NEWS IN BRIEF

Sitting is the New Smoking

There is emerging data that prolonged sitting can increase the risk of diabetes, heart disease, obesity, musculoskeletal diseases and early death. The first inkling that sitting can be injurious came when it was noticed that London bus drivers were twice as likely to have myocardial infarction as their colleagues who were conductors. A recent systematic review showed that the relative risk for mortality due to a sedentary lifestyle was high (RR 1.45-1.49), and was just lower than the relative risk of mortality due to smoking (RR=1.79). An analysis of six studies seems to suggest that prolonged sitting more than 30 minutes at a time and overall more than 7 hours of daily sitting can be injurious to health. There is a linear relationship between type-2 diabetes and sitting time, suggesting that any reduction of sitting time will reduce the risk of diabetes.

A recent study (The SMArT study – Stand More AT Work) conducted on employees of the National Health Services in the UK has tried to evaluate whether certain interventions can reduce prolonged sitting times. Participants received a height-adjustable work-station, coaching sessions and motivational aids. Duration of sitting was monitored using an accelerometer taped to their thigh. They were encouraged to change from sitting to standing posture after every 30 minutes of continuous sitting. Evaluation revealed a reduction of sitting times by up to 82 minutes by one year, better work performance and mood, lower anxiety, and less musculoskeletal pains.

Office workers, including doctors, spend upto 70-80% of their time in sitting posture. The writing on the wall is clear. We must break up our sitting times with intermittent standing, walking or other actions to improve long-term health. (*BMJ. 2018;363:k3870*)

Zika Virus in India

As of early November 2018, out of 2000 samples tested for the Zika virus in Rajasthan, 159 have tested positive with a little more than 20 in pregnant women. Most patients were asymptomatic. Around 25% have no specific symptoms of fever, headache, rash, muscle and joint pains, or conjunctivitis.

Zika virus was first isolated from a monkey in the Zika forests of Uganda in 1947. There was a huge epidemic in Central and South America in 2015. It was then noticed that about 10% of infected pregnant women delivered babies with microcephaly. In 2017, detailed studies in mice brain suggested that somewhere around 2013, the virus mutated resulting in a single change of serine to aspargine (S139) in the viral polyprotein. This resulted in a strain that can infect and damage mouse and human neural progenitor cells. However, this has not been corroborated in further studies. A Lancet study published in 2017 also identified another mutation A188V to be linked to fetal microcephaly.

The ICMR team which has completed genetic studies in the virus currently isolated from Jaipur has confirmed that the A188V mutation is not present in the current Indian strain; though, the S139 mutation is present.

Meanwhile efforts to contain the infection in Jaipur and surrounding areas are continuing on a war footing, More than 1 lakh households have been screened with 330 teams deployed to identify and eliminate the Aedes mosquito larvae. (*The Hindu 17 October, The Economic Times 17 October 2018*)

#MeToo in Medicine

Since October 2017, the #MeToo movement has swept the fields of cinema, politics, journalism and academia. In medicine, the most widely quoted figures came from a survey of clinicians/researchers in the US by Reshma Jagsi and colleagues. In this study, 30% of women reported having experienced sexual harassment as compared to 4% of men. A balanced discussion in the Canadian Medical Association Journal suggests that unprofessional behavior in medicine affects not just women but permeates the entire hierarchical structure. Authors further stated that: "A work climate that enables bullying, harassment, discrimination and micro-aggressions can negatively affect a person's health and career pathway."

Another editorial in the NEJM discusses the indirect consequences of the movement. Consequent to all the media attention, some men in power in turn say they are afraid to be in mentoring relations with women. What will that mean? Already women in leadership positions in medicine are few and far between. In the US, though nearly half of medical school graduates are women, only 16% of college deans are women.

Not only are there fewer women at the top, they earn less than men even after controlling for specialty, seniority, and number of work hours. They are less likely than men to have mentors who actively foster their careers and leave academic medicine at a higher rate than men. Now efforts are being made to address these issues

The article discusses several ways in which these tricky problems can be addressed with real-life examples. It concludes with some recommendations to improve gender equity such as transparency in compensation, encouraging mentorship, and providing flexibility in structuring career paths. (*NEJM 3 October 2018, NEJM 18 January 2018*)

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