or lung transplant, children with primary immunodeficiencies (PID), and those treated with a wide variety of immunosuppressive medicines and/or biologicals. These patients are considered to be at high risk of developing invasive fungal disease and a majority will receive antifungal prophylaxis and empiric antifungal therapy. A monthly calendar invite and conference link is disseminated to all teams as well as reminder email in the days before the MDT to promote and invite teams to discuss their patients. These patients are added to an MDT list on the electronic health system which can be accessed by all members of the MDT. The mycology MDT meetings are chaired by team of colleagues with complementary expertise including a pharmacist, a microbiologist, and a medical mycologist. Consultants and junior doctors in infectious diseases (ID), immunology, haemato-oncology, as well as other disciplines are invited to join as well as to ask specific advice on their patients. A local specialist guideline for the management of invasive fungal disease in neonates and children was previously developed to assist decision making.

Results Since implementing the mycology MDT there have been approximately 20 meetings and an average of 2–4 patients with invasive fungal disease or colonisation are discussed. Discussions include decision to treat, choice of antifungal agent, duration of therapy, optimal dosing, therapeutic drug monitoring, drug-interactions, monitoring and how and when to review the patient in terms of fungal biomarkers and imaging. The MDT discussion and recommendation is documented in the patient's electronic patient record (EPR) by the ID or microbiology registrar or antimicrobial pharmacist. Outcomes of the MDT have included discussion, planning and implementation of novel therapies such as intralesional voriconazole for pulmonary aspergillosis (*A. flavus*), oral amphotericin to reduce gastro-intestinal burden of *C. glabrata*, *C. albicans* and *C. tropicalis* cultured in stool of a child with PID planned for bone marrow transplant and discussion and attainment of compassionate use olorofim, a novel class of antifungal, for treatment of disseminated azole resistant aspergillus (A. fumigatus TR34 mutation).

Conclusion Treating invasive fungal infections in children is challenging. Our mycology MDT is unique and improves the care of our patients, antifungal stewardship and knowledge and engagement of our treating teams. Going forward the MDT plan to capture more data on outputs and metrics.

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SP5 CHILDREN'S AND FAMILIES' VIEWS OF 3D-PRINTED/ PERSONALISED MEDICINES IN CLINICAL PRACTICE

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Background Children and young people are three times more likely than adults to experience harm from medicines.[1] 75–85% of patients suffer from unwanted side effects from therapy not based on individual requirements[2] resulting in 1 in 15 hospital admissions in the UK.[3] Medication adherence is a significant concern in children due to unsuitable formulations and other factors.[4]

3D printing (3DP) is a novel approach of formulating personalised medicines using a pharmaceutical 3D printer. The technology allows 'printing' of tablets with personalised dose in customisable sizes, shapes, colours, textures and flavours and has the ability make a combination 'all-in-one' polypill to aid adherence. From a clinician's point of view, there are clear potential advantages to this approach for making the formulation truly 'personalised' for safer, more accurate dosing, while minimising side effects from excipients and thereby improving patient concordance. Patient and public opinion will help identify the need for this technology and shape any study design with 3DP, including interpretation and dissemination of findings for publications.

Aim To obtain the views of children and their families about the concept of using 3D printing technology to produce personalised medicines for children.

Method An interactive stall was set up as part of a 1-day patient and public involvement and engagement (PPIE) event in a large paediatric tertiary hospital to engage hospital visitors and staff to gather their views and opinion on the 3D printing technology. A voting system with stickers were used to engage young people and adults to express their priorities. A section was provided for the participants to express their hopes and concerns about the technology. Sample 3D printed placebo tablets of various types (colours/shapes/sizes and polypills) were available for members of the public to experience their looks and feel. Children and families were also encouraged to design their ideal form of medicine by drawing. To educate participants about the technology, a poster wall was on display to walk participants on how these medicines are manufactured and a brief background of this technology. No ethical approval was needed as this was a public engagement activity, with the aim to inform future research.

Results A total of 61 individuals, comprised of children and their families engaged with our team to express their views on 3D printing. All 61 individuals expressed positive views and would be interested in having their medicines 3D printed. Participants had expressed opinion simultaneously on multiple aspects: Size of tablets was ranked most important for 6 participants (ranked 6/91 or 9.8%); shape for 9 (14.8%) participants; taste/flavour for 15 (24.6%) participants; colour for 10 (16.4%) participants; and a combination polypill was important for 11 (18%) participants.

Conclusion Children and their families showed great level of engagement with the researchers on the subject of 3D printed tablets. All individuals who engaged with the activity would prefer 3D printed tablets over conventional ones. 3D printed tablets for paediatrics is an under represented area of research with a good level of interest from the public.

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