



## Identification of microbes and evaluation of efficacy of disinfectant on contaminated surfaces

• Shafia Ambreen • Megha • Nidhi • Shahla Yasmin

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Corresponding Author : Shahla Yasmin

**Abstract :** *This study aimed to examine the presence of pathogenic and non-pathogenic bacteria on commonly used devices such as mobile phones, remote controls and refrigerator handles. Out of 30 samples screened, 27 were contaminated with bacteria, while fungal growth was found on three samples. Staphylococcus aureus was the most abundant isolate. The findings indicate that these devices can act as reservoirs of both pathogenic and non-pathogenic bacteria. Therefore, hand hygiene and frequent decontamination of these devices are recommended, to limit the risk of infections.*

**Keywords:** *Mobile phone, Remote control, Refrigerator handle, Bacteria, Contamination, Disinfection.*

### Shafia Ambreen

B.Sc. III year, Zoology (Hons.),  
Session : 2016-2019, Patna Women's College,  
Patna University, Patna, Bihar, India

### Megha

B.Sc. III year, Zoology (Hons.),  
Session : 2016-2019, Patna Women's College,  
Patna University, Patna, Bihar, India

### Nidhi

B.Sc. III year, Zoology (Hons.),  
Session : 2016-2019, Patna Women's College,  
Patna University, Patna, Bihar, India

### Shahla Yasmin

Head, Department of Zoology, Patna Women's College,  
Bailey Road, Patna-800 001, Bihar, India  
E-mail : shahla\_apex@yahoo.co.in

### Introduction:

Environmental surface contamination provides a potent reservoir for pathogens to persist and cause infection (Beyene et al., 2013; Dannemiller et al., 2014). Indirect transmission via numerous objects such as Mobile phone, TV remote and Refrigerator handle, which have prolonged contact with the skin and those that are handled for extensive periods of time can transmit bacteria (Karabay et al., 2007; Dilek et al., 2009; Abdullahi et al., 2009; Acharya et al., 2010, Julian et al., 2012).

The most common concerns regarding heavy use of mobile phone is that they can act as a vehicle for the transmitting pathogenic bacteria and other microorganisms. People rarely disinfect mobile phones. As a result these devices have a potential for contamination with various bacterial agents (Selim and Abaza, 2015).

In the same way as the mobile phone is a germ factory, so is the remote control. Studies have found that thousands of bacteria can be hanging out on the remote (Reynolds, 2005). Remote control is most likely to come into contact with several different hands, leading to its contamination.