GOVERNMENT OF INDIA
MINISTRY OF HEALTH AND FAMILY WELFARE
DEPARTMENT OF HEALTH RESEARCH

RAJYA SABHA
UNSTARRED QUESTION NO. 1394
TO BE ANSWERED ON 11TH MARCH, 2025

RESEARCH ON FUNGAL INFECTIONS

1394. DR. AJEET MADHAVRAO GOPCHADE:

Will the Minister of **HEALTH AND FAMILY WELFARE** be pleased to state:

(a) the steps Central Government has taken in collaboration with State Governments and other agencies to prioritize research on fungal infections;

(b) whether Government is aware of the WHO's advisory on fungal infections, and if so, the details of the measures implemented in response; and

(c) whether Government is aware of the issue of drug resistance related to fungal infection, and the actions taken to address this concern?

ANSWER
THE MINISTER OF STATE IN THE MINISTRY OF HEALTH AND FAMILY WELFARE
(SHRI PRATAPRAO JADHAV)

(a): Indian Council of Medical Research (ICMR) has informed that it has undertaken significant steps to prioritize research on fungal infections-

(1) ICMR established Mycology Network (MycoNet) in 2020, aiming to map fungal infections across India and assess its impact, particularly invasive fungal infections (IFIs), on overall mortality and morbidity. Under the MycoNet program, eight (08) Advanced Mycology Diagnostic and Research centers (AMDRCs) have been developed, covering different zones across India (https://myconet.icmr.org.in/). These centers are well-linked with their state governments and state medical colleges, facilitating case referrals and training programs.

(2) ICMR has identified priority pathogens causing critical infectious syndromes in India. This has been finalized through intensive literature review as well as consultation with eminent clinicians and laboratory physicians in the country. This extensive list includes fungal pathogens of importance.

(3) ICMR also has an antimicrobial resistance research and surveillance network (AMRSN) through which it collects data on antifungal resistance.

Further, Department of Biotechnology has informed that it has supported a number of research projects in the area of fungal infections especially candidiasis.

(b): In 2022, the World Health Organization (WHO) published the Fungal Priority Pathogens List to identify and prioritize fungal pathogens posing significant threats to public health, and to combat the rising antifungal resistance. In response, ICMR MycoNet developed a mycology clinical registry (https://clinicomycoregistry.icmr.org.in/) in 2023 to document Invasive Fungal

Infection cases and rare fungal diseases (Mycetoma and Chromoblastomycosis). Additionally, MycoNet has developed a fungal mapping system based on collected data and generated antifungal susceptibility testing (AFST) data to monitor fungal pathogens and their resistance patterns from hospitals and ICUs.

(c): ICMR has informed that the MycoNet program actively monitors antifungal drug resistance by collecting data on critical fungal pathogens like Candida, Cryptococcus, Pneumocystis and Aspergillus. According to current findings, fungal resistance to commonly used antifungal drugs remains low in most cases. Additionally, ICMR Anti-Microbial Resistance surveillance network collects and monitors data on the trends and patterns of antimicrobial resistance of clinically important bacteria and fungi limited to human health from 30 tertiary hospitals across India.

Moreover, National Centre for Disease Control (NCDC) has informed that surveillance of Antimicrobial Resistance (AMR) in fungal pathogens has been included in the National AMR surveillance network (NARS-Net).

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