

Online paediatric EEG handbook: a survey on its usefulness

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Introduction

There is inadequate paediatric EEG training amongst doctors and technicians involved in the care of children with epilepsy in sub-Saharan Africa (Kander, 2021). An entry level handbook was originally developed for healthcare practitioners in sub-Saharan Africa. It has subsequently been encompassed as a resource on the International Child Neurology Teaching Network (ICNTN) making it accessible across the world covering high to low-income countries.

Aim

The aim of the handbook/module is to establish a resource for health practitioners to facilitate their knowledge base with regards to the interpretation of basic paediatric EEG and to ensure safe practice in the use of this tool.

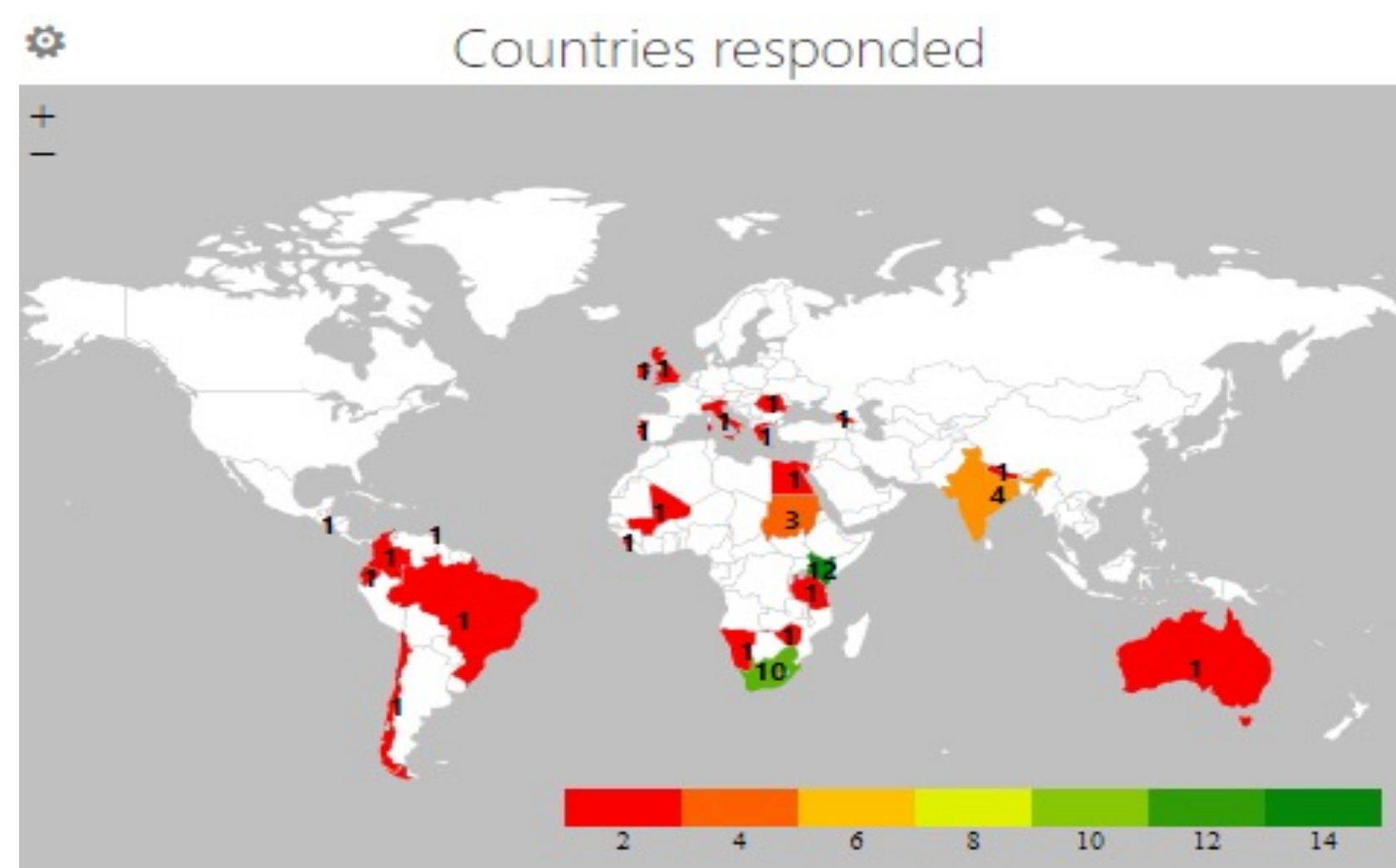
Methods

We developed a 15-minute web-based survey consisting of 26 questions. The survey was emailed to 108 of the 112 participants from 49 countries who registered to do the online course since it went live in 2016 on the International Child Neurology Teaching Network (ICNTN). Four new participants failed to finish the handbook by end of June 2022. Research electronic data capture (REDCap) from the University of Cape Town's (UCT) web applications were utilised to circulate the survey via the web with weekly ebcasts (24th Dec 2021 – 24th June 2022). Participation was voluntary and a consent form was signed. The study was approved by the ethics committee of UCT, Cape Town, South Africa (481/2018).

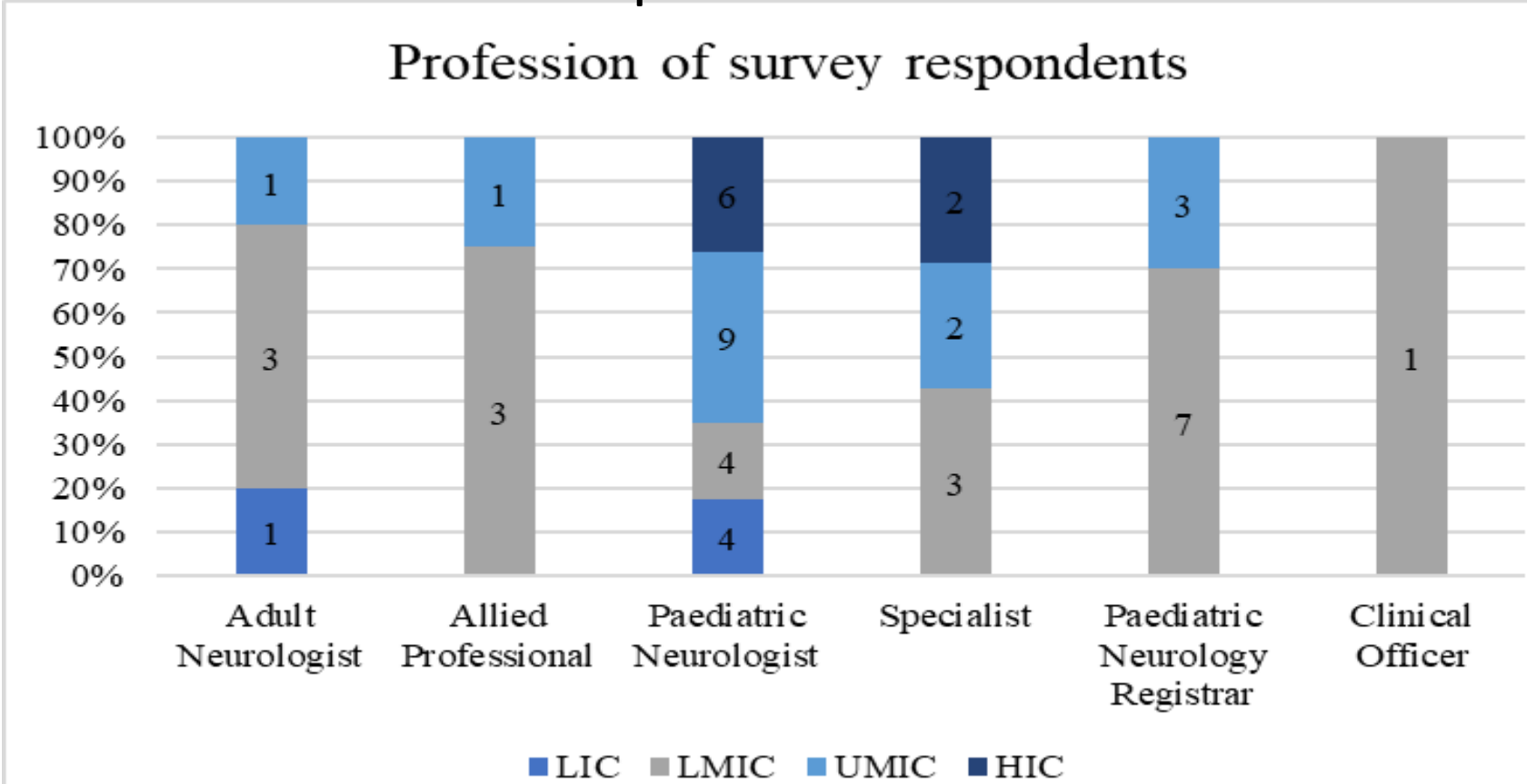


Results

By June 2022, 64% fully and 36% partially completed the survey. Responses were from 25 countries: n=8 high income, n=7 upper-middle income, n=7 lower-middle income and n=3 from low-income. Of the 50 participants, most (n=35) had successfully completed the handbook. Seven of the survey respondents had partially and eight did not completed the handbook.

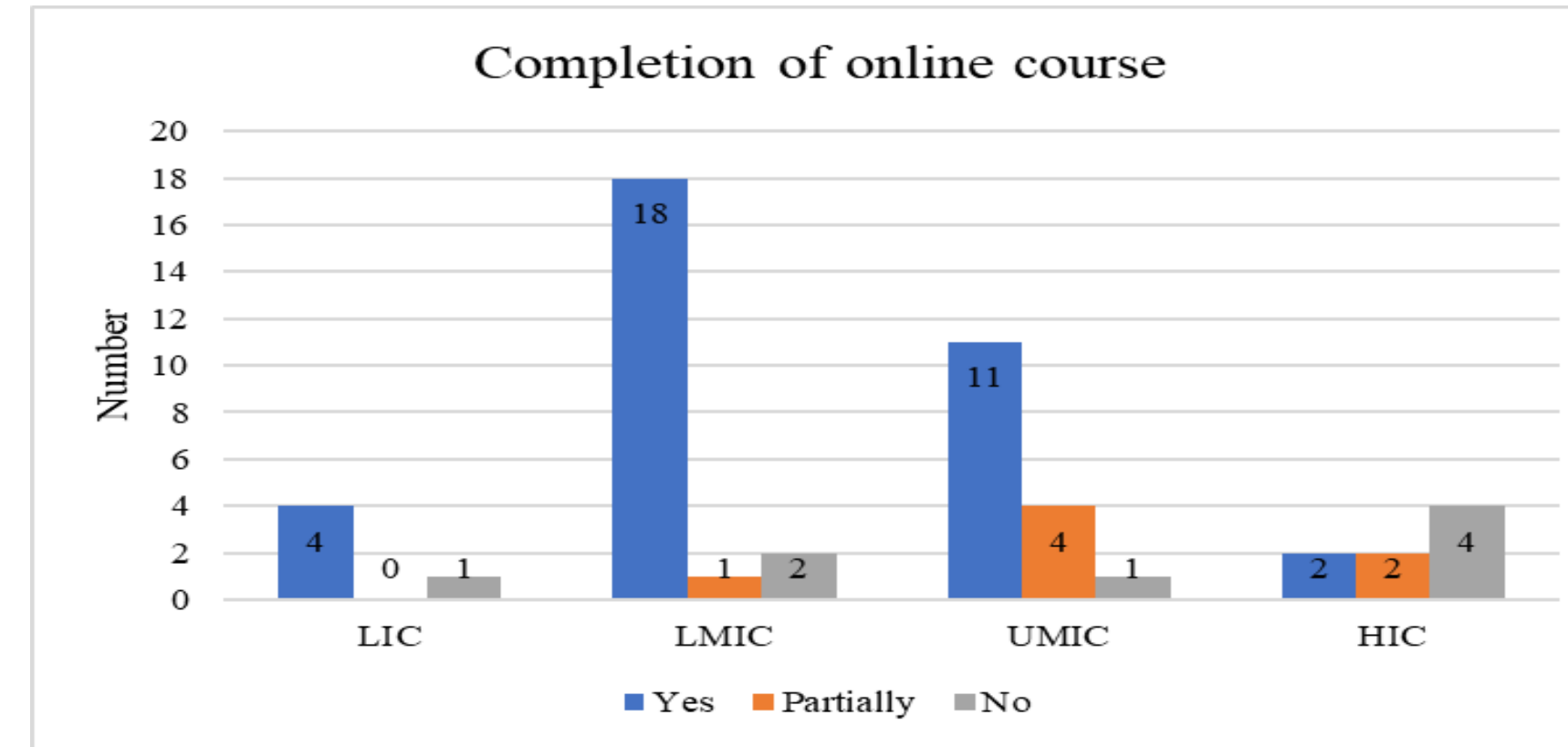


There was a female participant preponderance amongst the survey respondents (56%) even though most of the participants from Low Income Countries (LIC) was male (4/5 - 80%). The average age of the study cohort was 43 years (SD ± 10) with most of the participants being paediatric neurologists (23/50 – 46%) in the different income countries except for LMIC.

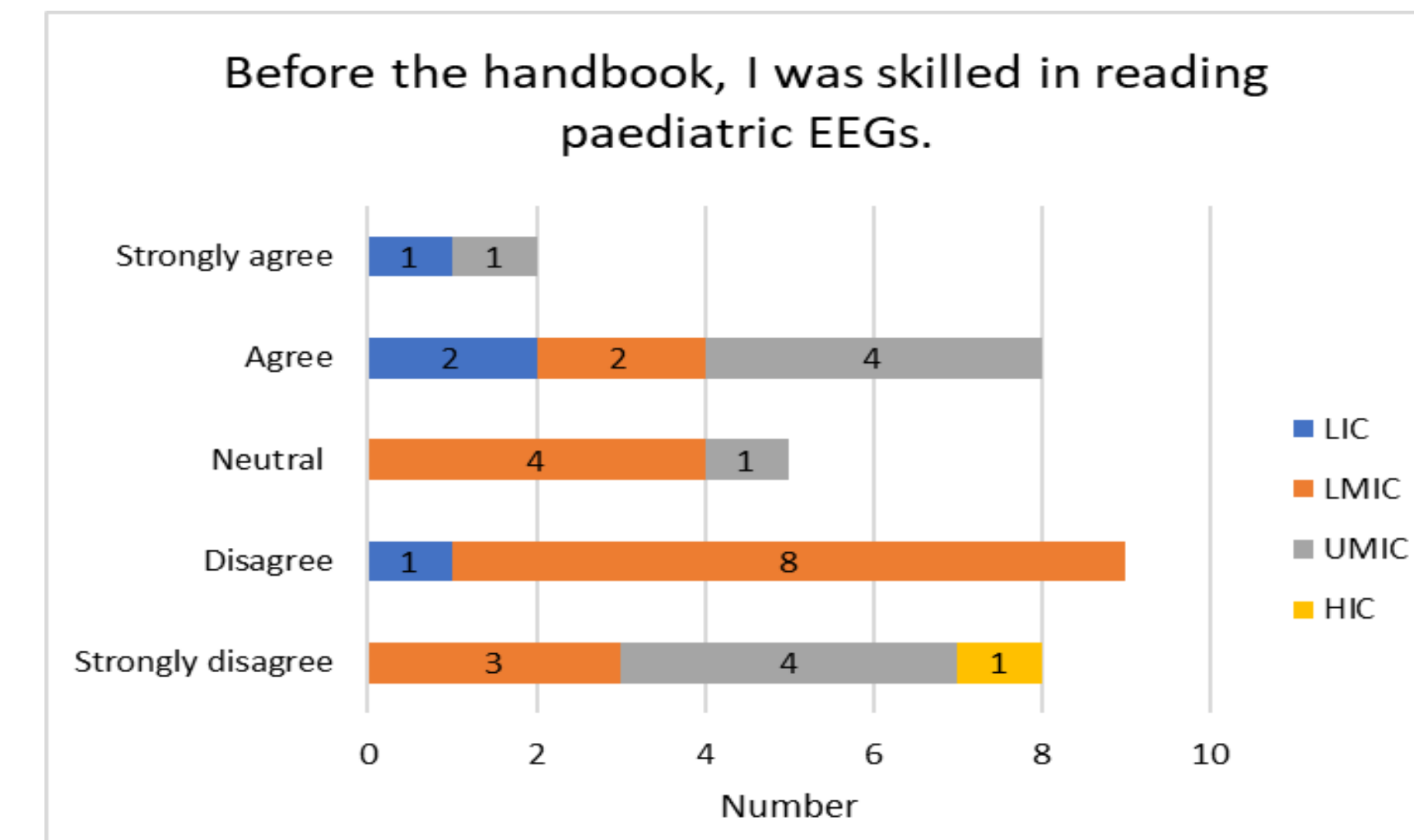


Results

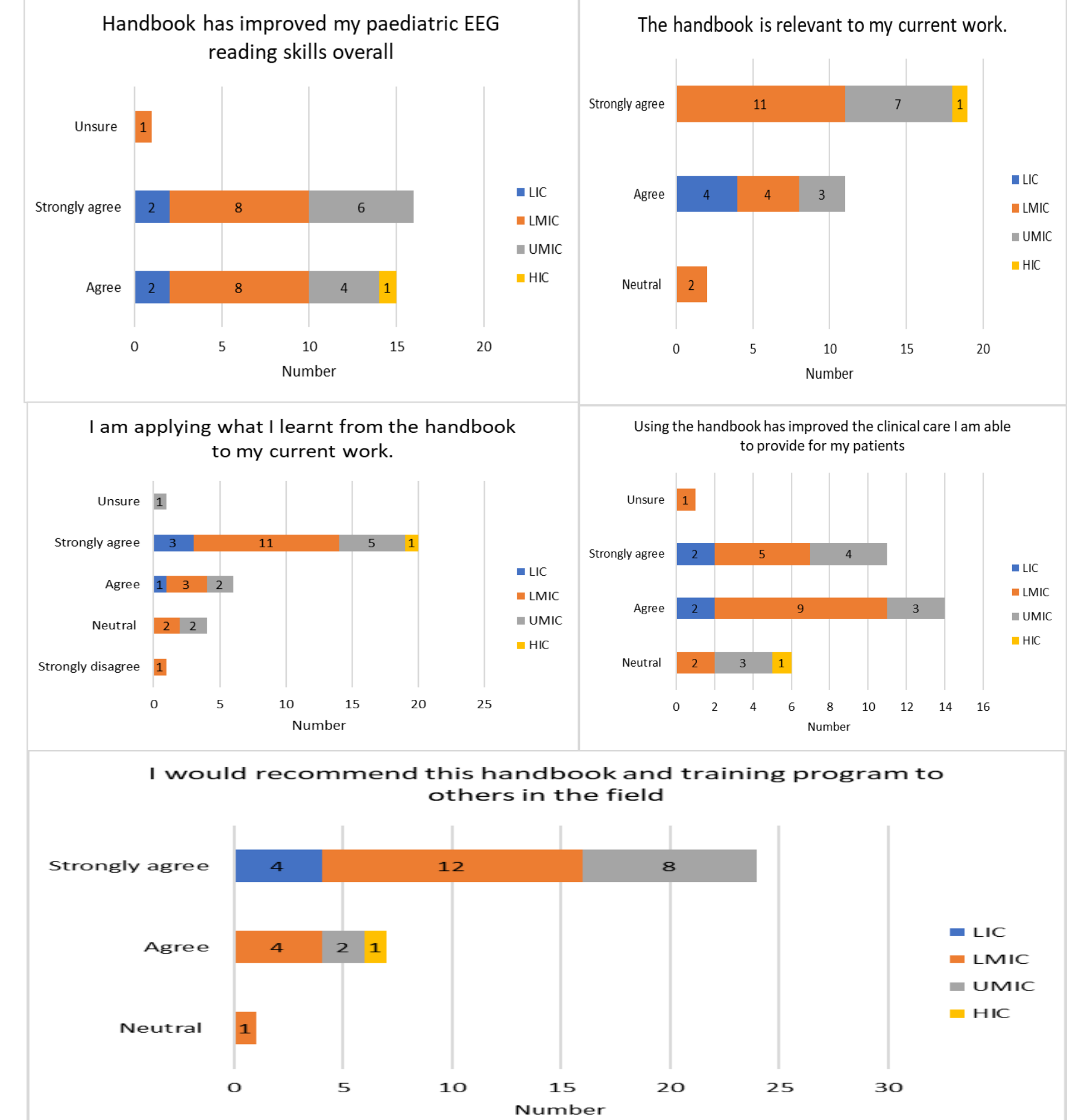
Close to three quarters of the respondent (35/50 – 70%) completed the online course and this was consistent over the LIC, LMIC and UMIC's. But for HIC's only half partially and fully completed the online course.



The experiences of the respondents with respect to already having skills in reading paediatric EEGs varied by income country. Over half of the participants (17/32 - 53%) disagreed/strongly disagreed with a higher proportion coming from LMIC's (n=11). For the rest of the experiences and opinions below the respondents were generally agreeing/strongly agreeing. The open-ended questions produced data relating to respondents' experiences of the handbook. This data was analysed using a thematic analysis.



Results



Conclusion

The findings from a thematic analysis of the qualitative responses to the survey indicate that participants found the handbook useful both for their clinical practice and for the accessibility of the knowledge contained in the book. Some three quarters of the respondent successfully completed the online course predominantly from the LIC, LMIC and UMIC's.

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