Discharge planning from Emergency Department following limb injury. The Saudi Arabia context

Abstract

Saudi Arabia spends $6 billion per year on the management of road traffic accidents (RTAs). With approximately 19 deaths a day from this cause, Saudi roads are among the most dangerous in the world. Of those that survive, 50% have a major injury and 50% have a non-major injury manageable with a brief period of hospitalization or discharge home directly from the Emergency Department (ED). The aim of the study is to explore approaches to discharge planning from the ED for limb injury for the first time and determine if it is systematic, evidence based and an efficient use of health services. A mixed methods design was utilized, a survey was distributed to patients (n=302), and orthopaedic plaster nurses were interviewed. The key findings were not surprising: As discharge preparation rating went down, there was a higher likelihood for unplanned ED return ($p<.01$). Further, verbal instructions in the participants' own language rated higher compared to other type of instructions. Discharge from nurses and doctors had significantly higher discharge preparation rating. As age increases returning to Ed increase, and more females returning to ED than males.

Table1.1 Gulf countries compared to Australia 2011: estimated fatalities population and fatality rate per 100,00 population

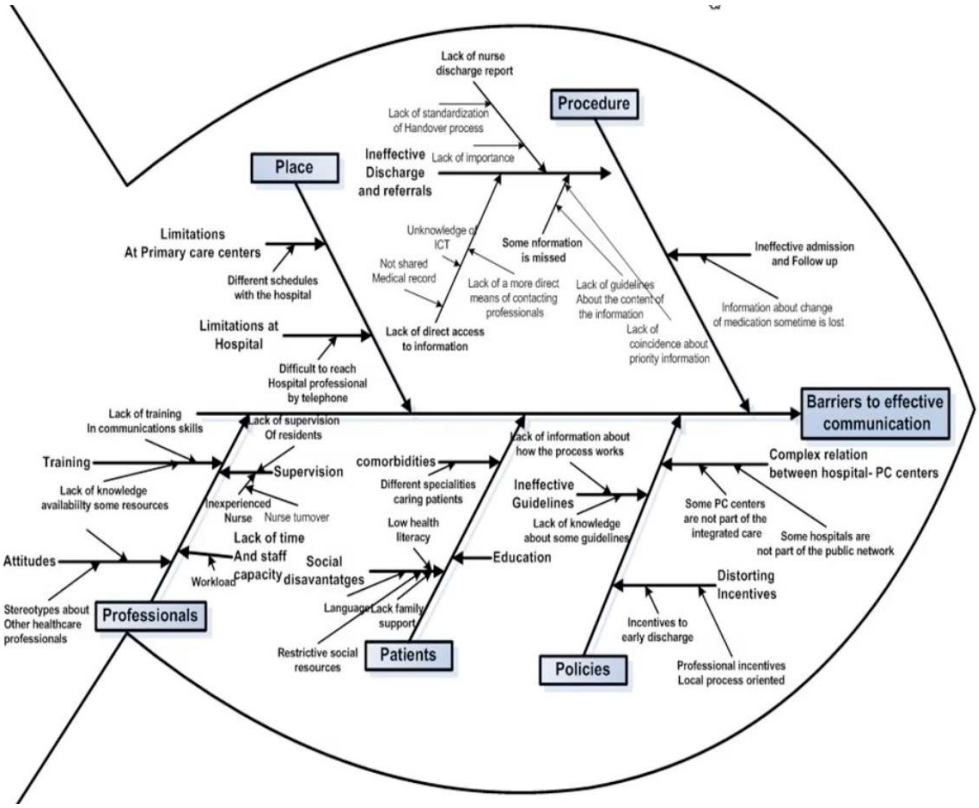
Country	**Population 2011**	**Total Number Killed**	**Road fatalities per 100,000 population**
Saudi Arabia	27, 448,086	7,157	26.3
Kuwait	2,736,732	374	16.5
Qatar	1,758,793	228	14.0
United Arab Emirate	7,511,690	826	12.7
Australia	22,268,384	1,363	6.1

Introductions

Discharge planning is a multidisciplinary process in that it involves the cooperation and coordination of several teams of people inside and outside the hospital. The characterized modern discharge planning as a more complex process than the routine preparation of patients for hospital discharge by a single health care discipline. It had been asserted that the process would ideally be comprised of a comprehensive assessment of consumers' range of needs by a team of nurses, social workers, physicians, and /or designated discharge planners.

In many cases, patients with limb injury are unable to stand or walk independently, so the role and responsibility of the patient's family cannot be overemphasized. One of the most important outcome of discharge planning with limb injury is the patient's access to adequate and appropriate information as a resource for making health related decisions. The need for information differs between patients, given the variability in people's level of health knowledge and previous experiences in dealing with healthcare issues. Theses are encompassed in the conceptual notion of health literacy, the ability to find, assess and understand health information and health services.

Fishbone diagram



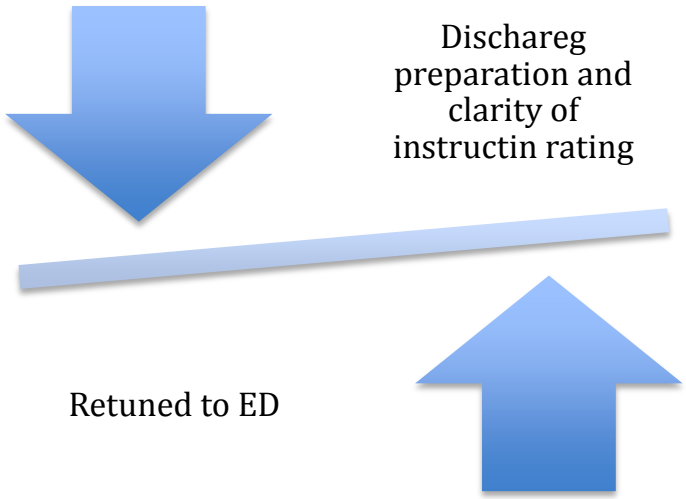
Methods

An explanatory sequential mixed methods design was considered to be an appropriate way of approaching the topic as due to the complexity of the problem there was a need to obtain data from different sources. A sequential explanatory design was selected using two phases. In phase one (quantitative) patient's with limb injury have been surveyed after discharge, about their discharge experiences and in phase two (qualitative) orthopaedic plaster nurses who work in the ED and who are responsible for patient discharge were interviewed about their view of the discharge process.

Result

Results are reported in detail as follow:

- Almost half of participants had early visit to ED 46%, indicated that the discharge process for patients with limb injury is not systematic. Also, result indicated that as discharge preparation ratings went down, there is a higher likelihood for unplanned ED return (P<.01). The same similar pattern was observed between clarity of instructions and unplanned ED return (p<.01).
- Both discharge preparation rating and clarity of instructions are positively related to each other.
- Verbal instruction in participants' language rated higher compared to other type of instructions, and instructions from both nurses and doctors had significantly higher discharge preparation rating, instructions from nurses had significantly higher discharge preparation rating then doctors.
- As age increase, returning to ED increase and more female returned to ED then male
- Female had significantly higher self care ability than male
- Lower educational level are more likely to returning to ED
- Lower limb injury has lower self care ability than upper limb injury



Conclusion

There is now evidence to support the implementation and support of a sound discharge planning process in ED and linked to community centres, both supported by discharge readiness focussed, and culturally informed nursing staff. Programs would need to focus the older patient, the spoken language of the patient and the discharge preparation rating, and the accreditations and quality of hospital.

Success factors in discharge planning

Success factors	Author/s
Identifying patients' needs after discharge	Shepperd et al., 2013
Early involvement with caregivers	Bauer et al. 2009
Adequate information during discharge process	Bauer et al. 2009
Effective interdisciplinary communication by health professionals	Bauer et al. 2009
Access to a range of ongoing support	Shepperd et al. 2013