Editorial

As a result of population ageing; urbanization; changes in diet; reduced physical activity, the prevalence of diabetes mellitus (DM) has increased worldwide. Moreover about 80% of the Global 415 million estimated DM cases are from low and middle income countries where the DM prevalence is estimated to rise most steeply with high Tuberculosis (TB) incidence over the next 30 years. The increase in the DM patients where TB is also endemic has led to the importance of DM as a risk factor for TB. This association these two diseases and their synergistic role in causing public health concern DM increases the risk of TB by two to three times and adversely affects TB treatment outcomes. The combination of tuberculosis and diabetes mellitus is a health threat to the increasing populations which are at the risk for both of these diseases.

In 2030, it is estimated that 12.6% of new TB cases in ten highest TB burden countries, will be attributable to DM, which is increase of 25.5% compared to 2010. DM affects the natural history of TB and related with the worse treatment outcomes. It is associated with the delayed sputum conversion and a higher probability of treatment failure. Therefore, it is important that the people with diabetes are screened for tuberculosis and vice-versa using cost effective screening strategies available. Taking in consideration, SAARC TB and HIV/AIDS Centre has recently completed a research on **"The prevalence and determinants of active tuberculosis among diabetes patients in tertiary care hospitals of Nepal, 2018."**The objective of the research was to assess the burden of active tuberculosis among the people with diabetes and describe the risk for the same attending the selected diabetic clinics of the tertiary care centers across the country. With 70 participants from the seven study sites, a total of 490 samples from the patients were used for data analysis. The study showed that the overall prevalence of TB among the diagnosed DM patient is 4.42% which is comparable with others studies conducted in Asia. Meta-analysis shows that the overall median prevalence of DM among TB patients in Asia is 17%. The study also shows the other co-morbidities related to diabetes such hypertension, nephritis, neuropathy and dyslipidemia as significant risk factors to develop TB. Patients with TB are vulnerable to high degree of co-morbidity and are at high risk of adverse effects of intensive glucose control. Therefore, more researches are necessary to examine whether the diagnosis and treatment of diabetes in TB patients may improve TB outcomes and the patient survival.

Chief Editor
Director, STAC