

**ARC2: The use of Smartphone vs Conventional ENT
Endoscopy among Otolaryngologists: A cross-sectional analytical study**

Camille Q. Tolentino, M.D.

Department of Otorhinolaryngology Head and Neck Surgery

Manila Central University Filemon D. Tanchoco Medical Foundation

OBJECTIVE: This study aims to evaluate and compare conventional ENT endoscopy (CE) and smartphone endoscopy (SE) based on a survey of Otorhinolaryngology residents and consultants in Metro Manila based on the following: clarity of image, diagnostic accuracy, ease of use, eye-hand coordination and costs including feedback on advantages and disadvantages of SE and to determine if there is a significant difference between the ratings of the respondents with <5 and >5 years in training or in practice.

METHODS

STUDY DESIGN: Analytical cross sectional study

SETTING: Training institutions and private clinics in Metro Manila

SUBJECTS: Otorhinolaryngology consultants and residents from training institutions and private clinics in Metro Manila who are both using CE and SE in their clinical practice and training for at least 6 months were included in this study. Residents and consultants with no or minimal experience of less than 6 months in using both CE and SE were excluded.

RESULTS: Conventional endoscopy got high ratings and was preferred by the respondents compared with SE with regards to clarity of image, eye hand coordination, diagnostic accuracy and ease of use. However, based among respondents with >5 years of practice, SE and CE were comparable in terms of clarity of image and ease of use. Eighty four percent (37/44) recommended the use of SE to ENT clinicians.

CONCLUSION: Smartphone endoscopy is portable, handy, with easy recording of file, retrieval and transfer. The study showed the potential of SE as an alternative, versatile, and affordable mode of ENT endoscopy.

KEYWORDS: Endoscopy, Smartphone