BAHMAN HOSPITAL

مستشفى بهمن

Prevention and Management of Pressure Ulcers in an Acute-care Hospital in Lebanon

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Background

Pressure ulcers (PU) are considered a complication that affects quality of care and a burden on patients and healthcare systems. They are defined by the National Pressure Ulcer Advisory Panel (NPUAP, 2009) as "localized injury to the skin and / or underlying tissue usually over a bony prominence, as a result of pressure, or pressure in combination with shear and/or friction."

Objectives

PU are often associated with pain, infection, high hospitalization costs, prolonged length of stay and delayed return to function. Prevention of PU in Bahman hospital shall have a major impact on the health care system and target to achieve an important goal for patient safety as recommended by the World Health Organization. The objective of this study is to implement a project, based on international guidelines, for the prevention and management of PU among healthcare workers.

Methods

An observational prospective study on patients identified at risk to develop PU in addition to patients with existing PU was done over 2 months period during the pre-intervention period. During the post-intervention period, the same data was collected and analyzed on a monthly basis in a retrospective study. The standards set by the European Pressure Ulcer Advisory Panel (EPUAP) and the American National Pressure Ulcer Advisory Panel (NPUAP) were implemented. Prevalence and incidence rates were calculated before and after introducing the prevention and management interventions.

Sample

In 2011, during the pre-intervention study, 114 patients were included before the implementation of interventions, policies, procedures and protocol. This sample included 86 patients identified at risk to develop PU and 28 patients with PU. In 2012, one year after the implementation of the interventions, the sample included 699 patients identified at risk to develop PU and 179 patients with PU (65 developed in-hospital and 114 admitted to the hospital with existing PU). In the first 6 months of 2013, the sample included 218 patients identified at risk and 104 patients with PU (26 developed in-hospital and 78 admitted to the hospital with existing PU).

Interventions

a. Formulation and implementation of new documents for prevention and management of PU:

- Multidisciplinary protocol,
- Clinical pathway,
- Policy for PU prevention,
- Policy for management of PU,
- Instructions sheets that describe the PU care,
- Teaching brochure for patients and families,
- Educational poster for healthcare professionals,
- Specific PU consultation sheet for dietician.

b. Implementation of a standardized tools for:

- Risk assessment (Braden scale),
- PU staging tool.

c. Purchasing of new materials:

- Air mattresses,
- Support devices for PU prevention.

d. Designing and implementation of electronic program to facilitate data collection about:

- Patients identified at high risk to develop PU,
- Reporting of PU (Out / In- Hospital).

e. Organizing training sessions about prevention and management of PU:

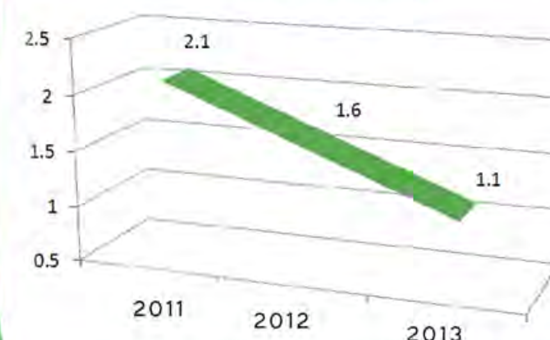
- One training session for data collectors in 2011,
- One training session for residents in 2012,
- Three training workshops for nursing staff in 2011, 2012, 2013.

f. Enhancing patient safety culture by:

- Organizing safety rounds in clinical units,
- Follow-up of reported cases with PU (existing or developed in hospital),
- Monitoring the incidence rate on a monthly basis,
- Increasing staff awareness,
- Collaboration between patient safety coordinator and unit managers / physicians to implement the prevention and management protocol.

Results

Before introducing the action plan, the prevalence and incidence rates were 3.9 and 2.1 per 1000 patient days, respectively (2010, 2 months). After introducing the action plan, for the year 2012 the overall prevalence rate was 4.4 per 1000 patient days and the incidence rate was 1.6 per 1000 patient days. During the 6 months of 2013, the prevalence rate was 5.4 per 1000 patient days and the incidence rate was 1.1 per 1000 patient days. The majority of patients who developed in-hospital PU (65.9%) were older than 66 years. Among PU patients, there were no differences in the distribution between males and females.



Conclusion

Continuous monitoring of pressure ulcer data in acute care hospitals imposes a huge impact on improving the rates, decreasing the length of stay of patients, maintaining quality of care and creating a pressure ulcer prevention and management culture among healthcare workers.

References

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