

Correspondence

Prevalence & determinants of depression in type 2 diabetes patients: Problem in generalization

Sir,

I have read with interest the study by Raval *et al*¹ regarding the prevalence and determinants of depression in type 2 diabetes patients. They found 41 per cent prevalence of depression among the diabetic subjects. Age >54 yr, central obesity, neuropathy, nephropathy, peripheral vascular disease, diabetic foot disease and pill burden were strongly associated with depression. These findings demonstrate the need for the assessment of depression among the diabetes patients. However, the lack of comparison to a similar population without diabetes prevents generalization of the study. Various studies have placed the incidence of depression among elderly Indian population to be between 12.7 and 58 per cent^{2,3}. Although the authors demonstrate the association between depression and its risk factors, it is not clear whether the presence of diabetes has an additive or synergistic effect on the prevalence of diabetes. The association was based on analysis of the group of diabetic patients only. Without a comparison to a suitably selected normal population sample it would not be possible to determine whether diabetes has any effect on the prevalence of depression or the associations are of the same magnitude as observed in the general population.

This was a hospital-based study¹ and no statistical sampling method was applied. Hence it is subject to selection bias^{4,5}. It may be possible that diabetic patients with depression were reluctant to visit the hospital. Or it may be the other way round. In any case, it would not be possible to draw a firm conclusion.

The authors have acknowledged that causal relationship could not be assumed but in conclusion they have stated that depression and diabetes are causally related. It should be noted that the study showed no difference in HbA₁C or duration of diabetes

between diabetes patients with or without depression, which would be likely if there was a causal relation. Temporal relationship has not been established either. The association between depression and diabetes indicates that there may be a causal relationship⁶. However, the direction and underlying mechanisms remain unclear^{7,8}. There may be a bi-directional relationship as found by Golden *et al*⁹.

Conflict of interest: None.

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