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# How Is Patient Safety Understood by Healthcare Professionals? The Case of Bhutan

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**Objective:** The aim of the study was to explore how the term patient safety is understood by healthcare professionals (nurses, educators, doctors, ward managers, senior managers, and health assistants), all of whom are responsible for promoting the patient safety agenda in the Bhutanese healthcare system.

**Methods:** The study was conducted as a naturalistic inquiry using qualitative exploratory descriptive inquiry. A purposeful sample of 94 healthcare professionals and managers was recruited from three different hospitals, a training institute, and the Ministry of Health. Data were collected via in-depth individual interviews. All data were subsequently analyzed using thematic analysis strategies.

**Results:** Data analysis revealed variation in the understanding of patient safety among healthcare professionals. Although most participants understood patient safety as fundamentally concerning “doing no harm” or “reducing the risk of harm or injuries” to patients, some understood patient safety as simply having sturdy infrastructure/buildings with sufficient space to manage public health emergencies such as earthquakes, floods, and epidemics. Some confused patient safety with quality of care and patient rights.

**Conclusions:** Inadequate understanding of the term patient safety has potential to hinder improvement of patient safety processes and practices in the Bhutanese healthcare system. To improve patient safety in Bhutan’s healthcare system, patient safety training and education need to be provided to all categories of healthcare professionals.

**Key Words:** Bhutan, healthcare professionals, patient safety, understanding

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Bhutan is a small kingdom situated in the eastern Himalayas. The concept of patient safety in the Bhutanese healthcare system is relatively new. As recently as 2013, the Bhutan Ministry of Health released its first guideline on patient safety in the National Referral Hospital.<sup>1</sup> The guideline was released during a period in which an inaugural study was being conducted in Bhutan to investigate what key stakeholders (nurses, educators, doctors, ward managers, senior managers, and health assistants) believed to be the main patient safety concerns in Bhutan’s hospitals.<sup>2</sup>

There is mounting evidence that patient safety in resource poor nations lags behind that of high-income countries and that improving patient safety in resource poor nations is challenging.<sup>3</sup> One factor that contributes to poorer patient safety outcomes in resource poor nations is a lack of knowledge and understanding

among healthcare professionals, managers, policy makers, and educators concerning the principles and processes of patient safety and how best to apply them.<sup>4,5</sup> To redress this factor, baseline data are required to first ascertain what stakeholders (responsible for promoting the safety agenda) actually know and understand about patient safety and what mechanisms need to be put in place to improve their knowledge and practice of patient safety processes.

Little is known about what Bhutanese healthcare professionals, managers, policy makers, and educators know and understand about patient safety and related concerns. To this end, this study aimed to explore how patient safety was understood and defined by the healthcare professionals, managers, and policy makers in Bhutan. The key question this study sought to answer was “What do the nurses, nurse educators, doctors, ward managers, senior managers, and health assistants in the Bhutanese healthcare system understand the term patient safety to mean?” Drawing on the findings of a larger study<sup>2</sup> that investigated patient safety issues and concerns in Bhutan’s healthcare system, we present the findings in relation to healthcare professionals’ understanding of the term “patient safety.” We then discuss the implications of the findings and finally, we make recommendations to address their understanding and ultimately improve patient safety in Bhutan.

## METHODS

### Study Design

This study was carried out as a naturalistic inquiry using a qualitative exploratory descriptive research approach.<sup>6,7</sup>

### Settings and Participants

We purposively recruited and interviewed a criterion-based stratified sample of 94 participants (36 nurses, 7 nurse educators, 15 medical doctors, 20 ward managers, 11 senior managers, and 5 health assistants) from three different levels of hospitals (district, regional referral, and national referral hospital), a training institute (nurse educators), and the Ministry of Health in Bhutan.

### Data Collection Procedure

Once ethics approvals were obtained from the Research Ethics Board of Health, Ministry of Health, Bhutan and the Deakin University Human Research Ethics Committee, participants were accessed and recruited through the following: invitation letters sent to the participating wards; posting flyers on staff noticeboards; and approaching potential participants personally and providing them with a plain language statement explaining the objectives and methods of the study. Informed consent was obtained from each participant before interview. The final number of participants interviewed and the decision to stop recruitment was determined by the point at which informational redundancy was achieved, that is, nothing new was emerging from the interview data.

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## Data Analysis

All audio recordings were transcribed verbatim and analyzed using content and thematic analysis strategies. To capture exact meanings of the data, the key phrases were summarized using the participants' own words. Most importantly, the initial depictions of the data analyzed were organized in and around the research question driving the inquiry and the categories of participants interviewed. Rival configurations and the organization of themes (including rival conclusions drawn from the analysis), which were not supported by the data, were eventually modified or dropped.

## RESULTS

This study revealed the following three major themes: “doing no harm” or “reducing the risk of harm or injuries” to patients; having sturdy infrastructure/buildings with sufficient space to address public health emergencies; and quality of care and patient rights. These themes are presented in the following sections.

### “Doing No Harm” or “Reducing the Risk of Harm or Injuries” to Patients

None of the participants had formally studied patient safety in either their professional first level entry courses or as part of a staff development program. Despite this, most had developed an experiential understanding of patient safety as fundamentally concerning “doing no harm” or “reducing the risk of harm or injuries” to patients:

As per my understanding, the word patient safety means preventing from the accidental injuries and any other harm (nurse).

It means there should be no harm to the patient during any medical intervention, whether it be investigation, treatment, or any operation. So there should be no harm and then the outcome should be good to the patient. There should be no or minimal adverse effects to the patient (manager).

“Harm or injury” in this instance was understood to include any process that had negative effects on the patient during the process of treatment. Specific examples included medication errors, procedure lapses (e.g., not cleaning the skin before venipuncture), wrong blood transfusion, wrong investigations, wrong surgery, and infections, which resulted in patients being in a worse condition than when admitted to hospital (e.g., suffering a permanent disability or even death that could have been prevented):

Patient safety is a procedure that we as a healthcare worker should follow whenever you are giving care to the patient. It could be giving medication or doing procedures starting from [wound] dressings, giving injections, doing an invasive procedure. All these things that you provide should be safely provided and not end up with complications such as doing wrong procedures, not following sterilization techniques [...] for example, giving wrong injections and bringing complications like deformities or leading to disability (nurse educator).

Any process that causes damage to the patient during the process of treatment for his problem is actually [a matter of] patient safety (manager).

### Having Sturdy Infrastructure/Buildings With Sufficient Space to Address Public Health Emergencies

Some participants, especially those from the health assistant and senior managers groups, understood patient safety as having strong infrastructure and protecting patients and keeping equipment “secure” during public health emergencies, e.g., during natural disasters such as earthquakes, floods, and epidemics:

But now, more concern on patient safety is during the time of disasters, epidemic outbreak or earthquake or flood, or like these situations. Health facilities are more important than any other activity because we are to give care. Now during the time of these disasters if the healthcare facility infrastructure is affected badly then how can we give the care? That is why safety in the form of infrastructure which can withstand earthquake of various magnitude that is one. Another, during the earthquake the expensive equipment and facilities in the hospital will not be damaged—it will be protected so that we can give care (senior manager).

### Quality of Care and Patient Rights

Some participants seemed to confuse patient safety with quality of care and patient rights. For example, patient safety for them included providing good quality care to patients by taking account of their privacy, dignity, and rights:

According to me, patient safety is good quality care and good nursing management (nurse).

Their [patients'] rights, their privacy all that is counted for me (manager).

I think patient safety has to do with providing safe medical or any invasive procedures with full understanding and respect for the patients' rights, as well as respect for his dignity as a human being (doctor).

## DISCUSSION

Analysis of healthcare professionals' understanding of patient safety revealed that there was variation in understanding of the term patient safety. Although most healthcare professionals understood patient safety as “doing no harm” or “reducing the risk of harm or injuries” to patients, which is consistent with the World Health Organization definition (“reducing the risk of unnecessary harm to patient”<sup>3</sup>), some participants understood patient safety as simply having sturdy infrastructure (buildings) with sufficient space to deal with victims of public health emergencies such as earthquakes, floods, and epidemics. Some participants also confused patient safety with patient rights and quality of care.

Improvement in patient safety in healthcare is known to be hampered by a lack of understanding of patient safety concepts and absence of a uniform approach to classifying the patient safety concepts.<sup>4,8</sup> Our research suggests that such deficiencies are indeed present in Bhutan's healthcare context. Variability in definitions of the term “patient safety” among respondents reflects a lack of clarity and understanding, despite widespread use of the term. Variation in understanding of patient safety meant individual stakeholders did not have knowledge of the full range of activities comprising patient safety. As a consequence, there is a danger that policy for patient safety is overlooked in the process of healthcare planning and implementation. For example, understanding patient safety to simply mean existence of sturdy infrastructure for public health emergencies and/or providing good quality care to patients by taking account of their privacy, dignity, and rights, policy makers might accord more importance to development of safe healthcare infrastructure and/or a quality assurance program (which is the case in Bhutan), neglecting patient safety and thereby resulting in a poor patient safety culture.

Until a more complete and shared understanding of patient safety is achieved, further development of appropriate patient safety interventions mediated by these healthcare professionals is unlikely. As a point of clarification, while patient safety is considered a first pillar of quality care, it is generally distinguished from quality of care in the following terms; although patient safety relates to avoiding or reducing actual or potential harm from healthcare management or the environment of care, quality care relates to

the extent to which a healthcare service or product produces the desired (best possible) outcomes.<sup>9,10</sup> Thus, safety is one dimension of quality; quality of care comprises a range of other dimensions including effectiveness, efficiency, timeliness, equity, accessibility, and person centeredness.<sup>11</sup>

## Recommendations to Address Health Service Providers' Understanding of Patient Safety

An immediate strategy to achieve a shared and comprehensive understanding of patient safety, based on the findings of this study, would be to provide patient safety training and education for healthcare professionals. Improvement of patient safety in Bhutan will need to address the ability of the healthcare professionals to articulate what patient safety is. By being able to articulate the meaning of patient safety, healthcare professionals will be positioned to develop knowledge and skills to improve patient safety. Therefore, a national patient safety education framework needs to be endorsed and implemented.

Endorsement of the national patient safety education framework must consider a hierarchy of priorities based on health service providers' needs. To this end, patient safety education should be tailored to the specific patient safety issues and burden of the country, as well as the skill requirements of different healthcare professionals. Priority areas include approaches to increase knowledge and promote a shared understanding of patient safety, including the causes and frequency, to develop a sense of responsibility for patients' safety among healthcare professionals, to develop self-awareness of the situations when patient safety is compromised, to develop interpersonal communication skills relating to patient safety, and to develop teamwork skills.<sup>12</sup> Providing well-designed patient safety training and education to healthcare professionals creates an imperative to improve their understanding of the problem and devise workable solutions.<sup>13</sup>

A well-designed patient safety training and education program that covers all levels and types of formal, informal, and continuing education programs is known to help create more in-depth understanding of patient safety among healthcare professionals.<sup>14,15</sup> Education and training programs on patient safety have also been found to be effective in creating a culture of safety and accountability. A systematic review of the medical curricula for medical students and/or residents on quality improvement and patient safety, e.g., demonstrated improved medical students' knowledge and clinical processes.<sup>16</sup> Apart from change in healthcare professionals' behavior, training programs have been shown to increase the ability of healthcare professionals to analyze and solve patient safety problems.<sup>17,18</sup> For instance, an education program on adverse events (how to predict and mitigate errors) carried out in the United Kingdom resulted in improved medical student knowledge on patient safety concerns and management.<sup>19</sup>

Implementation of the national patient safety education framework must include not only clear goals for understanding patient safety concepts but also clearly articulated goals for assessing and managing the risk of patient harm by all healthcare professionals involved (including managers and educators). This would help develop required knowledge and tools to enhance patient safety in the Bhutanese healthcare organization. Such knowledge would also help develop leadership roles to promote a safety culture, policy, protocols, and governance processes to improve patient safety and monitoring, evaluation, and research tools to guide improvement efforts.

The findings of this study should be interpreted in the light of certain limitations. A frequent reproach of qualitative research is that the sample of respondents is not representative. However, this study did include a broad range of healthcare professionals

operating within the theoretically defined sampling frame. As previously reported,<sup>2</sup> decisions about inclusion and exclusion of data were informed by the consistency of findings across the disparate participant groups and the themes and/or issues that were pertinent to informing perceptions of patient safety and related concerns in the healthcare context of Bhutan; it is possible that some material may have been lost in the process.

## CONCLUSIONS

There was variation in participants' understanding of the term patient safety. Although most participants understood patient safety as fundamentally concerning "doing no harm" or "reducing the risk of harm or injuries" to patients, some understood patient safety as simply the existence of sturdy infrastructure/buildings with sufficient space to manage public health emergencies, and some participants confused patient safety with quality of care. Acknowledging the limitations of the study, a key conclusion drawn from the data is that healthcare professionals' limited understanding of the term patient safety may hinder improvement of patient safety processes and practices in the Bhutanese healthcare system.

This study has provided a basis upon which future patient safety improvement strategies can be developed. An important strategy may be to integrate and provide patient safety training and education to all categories of healthcare professionals. Developing educational curricula on patient safety in all levels of training institutes, universities, and hospitals (for all categories of healthcare professionals undertaking certificate, diploma, higher degrees, and continuing medical education) is likely to help improve patient safety in the Bhutanese healthcare system by ensuring a shared understanding of the concept and components of patient safety.

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