A critique of Michael L. Millenson's book, Demanding medical excellence: doctors and accountability in the information age, and its relevance to CRNAs and nursing.

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Michael L. Millenson's well-documented book, Demanding Medical Excellence: Doctors and Accountability in the Information Age, is a wake up call to both medicine and nursing for somewhat different reasons. Millenson decries the lack of scientific-based medical practice and medicine's failure to wake up due to its own historical studies. He cites data that 85% of current practice has not been...
scientically validated despite medicine's claims of the physician-scientist. He outlines a historical chronology of advocacy for better practice based on concerns and studies that demonstrates significant differences in patient outcomes, adjusted for case mix, across hospitals studied. Millenson advocates the development of a broader base of benchmarking and best practices, reflected in clinical practice guidelines, recognizing the resistance of physicians to their use. He further advocates incorporating more fully information-age computers in the delivery of quality care by programming them to the tasks they are best suited for in informing and alerting us to flawed memories, orders, and abnormal laboratory and radiologic data. The relevance of Millenson's book to CRNAs and nursing in general is twofold: (1) He discusses the National Halothane Study and the subsequent Stanford Institutional Differences Study. The latter study confirmed what was found in the National Halothane Study concerning significant differences in patient outcomes across studied hospitals but did not address the role of the hospital's primary anesthesia provider, anesthesiologists, or CRNAs in these differences, as did the latter. He addresses the lack of publication and dissemination of the institutional outcome differences of these studies performed in the 1960s and 1970s, but he does not address the anesthesia provider portion of the Stanford Study. (2) While Millenson does mention nursing briefly and advocates its involvement in clinical practice guideline development, he does not discuss the profession's own concerns about the lack of scientific validation of our nursing practice. Research serves as a principal cornerstone for scientifically based clinical practice guidelines or best practices. Millenson and others address some of the problems associated with current research and the problems associated with the peer review system in the publication of methodologically flawed and politically motivated published studies. The Abenstein and Warner study in Anesthesia and Analgesia in 1996 is a prime example of the latter. A recent British Medical Journal editorial characterized medical literature as disorganized and biased (BMJ.1998;317[7152]:160). It further cites a study that found that over 95% of articles in medical journals did not meet minimum standards for quality or clinical relevance. While that figure may be high, we know that flawed and biased research is within the MEDLINE database, even though some studies have been retracted based on overt fraud. However, retraction has not stopped other researchers or practitioners from publishing retracted research in their own publications. Consumers of MEDLINE should be aware of this problem and be prepared to question the validity of research prior to adopting their conclusions. In the development of "best practices," flawed research may be as bad as personal biases and flawed memories. The potential adverse implications of flawed research for scientifically (evidenced) based practice and for health policy decisions by government and health payers with regard to the delivery of health services and its reimbursement requires that all involved do a better job of assuring that only valid, methodologically sound, and unbiased research is published, is included in the MEDLINE database, and is used in the care afforded to people in need.