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## Letter to the editor

### PRB Stick to facilitate stabilization of ultrasound probe and prevent work-related musculoskeletal disorder

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#### Abstract

Abstract: The authors propose a stabilizing aid to support arm of anesthesiologist during ultrasound guided procedures in the operating room.

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To the editor,

Dear sir,

We propose height adjustable stabilizing stick aid as support the anesthesiologist's arm during ultrasound guided procedures in the operating room.

Various causes of injuries among sonographers have been identified. Besides their physical and psychological factors and workload, inappropriate body posture and ergonomics

are primary causes. Repetitive hand movements force and transducer grip are attributed to adverse effect to their health. Sonography in operation theatre is different than its use in radiological suite. Appropriate ergonomics may be difficult to arrange in operation theatre meanwhile proper stabilization of hand is necessary for adequate visualization of body structures and needles. We applied

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simple walking stick for stabilization of operating arm during ultrasound use. We named it as PRB-stick. Resting arm on the PRB stick may contribute not only to stable hand position but also to maintain body posture.

The stick should be firmly stable with four supports at bottom and should be height adjustable. (Figure 1) The height should be adjusted to operator's umbilicus level or two inches above umbilicus Fig 2) so that elbow joint is flexed at ninety degrees when the operator is standing upright. (Figure 2) This facilitates resting of forearm at the handle of the stick while the operator is in upright position.

The stick is widely available, cheap and portable which will add ease in many ultrasounds guided procedures in operation theatre. The operator will be able to move his wrist freely to perform hand eye coordination during needle insertion. However, the stick may not be suitable for all types ultrasound guided procedures like paravertebral block in sitting position or in restricted work place like insertion of central venous catheter during ongoing surgery.



**Figure 1**



**Figure 2**

A randomized trial to access the efficacy is warranted.

**Consent for publication:** A consent for scientific publication of the photograph of the person with the stick without disclosing his/her identity was obtained.

**Conflict of interest:** The authors have filled the ICMJE conflict of interest form and have nothing to disclose.

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