

**Fly infestation in Karachi, a cause of the rapid rise in enteric illnesses**

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Madam, we would like to draw attention to the recent monsoon situation that affected the city of Karachi causing havoc. The residents have been facing many challenging situations. One of these is the dramatic increase in filth flies, affecting the daily lives. There is a rising concern among citizens regarding the poor sanitary conditions and improper garbage disposal in the city. The fly infestation has given rise to a large number of medical ailments such as malaria, dengue, typhoid and gastroenteritis.<sup>1</sup>

House Fly, a common Filth fly, is the leading vector of diseases spread by enteropathogens such as *E. coli*, *Shigella* and *Salmonella* causing gastroenteritis predominantly in developing countries with poor hygiene practices.<sup>2</sup> These flies use wastes such as garbage, animal bedding, animal manure and human faeces for feeding and breeding purposes.<sup>3</sup> Improper disposal of human and animal faeces, unavailability of toilets and promiscuous defecation are found to be associated with a high bacterial load in the rural areas of Pakistan.<sup>4</sup> Multiple epidemiologic studies suggest that incidences of gastroenteritis are majorly influenced by toilet hygiene resulting in high childhood morbidity and mortality in developing countries.<sup>4</sup> A rise in enteric disease is attributed to the seasonal increase in filth flies in urban and rural parts of developing countries and control of flies is related to the decline in the number of enteric illness.<sup>5</sup> Seasonal increase of diarrhoeal diseases is also enhanced by high temperature, which can cause rapid growth of bacteria, and increase of fly population. We, students of Dow Medical College and residents of Karachi, have noticed an alarming increase in flies brought about by the presence of stagnant rainwater and garbage on the streets, including the waste left behind from animal slaughter during Eid al-Adha. As quoted by the New York Times, a professional at Jinnah Postgraduate Medical Center said that this was the worst infestation of flies she had ever witnessed.<sup>1</sup> Even

though this problem has been highlighted in a number of newspapers including The Times, the medical menace of it remains unnoticed. The soaring number of gastroenteritis cases makes this issue one that needs immediate attention. Following Eid al-Adha, an alarming count of 2000 paediatric emergencies with gastroenteritis were reported to Civil Hospital, 2800 to Abbasi Shaheed Hospital, 2889 to NICH and 2500 to Sindh government children hospital; attributing to a 300 percent rise in contrast to the previous statistics of provincial health department.<sup>6</sup> Thus there's a dire need to control and terminate the flies by initiating various projects both on an individual and community basis. We as medical students would like to highlight the disease burden that this peril has brought on the already struggling public health care system. Through our article we would like to provide our readers with a better understanding of the situation and also recommend measures that might help prevent a problem like this in the future. Participation in various local cleaning projects along with patient education regarding proper hygiene practices, cleaning and covering of utensils and use of boiled water for drinking should be encouraged. City-wide fumigation, proper garbage disposal and improving sanitation along with betterment of medical facilities are required to minimize such illnesses. Whether these endeavors will contribute to lowering the disease burden of our city remains a question of interest.

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