Urinary Incontinence and Quality of Death in the Intensive Care Unit

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Dear Editor:

Background and Objective

Urinary incontinence (UI) is a debilitating condition near death that compromises patients' quality of life (QoL).¹ The embarrassment and distress it causes patients to present unique challenges at the end of life (EoL). We sought to determine the prevalence of UI, treatment, and its effects on QoL at the end of life (i.e., quality of death [QoD]) in the intensive care unit (ICU).

Materials and Methods

Following Institutional Review Board approval, 79 nurses who cared for 145 patients who died in an ICU in New York Presbyterian Hospital or Brigham and Women's Hospital were asked "In the last week of the patient's life, did he/she have UI?" and "If yes, how was the patient's UI managed?" The patient's QoL at the EoL was assessed with our validated quality of death (QoD) scale.² Fisher's exact tests and logistic regression analyses were performed to test for significant differences between groups. Statistical analyses were conducted using SAS version 9.4 (Cary, NC) and reported with two-sided tests ($p < 0.05$ considered statistically significant).

Findings

Of the 145 patients identified, the mean age was 67.6 years (SD = 15.4) and 37.9% were female. Nurses reported 35.8% (52/145) patients had UI in the last week, 13 (25%) had extreme problems with UI. Of the patients identified with UI ($n = 52$), 82.7% used an indwelling catheter, 11.5% a diaper, and for 5.8% the management strategy was unspecified. QoD was associated with extreme UI problems ($p = 0.011$) and catheter use ($p = 0.031$). Patients with extreme problems with

UI had a higher likelihood of having extremely poor QoD scores (i.e., ≥ 8 on a scale from 1 to 10) than those who did not (odds ratio [OR] = 16.89, confidence interval [95% CI]: 1.68–169.90, $p = 0.016$). Indwelling catheter use was associated with lower likelihood of extremely poor QoD (OR = 0.14, 95% CI: 0.03–0.72, $p = 0.019$).

Discussion

UI was commonly reported in the ICU in the week before death. Patients with UI had worse QoD scores. The vast majority of cases with UI were managed with indwelling catheters, although guidelines recommend avoiding their use.^{3,4} Despite concerns about indwelling catheters, we found management of UI with catheters was significantly associated with better QoD.

The use of postmortem nurse reports likely underestimates the high frequency of UI. Optimally, we would have obtained patient-reported UI, but assessing symptoms among patients as they are dying would be impractical, if not unethical. Having nurses report on the impact of catheters on patient QoL, however, may represent a conflict of interest, given that catheters may make nurses' jobs easier. Future research in which patients report on QoL outcomes associated with catheter versus other forms of UI management is warranted.

Much of the extant literature on UI management in the EoL setting is anecdotal, providing no evidence-based guidelines. The high prevalence of UI and its associated suffering highlight a need for greater clinical attention to detecting and managing UI. Best practices in the management of UI among terminally ill patients need to be informed by evidence-based guidelines to mitigate consequences of this prevalent condition.

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