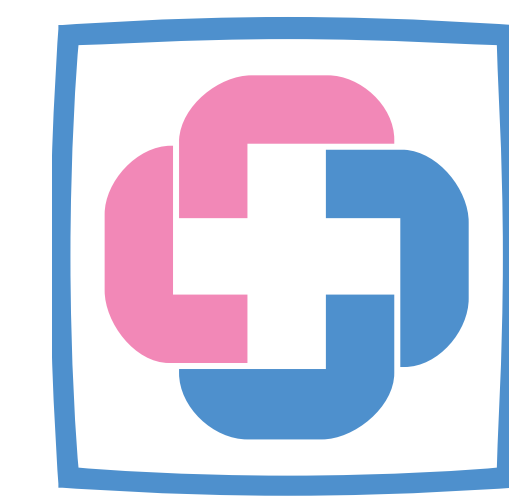




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# Improving Home Nebuliser Knowledge among Healthcare Professionals (HCPs) in KKH

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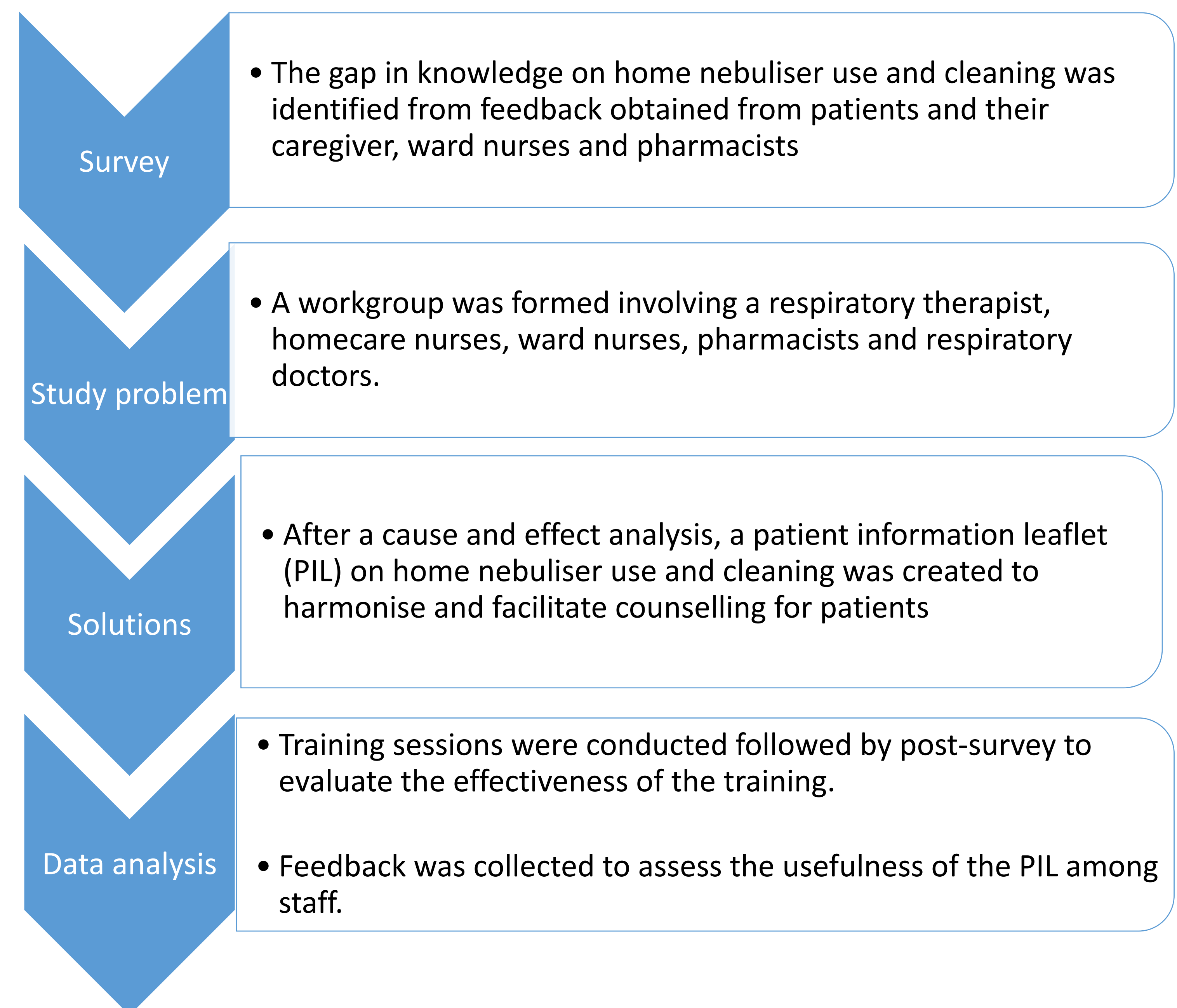
## Background

Some inhaled medications that are prescribed to respiratory patients can only be delivered by home nebulisers (e.g. hypertonic saline and antibiotics), but the KK Hospital Pharmacy no longer sells home nebulisers. These patients have to purchase the home nebulisers from external vendors or retail pharmacies. A recent review demonstrated a paucity of home nebuliser knowledge among patients, caregivers and health care workers (nurses, pharmacists & junior doctors). A check with external retail pharmacies showed that many do not sell home nebulisers nor provide aftercare services. Patients, caregivers and healthcare professionals often lack resources for nebulizer purchase and knowledge on the use and maintenance of home nebulisers.

## Aim

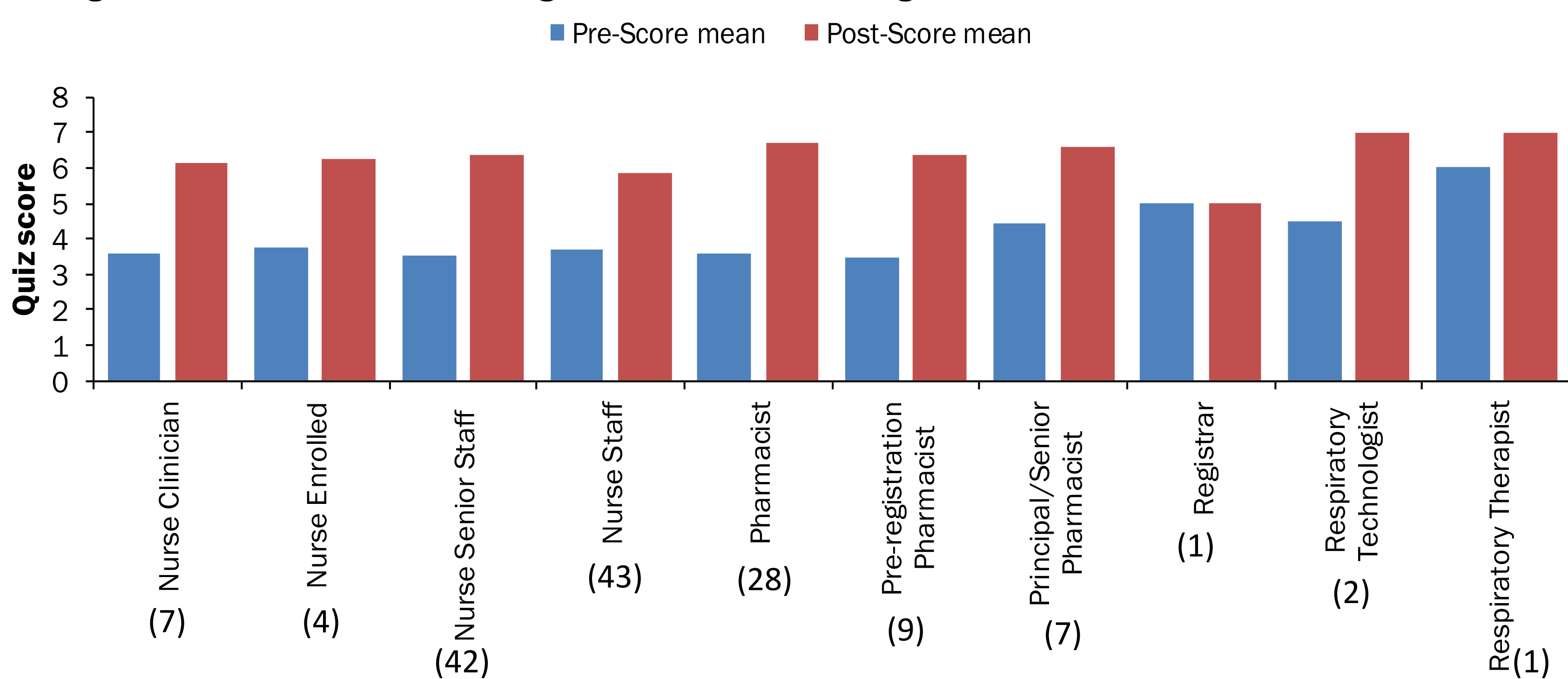
To improve healthcare professionals' (HCP) understanding and confidence on home nebuliser use and maintenance so that they can provide better nebuliser training and care to patients and their caregivers.

## Methodology



## Results

Fig 1. Pre- and Post-Training Quiz Scores Among Different Healthcare Professionals



A total of 144 HCPs participated in the study. There was statistically significant improvement in the mean knowledge score from 3.67 pre-survey to 6.26 post-survey ( $p = 0.001$ ) as shown in Figure 1.

The percentage of HCPs who graded themselves as good (score  $\geq 4$ ) increased from 9% pre-training (Figure 2A) to 58% (post training) ( $p < 0.001$ ) (Figure 2B).

With the new workflow and PIL implementation, the average number of phone-call from caregivers decreased from 6 per year to zero in last 6 months and enquires from nurses decreased from 8 per year to 2 in the last 6 months. HCPs (88.2%) found the PIL user-friendly and a helpful aid in their counselling.

Fig 2A. Participant Self Assessment of Nebuliser Knowledge (Pre-Quiz)

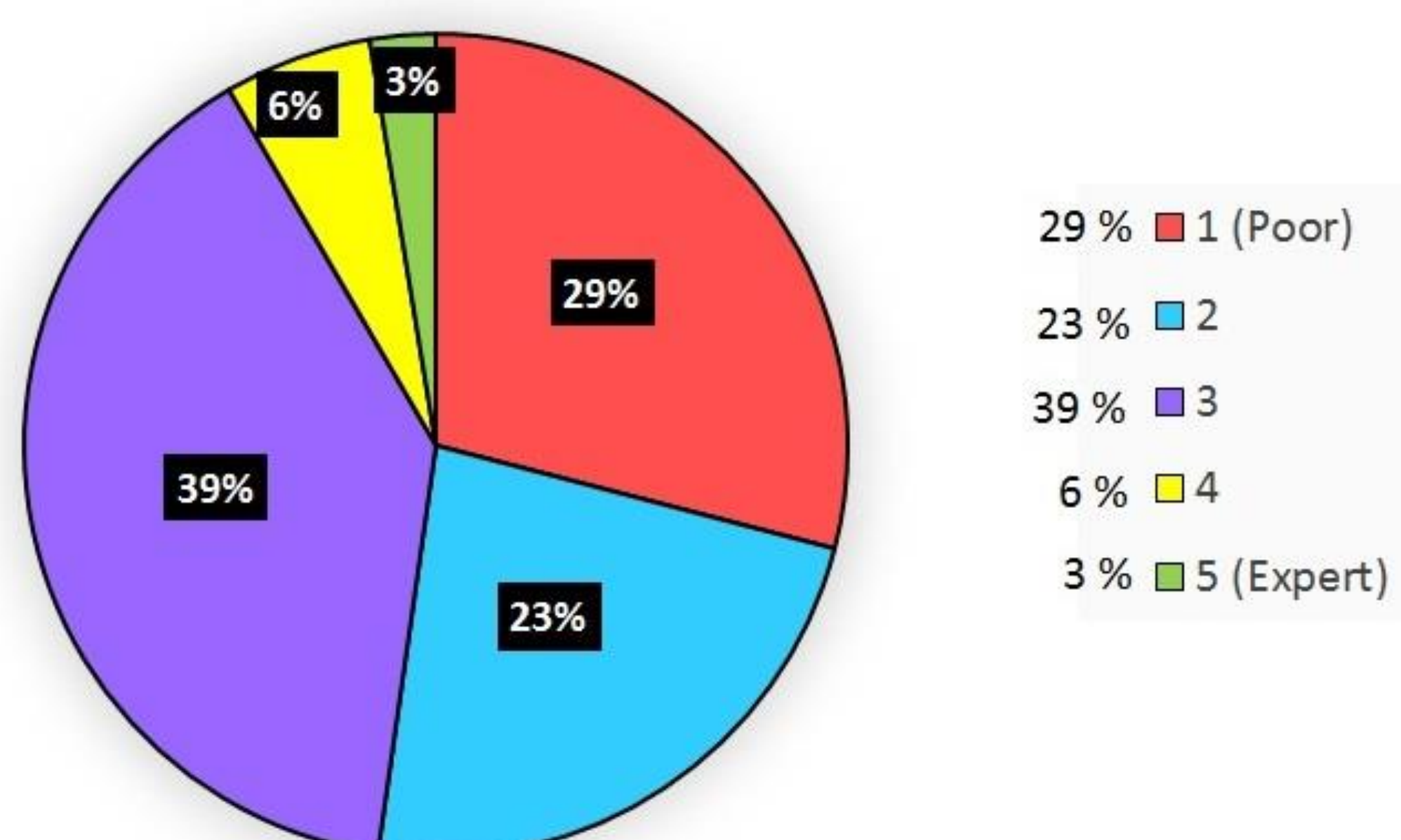
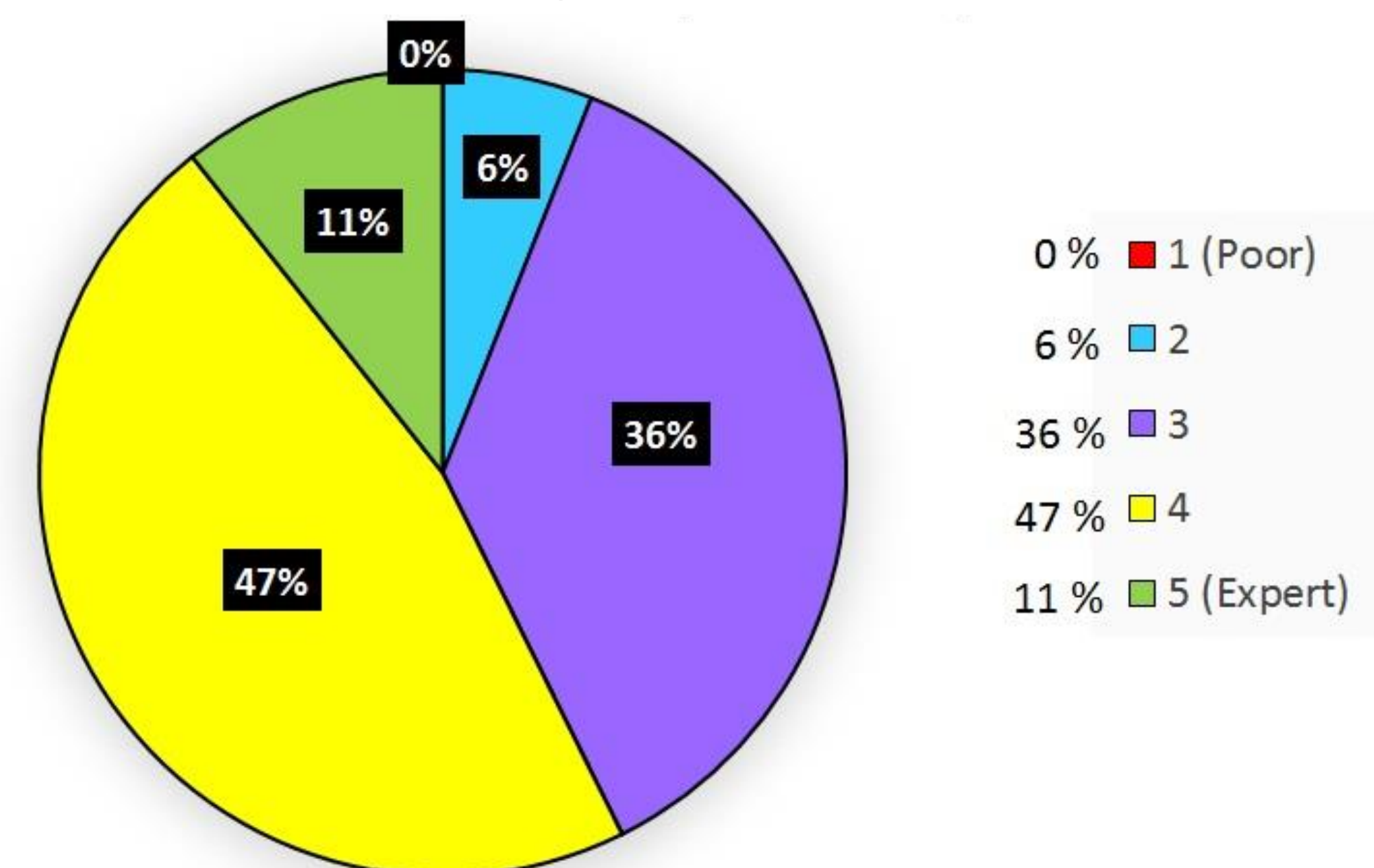


Fig 2B. Participant Self Assessment of Nebuliser Knowledge (Post-Quiz)



## Conclusion

There was improved confidence on nebuliser care knowledge among HCPs after implementation of these new measures. With the acquired knowledge and better confidence, HCPs can provide better nebuliser counselling to patients.