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01 USE OF A MULTI-DISCIPLINARY TEACHING PLATFORM FOR TEACHING PAEDIATRIC PRESCRIBING

Lucy Paterson-Brown, Eoin Dore. *Evelina Children's Hospital, London*

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Aim We present a case study of the development of a structured, holistic, multidisciplinary prescribing teaching program for medical students in our paediatric department. The aim was to integrate theory and practise into one multidisciplinary delivered teaching session.

Method Prescribing is an area that medical students consistently report as challenging with poor teaching and minimal paediatric specific prescribing teaching as an undergraduate. After collaboration with our pharmacist colleagues the agreed objective was to design a teaching session run by doctors and pharmacists together in order to more accurately simulate paediatric prescribing in clinical practice for the inpatient environment. The method was based on Blooms Taxonomy,¹ starting with a pharmacist delivering teaching on the theory of paediatric prescribing. Following this, junior doctors delivered case based prescribing scenarios to allow assimilation and application of theory. At the end of the 150 minute session feedback was collected from both session facilitators and students. These were evaluated to allow for revision and improvement of the session.

Results Both facilitators and students very enthusiastically received the session with phrases such as 'amazing session thank- you!' added to the feedback forms. Feedback was gathered from 32 students over the first 8-week cycle of the project. The majority of students stated that prior to this session they had little or no paediatric prescribing teaching. When asked the question 'how prepared do you feel for prescribing in paediatrics?' and asked to rank themselves from 1 (not at all) to 5 (very well) the average improved from 1.44 pre session to 3.55 post session. The feedback was consistent between sessions demonstrating no significant variation between facilitators. This highlights that the standardised, formal structure of the session allows it to be delivered by pharmacists and doctors of different grades and levels of experience without changing the success of the session for the students.

Conclusion This project demonstrates that there is a significant gap in undergraduate teaching on prescribing, especially paediatric prescribing. This teaching session is low cost, produces similar feedback despite variation in facilitators between sessions, and is easily transferable to multiple inpatient areas. Our students demonstrated that after one teaching session they felt more prepared for prescribing in paediatrics and following the feedback changes have been made to the session and ongoing feedback has further improved. We propose that this style of teaching session could be used across the country for both adult and paediatric prescribing undergraduate teaching sessions. We aim to compare our session with other universities approaches to prescribing teaching and establish whether this is a national area that requires focused educational attention.

REFERENCE

1. Bloom BS. *Taxonomy of educational objectives: The classification of educational goals* 1956.

02 ASSESSING MEDICATION ADHERENCE IN PAEDIATRIC CYSTIC FIBROSIS PATIENTS

¹Thujaintha Thevan, ²Amanda Bevan. ¹University of Portsmouth; ²Southampton Children's Hospital

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Background Cystic fibrosis (CF) is a life-threatening, autosomal recessive disease, caused by a mutation in the CFTR gene. It affects over 10,800 people in the UK. There is currently no cure for CF with treatment aimed at controlling infections and preventing complications. Paucity of research exists in assessing adherence of long-term medications in paediatric CF patients, in the UK. This is a continuation of a small proof of concept study established in 2015 at Southampton Children's Hospital.

Aim To calculate the medication adherence of Creon, d-nase alfa and vitamins over a 12- month study period. To gain a better insight into impact of CF treatment in patient and their family's daily life.

Method This study was approved by the local research ethics committee. A mixed- method approach was taken. Medicines possession ratio (MPR) was calculated using SPSS software from data collected via hospital, homecare and community services, this was used to estimate medication adherence. Semi-structured telephone interviews were conducted with patients' parents. Thematic analysis was used to study the qualitative data.

Results Twenty nine parents/patients were consented to take part in the study. Fifteen of these had to be excluded from the MPR calculation due to lack of prescription information from primary care; n=14, mean age 8.4 years (1–14 y), males/female 8/6. Calculated MPR: Creon 72.44% (36.4–100), d-nase 85.27% (57.4–100), vitamins 86.51% (41–100) The themes identified from the qualitative interviews (n=9, all were parents) were time, routine, relationships and psychological impact.

Conclusion Having a set daily routine was felt to be important; adherence was described as more difficult on 'non- typical days'. Many parents prepared the medication for their children (at all ages), but left it for them to take when they were older; they also helped afterwards by washing nebulisers for example. Finding the time for prolonged time-consuming treatment was described as tricky when trying to balance it with other daily activities. The relationships between parents and their children, especially as the children reached secondary school age; between parents and their healthcare team (in both hospital and community) were described as important factors to aid adherence. CF treatment was described as a 'chore', with no break or respite. Adherence, estimated via MPR was lower for oral treatments rather than inhaled, but higher overall than has been shown in other studies.¹ Obtaining data from primary care was problematic; this will need to be overcome for further studies. The complex nature of medicines prescribing for this patient cohort led to difficulties with data collection, the loss of 15 patients due to incomplete data from primary care highlights this problem. The increased