

The Reply



Gosmanov raises 2 important limitations to our study,

which we had briefly acknowledged in that article.¹ First, Gosmanov notes that our reported incidence of diabetes exceeds incidence rates reported by the Centers for Disease Control and Prevention by 2-3-fold and suggests that the methodological criteria chosen to determine diabetes status may be a potential source of misclassification bias. Our findings are consistent with a previous report² showing that veterans have a higher prevalence of diabetes, even when determining diabetes diagnosis based on at least 2 International Classification of Diseases (ICD) codes without including use of diabetic medications as a criterion for diabetes diagnosis, when compared to the general population (17.6% by use of diabetic medication or at least 2 outpatient diabetes ICD-9 codes vs 16.8% using only ICD-9 codes in 2000 in the Veterans Affairs Health Care System [VA] vs 6.0% in the general population [age-adjusted in adults age 18 years or older] in 2000³). The same study also showed a higher incidence of diabetes in the VA (2% annual incidence in the VA² vs 0.62% in the general population [age-adjusted in adults age 18 years or older] in 2000³). Therefore, inclusion of diabetic medication use in the criteria of diabetes diagnosis does not appear to be associated with a significant misclassification bias. Moreover, the higher prevalence and incidence of diabetes in the VA indicate a heavier burden of disease in this population, likely attributable in part to higher prevalence of risk factors, including older age and higher proportion of minority race, among others.

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Conflict of Interest: MKR has nothing to disclose. LSP has served on scientific advisory boards for Boehringer Ingelheim and Janssen, and currently has or has had, over the past several years, research support from Merck, Amylin, Eli Lilly, Novo Nordisk, Sanofi, PhaseBio, Roche, Abbvie, GlaxoSmithKline, Janssen, Vascular Pharmaceuticals, and the Cystic Fibrosis Foundation. He has also been a speaker for Novartis and Merck, but not for the past several years.

Authorship: Both authors had access to the data and a role in writing this manuscript.

The second concern raised by Gosmanov is the potential bias introduced by use of glucocorticoids in hospitalized patients leading to steroid-induced hyperglycemia. We were not able to adjust for the use of glucocorticoids in our analysis and consider this a limitation to our findings. However, steroids in the inpatient setting are often given as a short-term course of treatment, which is completed soon after discharge from the hospital. In our analysis, patients were considered to have a new diagnosis of diabetes only if the ICD-9 code or initiation of diabetic medication(s) remained present every year subsequent to the first appearance of the ICD-9 code or diabetic medication prescription. Therefore, if patients had developed steroid-induced hyperglycemia without persistent glucose elevations, we assumed that the use of the diabetes ICD-9 code with or without diabetes medication(s) would not have persisted for the subsequent years, and therefore those patients would not have been classified as having incident diabetes.

Nevertheless, Gosmanov raises valid concerns that should be addressed in future investigations.

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