

### Length of stay of patients in different rehabilitation programs. *A hospital experience in Saudi Arabia*

*To the Editor*

In an article regarding length of stay (LoS), Dr. Al-Jadid has brought attention to a challenging aspect of rehabilitation in the Kingdom of Saudi Arabia (KSA).<sup>1</sup>

Length of stay has become increasingly important for policy makers in health care. It has been used as an indicator of quality of inpatient care, and reflects one of the main sources of hospital costs. The report reveals a tip of an iceberg. It has far major impacts than can be perceived. In Saudi literature, less attention has been given to the issue of “difficult discharge” (the iceberg). In KSA, one of the reasons for a longer LoS in acute settings is the refusal for discharge, and preference of patients and family for continued care at hospitals, even if they can be cared at home.<sup>2</sup> This is particularly seen in chronic, inactive, and completely dependent patients. The result is that patients requiring only skilled level nursing care occupy a significant number of acute hospital beds. A reported 4.3-14% of acute hospital beds were occupied by long-stay patients in Riyadh.<sup>3</sup> Approximately, one fourth of the beds were occupied by elderly; some of the patients stayed for over 6 months after discharge, and not receive any medical treatment. The cost per year per bed to provide services in some specialized hospitals is reportedly over US\$200,000 compared to an estimated US\$24,000-\$32,000 per year per bed in long-term care facilities.<sup>3</sup> These challenges can be met by improving rehabilitation strategies, strengthening home care, and building standard long-term care facilities as independent units, or extensions of specialized hospitals. In a rehabilitation program, excluding the ‘days off from therapy’ can determine the actual days of rehabilitation during hospital stay. This can help us to identify the factors affecting LoS.

The authors recommend that an extensive research is required to explore this area; the dimensions of this iceberg can be deeper than imagined. The authors have already described the limitations of the study, however, few points can add to the clarity of the report.

Stroke, non-traumatic brain injuries, non-traumatic spinal cord injuries, and ‘neurological disorders’ were mentioned as distinct entities in the list of rehabilitation

programs. There is an overlap in this classification as they all represent ‘neurological disorders’. A stroke is a type of non-traumatic brain injury, and certain ‘neurological disorders’ can cause non-traumatic spinal cord injury (for example, multiple sclerosis, or transverse myelitis). Unrelated diagnoses were grouped together for analysis of LoS, like ‘developmental delay, infections, and respiratory failure’. This may affect study outcomes. The use of operational definitions or diagnostic coding tools in the above situation, can prevent misinterpretation. Rehabilitation diagnosis and problem listing is one of the primary interventions in rehabilitation. The diagnostic coding tools; International Classification of Disease (ICD), and International Classification of Functioning, Disability and Health (ICF) are widely used now. The ICF is a diagnostic framework in rehabilitation, which is a standardized classification based not only upon structure and function, but also includes domains of functioning and disability.<sup>4</sup>

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#### *Reply from the Author*

We appreciate the response by Dr. Qureshi on our article.<sup>1</sup> We agree with Dr. Qureshi’s comments regarding the overlap in the classification of the neurological disorders, and the possible effect on the outcome due to the grouping of unrelated diagnoses. However, this is a hospital based study, and LoS is presented based on the rehabilitation programs available in the hospital. Data related to some conditions like stroke are presented separately due to the higher prevalence and importance of stroke care in Saudi Arabia.<sup>5,6</sup> This study provides basic information regarding LoS in KSA, and brings out the importance and need for extensive research in this area.

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### ERRATA

In manuscript "Rhesus alloimmunization in pregnancy. A tertiary care center experience in the Western region of Saudi Arabia" *Saudi Med J* 2011; 32: 1039-1045, the author's affiliation should have appeared as:

Division of Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, Princes Al-Johra Center of Excellence for Genetic Disease, King Abdulaziz University, College of Medicine, PO Box 80215, Jeddah 21589, Kingdom of Saudi Arabia.

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In manuscript "Histopathological pattern of ovarian neoplasms and their age distribution in the western region of Saudi Arabia" *Saudi Med J* 2012; 33: 61-65, the author's affiliation should have appeared as:

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