Waiting areas in tertiary-care hospitals in Pakistan, a major risk for airborne infections

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Dear Madam, An airborne infection is any disorder transmitted through the air and caused by microorganisms including bacteria, viruses, and fungi. The most common disorders transmitted by this route include Tuberculosis, Influenza, Measles, Mumps, Coronavirus, MERS-Co V, Smallpox, Chickenpox, Aspergillosis, Blastomycosis, etc. According to the World Health Organization, "Airborne transmission of infectious agents refers to the transmission of disease caused by the dissemination of droplet nuclei that remain infectious when suspended in air over long distance and time".[1] In Pakistan, infections spread in this way also contribute to one of the major factors in the overall prevalence ratio of airborne diseases.

Activities such as coughing, sneezing, and talking, which generate aerosolised particles can cause transmission. as. The possibility of spreading contagious disorders tremendously increases when susceptible individuals are placed together with index cases within confined spaces. Hospital waiting areas are among the most common confined spaces that could lead to airborne infections among individuals.[2] Personnel including patients, visitors and working staff are the most likely contributors of transmission sources in hospital boundaries. Other possible sources within the hospitals include dust or aerosols from the floor or furniture, potted plants or flowers, sinks, showers, or aspirating devices. Dust or infective aerosols from contaminated air-conditioning systems may also be a source of airborne infections.[3]

Airborne transmission in waiting areas of hospitals in Pakistan can be substantially reduced by taking a multi-faceted approach including environmental controls, administrative measures, usage of modern technologies, and personal protective strategies. The best way to prevent airborne infection in waiting areas is by using masks and hand sanitisers. Hand sanitisers should be placed at all the entrance and exit points of waiting areas. Improvement in the ventilatory system through natural and mechanical means plays a significant role in reducing airborne infections. Using extra doors and windows for better airflow is one of the natural ways to reduce infection. Mechanical ways to reduce airborne infection include installing high-efficiency particulate filters and air purifiers in waiting areas. The physical distance of the patients should be increased by increasing the space between seating arrangements. Separate waiting areas should be created for patients with respiratory infections and those without. Implementing screening checkpoints at the hospital entrance to separate patients with infectious diseases is also beneficial. In short, there is a need to resolve this issue for the betterment of health of patients as well as their families.

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