of their medication and to report whenever they have any reactions to their medications.

Fundamental skill in general practices is prescription of medication to patients. General Practitioners must always re-check the prescription before handing it over to patients. If they are unsure about the required dose of drug, they should contact the pharmacist for assistance. They should conduct frequent blood tests to monitor drug intake of patients to prevent overdose or under dose. Some pharmacological harm may be irreversible.

Avoidance of distraction and interruption by health care professionals should be a priority when administering drugs and medications to patients during hospital admission. Conversations between health care personals can be minimized while attending to patients. Personal conversations should be discussed after attending to patients. Labels of medicines and prescriptions must be read carefully. Patients taking multiple drugs could be asked to

confirm their medications if healthcare professionals are not sure. Most patients know the medications prescribed to them.

Practising good health care hygiene and taking preventive measures is very essential in the hospital wards. Physicians should not forget to wash their hands when examining patients. Before attending to each patient, hands must be washed and/or disinfected properly. In this way, the chain of transmission of infection can be broken to prevent harm to patients.

At wards in hospitals, cleaners tend to ignore commonly used equipments such as telephones, keyboards, mouse and computers. If these equipments are not cleaned efficiently microbes accumulate on their surfaces. Many a time, health care professionals are very busy or stressed and therefore forget to comply with basic but very crucial routines. Health care professionals and physicians, who forget to wash their hands or disinfect their hands, can easily transmit microbes unto patients after using these equipments. Thorough checking of the surfaces of all equipments used in the hospital is very important.

Many health care professionals also make it a point to educate their patients on preventions; the importance of prevention and their benefits to the patients themselves.

Falls are important issue for hospitals and another threat to patient safety (21, 23). A key component of fall prevention is to identify the patients who are at most risks; in this case, the elderly (23, 24). Wheelchairs should be provided for elder patients; whether the patients are totally mobile or partially mobile. Transportations from one department to the other should be done on wheelchairs if possible. Elevators and other transportation facilities should be provided to prevent falls at the hospitals and older patient hospitals. Bed rails should be attached to hospital bed to prevent falling. Patients who fall and suffer from injuries such as head trauma, fractures or long-term disabilities may also suffer psychologically. These

patients may have to go to rehabilitation units or nursing homes, stay longer in the hospital that required and would have to pay additional bills (21, 28, 29, 30). If low income patients do not health insurance providers, such situation will be very difficult for them.



## **Conclusion**

In association with health care services, prevention of harms is very crucial. Patient safety practices are most essential toward improving overall performance and quality of healthcare services (10). A lot can be done to improve weak areas and enhance strong areas in the healthcare system. Open communications, teamwork, good hygiene practices and mutual dependence are essential key components in quality health care (10).

Patient should be involved in promoting safety health care. They should be educated about the complexity in health care delivery. To create realistic care expectations, patients and the public in general need to be informed better about the risks involved in health care delivery (10). There should be improvement in controlling infection in the hospital, good management of risks and safe use of clinical equipments and improve safe clinical practices by healthcare professionals (18).

Facts are undeniable that up to 50% of patients who are hospitalised are at risk for falls. Within this 50%, almost half of patients who fall suffer from injuries. All these falls and their resultant in injuries have huge on patients. The length of stay of patients at the hospitals as well as the costs of their stay is directly affected (23).

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