



## Health Information Communication among Health Personnel for Effective Patient Safety

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### Abstract

*This paper reviewed health information communication among healthcare personnel for effective patient safety and associated benefits. The paper focused on health information and healthcare personnel, evolution of written communication and media, health information communication with determinants, patient management procedure and patient safety. This paper used secondary data from internet, journals and books. A systematic analysis was applied to streamline the diverse concepts in order to determine occasional critical views to address. Findings included better, well-targeted health information communication as pivotal for optimal healthcare services and safety of the sick; improved health care and safety of the public with relative reduction in treatment cost, man-hour wastage and length of stay in hospital by patients; and needed avoidance of unexpected imposition of extra hours of work. Additionally, well-targeted health information communication directed on patient care plays a significant part in maintaining and advancing safety of patients effectively. The study recommended healthcare givers' maximum cordial relationship with patient for improved health information communication, health institution management to train staff on new high technology equipment, strict enforcement of adherence to patient management procedure by team lead of health institution along with organizing regular updates for staff to avoid error and harm to patients, management of health institution to ensure instruments for patient diagnoses and treatment are regularly serviced for maximum functionality and medical team lead strictly ensuring instructions or directives given by consultants are passed both in written and oral forms so that no excuse is given for non-implementation.*

**Keywords:** Health information, Communication, Healthcare personnel, Patient management procedure, Effective patient safety

### Introduction

Man has been endowed with speaking ability by his creator. Society evolved with need for information sharing, known as communication. Life is a vital and necessary aspect of communication, without which many people could struggle to survive. Humans are tridimensional entities with a body, mind, and heart. Not only is communication necessary for knowledge and information to be passed between people, but it is also crucial for human relationships globally. This suggests that communication occurs everywhere in the context of interpersonal relationships, families, workplaces, the natural world, and tribal groups. Health information is varied but depend on any ill-health conditions. Nevertheless, it is concerned with accurate diagnosis of a disease, appropriate treatment by strictly following the planned patient management procedure which ensured desired patient safety outcome. Knowing one's



level of communication abilities, personality traits, cultural backgrounds, strengths, weaknesses, and improvement areas are crucial work skills, especially in the physician-patient or caregiver-client relationship in the health care industry that ensure safety of the public with relative reduction in treatment cost, man-hour wastage and length of stay in hospital by patients.

Information sharing between people, groups, and/or organizations occurs through communication. The process of communicating meaning from one entity or group to another by the use of mutually understood signs, symbols, and semiotic norms is known as communication (derived from the Latin verb *communicare*, which means "to share") (Bretherton, 2012). Many people define communication as the sharing of ideas, sentiments, and information between individuals (Ennis, 2013). Furthermore, he iterated that in an effort to establish mutual understanding, it is also a process by which meaning is ascribed and communicated, described by Gregory Bateson as "the replication of tautologies in the universe". There are verbal and non-verbal forms of communication. Communication, both verbal and nonverbal, begins at birth and lasts until death (Vertino, 2014). The information might be expressed orally or in writing; it could be intimate or impersonal; precise or general; relationship-focused, etc. (Sheldon, 2013). Given that nearly everyone engages in some form of automatic, natural communication, stressing its usefulness can be easily disregarded. Despite these importance of information communication, the global society faced the challenge of reduced communication especially in 2020 following diverse restrictions due to COVID-19 pandemic. Although there has been a focus on reducing in-person encounters because of the risk of COVID-19, it is still important to recognize and give priority to communication in the safe delivery of health care (Schnipper et al., 2021). For the most part, spoken and written words are used in verbal communication to transmit ideologies. It is crucial that verbal and nonverbal communication are in harmony, especially in stressful situations where it may be challenging to notice and comprehend changes in the nonverbal cues given by the patients with whom we may have been conversing.

The client's response to health care services is influenced by clear and kind communication, and excellent interpersonal communication is at the core of all client care. According to research (Berengere, 2017), patients who perceive and believe their healthcare provider cares about their wellbeing, who comprehend the specifics of their illness and treatment, frequently express greater satisfaction with the care they receive, and are more likely to adhere to prescribed treatment regimens. According to Charlton (2018), using a person-centered approach in interactions between patients and healthcare professionals improves care outcomes in terms of patient satisfaction, adherence to treatment regimens, and patients' health. However, it has been discovered that while competent healthcare professionals frequently think highly of their own communication abilities, patients frequently express less pleasure and ask that communication be improved. Researchers have acknowledgement on the value of interpersonal and effective communication skills, which are underemphasized in clinical training. Consequently, there is a constant need for education and awareness-raising, with a focus on the need of using efficient communication among healthcare personnel. This paper lays specific emphasis on the role of information communication in improving health care service delivery at Nigeria's sub-centre level like tertiary health care to achieve patient safety. It reviews health information and healthcare personnel, historical antecedents of communication modalities with media, effective information communication and determinants, patient management procedure as well as patient safety communication and advancement and deduce other benefits.



## **Health information and healthcare personnel**

Any information meant to prevent, treat disease condition and maintain our optimum health status is a health information. Healthcare personnel are trained workers involved in managing ill-health of and disease in an individual. Managing disease state implies diagnosis, treatment and preventive measures. Healthcare personnel include medical officers and nurses, medical laboratory scientists, physiotherapists, pharmacists, radiographers, environmental health officers, public health officers amongst other paramedics. The veterinary doctors by their practice ensure we consume meat from healthy animals along with maintaining health of our pets and domestic animals. Health information could be curative and maintenance-oriented as well as prevention-focused. In 'Public Health' view, "Health" has been defined as the state of equilibrium between man and the physical, biological, chemical and socio-cultural factors in his immediate environment. Thus, "health" is seen as successful acclimatization to the environment, but "illness" denotes a failure of acclimatization. In a similar vein, 'health' is a relevant science, study and practice of human's well-being (Legit Organization, 2019). For example, health information is diverse in obesity aetiology and management. Some scientists considered pathophysiology of obesity and think that because simple carbohydrates (CHO-sugars, fructose, desserts, soft drinks, beer, and wine, etc.) are absorbed into the bloodstream more quickly than complex carbs (pasta, brown rice, grains, vegetables, fresh fruits, etc.), they contribute to weight gain through sustained insulin production. The released insulin promotes the growth of fat tissue, an endocrine organ. The majority of scientists believe that an obesity epidemic cannot be caused by a single gene. Obesity comes from a loss of control if for some reasons the body is unable to create enough leptin product/molecule (peptide hormone) or if leptin cannot instruct the brain to eat less. (Obradovic et al., 2021; Seoane-Collazo et al., 2020).

Obesity aetiology is due to unhealthy diet and inactivity with 10 other predisposing factors: a lack of sleep, endocrine disruptors, a decline in smoking rates, a rise in the use of certain pharmaceuticals that might induce weight gain, pregnancy at a later age, epigenetic risk factors passed down through generations, and speciation for higher body mass index etc. (Yazdi et al., 2015; Saxena, 2021; CDC, 2022) The diagnosis of obesity is basically clinical in nature through the symptoms and signs with associated anthropometric measurements. Obesity is treated on the basis of lifestyle changes (usually through dietary approaches as the basis of most weight loss interventions), medication and surgery. Prevention is focused on healthy diet of taming gluttony impulse but adhere to healthy eating plan, engage in streamlined daily exercise, regular weight monitoring, consistency with healthy weight maintenance plan, joining a local weight reduction/loss group, and emulate role model with expectation from parents/other adults on adjudged better steps for avoiding obesity or overweight (World Health Organization, 2021).

## **Historical antecedents of written communication modalities and media**

Through the ongoing advancement of technology, communication methods and concepts have changed over time. The fields of communications psychology and "media psychology" have advanced (as an emerging field of study). Advancements in written communication include three categories of "information communication revolutions", viz. utilization of cave paintings with graphic symbols carved into immovable rocks that eventually started to take on standardized and reduced forms; written communication on mobile media like papyrus, clay, wax, and paper; and information transfer through 'electromagnetic irradiation' wavelengths under control, such as airwaves, microwaves, and infrared, as well as other electromagnetic frequencies (Greenhalgh et al., 2018).

This communication collaboration and cooperation are made possible by the process, which calls on a wide range of interpersonal processing abilities, including listening, observing,



discussing, inquiring, analyzing, gesturing, and assessing. It thus serves to improve patient safety. So, there is a place for spoken communication in healthcare settings. Speaking entails much more than just sharing words; it also involves taking the time to listen, connect emotionally, foster relationships, consider regional practicalities and eventualities, and identify and respond to a variety of needs. According to academics, the fourth domain of communication—aligning and responding—is essential for fostering the relationship between the doctor and the patient (Iedema et al., 2019). Such nurturing creates a "shared ground" for the discussion of delicate and intimate issues as well as mutual trust and confidence. When considered collectively, these domains support some more well-known aspects of safe communication while also broadening our understanding of healthcare communication beyond information exchange to take into account factors like the standard of the overall healthcare environment, people's listening skills, and interactional dynamics in the furtherance of interpersonal orientation.

### **Effective information communication and determinants**

Everyone communicates, but not everyone takes the time to do it effectively. Communication is a fundamental aspect of the human condition. Particularly in the practice of health care, communication has content and value, and in order for it to be productively effective, attention must be paid to its core. How the two sides perceive the communication pattern will determine the qualities of the caregiver-patient relationship. Negative stereotypes and attitudes are typically the result of inefficient communication since the two-way capability of communication is not recognized and followed. Effective communication is not unidirectional. Berengere (2017) joined in claiming that good communication is a two-way dialogue between patients and providers, or by definition, a two-way road where both talk and are as well listened to without either interrupting, supports this viewpoint in regard to healthcare delivery. Both are able to fully grasp and understand what the other is saying and both are able to ask clarification questions, express opinions, and exchange information (Boykins, 2014). As a result, it entails interaction where each transmitter also serves as a receiver, and vice versa (Kourkouta, 2011). The words that patients and caregivers choose to use during a care interaction have a significant impact on how well they can comprehend one another in healthcare settings. For instance, doctors utilize clinical and scientific jargon to communicate information precisely and properly with other clinicians, yet utilizing these terms with patients is inappropriate because non-medical professionals may find these terms incomprehensible (DiPrete & Lori, 2015). When patients communicate verbally with caregivers in their native tongues, accents, or terminology, it can be perplexing and upsetting for the caregivers since it can be very challenging for caregivers from different parts of the country to understand what the patients are saying. Therefore, the available care provider would need to pay more attention in such circumstances, especially where there is no substitute nurse who might comprehend such patients readily and better, in order to truly comprehend the patients' intonation.

Health staff convey services by providing patients with both verbal (via speaking) and nonverbal (through acting, demonstrating, touching, doing, etc.) medical treatment. The majority of the time, medical professionals and healthcare specialists concentrate on addressing the requirements of the human being as a bio-psychosocial-spiritual person. This position corroborates Lambrini and Loanna's (2014) assertion that providing health care requires not only scientific understanding but also excellent interpersonal communication, intellectual prowess, and technical know-how. In our attempt to co-exist as individuals, groups, cultures, religions and countries, the "how, what, why, and where" of the communication method we choose can either degrade or elevate us. Raya (2016) posited that what one says, how one says it, and what one truly means by it are all immensely and equally



essential, and they all have the potential to change one's life. According to Papadantonaki (2016), this incidence is also undoubtedly present in healthcare settings. The author asserts: "the impact of the 'how, what, where and when' of communication could be extremely detrimental to both the health of patients and healthcare provider in health care settings". Papagiannis (2010) wanted verbal and non-verbal communication to agree, for in ill-health distress there has usually been difficulty seeing and understanding the change in the non-verbal communication from patients with whom we might be communicating. In recognition of a scholar's view that "Caring is health staff, and health staff is caring" implying that caring and health staff as held or believed by Watson (2018) that health professionals are capable of projecting a human-to-human interaction in which a "medical officer" both influences and is influenced by a "patient" in accordance with that knowledge. In light of the above and in order to attain the concepts of "health staff is caring" and "patient-centered care," greater attention should be put on the development of effective relationships among other health staff skills, which will improve patients' satisfaction with their care.

Words are said to express only a portion of what is being said; the remainder is transmitted by attitude, tone, and gestures. Interaction could be improved by sitting at the same level as the patient, smiling, and paying careful attention. The majority of nonverbal communication techniques and interpretations depend on the unique cultural practices of the communicator and the recipient, respectively. This assertion is supported by the fact that, in the majority of western nations, making direct eye contact can be seen as a sign of positive regard and respect, whereas decades ago, in some parts of Nigeria, it might have been seen as disrespectful of the elderly or as sending flirtatious or sensual signals to the opposite sex. The health personnel's ability to communicate with patients would be improved by having a rudimentary understanding of their cultural backgrounds. Warm greetings and/or insightful questions from the caregiver can frequently relieve the patient's anxiety and improve communication. These small gestures don't take much work but have a big impact. In the end, Ennis (2013) stated that it is important for caregivers to remember that all non-verbal cues convey information. When used effectively, communication contributes to the delivery of clear, accurate, consistent, and easy health staff services, ensuring both patient satisfaction and the protection of the health workers. The entire process occurs within a context made up of the physical world, social and cultural values, and mental condition (Verderber, 2018). The message transmitted and the message received frequently differ.

It has been discovered that individual variables and personal views influence how communications are decoded. This means that the receiver's interpretation of what they hear might not match what the sender intended. It has also been suggested that in the field of medicine, healthcare professionals have a duty to speak on behalf of patients who may be unable to speak for themselves or advocate for themselves. Unfortunately, many people lack the ability to influence others, work effectively with others, and effectively advocate for their patients, especially newly graduated healthcare provider (e.g. staff nurse) and student (Jarrette & Payne, 2015). Evidence also suggests that healthcare professionals who have been in practice for a long time have a high tendency to communicate poorly because they may have grown accustomed to a particular style of speaking and are no longer aware of how their personal characteristics affect their ability to communicate professionally (Radsma, 2014). It has long been known that nurses and doctors commonly give different accounts of the same patient scenario. The condition of a patient could be described simply yet precisely by nurses. Medical officers may speak in coded pattern for quick explanations of clinical findings. According to Wojciechowski (2019), this communication style mismatch makes it simple for miscommunication and confusion to occur. The message or intention being delivered can be delayed or distorted by obstacles to efficient communication. The communication process





may fail as a result, or it may have an unfavorable effect. These include gender differences, political correctness, information overload, filtering, selective perception, emotions, language, and silence. This also involves a lack of "knowledge-appropriate" communication, which happens when someone employs jargon, confusing or difficult terminology (such as those used in the medical or legal fields) or descriptions of an environment or a scenario that the recipient does not understand. The message or intention being delivered can be delayed or distorted by obstacles to efficient communication. The communication process may fail as a result, or it may have an unfavorable effect due to barriers like attitudinal barriers, physiological barriers, gender barriers, fear of being criticized, technological multi-tasking and absorbency, system design, pattern of phrase ambiguity, linguistic capability of someone, and bypassing.

In healthcare, poor communication skills continue to be a major problem that calls for greater awareness and remediation. Understanding the patient's feelings and how they express them is necessary for effective communication. Therefore, successful communication requires the medical officer or nurse to have the necessary abilities and a real desire to comprehend the patient's problems. According to Papadantonaki (2016), simply comprehending the patient is insufficient; the medical officer must also communicate with the patient in a way that is acceptable, clear, and understood. The World Health Organization (WHO-2010), the European Union (EU) Brussels (2014), and the Department of Health (DH) London (2014) have all worked to raise awareness of and place an emphasis on the value of excellent patient-focused communication between healthcare providers and patients. Patient happiness, inclusive decision-making, and top-notch health services have all been made possible; thanks in large part to person-centered communication, according to McCabe and Timmins (2016), who also advocated this idea as an example of best practice in health care delivery system. According to the WHO (2019), by its qualitative content analysis, patient assistance must be provided gradually, and the healthcare provider must constantly ensure that the patient has accepted and grasped the message.

### **Patient management procedure**

Basically in a hospital set up, patient management procedure requires diagnosing, treatment and preventive steps. Usually diagnosis may require clerking to determine clinical history (symptoms), carrying out physical examination to elicit signs of a disease condition and undertaking ancillary laboratory investigation to conclude findings on the disease state. Depending on a particular disease condition specific modality of treatment is commenced. Furthermore, the patient and relatives are counselled for preventive purposes. Important public health programme areas include those for HIV/AIDS, tuberculosis, and malaria; neglected tropical diseases; behavioral risk factor surveillance; safe water initiatives; and smoking and health programmes. These areas encompass both infectious diseases and environmental and non-communicable diseases and require vigorous preventive measures. As the relative wealth of their populations rises and lifestyles change, many middle-income countries have seen a shift in the burden of disease. Countries that once viewed infectious diseases as their biggest public health challenge now struggle with non-communicable diseases, particularly those linked to tobacco use, obesity, cardiovascular disease, and cancer (WHO, 2011). On this note, understanding behavioural risk factors and putting interventions in place to change such behaviours and encourage healthy lifestyle choices must become the top goals for public health programmes. Major public health objectives, such as those specified by disease-specific global health efforts for HIV/AIDS, tuberculosis, malaria, childhood vaccinations, and others, have been the focus of health system strengthening (Bloland et al., 2012).



The patient-centred medical home (PCMH) models are a manner of patient management that anthropological approaches could be used to assess and improve with an expanding toolbox of techniques (Goldman & Borkan, 2013). A primary care strategy called the PCMH seeks to enhance patient and provider satisfaction while lowering costs and raising quality. The PCMH models place a strong emphasis on quality and safety-driven care that is patient-centered, thorough, coordinated, and easily accessible. Participant observation, in-depth interviews, focus groups, and textual analysis are the four typical qualitative anthropological data collection techniques. Healthcare professionals gather to examine an issue, record their findings, and debate possible improvements.

### **Patient safety communication and advancement**

The focus of the field of patient safety is on preventing, reducing, reporting, and analyzing errors and other sorts of avoidable harm that frequently result in negative patient events. Before the 1990s, when numerous nations reported sizeable numbers of patients hurt and killed by medical errors, the frequency and scale of preventable adverse events, also known as patient safety incidents, experienced by patients were not well understood. The World Health Organization (WHO) describes patient safety as an endemic concern since healthcare errors affect one in ten people globally. Patient safety has in fact become a separate healthcare field, underpinned by a young but developing substantial evidence. The science of patient safety is informed by a sizeable trans-disciplinary body of theoretical and research literature (Aiken et al., 2014). In order to help patients achieve their ideal health outcome, a healthcare provider must ensure that the patient's safety is not in danger. The promotion and protection of patient safety are greatly aided by the practice of efficient communication. The avoidance of adverse events and the response to adverse events are the two areas into which communication with regard to patient safety can be divided. Effective communication can help avert negative events, whereas inadequate communication can increase the likelihood of these occurrences (DiCuccio, 2015). To attain the best results for the patient's safety, better and more effective communication techniques must be used if inefficient communication causes an unfavorable incident. Healthcare personnel can communicate verbally and nonverbally with patients as well as employ proper communication technology to their advantage in order to maximize patient safety. Almeida (2019) advanced the idea that good communication enables us to identify dangers and establish patient safety parameters. Similar to this, Ricciardi and Shofer (2019) emphasized the need of involving patients in their care by having an open communication with medical personnel regarding their diagnosis and treatment. Patients who are actively involved as partners can recognize adverse events, guarantee safe care, and advance a safety culture.

When a mistake or blunder is made, as in other businesses, individuals search for someone to blame. This may seem normal, but it fosters a blame culture in which "who" is valued above "why" and "how." In a society where there is no blame or culpability, an occurrence is investigated for its underlying reasons rather than merely its participants. The delivery of healthcare is moving in the direction of a patient safety culture. This transfers knowledge from fields like aviation, shipping, and industrial production to the field of healthcare. If those engaged are aware that their jobs are not in jeopardy, they are considerably more inclined to be honest when examining and analyzing an occurrence. This makes it possible to create a far more accurate and detailed picture of the facts around an incident. Root cause analysis can then follow. An unpleasant or near-miss occurrence frequently involves a number of causal elements. Effective modifications that will stop a repeat of the occurrence can only be done once all the underlying causes have been identified (Burke & Onwuegbuzie, 2014). The safety of patients depends on effective communication. In order to communicate, information must first be made accessible on any operating site, but notably in the case of



mobile professional services. The process of communicating goes on as administrative burden is reduced, operating staff is released, and model-driven commands are made easier to follow, enabling compliance to a well-executed procedure that is finished with a qualified minimum of required feedback. Alharbi and others (2014) Another crucial method for making sure the recipient understands the message that was sent is closed loop communication. Situational awareness, or knowledge of a patient's present state and expected course of care, is necessary for sharing patient-specific health information during handoff.

The drop of registered healthcare providers has recently been offset by an increase in work hours and overtime shift responsibilities for healthcare providers (e.g. medical officer or registered nurses, RNs). Nearly 400 registered nurses' logbooks showed that roughly 40% of the 5,317 work shifts they reported were longer than twelve hours. When shifts last longer than 12 hours or a healthcare worker works more than 40 hours in a week, errors are more likely to happen. The quality of patient care is negatively impacted by overtime shifts, according to studies, while some researchers "who investigated the safety of 12-hour shift duties did not find increases in medication errors." The mistakes that these researchers identified were "lapses of attention to detail, errors of omission, compromised problem solving, and errors in grammatical reasoning and chart reviewing." These are known to be caused by reduced motivation as well as fatigue. Overworked healthcare provider is a major safety concerns for the health of their patients. Working consecutive shifts, especially at night, is a major contributor to hospital healthcare provider weariness. "Less sleep, or fatigue, may lead to increased likelihood of making an error, or even the decreased likelihood of catching someone else's error." Putting a cap on working hours and shift changes could "reduce the adverse effects of fatigue" and ultimately improve the standard of patient care (Nilsson, 2018).

Despite the aforementioned argument or thought that extra working hours often weaken the individual to decline in output, it should be recalled that consistency on a particular duty leads to dexterity moreso as patient care or health care services in general is not a productive sector which churn out physical items in the factory. Therefore, application of the above view in services occupation should be done with caution. It is only abrupt increase in time for working duration that could easily lead to errors. Remember that after sometime the worker could adapt to the duty schedule in which the expected errors might not occur. Similarly, the fact that doctors and nurses work in shift, any little additional time could not immediately cause undue risks of high magnitude! Consider another scenario where a care-giver does his/her work with passion; could overtime lead to mistakes or errors? Certainly, that will not arise. Furthermore, with Situation, Background, Assessment, and Recommendation (SBAR), a dependable and validated communication tool, shows an improvement in communication among healthcare professionals, a decrease in adverse occurrences in the hospital setting, and the advancement of patient safety (Shahid & Thomas, 2018), and the likelihood of adverse outcomes in patients' health care are reduced to the barest minimum. In addition to ensuring that patients receive the best care possible, communication among healthcare workers also helps to avert any potential problems. Health care practitioners must communicate effectively in difficult situations. A variety of methods, devices, and strategies are employed to enhance communication. Any team should have a defined goal, and each member should understand their responsibilities and participate as needed. Regular feedback should be given in order to improve the level of communication amongst those engaged. Briefings, debriefings, and closed-loop discussion are all strategies that help teams stay focused on their objectives and make sure that everyone is aware of both the goal and the steps they will take to get there. Briefings foster a good atmosphere for patient safety by reducing interruptions, preventing delays, and fostering positive connections.





It is only possible to exercise and apply the health care process, which is a scientific approach, through discourse, interpersonal interactions, and specialized verbal and nonverbal communication abilities (Raya, 2016). To create a unique plan of treatment, the physician consults relevant clinical research on the reliability of diagnostic procedures as well as the effectiveness and security of therapy, rehabilitation, and prevention. He/she thus apply evidence-based medicine termed "best practices" (clinical practice guidelines) for specific medical conditions (Kirk et al., 2017). Technology for patient safety deployment, e.g. specific patient safety software and watch out for "e-iatrogenesis" is targeted for patient safety. A hospital, clinic, or health system can record incidents such as falls, medication errors, pressure ulcers, near misses, etc. using specific patient safety software, which is a standardized, modular technological solution. Unfamiliar and novel process faults frequently occur when these systems are subjected to the additional strains brought on by the spread of new technology. (Hofstede, 2011) Causes of healthcare error in context of patient safety are human factors, medical complexity, system failures etc.

### **Conclusion**

Effective communication is still a crucial element in fostering better interpersonal connections, which has a knock-on effect on patient outcomes, speedy healing, and improved quality of life. An evidence-based practice standard known as "safety huddles" enables staff to share safety information, foster empowerment, and foster a sense of community. These factors together create a culture of collaboration and civility that raises awareness among all staff members of the importance of preventing patient harm through the promotion of patient safety. The quality of communication between caregivers and patients has a significant impact on how they both see the care provided as well as allowing top management and employee agreement on working hours to avoid unexpected imposition of over-time duty capable of increasing mistakes at work. The planned patient management procedure ensured desired patient safety outcome, relative reduction in treatment cost, man-hour wastage and length of stay in hospital by patients.

### **Recommendations**

Considering the need for adequate and proper health information communication to enable patient safety, the researchers recommended as follows:

1. Health institution management should encourage and strictly monitor healthcare-giver relationship with patients as this would enhance adequate health information communication.
2. The authority and team leader of health institution should organize regular updates for staff on procedural case management and ensure adherence to avoid error and harm to patients.
3. The management of health institution is enjoined to ensure instruments for patient diagnoses and treatment are regularly serviced for maximum functionality/efficiency.
4. The authorities of health institutions should give training to their staff on use of new, high technology equipment.
5. The management of health institution should allow specialists to apply any recent technology so-developed for maximum success in patient management and safety.
6. Medical team lead should strictly ensure instructions or directives given by consultants are passed both in written and oral form so that no excuse is given for non-implementation.



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