

# The role of the Musician in Hospital and potential QOL benefits for paediatric patients – Dr Kamal Patel

A22

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## Introduction:

- This SSC was my top choice, and I was allocated to take part in it during the second term.
- Our leader, Kate, taught us some of the repertoire that we were to use on the wards, and organised many interactions for us to practice.
- We were really encouraged to **reflect** upon each interaction and delve into the benefits of music in healthcare. Furthermore, it allowed us to develop our **confidence, spontaneity** and **self awareness**.

## The role of the Musician in Hospital:

- Provide a moment of respite for patients and parents too.
- Create a family experience.
- Provide an opportunity to improve maternal-infant attachment.
- Give some control back to the child.



## Alfie

- 8 years old.
- He seemed quite shy and looked a lot to his mum for reassurance.
- For this interaction to be successful we had to gain his **trust**.
- We did this by approaching slowly and **involving his mum** first. We then tried to **personalise the experience** by using his name in the songs and allowing him to pick the direction of the song in 'wheels on the bus', for example.

Establishing trust with your patients is a **fundamental** aspect of being a doctor, as highlighted by the GMC guidance.<sup>1</sup> Music has been found to help with this social barrier, and thus the **doctor-patient relationship**.<sup>2</sup> As a consequence, compliance, satisfaction and future relationships with healthcare professionals will be facilitated.<sup>3</sup>



## Charlie

- With Charlie, I had the opportunity to analyse his **sound environment**. I found this consisted of:
  - **Beeping** machines
  - **Suction** noises for his oxygen
  - Eerily quiet room, in comparison to the **rushed footsteps** and **muttering voices outside**
- Creating a sense of agitation and **anxiety**

- Research has shown that the sound environment has a direct impact on **physiological wellbeing**. For example, looking at babies in neonatal intensive care units the medical sound environment correlated with:<sup>4</sup>

- Fluctuating HR and BP
- Increased oxygen and calorie consumption at the tissues.
- Failure to thrive
- Increased agitation
- Altered sleep-wake cycle, thus adequate REM sleep is not achieved; which is required for development and growth.

In comparison to when soothing lullabies and intrauterine sounds were used.

- In older children, physiological responses were more difficult to obtain. However, benefits could still be demonstrated in helping these children with anxiety and dealing with their illness as an in-patient.<sup>5</sup> Pain and anxiety **delays recovery** as children become **less compliant** and **side effects** can be exacerbated.<sup>2</sup>

## Ryan

- 1 year old boy, who had been in hospital since birth.
- He also had a tracheostomy.
- His mother used to only visit occasionally and so, had developed a **weak, ambivalent, attachment** with Ryan.
- Whilst music-making we tried to give him **control**, especially when his mother was there, to try to improve their attachment.
- In addition he was able to develop his fine and gross motor skills, hearing, visual and social development.
- Due to his inability to vocally communicate, he could release his frustration in the music session.

**Attachment** is important to provide children with safety and security. It helps children to learn to manage their emotions and provides a template for future relationships.<sup>6</sup>

Furthermore, we used songs using sounds and references to the **natural environment** to develop his knowledge of the world, which he would have started doing had he been at home. His musical skills could also develop and cognitive skills like memory and concentration.<sup>2</sup> Research also shows a positive influence on language development.<sup>7</sup>

## Sophie

- 10 year old girl
- She had cerebral palsy and was blind.
- All her family were present in the room.
- In this situation it was important to remember that **ethically**, everyone has the right to access the music making opportunity and we should **adapt** to different abilities and needs. This will be important as a doctor, to avoid discrimination between patients.<sup>8</sup>
- Thus, for Sophie we used the iPad so as she could still interact and have a positive experience. Furthermore, it was important to remember techniques like touching her hand, so as she could localise our voices in the room.
- Finally, we were able to facilitate a **family experience** and memory, where her parents were able to see her smiling and happy, giving her parents a little **respite**.
- We used their own repertoire to make it more of a personal experience.

Particular benefits have been seen for children with cerebral palsy.<sup>9</sup>



## Angel

- 2 month old baby.
- She was very distressed following some chest physiotherapy and was having CPAP at the time.
- The sound of the CPAP machine itself was providing a negative sound environment.
- We to calm Angel by singing a Tanzanian lullaby and singing familiar nursery rhymes such as 'incy wincy spider' and 'twinkle twinkle little star'. These particular nursery rhymes are used at home and provided security to Angel as she began to shuffle comfortably and smile.
- We ended using the 'Bloom' app on the iPad.
- These lullabies and the 'Bloom' app seem to be most effective because they are slow, quiet, regular, monotonous and repetitive forms of music.
- **High pitches** and fluctuating tones usually create a sense of tension and excitement, whereas these **lower pitches** provide security, safety and strength.<sup>4</sup>

Throughout this interaction mum was able to comfort her, strengthening their bond, and a healthy attachment was demonstrated by Angel. Physiological benefits were also seen such as a reduction in her heart rate and blood pressure.

## Conclusion:

This poster summarises the different kinds of interactions I had during the SSC and the various learning points gained from each. Music in healthcare is hugely beneficial for paediatric patients and I think this kind of opportunity should be available regularly in all paediatric hospitals. Perhaps incorporated as part of medical training and approach as doctors.

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