

Management of Infections in the Intensive Care Units: An International Survey

A Roshdy ¹, A Elsayed ², A Saleh ³

1 Whipps Cross University Hospital, Barts Health NHS trust, London, UK. 2 Intensive Care Unit, King Fahd Military Medical Complex, Dhahran, Saudi Arabia. 3 Intensive Care Unit, Okba Ibn Nafee Hospital, Alexandria, Egypt.

INTRODUCTION

The heterogeneity managing infectious diseases (ID) in different ICUs remains a main obstacle for stewardship programs. Easy, fast transmissibility and antimicrobial (AM) resistance are of global concern. Altogether, they make the assessment of management, knowledge and training for intensivists an essential step towards improving outcome from ID in the ICUs.

OBJECTIVES

To explore the practice of Infectious diseases management in different ICUs.

METHODS

International cross sectional descriptive and analytical internet based open survey of Intensivists. The survey consisted of 25 questions divided into 4 sections. After external peerreview, it gained endorsement by the ESICM. It was hosted on SurveyMonkey (July 30, 2019) for 82 days. Invitations were shared on social media and by emails.



RESULTS

466 respondents from 74 countries completed the survey with median ICU experience of 10 years (IQR 5-19) and were trained in ICM as a sole specialty (30%), or dual along with anaesthesia (36%) or medicine (30%). 76% of the respondents were full-time Intensivists and 34% were from low- and middle-income countries (LMICs).

2/3 of participants had adequate knowledge of the ID diagnostic capabilities in their hospitals. The initiation of AM was protocolised in 68% of cases, and half of Intensivists seldom request non-ICU opinion.

Intensivists sought non-ICU expert opinion in immunocompromised patients and in Extended or Pan-resistant microorganisms as well as fungal infections (63%, 43%, 55%, and 32% respectively). Only 27% of Intensivists felt a need for expert opinion in case of viral infections.

Stewardship program was in place in 66% of ICUs, and a regular microbiology round is lacking in 40% of them. The implementation of Stewardship programs differed significantly between LMICs and HICs (62% vs 68%, p=0.013).

Satisfaction with ID training was low at 43%; even less in LMICs (29%, p < 0.001). 95% of Intensivists think addressing such gap can improve patients' outcome and decrease cost and AM resistance.



LMICs





40%

CONCLUSIONS

From Intensivists' prospect, there is a need to improve training and knowledge in the field of ID. Stewardship programs are not universally implemented and ID management follow mostly a protocolised approach.

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CONTACT INFORMATION

ashraf.roshdy@nhs.net