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Introduction

- Telemedicine involves the utilisation of communication and information technology to provide clinical care for patients from a remote location.¹
- The COVID-19 pandemic played a crucial role in accelerating the acceptance of integrating technology in healthcare.
- Telemedicine has now become a regular aspect of daily medical practice and it is evident that its benefits, to both patients and clinicians, continue even after the pandemic (as per the NHS England 2019-NHS Long Term Plan)
- The adoption of telemedicine into mainstream practice was not established with training as a consideration.
- Now, two years on, we evaluate the impact on Obstetrics and Gynaecology postgraduate training.

Aims

- To determine uptake of telemedicine by postgraduate O&G trainees in London and the perceived impact on training.
- To evaluate trainee views on ultrasound and laparoscopy training, and telementoring.

Method

- An in-depth survey was designed on previously published questionnaires and a systematic review performed on telemedicine in gynaecology.^{2,3}
- Feedback on the questionnaire and content validation was performed by a combination of O&G trainees and consultants involved in postgraduate O&G training.
- Study participants were postgraduate doctors on the obstetrics and gynaecology training programme in London, UK.
- The survey was circulated from Health Education England, via email, to the 2022 cohort of London O&G specialist trainees.
- The study was approved by the Education Ethics Review Process team at Imperial College London.

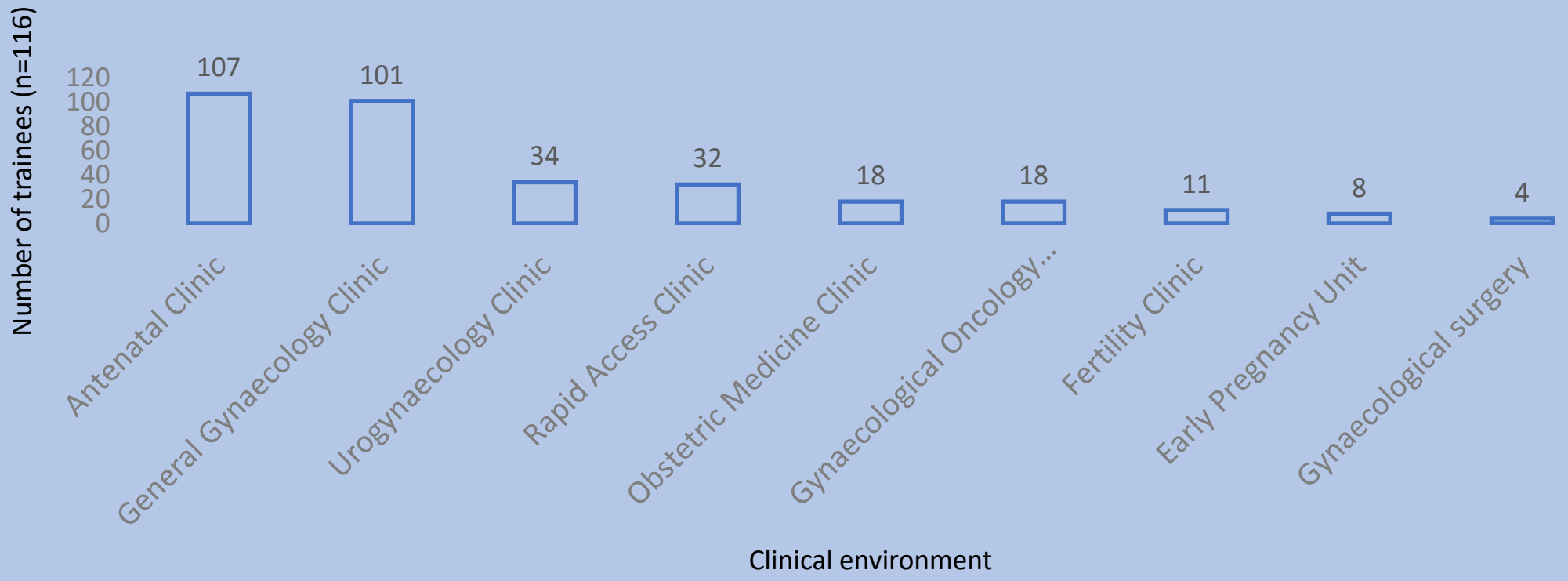
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Results

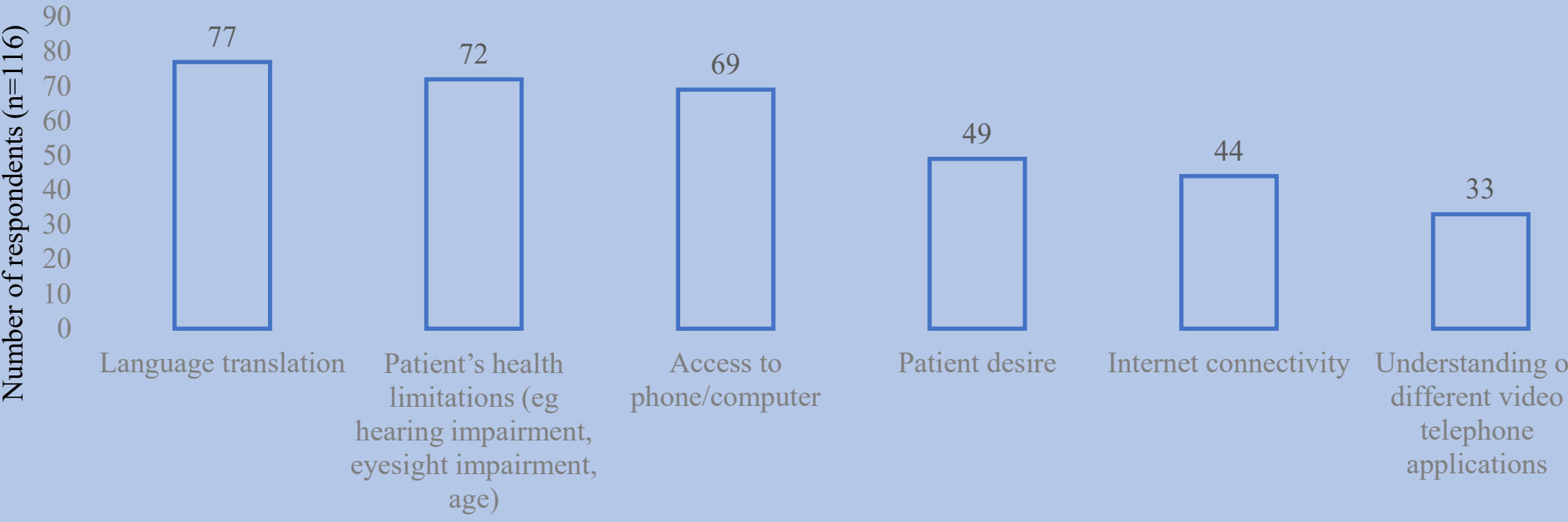
- The survey was sent to 255 London O&G trainees, the response rate was 46.3% (118/255).
- 96% (113/118) had participated in patient encounters using telemedicine. Of those, 80% had participated in telemedicine using telephone consultations only and 19% had used both telephone and video consultations.
- Trainees had used telemedicine in a range of clinical environments. (Fig 1)

Figure 1: Clinical environments in which trainees have used telemedicine



- 91% (106/117) of respondents felt that telemedicine should become a permanent part of O&G practice.
- Trainees reported that telemedicine consultations **saved time** in comparison to in-person.
- The most commonly identified patient barrier to telemedicine identified by almost two thirds of trainees was language translation, and 41% of respondents felt they did not have easy access to a language interpreter in telemedicine consultations (Fig 2).

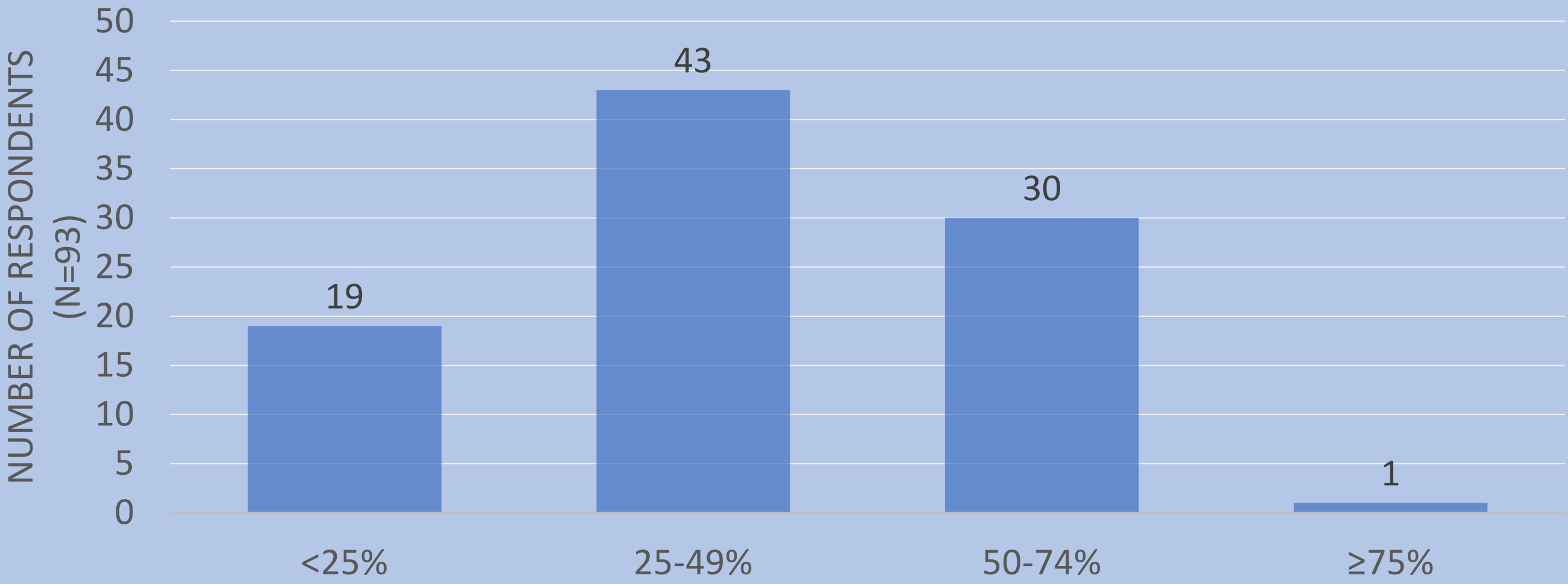
Figure 2: Barriers to telemedicine from a patient perspective



- 50 trainees (**43%**) felt that they had not managed to achieve effective clinical training with telemedicine appointments. Of the 67 trainees who had achieved effective clinical training with telemedicine appointments, 41 (61%) felt that telemedicine consultations were useful when they obtained the history, presented to the supervisor, received feedback, and then the trainee finished the consultation alone.
- Almost all respondents had attended teaching sessions remotely online, and **70% (81/116) of trainees preferred remote teaching to in-person.**
- The majority of trainees (75%) had some experience in the use of technology in training: the modalities included surgical and ultrasound simulation, remote real-time training and virtual reality patient consultations.

- Trainees overall lacked confidence in their USS skills (n=102)
 - median=3, where 1=not at all confident and 10= very confident
 - IQR=4
- 79.5% (74/93) of trainees responsible for acute gynaecology admissions out-of-hours felt that at least 25% of gynaecology admissions were for the purpose of a deferred USS investigation the next day (Fig 3).

Figure 3: Acute gynaecology patients admitted for the purpose of a formal USS the next day



- Most trainees anticipated real-time remote supervision for both USS and laparoscopy would increase training opportunities and reduce time to patient diagnosis and management.
- Barriers anticipated included technology uptake and connectivity issues.

Conclusion

- Telemedicine has established itself as a mainstream method of providing clinical care, which is popular with O&G trainees.
- There is a need to consider effective training in O&G when delivering telemedicine.
- Technology offers a variety of training opportunities, with the development of online teaching, telementoring and simulation.
- Trainees report advantages and disadvantages which should be taken into consideration to optimise postgraduate O&G training.

Declaration of interests

No competing interests. For more information, please email sughashini.murugesu@nhs.net