

Stethoscope Friend or Foe

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An article concerning Cross Infection between the Stethoscope diaphragm and the Patient.

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It's "back to the future"! We are now returning to what we thought was a bygone era, the era of untreatable bacteria. We now have methicillin and vancomycin resistant staph. aureus, vancomycin resistant enterococcus, multiple-drug resistant TB, resistant salmonella, strep. pneumonia, and this is just the start. What are you and your institution doing to protect your patients from these infectious bacteria? What are you and your institution doing to protect yourselves from the financial cost and public relations fallout that can occur when these resistant bacteria are found in your institution? How are you demonstrating to your patients that you are dealing with this issue?

A major vector of infection transmission is direct-hand or stethoscope contact. Health-care providers find it difficult to examine a patient while wearing gloves, they resort to hand washing as an alternative. Why use an inferior and time consuming method, cleansing the surface of the stethoscope with soap and alcohol, when it is possible to "glove" your stethoscope with a visible disposable stethoscope shield which is obvious to your patient?

In my experience as a health care provider, having observed stethoscope use in hospitals, doctors offices', nursing homes and emergency medical providers, there are very few health care practitioners who take the time to properly disinfect their stethoscopes. I am convinced, based on the studies that you will find at the end of this article and my own first hand experience, that there is extensive cross contamination between the stethoscope and patients. The CDC and the AMA have both recommended disinfecting stethoscopes. However, as a practical matter, it is not happening because of the time that it takes to properly clean the surface.

Though the case for stethoscope cleanliness seems self evident, it becomes even more pressing in light of recent studies that find residual blood and organic matter on stethoscopes used in hospital emergency rooms, maternal/infant units and OB/GYN departments even after these instruments were cleaned (see reference #1). Therefore, especially where blood borne pathogens may be an issue, a protective barrier between stethoscope and patient may be the only practical solution for stethoscope cleanliness, since sterilization is not a feasible option.

The public is becoming increasingly aware of infection control issues in hospitals and nursing homes. By way of example, ABC's TV news, Prime Time Edition, Thursday, October 23, 2003, aired a report on hospital acquired infections. On the program, Dr. Barry Farr, the head of Infection Control at the University of Virginia Medical Center, stated that infections are spread "right there by your own doctor and your own nurse by contaminated stethoscopes."

Likewise, recently several prestigious newspapers, such as the Chicago Tribune, the Pittsburgh Tribune Review and the Readers Digest have run articles concerning the problem of infection control in hospitals mentioning that cross contamination by stethoscopes is a problem.

In the hope of promoting a more hygienic approach to stethoscope usage, so that the potential for pathogen transmission is reduced, I have developed an easy to use, inexpensive and patented disposable protective shield that should become as indispensable as disposable gloves. This product has been thoroughly tested for acoustical integrity and has proven, in some cases, to render stethoscopes even more sensitive with the shield in place.

The dispenser box, which I have designed, will be placed in the patients' rooms similar to the dispenser box that holds the disposable gloves. The disposable shield is easily removed and placed on the diaphragm of the stethoscope and then discarded after use.

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