

Summary

A questionnaire was mailed to all Danish obstetrical departments to assess the departments' reporting procedures of the preeclampsia (PE) diagnosis to the Danish National Patient Registry (NPR) and about the specific criteria used to state the diagnosis. The response rate was 97%, the prevailing education of the reporters was specialist in obstetrics and gynaecology. The criteria for PE differed widely between departments and were obviously not easy to apply on three constructed case stories.

To explore the quality of the PE diagnosis in the NPR further, a review of 3,039 patient charts was performed, choosing pregnant women participating in the Danish National Birth Cohort (DNBC). These women represented a sub-cohort (3%) of the 101,039 enrolled in the DNBC. The estimates of the proportion of PE and related diagnoses being misclassified were expressed as sensitivity, specificity and kappa. The specificities were very high (> 98.5%) for PE, which means that very few women were wrongly diagnosed with PE if they were not diseased, whereas the sensitivities could be improved and the kappa values ranged from fair (0.4) to very good (1.0). Combining the information from the DNBC with the diagnoses obtained from the NPR, we were able to increase specificity. We used a hypothetical population for an etiological study and made up a table describing the effect of misclassification on the true association expressed as odds ratio (OR). Applying our measures for validity from different combinations of the NPR and the DNBC, gave the possibility to choose the optimal combination to assess the smallest attenuation of the true OR.

A study on etiologic aspects of PE among 45,063 pregnant women, showed an association of women's risk of becoming preeclamptic and an intake of vitamin C below the recommended daily allowance (< 70mg/day). Similar analyses on intake levels of vitamin E could not detect any association with PE.