

Keep that Stethoscope!



The COVID-19 outbreak has made it necessary for doctors to ensure the safety of staff during airway management of patients. However, recently a paper was published that suggested less use of the stethoscope and more ultrasound.

This viewpoint could mislead doctors to abandon their stethoscopes for several reasons. First, many doctors were infected during the COVID-19 pandemic so it is understandable that they are afraid to get too close to patients. Also, it may be difficult or impractical for healthcare providers to use conventional stethoscopes while wearing protective clothing. Finally, ultrasound equipment is not only handheld but also provides data detection and imaging.

However, there is another side to this argument which must be considered. It is during these very stressful times that patients require more humane care. Because of social distancing measures, they can now no longer be accompanied by their families. They are also extremely afraid of COVID-19. The stethoscope can be an excellent tool to bridge the gap between the doctor and the patient if you consider it as more than just an instrument for diagnosis. A stethoscope allows interaction with patients and gives doctors the opportunity to listen to them - their lifestyles, their histories, their bodies, their concerns etc. Hence, auscultation can shorten the distance between patients and doctors and can help gain their trust and improve the doctor-patient relationship.

Also, it is important to keep in mind that if ultrasound doctors are constantly called to the bedside, it could increase the risk of infection by COVID-19. The virus could also be carried by the ultrasound doctor to the next patient who requires an ultrasound examination. In addition, ultrasound physicians have participated in the front-line during the pandemic with brief training and it may not always be possible to have sufficient ultrasound doctors to perform the required examinations.

Auscultation of the lungs is generally the first procedure to determine whether the lungs are infected. Relying on ultrasound without a detailed physical examination first could lead to misdiagnoses. There have been instances where a stethoscope showed and an ultrasound missed a diagnosis. Also, a stethoscope can understand the progression of pneumonia with COVID-19 which an ultrasound cannot. There is also more time required to train medical practitioners to ensure high ultrasound diagnostic accuracy. Many doctors in community hospitals and remote villages do not have enough knowledge of ultrasound medicine.

A stethoscope may enable healthcare providers to find the cause immediately instead of scrambling to find ultrasound equipment during a clinical emergency. For example, if a patient is suddenly obstructed by dried mucus plugs whilst on a ventilator, it is the stethoscope that will serve as the diagnostic tool near the bed or one that the doctor is wearing, not the ultrasound equipment. It is the stethoscope that could potentially save this patient's life at that critical moment. Finally, using a stethoscope is much easier than using ultrasound equipment.

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It is also noteworthy that doctors are expected to give a preliminary diagnosis after a complete physical examination instead of a cold examination list that requires the use of expensive equipment, not really suited for preliminary diagnosis or real-time monitoring of patients. The very definition of a physical examination states that it should be an investigation of the body to determine its state of health using the techniques of inspection, palpation, auscultation and olfaction. It is the findings of the physical examination, the patient's medical history and initial laboratory tests that constitute the basis for a diagnosis and treatment strategy.

We should also not forget that ultrasound equipment and ultrasound pocket devices are expensive. Every community hospital or remote village doctor may not have access to such equipment.

There could be a simple substitute for the traditional stethoscope if doctors battling the pandemic wish to lower their risk of infection. Authors of this article suggest that doctors could use sterilised paper around an empty potato chips cylindrical packet which can be placed on each bed to prevent cross-contamination. This alternate stethoscope is economical, safe, and free and can help protect medical workers from infection. Also, contactless stethoscopes have also been invented with sounds collected and analysed directly through computers. What could help even more would be bluetooth earphones where a new device could have a built-in bluetooth drum and earplugs which doctors could insert into their ear before they put on their protective clothing. Sounds would then be transmitted to them wirelessly.

Whatever the options healthcare providers choose to use, the important thing is to hold on to that stethoscope as it still has significant utility, with or without COVID-19.

Source: [European Heart Journal](#)

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