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Reduction of ventilator-associated pneumonia: enhancing knowledge is important

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Sir: Given our commitment to the promotion of evidence-based measures for infection prevention, our interest was aroused by the publication by Hawe et al. [1] in the July issue of *The Journal*, and in which the authors gave a promising account of the reduction of ventilator-associated pneumonia (VAP) in their intensive care unit (ICU) through an active guideline implementation strategy.

This study adds to the literature an excellent example of the fact that, until guidelines become self-implementing, considerable efforts are to be invested in the promotion of their adoption. With the rise of the concept of evidence-based medicine since the early 1990s, worldwide, investment has been made in various ambitious programs for guideline development. At that time, it was commonly thought that guidelines, merely by being published, would highly facilitate the transfer of research findings into daily practice. Soon, however, the concept of effortless guideline implementation became a shattered illusion, and research into the effectiveness of various implementation

strategies revealed itself as an important branch within the field of health sciences. The hopeful results of the study by Dr. Hawe and colleagues exemplify the rather recently recognized synergetic effects of both care bundles and multifaceted improvement programmes on guideline implementation [1].

As we are convinced of the importance of knowledge as the first step on the ladder of guideline implementation and adherence [5], we applaud the inclusion of a staff education intervention in the multimodal policy applied. To our regret, however, staff knowledge of the evidence base for VAP prevention was not measured before and after the implementation of this educational strategy. Measuring the baseline level of knowledge allows to identify the specific educational needs of a target group and to tailor educational interventions to the group's exact requirements. To measure the level of knowledge of evidence-based VAP prevention guidelines, we developed a validated and easy-to-use multiple choice knowledge test [2, 3] that can be employed for both formal and pre-post testing purposes. Use of this questionnaire among a European sample of 3,329 ICU nurses [4] has demonstrated overall poor test scores and has allowed us to identify the gaps in knowledge to be addressed in a website-based e-learning course on infection prevention we are currently developing (www.evidenceproject.org).

It is well documented indeed that knowledge does not guarantee adherence. It is much more important, though, to realize that a lack of knowledge, per definition, impedes adherence. As long as the ladder of compliance does not rest on a solid and stable bedrock called knowledge, the first step will, in spite of endless efforts, remain far too high to take.

We congratulate Dr. Hawe and colleagues on the results obtained and

would like them to clarify which measures they plan to maintain in a long-term intervention. Consolidating and possibly improving the obtained results will be a challenge we look forward to reading about.

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