Editorial

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Mobile Phone and Tablet Make Your Kids Sick

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Editorial

Child mortality is a challenging problem and in 2015, approximately 5.9 million children under the age of 5 years died worldwide. One of the major causes of death being infections such as sepsis, pneumonia, tetanus and diarrhea [1]. The death toll is even higher in developing countries such as India, where over 20% of the world's under-five deaths occur [1]. More than half of these child deaths are preventable by controlling the transmission of the infectious agents [2].

With the advance in technology, there are very few people without a mobile phone or related gadgets such as tablet, iPhone, iPad, etc. These electronic items come into contact with aerosols generated in the mouth and washrooms, cluttered bags and other unclean surfaces [3]. Given the heat generated by these gadgets, temperatures are favorable for microbial growth; as a result these gadgets become a prime location for rapid microbial growth and colonization [4]. An average cell phone device is 10 times dirtier than a toilet seat and the bottom of a shoe [5]. Even the nosocomial contamination of phone can be life threatening for the individual with a weakened immune system [6].

Anuradha *et al.* showed that there is less awareness regarding mobile phone contamination in both urban and rural communities [7]. The mobile phones of parents have been reported to have microbial contamination [8]; when infants and toddlers grab the glowing screens of smart phones and tablets and stick them straight into their mouths, allows the microorganisms enter the body. Though, this may help in developing the immune system, it may also lead to more serious illnesses in susceptible children [8].

Coagulase-negative staphylococci (CoNS) and *Micrococcus* are the most common mobile phone contaminants; while pathogenic bacteria such as methicillin-sensitive and methicillin-resistant *Staphylococcus aureus* (MSSA & MRSA), *Acinetobacter* species, and *Pseudomonas* species can range upto 31%. This microbial profile varies with the geographical setting, but almost all studies have shown the existence of pathogenic microbes on the mobile phones that can make children sick [7-9].

Though, antimicrobial drugs can save lives, it would be wrong to assume that all infections have to be treated with these drugs. For example, antibiotics are ineffective against the viral infections such as common cold, a cough, flu, most sore throats, bronchitis and sinus/ear infections. Antimicrobial drugs kill pathogenic and nonpathogenic microorganisms indiscriminately, but the misuse and overuse of these drugs will promote the emergence of multi-drug resistant strains that can further complicate illnesses [9]. Furthermore, consumption of antibiotics in early childhood can cause lifelong changes to gut bacteria, metabolism, and the immune system which causes problems such as obesity, diabetes, asthma, allergies, autism and inflammatory bowel disease [10].

There are no proper guidelines for care, cleaning and usage of the mobile phones or related gadgets. Though, it is difficult to keep the devices germs free, some simple measures such as proper hand hygiene practices and regular decontamination of the mobile phones with alcohol wipes may help reduce the risk of transmission of detrimental bacterial agents [3,6]. Avoiding the use of mobile phone while being with infants, kids, and washing the hand after use of mobile phones may help control the possible risk and transmission of infection to little ones.

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