

Impact of COVID-19 on training: a single-centre survey of trainees

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ABSTRACT

To review the impact of COVID-19 on postgraduate paediatric training, a 10-question online survey was designed to evaluate trainees' training opportunities. 56 trainees working at a single centre, Alder Hey Children's Hospital, completed the survey. The majority of trainees felt that COVID-19 had affected their training. Trainees wanted to become involved in Quality Improvement Programs. Face-to-face teaching was still favourable but web-based teaching methods were preferred. Novel online, Worked Based Assessment clinics were well received. COVID-19 has affected traditional learning opportunities but offered a new positive range of digital solutions to give and store educational material.

trainees within departments. Due to government recommendations of social distancing, regular face-to-face teaching and traditional teaching/training opportunities disappeared overnight.

An online survey using 'monkey survey' (table 1) was designed to ascertain how the trainees felt about their training and to identify what training opportunities they wanted. The survey was sent out 4 weeks into the start of changes to normal working pattern. The style of question was determined to be binary yes or no, or rank.

Alder Hey Children's Foundation Trust (AHH) is a standalone, tertiary, regional paediatric hospital. Prior to COVID-19, the education programme comprised of mandatory training, regional educational programme run out of AHH and self-directed learning supported by educational and clinical supervisors. During COVID-19, from 23 March, Alder Hey implemented new ways of clinical working, moving to weekend working 7 days a week and loss of typical placements of

PATIENT INVOLVEMENT

This research was done without patient or public involvement. Patients were not invited to comment on the study design, interpret the results or contribute to the writing of this document.

At AHH, after implementation of the new COVID-19 way of working (COVID-19 rota), there were: 8 Foundation/GP trainees, 15 ST1–3 and 33 ST4–8 paediatric trainees. The overall response rate was 53/56 (94.6%),

Table 1 Ten questions used on the survey monkey

Qu 1	Do you feel your training and education has been affected by the COVID-19 pandemic? Yes/no
Qu 2	To increase clinical exposure would you be happy to see patients in ED and discuss with the necessary consultant? Yes/no
Qu 3	To increase clinical exposure would you be happy to see HDU/PICU step down patients, and discuss with the necessary consultant? Yes/no
Qu 4	Would you be interested in getting involved in Quality Improvement Programs? Yes/no
Qu 5	If yes to question 4, please rank the following below with 1 being your most preferred? Guidelines/audits/standard operating procedure/feedback forms/pathways
Qu 6	Do you think there should be a Worked Based Assessment clinic? Yes daily, yes weekly, yes two times per week, yes monthly, no
Qu 7	Would you like a formal teaching programme? Yes daily, yes two times per week, yes weekly, yes monthly, no
Qu 8	How do you want to access your teaching opportunities? face to face, live stream, recorded or live stream and recorded
Qu 9	What is the best time for teaching? 8:30/11:30/12:00/13:30/14:00/14:30
Qu 10	What is the best length of time for a teaching session? 20/30/45/60 min



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**Table 2** Results of binary questions

Question number	Paediatric trainees (n=47)		Foundation/GP trainees (n=6)	
	Yes	No	Yes	No
Qu 1 Do you feel your training and education has been affected by the COVID-19 pandemic?	47	0	5	1
Qu 2 To increase clinical exposure, would you be happy to see patients in ED and discuss with the necessary consultant?	31	16	6	0
Qu 3 To increase clinical exposure, would you be happy to see HDU/PICU step down patients, and discuss with the necessary consultant?	35	12	N/A	N/A
Qu 4 Would you be interested in getting involved in Quality Improvement Programs?	38	9	6	0
Qu 6 Do you think there should be a Worked Based Assessment clinic?	45	2	5	1
Qu 7 Would you like a formal teaching programme?	46	1	6	0

ED, Emergency Department; HDU, High Dependency Unit; PICU, Paediatric Intensive Care Unit.

comprising 6/8 (75%) Foundation/GP trainees, 15/15 (100%) ST1–3 and 32/33 (96.9%) ST4+.

The majority of trainees thought the COVID rota had affected their education and training opportunities. Most of the trainees wanted to become involved in Quality Improvement Program (QIP) (table 2). For paediatric trainees: guidelines (19/38), audits (15/38), standard operating procedure (3/38) and parent and family feedback (1/38) were listed as the preferred QIP for them to be involved with. For Foundation/GP trainees, guidelines (4/6) and audit (2/6) were ranked highest. Overall, 45/47 paediatric trainees wanted a Work Based Assessment (WBA) clinic (12 daily, 12 weekly, 20 two times per week, 1 monthly) and 5/6 Foundation/GP trainees wanted a WBA clinic (4 weekly, 1 monthly). Formal teaching programmes were still desired by trainees (table 2). The frequency most highly ranked was weekly for paediatric trainees and two times per week for Foundation/GP trainees (19/46 weekly for paediatric trainees and 4/6 two times per week for Foundation/GP trainees). All trainees still liked having face-to-face teaching (13/47 paediatric and 5/6 Foundation/GP trainees) but the paediatric trainees also indicated that their preferred method was live streamed and recorded material 21/47. Other options were live streamed with no recording 9/47 and only recorded 4/47. For all trainees, the best time for training was 13:30 (12/53) or 14:00 (16/53). The optimal length of a teaching session for all trainees was 30 min (19/53) or 45 min (23/53).

The majority of trainees felt that the introduction of a new way of working due to COVID-19 had affected their training. There were no significant difference between the paediatric trainees and the Foundation doctors

results. Trainees wanted to become involved in Quality Improvement Programs, particularly guidelines and audits. Formal and novel online teaching (WBA clinics) formats were well received. Face-to-face teaching was still favourable but using web-based teaching methods was the most preferred. With the introduction of social distancing, new digital solutions to learn and teach have become available, which appear to be well received by the trainees. Although service provision is vital during a pandemic, the educational needs of trainees' should still be considered and are important to our future medical workforce. By seeking out the trainees' views about their education, we hope that this will allow the development of the best-informed programme and engagement of the trainees in their adult learning.

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