

## Exploring Paediatric Trainees' Experiences of Hospital-based Paediatrics compared with Community Paediatrics

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### Abstract

#### *Background:*

Most paediatric training programmes are focused on the development of hospital-based paediatricians who work primarily in tertiary centres or large acute urban hospitals. Community paediatric rotations are often described as having less 'social capital' than hospital-based rotations. Little is known about the differences in learning experiences between acute and community-based settings.

#### *Methods:*

A phenomenological qualitative approach was adopted for this study. Semi-structured interviews were recorded during the period April to May 2022 via telephone and were transcribed verbatim in accordance with data protection. NVIVO software was used for the coding of data which were then analysed through template analysis.

#### *Results:*

Seven paediatric trainees participated in the study. All were specialist registrars; 6 were working in acute/hospital-based settings while one was working in an academic role. Hospital-based training was associated with a more independent, autonomous learning experience whereas training in the community context facilitated a better-supported consultant-led approach. Three main themes were observed: defining community paediatrics, differences in learning in acute paediatrics and community paediatrics, and holism versus single problem-solving.

#### *Discussion:*

This study has highlighted the similarities and differences between paediatric trainees' learning experiences in the acute hospital setting and community setting. Pattern recognition in a fast-paced world of pathology contrasts with the exploration of case complexity in the reflective world of day-

to-day adversities. The divide between learning in acute and community paediatrics is unlikely to change unless training programmes are designed to suit the needs of paediatric services.

## Introduction

Community paediatrics is an area of paediatrics associated with the assessment and care of children and young people including those with disabilities such as cerebral palsy, neurodevelopmental conditions including Autism Spectrum Disorder (ASD) and Attention Deficit Hyperactivity Disorder (ADHD), behavioural and emotional problems, and language impairments<sup>1,2</sup>.

Most paediatric training programmes are focused on the development of hospital-based paediatricians who work primarily in tertiary centres or acute urban hospitals. Given the acute sectoral orientation of training, community paediatric rotations are often described as having less 'social capital' than hospital-based rotations among paediatric trainees. Prejudice against community-based training is not founded on a strong evidence base because little is known about the differences in learning experiences between acute and community-based settings.

For this study, hospital-based paediatrics or acute paediatrics incorporates the diagnosis, management and ongoing care of children and young people primarily in secondary or tertiary centres, including general paediatrics, general paediatrics with special interest services and paediatric subspecialties<sup>3</sup>.

The traditional hospital-based focus of training from medical school onwards has been noted to polarize attitudes at an early stage and lay the foundations for the hospital-community divide<sup>4</sup>. Paediatric trainees' apparent disinterest in community paediatrics is driven by a common desire to be seen as experts rather than generalists, the absence of a strong scholarship culture in community paediatrics, and a perception that community paediatricians are removed from what matters i.e. acute presentations<sup>5</sup>. The decline of interest in community paediatrics is a matter of concern given the increasing need for continuing high quality care of children with neurological, physical and psychological disabilities.

The hidden curriculum that sustains the primacy of acuity over community paediatrics needs to be addressed. The aim of this study is to take a first step in that direction by exploring the lived experiences of paediatric trainees in hospital and community-based placements.

## Methods

A qualitative approach was adopted for this research with the goal of generating an in-depth understanding of the phenomenon in question<sup>6,7</sup>.

Ethical approval was provided by the Royal College of Physicians of Ireland (RCPI) Research Ethics Committee. Pseudonyms were provided to participants who were advised that their data would remain confidential. Recordings were destroyed once transcription was complete.

Purposive sampling was used to produce a homogenous sample of paediatric trainees<sup>6</sup>. Participants were recruited through the RCPI via the Paediatric Training Administrator who acted as gatekeeper. An information email provided readers with an overview of the research, what their involvement would be in the study, and how the data gathered would be used.

Semi-structured interviews were employed to collect the data for this study. Use of telephone interviews helped to expand the sample population beyond a particular hospital or region<sup>6,8</sup>. Interviews ranged from 25-40 minutes, depending on the extent of each participant's experience of the phenomenon<sup>9</sup>.

An interview guide was created to ensure that the predominant aspects of the research question were addressed, comprising of fixed open-ended questions and further probing questions<sup>10</sup>.

Audio recordings were transcribed verbatim and stored on a password-protected computer. Transcriptions were pseudonymized in accordance with the NUIG Data Protection Policy<sup>11</sup>.

Interpretive phenomenological analysis (IPA) enhanced the researcher's 'exploratory capability' to understand paediatric trainees' subjective experiences of training<sup>12</sup>. IPA produces an account of lived experience in its own terms rather than one prescribed by pre-existing theoretical preconceptions<sup>13</sup>.

Template analysis was chosen as it offers an accessible format suitable for a novice researcher to structure codes and themes through a coding 'template'<sup>14,15</sup>. The researcher identified some themes in advance, 'a priori' themes, but recognized that these themes were subject to redefinition or removal throughout the process<sup>15</sup>.

Interview recordings were re-reviewed following initial transcription to maintain researcher reflexivity<sup>16, 17</sup>. Time was allocated for the researcher and supervisor to discuss preliminary coding of transcripts<sup>16</sup>. Computer software *NVivo* was availed of during coding and data analysis<sup>17</sup>. An audit trail was maintained throughout the analysis process<sup>15,18</sup>.

## Results

Seven paediatric trainees participated in the study, six female and one male. All trainees were specialist registrars; 6 were working in acute/hospital-based settings while one was working in an academic role.

In these results, we show that hospital-based training was associated with a more independent, autonomous learning experience whereas training in the community facilitated a better-supported,

consultant-led approach. Three main themes were observed: defining community paediatrics, differences in learning in acute paediatrics and community paediatrics, and holism versus single problem-solving.

### *1. Defining Community Paediatrics*

Many participants described their difficulty in clearly defining community paediatrics and their role as trainees in the community:

*“The biggest thing with Community Paeds is people understanding what it is... I think people just think ‘oh it’s autism’, but it’s also neurodisability, it’s children with CP and acquired brain injuries... people aren’t sure if it includes children in hospice care... what does it actually encompass?” [B]*

All participants emphasized the long-term issues dealt with in the community including *“physical disabilities, specifically cerebral palsy, and intellectual disabilities”* [A] with issues often *“recurrent”* [D] in nature. Similarly, participant E discussed the areas they felt were covered in Community Paediatrics:

*“... the chronic evolving problems like tone, feeding difficulties or dyskinesias”* [E]

Each participant emphasized that community clinics generally have *‘less time pressure’* [F] and *“focus on medical issues and non-medical issues such as family problems, feeding problems and funding”* [F]:

*“You have time to sit down to really go through everything, their history, examination, and to ask about every aspect of their life, their sleep, their constipation, their diet”* [B]

Participants discussed how trainees can view community paediatrics as a *“soft rotation”* [B] or *“a bit of a half-day”* [C] and how some *“don’t expect to gain a lot of knowledge or think it’s related to what they want to do”* [B]. Participant D references that *“some might think it’s a cushy job and not get how complex these kids are”* [D]. Some participants understood the distorting effect of viewing community paediatrics through the lens of acute medicine:

*“we work in such understaffed and under-resourced conditions that we think it’s bad in some way to have a break between patients in clinic”* [C].

Participants felt there may be a clash between apparent ‘opposite specialties’:

*“I think people who are more fast-paced, people who love ED, the ICU, neonates, may go into it with an eye roll”* [B].

Individual preferences were felt to be central to trainees’ attitudes to community paediatrics:

*“I don’t think it’s a subject matter. We’re all doing paediatrics for a reason, we all like children and want them to be better. I just think it’s the way that maybe different personalities are suited to different things”* [E]

## 2. Differences in Learning in Acute Paediatrics and Community Paediatrics

Hospital-based training is about rapid assessment and diagnosis whereas community working is about making sense of complex presentations:

*“a lot of [acute paediatrics] is probably pattern recognition from what you've seen before? Coming up with a theory on what you think is going on... whereas in the community, it's often years and years of layered issues” [F].*

All participants discussed how most of their experience has been in the acute hospital setting where *“you learn in the deep end” [G]*. Participants reported a sense of *“higher competency” [C]* in acute paediatrics because *“the more kids you see, the more you recognize the variations of normal” [A]*. Hospital-based training is described as more autonomous; in particular, on-call shifts were highlighted as areas of high-yield learning where trainees *“work independently somewhat” [E]* and *“learn to make our own decisions” [G]*:

*“I've seen thousands of kids in ED whereas I've seen a small number of complex kids in a community setting... I'd probably be more comfortable managing DKA or status epilepticus than the kid you might see in clinic who has five charts and multiple specialists looking after them” [A].*

Participant G described their experience of immersive learning in the acute setting:

*“After emergencies, I try to get feedback and think ‘what could I have done better there’. I think that’s how I’m learning...” [G].*

Participant C felt trainees *“don’t really learn about community paediatrics in college and then I don't think you have the time to learn working in acute paediatrics” [C]*. Similarly, Participant G remarked that community paediatrics is a *“foreign concept to you by the time it comes to you in your registrar years” [G]*.

A *“slow-paced” [B]* approach to the *“all-encompassing nature of community paediatrics” [D]* in the community was highlighted by participants. Participants reported that trainees encounter *“difficult-to-manage cases of children who can get deteriorate very quickly” [D]* in community clinics where *“you benefit from concentrated time shadowing the consultant” [F]*.

A consultant-led approach was highlighted in many interviews with Participant C noting that community clinic was *“the first time I've sat in on a clinic and watched a consultant do a consultation since I was a student” [C]*.

Time pressure and lack of proximity to consultant experts impacted learning in the acute setting when compared with the community setting:

*“In the community, you have time to think and to ask questions whereas in the hospital, I also have questions but I don't have time to be hassling consultants. Often, you're the only one in the community with a consultant so you get more one-on-one time with them [G]”.*

### *3. Holism vs Single problem-solving*

The term “*holistic*” [F] was referenced in community paediatrics multiple times relative to the doctor-centred position of hospital medicine:

*“that's kind of the point of the Community Clinic... asking about the things that other people haven't asked... to tie everything together, to address the parents' concerns, rather than to go through your own list of questions of what you think you're supposed to ask”* [C]

Participants' preferences for hospital or community-based learning depended on what motivated them the most. For example, one trainee observed that “[in hospitals] *you get more of a feeling that you've fixed the problem - you've given them oxygen and NG feeds and fixed their bronchiolitis*” [B] whereas another trainee felt more rewarded in the community setting because “*you get to know the patients well and their individual needs*” [D].

Participants felt that they don't learn about “*maximizing a child's independence... future planning... sleep... their personality, behaviour... be it learning to ask about them or learning to manage them*” [C].

Consideration of the family unit was mentioned by participants in both acute and community settings - “*we talk lots about how looking at the child as part of the family but I think it was only in community paediatrics that I really got to experience that*” [E].

Learning to adjust practice to a particular child's needs was reflected on by Participant B who commented “*although you might want to do their bloods quite regularly, you might have to take a different approach*” [B]. Participant E felt it was vital to recognize that “*kids aren't at their best in hospital and their quality of life is not best assessed in that setting - something we have to remember in ED at 4AM*” [E].

Likewise, participants described how the community environment was where “*you get a better idea of the family's ongoing struggles, be they medical, financial or respite-based*” [F] and where they learned how to help families by “*small things that you wouldn't think would be a major thing... like calling the pharmacy, writing letters...*” [B].

### **Discussion**

Community paediatrics was referred to as “*a cushy job*” by participants in this study, contrasting with the fast pace of the hospital environment where participants felt they had a higher competency from being ‘thrown in the deep end’. This may be attributed to the perceived lack of precision in community paediatrics relative to many hospital-based specialties<sup>19</sup>.

Some of our participants reported that they were motivated by a sense of having fixed a problem. Other learners were motivated by knowing their patients and their families and their individual needs. Tensions may exist between these two worldviews where one is seen as slow and complex while the other lends itself well to the rapid ‘fix-it’ mentality associated with being a doctor. Is it

possible that we can have paediatricians that can do both and that are motivated by both? It has been emphasized that all paediatricians should have some learning in community and public child health concepts, as well as child mental health<sup>3,5,20</sup>. There has been an increase in the numbers of children and young people living with complex healthcare needs, life-affecting illnesses, and life-limiting illnesses in recent years; the responsibility for this growing cohort oscillating between home and hospital, good quality of life and poorly controlled symptoms, is ever present in both acute and community settings<sup>21</sup>. These children and young people are often seeing their subspecialists more frequently than their community paediatricians; these specialists must know how to access supports for their patients and families<sup>22</sup>.

In the acute hospital setting, participants felt that they learn through the autonomy of working independently on-call whereas in the community, participants felt they learned through time shadowing the consultant. While both approaches were felt to be effective, time with consultants who were keen to teach and help trainees learn from clinical experience was hugely valued by trainees (23,24).

This study has several limitations. Only current trainees on the Irish paediatric training schemes were invited to participate, introducing a clear selection bias with NCHDs (non-consultant hospital doctors) not on formal paediatric training schemes excluded from the study. Therefore, we cannot comment beyond the Irish paediatric training setting. Furthermore, due to the limited timeframe available for completion of postgraduate research, efforts to maximize credibility through member checking and data triangulation was not feasible. The study was carried out by a novice researcher who had no prior experience carrying out qualitative research.

All trainees who participated in this study were Paediatric Specialist Registrars; this may be secondary to the apparent limited exposure to community paediatric learning in the earlier years of training. Goldfeld et al. write that there should be a sustained plan to improve early exposure of trainees to community child health (22). While we are moving to a healthcare model encompassing “right care, right place, right time” and reducing overreliance on acute hospital care for those who could have their needs met in the community, we are faced with the question of whether the learning outcomes of our paediatric trainees’ meet the child health needs of today and the future (25,26).

This study has highlighted the similarities and differences between paediatric trainees’ learning experiences in the acute hospital setting and community setting. Pattern recognition in a fast-paced world of pathology contrasts with the in-depth exploration of case complexity and deliberation in the reflective world of day-to-day adversities. The divide between learning in acute and community paediatrics is unlikely to change unless training programmes are designed to suit the needs of paediatric services.

While many paediatric trainees will work in non-community-based settings, time in community paediatrics could be seen as a time to reflect in a profession that is programmed for throughput,



accuracy, and the primacy of the medical model. Community-based paediatric rotations offer trainees the time to understand the impact diagnoses have on children and young people and their families, adapt treatment to the individual needs of a child or young person, and incorporate these attributes in whatever field of paediatrics they ultimately work.

#### **Declarations of Conflicts of Interest:**

None declared.

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