Sir,

Food prepared for a mass under poor hygienic conditions can be a potential source of infection and disease. Food handlers play an important role in the prevention of foodborne diseases.\(^1\)\(^2\) It is expected from medical institutions that their food service establishments should not act as potential sources of infection.\(^3\) Any incidence of foodborne diseases affecting health caregivers will result in sickness absenteeism and can also potentially transmit pathogen from health caregivers to patients.\(^2\)

We conducted a cross-sectional study in eight food service establishments located within the campus of a medical college of Delhi (MCD) and its associated hospital to assess the hygiene parameters of food handlers and sanitary status of food establishment. The study explored the sociodemographic characteristics, personal habits, health status, knowledge, and practices of food handlers. Sanitary status of food service establishments and practices of food handlers were recorded through interview and on spot observations. Data collection was done from July to September 2016 through an interviewer-administered, pretested, semi-structured, schedule derived from the guidelines given by the Bureau of Indian Standards\(^4\) and the World Health Organization.\(^5\) The study was approved by the institutional ethical committee, and informed consent was taken from all the participants.

A total of 45 food handlers were working in these eight establishments, serving 30–200 doctors/medical students per day. These establishments were operated by private contractors, and five of eight establishments had MCD-issued license which has to be renewed annually. The mean age of food handlers was 30 ± 9.8 years. None of the workers was minor. More than half of the workers (24, 53.3%) were consuming either alcohol or tobacco. The prevalence of substance abuse among food handlers reported by previous Indian studies was from 10.1% to 53.7%. There is a potential risk of contamination of food during smoking through microorganisms and tobacco.\(^3\) We found that in the last 6 months, more than one-fourth (13, 28.9%) of the workers reported illness, but majority (34, 75.6%) had never undergone any medical checkup. Periodic medical examination was lacking. More than one-fourth (12, 26.7%) had cuts and wounds in hands and none of them was using gloves at the time of food preparation. Our findings are in line with previous study.\(^6\) Less than half (20, 44.4%) had adequate personal hygiene. None or very few were using cap/hair-tie/gloves/apron at the time of food preparation. Less than two-thirds (29, 64.4%) were washing hands after touching/scratching scalp/hair/body. Hands of food handlers with poor personal hygiene can act as vectors in the spread of foodborne diseases.\(^6\)

More than half (26, 57.8%) of them reported reuse of the leftover food such as rice for subsequent meal preparation. Only five food handlers knew the correct way of thawing frozen food before cooking. Reuse of leftover food can become a potential outbreak source, especially when the food is not refrigerated properly, leading to *Salmonella* infection.\(^7\) Reheating of cooked rice, again and again, leads to *Bacillus* cereus food poisoning and should be avoided.\(^8\) As per the food safety guidelines by the United States Department of Agriculture, one should never thaw foods in open on kitchen counter as this can leave foods unsafe to eat. The suggested three safe ways to thaw food are in the refrigerator or cold water or in microwave.\(^9\)

Several observations reflected poor hygiene of the food establishments such as uncovered dustbins placed close to food preparation area, pest infestation, unlabeled pesticide containers, unclean food cutting surface and meat cutting blocks, no separate dishwashing area, and unhygienic dishwashing scrubs. Our findings were in line with previous studies.\(^2\) None of the units had display of health education materials, especially for food, hand, and personal hygiene. It is accepted that knowledge alone is insufficient to initiate sanitary practices and some mechanism is needed to motivate workers toward food safety.\(^10\) Periodic training of food establishment managers and food handlers along with display of education material may motivate the workers to adopt sanitary practices.

Guidelines have been laid down by regulating authorities for sanitary practices. However, lack of knowledge, motivation, and supportive supervision and increased workload lead to deviation from good practices. Doctors and other health caregivers are an important workforce group whose sickness can lead to detrimental effects on patient management. There is always scope of improvement in such establishments, and periodic vigilance can ensure prevention of foodborne diseases.

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