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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

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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

availability of shared electronic prescription data will make this type of study much more feasible in the future. The overall MPR was higher than expected, but this might be related to the role of parents, we would like to continue this work with more of our adolescent patients and those who have recently transitioned to adult services.

REFERENCE

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03 DEVELOPING A PHARMACIST PRESCRIBING ROLE WITHIN CHILD AND ADOLESCENT MENTAL HEALTH SERVICES (CAMHS)

Claire O'Brien. *NHS Tayside*

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Aim CAMHS were unable to achieve the waiting time target for the Attention Deficit Hyperactivity Disorder (ADHD) titration clinic due to ongoing medical staff vacancies. Patients were waiting up to 7 months after diagnosis to commence medication which has a significant impact on quality of life and education.¹ The aim of this project was to utilise the skills of a pharmacist independent prescriber to initiate medication and review the response and to evaluate the impact on waiting times.

Methods Following funding approval, resource was made available to release an independent prescribing pharmacist for 1.5 days a week. Over a period of 8 weeks the following training was undertaken: shadowing clinics; reading books; national and local guidelines; accessing IT systems eg, TrakCare, EMIS, Winscribe; measuring height, weight and blood pressure; attending training sessions; appointing patients to the pharmacist led clinic from January 2018. The patient attends a baseline appointment where ADHD symptoms are assessed and medication options are discussed. The most appropriate medication is initiated at the lowest dose and is reviewed and adjusted at appointments every 2 weeks. On average it takes 4–5 appointments to complete a titration and stabilise the patient on a regular dose. Upon completion of the medication titration, a request is sent to the GP to commence repeat prescribing as per the local protocol. The patient is then appointed to the specialist nurse 3 month review clinic list.

Results Following a review and update of the ADHD titration waiting list, there were 78 patients to be initiated on medication with new patients being added each week following their end of assessment diagnosis. Over the last 6 months, the pharmacist has titrated 28 patients (36%) onto ADHD medication. 3 patients did not respond to the first line stimulant and 1 patient has not responded to the first or second line stimulant and is currently being titrated onto a non-stimulant option. All patients on the list have been appointed to a clinic run by a non-medical prescriber or a nurse with support from a medical prescriber. Moving forward, the new pathway allows newly diagnosed patients to start medication either at their diagnosis appointment or given an appointment with the pharmacist for the following week. This may result in no waiting list at all. The service has also benefitted from having a pharmacist available every week to discuss issues with clinical governance processes and high risk medication.

Conclusion The pharmacist independent prescriber played a significant role in the reduction of the waiting list for

initiation of medication to treat ADHD. Due to the number of titrations completed within the last 6 months, there is now pressure on the 3 month review waiting list. By continuing to utilise the pharmacist independent prescriber to initiate and titrate medication, this will free up specialist nurse time to focus on initial assessments and the review clinics. As a result, the clinical group are planning to provide permanent funding for this role to continue to support the new model of ADHD clinic.

REFERENCE

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04 DETERMINING THE ACCURACY OF GP RECORDS IN PAEDIATRIC MEDICINES RECONCILIATION

^{1,2}Octavio Aragon Cuevas, ²Levi Stenson Jones. ¹*Alder Hey Children's Hospital*; ²*Liverpool John Moores University*

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Aim Medicines reconciliation (MedRec) is a process undertaken on admission to hospital to obtain an accurate list of patients' current medication.¹ National guidance for MedRec is available only in adults. Previous studies looking at accuracy of sources for MedRec in paediatrics are scarce in the United Kingdom. A few studies have shown that General Practice (GP) records do not match the patients' current medicines lists in 29–45% of patients.^{2 3} The primary aim is to determine the accuracy of GP records in paediatric Med Rec, exploring types of discrepancies and any potential relationships between discrepancy rates and polypharmacy. The secondary aim is to audit compliance with local MedRec standard operating procedures (SOPs).

Methods Prospective observational multicentre study (Site A: general district hospital; Site B: tertiary care hospital) that will take place over a 4 week period during three consecutive years. HRA approval was granted (IRAS ID 234128).

Participants received an age appropriate study information sheet and were consented to the study by pharmacy staff. Consent gave the researcher access to summary care record (SCR) and hospital records. All data was anonymised. Patients who were on no medicines at home, patients who had never been home, and those transferring from another Trust were excluded. Using the SCR, the patients' GP repeat medication list was compared to the list compiled during MedRec by hospital pharmacy staff. Statistical relationships between polypharmacy and discrepancies were explored using the contingency Fisher's Exact Test.

Results 63 patients were recruited- 27 patients (43%) on site A and 36 (57%) on site B. The study showed that the SCR did not match (medication omitted, differences in dose, frequency of formulation) the patient's actual MedRec in 54 (86%) patients. Discrepancy rates per patient were higher at site B (94%, n=34) than site A (67%, n=18). The study included 347 medicines- 95 on site A (27%) and 252 (63%) on site B. The discrepancy rate looking at the total number of medicines included in the study was 51% (n=177). Overall, the most common type of discrepancy was 'medication omitted', accounting for 114 (64%) of discrepancies. Looking at the omitted medicines, 25 (22%) were unlicensed or off-label.