



## **Superheroes Against Superbugs at Adhbutha: The festival of Learning**

**Dr Ponnari Gottipati**

Adhbutha: A festival of learning is underway in Hyderabad which provides a platform for school students and teachers from different cultural and socio-economic backgrounds to participate in arts based and place based learning and pedagogy. Organised by Ajahn Education foundation, it is a two month long festival, where 1 lakh children from different schools in Hyderabad experience alternate learning by engaging in various concepts/subjects through arts and activities in the backdrop of various heritage sites/venues.

Superheroes Against Superbugs is one of the initiatives at the festival reaching out to about 275 students in the age groups of 11-15 years and 12 teachers from 5 different schools over 5 days between 27<sup>th</sup> November - 1<sup>st</sup> December 2018. The venue for this engagement was Laboratory for Conservation of Endangered Species (LaCONES), Center for Cellular and Molecular Biology, Attapur, Hyderabad where the emphasis of the workshop was making the participants think about how their everyday choices affect the world around them be it the misuse and overuse of antibiotics leading to antibiotic resistance, urban lifestyle destroying the habitats of sparrows or human action leading to certain species to be critically endangered. LaCONES formed a perfect backdrop to engage with the children on these important topics and start a conversation on how each of us can tackle these issues and bring about a positive change.

About 50 - 60 children participated in the Superheroes Against Superbugs program each day, where they spent 2 hours with workshop facilitator Dr Ponnari Gottipati learning about microbes, infections, antibiotics and resistance through fun and interactive games using simple material like glitter, boxes, pearls and toothpicks. The mission of the Superheroes Against Superbugs initiative is to empower children with knowledge on antibiotic resistance and encourage them to raise awareness about its perils in their immediate community. The key takeaways for the students were:

1. How easily infections spread, the importance of hand hygiene and best hand washing practice
2. How antibiotics work and why they are ineffective against viruses
3. The importance of finishing the full course of antibiotics

#### 4. The perils of misuse of antibiotics and the problem of superbugs

A short exercise at the end helped gauge the understanding of these students, re-emphasize the need for using antibiotics with care and the necessity to spread this important message. The sessions closed with students calling out in their own words, 5 ways in which they can become superheroes in the fight against superbugs.

The 5 private schools that participated in these workshops are:

Vidya Bharathi High School, Monarch High School, M.A. Ideal School, Kushbow Vidya Niketan and Loyola High School

Learnings:

The most important learning from this exercise is that children as young as 11 years are familiar with microbes to some extent and are capable of understanding the complex subject of superbugs when explained through simple games and activities. It is possible to make them understand the problem without overwhelming them with too many scientific details.

Teachers from participant schools were equally engrossed in the activities and are appreciative of activity based learning and teaching through games. As noted previously, teachers were also unaware of antibiotic resistance and these workshops were a good way to engage both students and teachers alike on the topic of superbugs. It is also a way to get teachers thinking about alternate and innovative teaching methods.

The enthusiasm for learning varied between students from different schools and that was the primary bottleneck in engaging with the children rather than the age of the children. Even the most reluctant of learners were enthused by the games and showed interest in trying to know what the games were all about. However, 2 hours were perhaps too little time to get them deeply engrossed in the subject. But keen learners among the groups were able to connect with the problem and continued the conversation with the facilitator even after the sessions.

Adhbutha was a good opportunity for the Superheroes against Superbugs team to engage with a large number of students and their teachers on the important topic of superbugs and antibiotic resistance. Within the short time span, it provided an opportunity to get the children thinking about the issue and understand their role in tackling the issue through hygiene and proper antibiotic usage.