# Patient And Bystander Perception On Their Safety
During Hospitalization At The Likas Hospital

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How do people perceive safety? While news of street crimes, accidents, and natural calamities that threaten public safety create paranoia among the majority of the populace, reports on accidents in hospitals: misdiagnosis, malpractice, and random instances of hazards diminish public confidence on hospitals and being in hospital setting where health and safety matter.
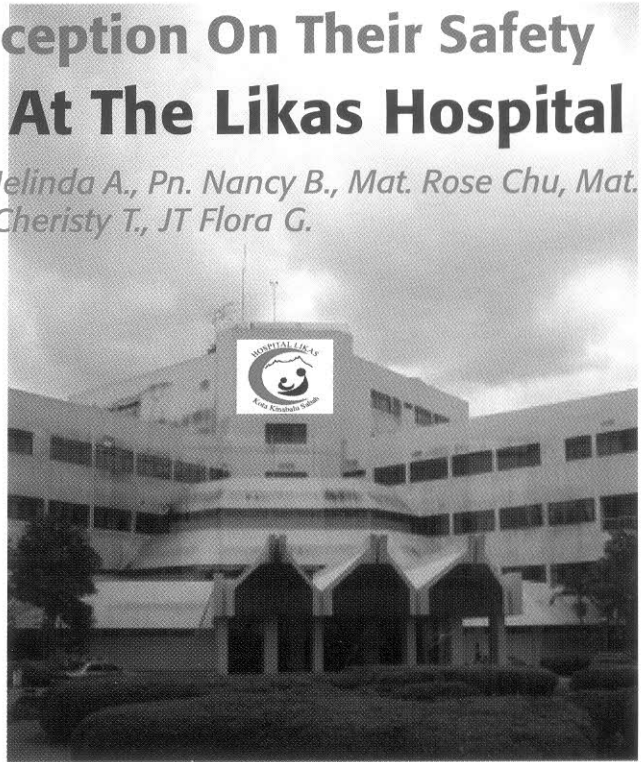
Everyone needs a safe environment - be it for himself, his family, or the persons around him. Definition of safety is subjective and varies from person to person. For example, there are those who define safety as keeping away from accidents or natural disasters, whereas some others presume that safety is being attuned to his environment and society; secure in his home; following the rudiments of nutrition, well-treatment , and clean living; having religious faith and sound philosophy; and other various ways that gauge safety .

Safety is emphasized by everyone in order to ensure a tranquil environment, free from any form of accidents and sufferings. However, this quest for safety trickles down even to areas where safety matters.

The hospital is supposed to be one of the places where safety thrives. However, several factors come into play, which influence the level of safety of patients or their relatives during hospitalization. Being safe in a new environment, from slippery floors, high bed, usage of high technology machinery, temperature, among others, are the general concerns; while falling off a bed or being prescribed with the wrong medication are among the particular concerns.

Patient assumption of being unsafe during hospitalization may lead to patients' lack of confidence, a sense of anxiety, as well as doubt regarding the hospital services. Probable consequence of this would be patients and public complaint that could affect the reputation of the medical organization.

The Study: A Brief Background

Given this situation, we conducted a research at the Likas Hospital (also called Hospital Likas) in Sabah State. The study aims to explore patient perception on their safety during hospitalization. The result of which will be used as a guideline for the enhancement of safety procedures in hospital and mitigate the quality of nursing care in terms of patients' safety during hospitalization. Below are the specifics of our study:

1. **Objectives:**
   General Objective: To assess patient / bystander perception on their safety during hospitalization
   Specific Objective: To explore patient perception on their safety during hospitalization; increase awareness of patients safety during hospitalization;

and improve the level of patient safety at the Likas Hospital

2. Significance of Research

Professional: Increased quality of nursing care
Client: Satisfaction and confidence towards the services at the Likas Hospital
Organization: Promote positive image and job satisfaction among the Likas Hospital staff.

3. Operational Definition

Hospitalization: Patients who are admitted at the Likas hospital for more than 12 hours (*Kozier,et.al., 2005*)

Patient : A patient is a person who is awaiting for or undergoing medical treatment and care. The term *Patient* comes from the Latin word *Patiens*, meaning "to suffer" or "to bear". The person receiving health care is called a *patient (Kozier, et.al., 2005)*.

Bystander: Family members / caregivers who tend to the patient or accompany the patient during hospitalization (*Brown, 2002*)

Perception: An ability to notice a particular way of looking at or understanding things (*Steel, 2003*)

Patient safety: Freedom from accidental injury when interacting in anyway with health care system, in terms of problem environmental, mental, psychosocial within a hospital community. *Ball, J & Bindler, (2003)*

Framework of the Likas Hospital Study

The study, which was designed to be cross-sectional was conducted at Kenanga1, Kenanga 2, Kenanga 3, Kenanga 4, Melur 1, Melur 2, and Melur 3 wards of the Likas Hospital (Sabah women and children's Hospital). The respondents consisted of all patients admitted for more than 12 hours, from December 1 to 30, 2008. Moreover, Proper pre-research procedures were undertaken, such as obtaining Letter of Approval from the hospital director and informed consent from the respondents. Quota sampling method was used; sample size comprising of 30% of admitted patients and bystanders alike who were in the adult and pediatric wards during data collection were selected for this study. Majority of the respondents were female between the ages 15 to 50 (The Likas Hospital is a woman and children hospital).

Self-administered questionnaires indicating five sections with 35 sub-items: Respondent profile; Safety issues on hospital environment; Safety issues during hospitalization; Safety aspects on social and mental; Awareness toward patients' safety during hospitalization, were used as research tools. As a result, a mean of 83% indicated satisfaction with the "safety of the environment of the hospital". "Professional competency of the healthcare providers" obtained a mean of 83%. A mean of 71% was scored for "Awareness of the safety aspects on social and mental", while 94% of the respondents indicated their understanding the "Awareness towards patient's safety during hospitalization" section.

In preparation of the main study, a pilot study was conducted in November 1 to 7, 2008, and participated in by 10 respondents. Data collection commenced from January 1 to 31, 2009. The SPSS version 13 software was utilized for data analysis; data was presented using descriptive statistics.

TABLE: Findings of the Study

Section A:

No	Items	Frequency and Percentage
1	**Age:**	
	Minimum	15 Years
	Mean	29 Years
	Maximum	50 Years
2	**Yours are :**	
	Patient	63.4 %
	Bystander	36.6 %
3	**Race:**	
	Kadazan / dusun	35.8 %
	Melayu	15.6 %
	Cina	4.5 %
	Bajau	25.5 %
	Lain-lain	18.6 %
4.	**Sex:**	
	Male	9.0 %
	Female	91.0 %

5	Highest educational level:	
	No schooling	7.5%
	Primary school	15.1%
	Secondary school	62.3%
	Tertiary level	15.1%
6	**Address:**	
	Rural	49.1%
	Urban	50.9%
7	**Wad:**	
	Kenanga 1	112 (26.4%)
	Kenanga 2	62 (14.6%)
	Kenanga 3	27 (6.4%)
	M1	75 (17.7%)
	M2	21 (5.0%)
	M3	39 (9.2%)
8	**How many time have been warded?**	
	First time	59.7%
	Two and more	40.3%

Section B: Safety environment of the hospital.

No	Items	Safe	Unsafe	Unsure
1	Hospital stairs	71.2%	4.7%	24.1%
2	Lifts	85.8%	5.7%	8.5%
3	Wards doors	93.9%	2.8%	3.3%
4	Patients Bed	92.9%	3.3%	3.8%
5	Ward toilet	89.6%	7.5%	2.8%
6	Ward windows	93.2%	3.8%	3.1%
7	Hospital floor	89.4%	4.0%	6.6%
8	Clear warning signage	89.9%	1.7%	8.5%
9	Hospital environment			
	9.1. Proper ventilation	82.3%	5.2%	12.5%
	9.2 Proper lighting	86.8%	6.4%	6.8%
	9.3 Clean environment	86.8%	6.1%	7.1%
	9.4 Clean medical instrument	91.3%	3.3%	5.4%
	9.5 Arrangement of ward furniture's	88.2%	5.0%	6.8%
10	Car park	73.6%	8.0%	18.4%
11	Public toilet	89.6%	7.5%	2.8%
12	Visitors room (Station)	71.7%	3.8%	24.5%

Mean: 83 %

Section C: Professional competency level

No	Subject	Safe	Unsafe	Unsure
1	Nurses	93.9%	0.9%	5.2%
2	Doctors	96.5%	1.4%	2.1 %
3	Equipments:			
	3.1 Wheelchairs	96.5%	2.1%	15.1%
	3.2 Incubators	71.9%	1.4 %	26.4%
	3.3 Patients trolley	78.5%	1.2%	20.3%
4	Procedures:			
	4.1 Surgeries	71.7%	1.4%	26.9%
	4.2 Drug administration	87.5%	0.9%	11.6%
	4.3 Intravenous administration	79.0%	1.9%	19.1%
	4.4 Injections	87.7%	2.1%	10.2%
	4.5 Monitoring of vital signs	89.6%	2.8%	7.5%

Mean: 83%

Section D: Social and mental safety aspect

No	Subject	Safe	Unsafe	Unsure
1	Presence of too many visitors during Visiting time	62.5%	14.4%	23.1%
2	Security personnel on duty	71.5%	6.8%	21.7%
3	Presence of bystanders for other patients.	75.9%	5.7%	18.4%
4	Supportive service personal	80.9%	5.4%	13.7%

Mean: 71.7%

Section E:
Safety awareness within the Likas Hospital

No	Subject	Safe	Unsafe	Unsure
1	The nurses are able to build up confidence regarding patients' safety	91.5%	2.5%	6%
2	You are discouraged to bring personal valuables while hospitalized	92.9%	3.8%	3.3%
3	For the client's safety, the main wards doors are closed at all times except during visiting hours	97%	1%	2%

4	Visiting hours are strictly followed so that medical and nursing procedure can be carried out smoothly	93%	4%	3%
5	You are required to follow instructions of the medical staff while hospitalized	96%	2%	2%
6	You are free to use the hospital stairs, but in cases of fire /emergency please use the hospital stairs	95.0%	2.8%	2.2 %
7	Practice of washing hands reduces and prevents infection	97.9%	1.4 %	0.7%
8	The availability of call bells at bedside or toilet is important in emergency cases	94.3%	2.6%	3.1%

Mean: 94.7%

Defining Patient Safety

Patient safety involves minimizing the risk of error to patients. That may appear simple but in reality the reasons for such errors are a complex combination of system, process, and human factors, which are difficult, if not improbable, to manipulate. Identifying and addressing the cause of an error and implementing change to prevent them can be complicated. It is also important to recognize that errors can occur even in the best run systems in the best organizations *(NHS Scotland, 2007)*. Kozier, et al *(2005)*, states that patient safety has been a major issue in hospitals. Most of the complaints pertain to the patients' dissatisfaction regarding their safety during hospitalization.

Further, so-called medical errors, which according to Kozier, et al *(2005)* are adverse events in patient outcomes consider, likewise appall patients for their safety, which can also be defined within the context of avoidance and prevention of unanticipated and undesirable patient outcomes; and being free from accidental injury within the healthcare and hospital community. Incidences of medical errors, according to Vincent, et al *(2001)*, have cost the National Health Service of UK (UK NHS) around £2 billion a year,

and an additional £1 billion attributed to healthcare acquired infection. Despite this, it is important to note that not all adverse events are due to or resulting from errors. Distinguishing errors, such as a patient receiving the wrong medication, from circumstantial events, such as a patient has a bad reaction to a medication or treatment, which he has not previously been prescribed. In the latter example, while the drug reaction should be classified as an unanticipated adverse event, it should not be considered an error *per se (Kozier et al. 2005)*.

The goal of warranting patient safety is to reduce, if not eradicate, the likelihood of incidence of unanticipated adverse events, regardless if it is a medical error or not. Developing protocols to affect the abovementioned, as well as to understand the way health care is delivered. The National Survey on Consumers Experiences on patient safety *(2004)* shows that nearly 53% of the respondents reported that they were very or somewhat worried about the safety of the medical care that they and their family received. In the said survey, health care safety ranked third, preceding other variables such as 'being injured in a car crash', and 'the quality of air you and your family breathe'; but slightly leading from "food safety and water quality" concern. Moreover, 48% of the respondents reported that they were very or somewhat worried about the medical care they and their family received.

What the Findings Tell Us

Safety of patients depends on the skills, attitudes, and actions of health care staff, as well as the systems and processes enforced in their workplace. Protecting patients and staff involves reporting incidents and near-misses that could indicate which areas are flawed. *(NHS Scotland, 2007)*. In our practice, we should be able to report all incidents and near-misses and know that action will be taken to minimize recurrence of such happenings. All healthcare professionals are required by their national regulatory bodies to maintain and improve the quality of their work and promote patient safety. As stated by Donaldson *(2006)*, promoting patient safety also includes:

- Respecting the patient or client as an individual
- Co-operate with others in the team

- Maintain professional knowledge and competence
- Act to identify and minimize risk to patients and clients
- Being open about error and its frequency
- Speaking up when you consider a patient to be at risk
- Reporting incidents and near-misses
- Learning lessons and implementing improvement as a team
- Adhere to local protocols and national guidance and standards
- Acceptance that the needs for support is not a sign of weakness
- Using risk assessment tools in the care of individual patients
- Regularly assessing risks and taking appropriate action

All healthcare staff should be informed about and trained on patient safety issues and incident reporting as part of risk management requirements.

Patient's Predilection: Are Hospitals Safe?

Robert (2005) asserts that patient care should be safe and that errors resulted not only from the provider's carelessness and unique circumstances, but also from flawed processes and systems. Furthermore, Robert (2005) stresses that stories of medical errors capture reader's attention with the perception that the healthcare environment is only 'moderately' safe – while safer than food handling, is less safe than airline travel or the workplace (National Patient Safety Foundation, 1997) - and disseminates an image of hospital as a likely dangerous place. Consequently, patients, exposed to media accounts of medical errors that occur in hospitals, will be anxious as they make a hospital visit: Will something adverse, even disastrous, happen to me? (Robert, 2005 cited from Rein, 2004). Hospital personnel must make steps to counter initial negative feelings of discomfort or lack of safety to increase patient comfort levels while in the hospital. They must make actual care safer, and personnel must communicate to patients what is being done to assure their safety.

Over the past few years, the advocacy for patient safety has urged the hospitals to improve safe practice standards. Hospital efforts are ongoing, and there is much more progress to be achieved. Surprisingly, to date, there is minimal participation of health care consumers in the patient safety movement (Hatlie, 2004). Yet, the patients are the ones who would benefit the most if the degree of safety in hospitals is improved.

To encourage participation of patients in the safety movement, their perception on what safety is during hospitalization may be evaluated and utilized in determining the kind of persons, places, and processes to be considered when assessing current practices and designing patient safety initiatives. Further, these can serve as reality check for respective hospitals interested in improving their culture of safety.

Processes of Patient Safety

In this study that we conducted, we examined the following issues:

- How do patients perceive the safety and security within an in-patient hospital milieu?
- Do such perceptions vary in predictable ways?

To obtain findings, we probed several specific factors – the processes of patient safety to safety improvement can be done to increase the degree to which patients believe that their hospital visit will be safe and secure.

A. Physical

i) **Environment:** environmental factors such as noise, air quality, lighting, toxic exposures, temperature (humidity), and images have been scrutinized for their effects on both patients and workers (Advanced Practice Nursing Journal, 2005). It was further stated that properly designed and maintained environments can likely reduce a number of risks, including fire hazards, chemical exposures, infectious agents, contaminated air and water, and other environmental agents. Air filtration systems and air exchanges reduce the amount of airborne pollutants. Waste disposal systems can control typical components of institutional waste (medical waste, mercury, batteries, solid waste, surgical specimens, blood, and body fluid).

ii) **Procedures:** the complexity of many procedures presents likelihood for medical errors and at the

same time pauses threats to patient safety *(George, 2008)*. He further relates that a procedure involves the 'hands-on' execution phase during which the technical aspects of the procedure are actually performed. Procedural error pertains to events occurring during the preparation, performance, or post-performance *(Hall, 2001)* of medical procedures.

B. Mental/Stress

The patient who is entering a hospital is under many emotional and psychological pressures. Fear of death, disfigurement, pain, or a prolonged illness, and loss of control over the surrounding environment are just a few of the emotional and psychological concerns being faced. People react to stress in many ways. According to Paik *(1997)*, stress during hospitalization is due to the patient's adaptation to a new environment, isolation from friends, limitation due to illness, and anxiety towards the treatment environment and nursing care.

C. Psychosocial

i) Separation from spouse/family
ii) Isolation from other people
   - Having an unfriendly roommate
   - Not having visiting friends
   - Being under the care of a medical staff who is rushing to talk or more importantly, listen.
iii) Lack of information
   - Either having questions that are not satisfactorily answered by staff members or lack of it
   - Having nurses or doctors who talk too fast. Nervousness and anxiety often make it difficult to fully concentrate on what is being said. Needless to say, patients often have plenty on their minds, so it is crucial that we explain things patiently and slowly and be prepared to repeat instructions and explanations. We do not assume that because we have explained something once, our job is done
   - Not knowing the reasons for (or the results of) treatments *(Medical Education Division, Brookside Associates, Ltd. 2007 http:// www.brooksidepress.org/Products/Nursing_ Fundamentals_1/lesson_1_Section_3.htm)*

The Factors Up-Close

There are several other relevant findings from various authoritative bodies that reinforce our own findings , regarding factors that can affect patient's perception on safety in hospital and probable consequences should safety aspect be compromised:

A. Human factors
   - Poor interpersonal communication with no effective interaction between patients and staff, as well as between health professionals, leading to communication failures
   - Variations in healthcare provider training and experience, fatigue, depression and burnout
   - Dissimilar patients, unfamiliar setting among unfamiliar faces *(National Patient Safety Foundation, 2002)*

B. Medical complexity
   - Complicated technologies.
   - Powerful drugs.
   - Prolonged hospital stay.
   (WHO, 2007)

C. System failures
   - Poor communication, unclear lines of authority of doctors, nurses and other care provider
   - Complications increase as patient-to-nurse staffing ratio increases
   - Environment, design factors or lack / improper signage
   - The impression that action is being taken by other groups within the institution
   - Infrastructure failure. According to WHO, 50% of medical equipment in developing countries is only partly usable due to lack of skilled operators or parts. As a result, diagnostic procedures or treatments cannot be performed, leading to substandard treatment.

(Joint Commission Annual Report, 2007; WHO 2007 - http://www.emro.who.int/mei/patientsafety1.html; World Health Organization - http://www.who.int/ patientsafety/en/index.html.2008)

D. Detriments of compromised patient safety
   2.6.1   Increased patient complaint

2.6.2 Medical legal lead to stress among health care provider

2.6.3 Poor standard of nursing care

2.6.4 Prolonged hospital stay lead to higher risk of infection, and thus increasing hospital and patient cost

2.6.5 Increased bed occupancy rate

2.6.6 Negative hospital image

(Kaiser Family Foundation, 2004)

Other Related Studies

A recent study authored by Thomas E. Burroughs, et.al, and published in January 2007 by the Joint Commission on Accreditation of Health Care Organizations aims to better understand patient definitions of and concerns about medical errors during hospitalization. The study, which was conducted in the State of Texas was participated in by 1, 656 patients, who were randomly selected from among the discharged patients from 12 acute care hospitals. Data weighting techniques were applied to make sure that the results were representative of the entire hospitalized population, not only in terms of age and gender but also in terms of proportionate volume of patients discharged from each hospital within the system during the span of the study. The Burroughs study confirmed what has also been demonstrated by other studies (and which is only logical): that patient's overall perception of health care quality and safety is directly linked to patient satisfaction and willingness to recommend the facility to family and friends. The strongest correlation was found between patient satisfaction with the delivery of nursing care and the compassion with which care was provided. Moreover, the following five concerns are highly predictive of reduced patient satisfaction: (1) nursing error; (2) misdiagnosis; (3) being mistaken for another patient; (4) being administered with wrong medical procedure; and (5) physician errors. Patients who experience one of those five concerns were less willing to recommend the hospital or return to that hospital for subsequent care.

Another research was conducted in September 20, 2000 by The Robert Wood Johnson Foundation (RWJF) in Alamo, California. From 1998 to 1999,

developmental researches had been undertaken and findings had been utilized in the creation of educational programs to help reduce the incidence of injuries and death due to preventable errors during hospitalization. The research consisted of a literature review on patient safety and quality of medical care, along with interviews with experts in this area.

The research revealed that as many as 18 percent of hospitalized patients are affected by health care errors. Some 11 of the 23 patients and family members interviewed had witnessed medical errors.

Patients and family members who challenged a potential error said it took considerable assertiveness to address the problem. Most patients and family members interviewed thought active involvement and better education could help improve patient safety and outcomes.

Meanwhile, a retrospective, descriptive and exploratory study to identify patient risks during hospitalization was conducted by Lucelia Ferreira Lima for the period of July 2006 to July 2007 at a hospital in the city of Sao Paulo, Brazil. The aim was to identify the risks reported at a public institution and to know the main risks from the point of view of the nursing staff. There were 440 sentinel events reported, and the main risks included patient falls (122; 27.7%), pressure ulcer (104; 23.6%) ,and medication errors (75; 17.0%. Sixty five nurses were interviewed who confirmed the incidence of the abovementioned main risks. Risks assessment and implementation of effective preventive actions are necessary to ensure patients safety. Involvement of a multidisciplinary team is one of the steps for a successful process.

Recommendations on Patient Safety for Patients Admitted to the Likas Hospital

Recommendations have been culled, based on the issues that transpired from the presentation of evidences during the collection of data. The recommendations may be considered as a definitive set of actions that will guarantee the safety of patients while receiving care and treatment at the Likas Hospital.

One of such recommendations is giving consideration to the patient's cultural values and belief systems, and incorporating these sensitivities and knowledge into

nursing care, as this is vital to achieving success and patient satisfaction in care delivery. Nurses should always possess comprehensive knowledge about culture and specific information of the multi-cultural preferences prevalent in their workplace. More concrete recommendations are listed below:

• ENVIRONMENTAL SAFETY

- Hospital stairs should be well ventilated and lighted with bright lights always and ensure the cleansing team of support services clean the stairs at least 3 times a day. Security guards should help to limit the visitors from using the stairs except during emergency.
- Lifts should be checked with maintenance check daily to ensure safe and proper function thus to avoid any risk of malfunction that might occur.
- Ward entrance doors should be kept locked with digital lock to ensure safety policy for baby safety and patient safety being adhered at all times. Security guards are informed to do hourly rounds and request to do additional rounds when required.
- Parking area should be always lighted at night time and frequent rounds to be carried out by the security guards.
- Patients are advised to take care of their own property while hospitalized and not to keep valuables such as large amount of money, watch. Jewellery etc with them. Orientation during admission and signage on this information should be displayed at strategy places in the wards.
- Ensure floor is kept clean and dry at all times to avoid accidental fall of patients. Ensure a clean and safe environment for patients always.

• PROFESSIONAL COMPETENCY

- Healthcare providers should be encouraged to attend Continuous Medical Education and Continuous Nursing Education, workshop, seminar and conferences to update knowledge and skills in order to keep in par with the advances in healthcare practices and technology.
- All healthcare providers are encouraged to attend the competency test set by the government organization.

- All healthcare providers are to give proper and clear explanation to patients on procedures to be carried out and progress of management of care on the patients during hospitalization period.
- Ensure all healthcare providers are qualified and certified to practice with the licensure or otherwise credential and privilege to practice.

• SOCIAL AND MENTAL SAFETY ASPECT

- All staffs entering into the hospital premises must carry the pass or name tag of the organization.
- All security guards must do frequent rounds to the hospital premises. Ensure they put on complete uniform and name tag while on duty.
- All support services personnel must be in proper and complete uniform while on duty.

• SAFETY AWARENESS

- Patients must be oriented on visiting hours policy, safety of personal belongings, environmental safety, and standard precautions practices on infection control, e.g., hygiene practices such as hand washing and proper disposal of general and clinical waste, Moreover, implementation of newborn baby safety policy and floor plan of wards must be initiated.
- Conduct frequent studies to monitor the safety aspects of patients according to the Ministry of Health policy.
- Pamphlets and brochures on hospital services should be available at all times.
- Suggestion box should be available and positioned in strategic places to encourage patients to give suggestions for improvements of the services and to guarantee patient satisfaction with the rendered services.

Conclusion

There is a pressing need for regular monitoring on the safety requirements for our patients and by standers during hospitalization. How clients feel cannot be undermined. When clients feel safe and satisfied with the services provided, complaints are kept at bay while satisfaction level soars – a guaranteed win-win situation for both the patients and the health care and medical service providers. ∎