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Letter to Editor

Dear Editor,

We read with great interest the article “Comparison of training in neonatal resuscitation using self inflating bag and T-piece resuscitator” by Mathai et al published in *Med J Armed Forces India* 2015; 71: 19–23.¹ The study highlights the effectiveness and ease of training of health care personnel using infant training manikins. T-piece resuscitator was acceptable to most of the probationer nurses and first year PG residents of different specialties in this study even though assembling of T-piece device was done correctly by lesser number of participants as compared to self inflating bag. Having gone through the article, we would like to add the following:

T-piece is a simple pressure limited manual device which provides consistent target pressures including positive end expiratory pressure and peak inspiratory pressure regardless of skill level of the operator thereby improving pulmonary outcomes by decreasing atelectrauma and barotrauma respectively. In the study by Dawson et al, there was no significant difference in SpO₂ at 5 min after birth in infants less than 29 weeks gestation given positive pressure ventilation with a T-piece or a self inflating bag.² In a very recent Indian study using T-piece resuscitator during delivery room resuscitation resulted in shorter duration of positive pressure ventilation and lesser rates of intubation as compared to self inflating bag and more importantly a higher proportion of neonates could be resuscitated with room air alone thereby decreasing the need of oxygen and concomitant oxytrauma.³ T-piece has another advantage of giving newly born preterm infants sustained lung inflation which is proven to decrease the need of mechanical ventilation in first 72 h⁴

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Reply

Dear Editor,

I thank the authors for their interest in the article and fully endorse the sentiments expressed in their letter. We hope that the findings of our study will reassure doctors and nurses of the

ease of using this important piece of equipment. Having said that, I would like to reinstate the fact that the T-piece resuscitator requires a source of compressed air and oxygen along with a blender to administer FiO₂ in desired concentrations including 21% O₂. Unfortunately, this facility is still not present

in the delivery rooms of most of our service hospitals, though the T-piece resuscitator is now available in all zonal and bigger hospitals. Having this facility is the need of the hour so that we can effectively use the T-piece resuscitator to administer positive pressure ventilation to newborn babies.

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Letter to the Editor

Technology acquisition in radiodiagnosis: Pros and cons

Dear Editor,

I read with extreme interest the original article titled “Life cycle costing as a decision making tool for technology acquisition in radiodiagnosis” by Chakravarty et al published in *Med J Armed Forces India* 2015; 71:38–42.¹

I must complement the authors who have brought out an important concept about technology acquisition in health care settings. The authors have passably and rationally elucidated that upgradation of an existing 1.5 T MRI to a state of art improved version along with increase in life cycle is an attractive alternative option to buying a brand new 3 T machine.

However, while agreeing with most of the viewpoints given by the authors, I must mention here that, the choice of newer version machines with large capital investment is not only governed by the break even economics but also is based on the progressive clinical settings and scientific expectations brought in by the evidence based practice and scientific quest. As the technology sector and health care delivery are considered areas of highly dynamic progression, the choice between complete replacement and upgradation on existing platform will remain a challenge in most health care providers in both governmental and corporate settings.

The rationale behind the huge investment on a newer 3 T MRI machine will be dictated by the clientele specialties/super-specialties demand. It is expected that the demand for the highly refined MRI machines with greater magnetic field strength especially in structural and functional neuro-imaging is going to be persistently high. Such requirements as well as tremendous research potential needs to be considered particularly in the institutional practice which would be an important factor justifying complete replacement to higher technology platform.

Change in hardware elements like magnet strength, increasing aperture diameter to partially reduce claustrophobia with cohesive in built software and acquiring faster sequences, are other important parameters which need to be examined in detail before making a decision for such a technology acquisition.

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Reply

Dear Editor,

The authors thank the reader for showing interest in the article and for the critical, constructive and pertinent issues raised in the letter.

The authors agree that health-care organizations, at any point of time, cannot ignore various progresses being made in technology evolution and up-gradation. It also merits consideration at this point that all claims for the “Latest and the