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Institutionen för klinisk neurovetenskap

Depressive symptoms over higher education and the first years in the profession

– a longitudinal investigation in Swedish nursing students

AKADEMISK AVHANDLING

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Abstract

Background and aims: A substantial part of the population attends higher education, which makes the welfare of students a matter of concern for public health. There are indications of a high prevalence of mental distress and depressive symptoms in students, as well as an increase over the past decades. If this is an effect of education is uncertain. The overall objectives of this thesis were to investigate prevalence of depression and to follow change in depressive symptoms over higher education and the first years in the profession. The specific aims were to investigate 1) prevalence of depression and associations with demographic and education related factors in first year students (study I), 2) effects of time in higher education and work establishment on depressive symptoms and to map change over the period (study II), and 3) risk of conflicting demands between education/work and private life (work-home conflict) over time in higher education and work establishment, and the association with depressive symptoms (study III). **Methods:** The data came from LANE (Longitudinal Analysis of Nursing Education), a national cohort of 1,700 nursing students who responded to annual questionnaires from 2002 to 2007. Study I was cross sectional and we used data from the baseline questionnaire collected during the first year of education. Depression was measured by the Major Depression Inventory. Associations with socio-demographic and educational factors were tested in logistic regressions. Study II and III were longitudinal, and for both we used data from five consecutive years; three in education and two post graduation. In study II we measured degree of depressive symptoms by a summed score of the Major Depression Inventory. Change over time was analysed in a linear mixed model. In study III we measured two directions of work-home conflict: work → home and home → work conflict by single items. Depressive symptoms were measured as in study II. Change over time was analysed in generalized estimating equations and linear mixed models. **Results:** Study I showed that 10.2% (5.7% men and 10.7% women) reported depression at baseline. Younger age (<30), immigration from outside Europe, high workload, dissatisfaction with the education, low self efficacy and work-home conflict were associated with higher risk of depression. Prior work experience, less need of financial support and salaried work during term time were associated with less risk. In study II we found an increase in depressive symptoms over time in education, but a decrease to levels similar to baseline a year after graduation and work entry. Symptom levels differed between groups of different age, family status and prior nurse assistant training, but the pattern of change was similar across groups. Study III revealed that experience of work-home conflict increased over education, but a year after graduation the risk was lower than at any time in education. Respondents who were parents reported conflict more often. The association between work-home conflict and depressive symptoms was strong and consistent over the whole period of investigation. **Conclusions:** The students investigated were a heterogeneous group consisting both of young adults and individuals with extensive experience of adult life. 10.2% reported depression in their first year of education, but the overall risk was affected by age and gender. The findings of an increase on depressive symptoms over education and a decrease a year after graduation and work entry show there is an effect of heightened distress over education, but that it is transitional and abates once the graduate has had time to accommodate to the profession. Moreover, many students, especially parents, found it difficult to balance the demands of education with those of private life, and experienced work-home conflict. The strong association with depressive symptoms suggests that measures to reduce work-home conflict, especially in education programs with many mature students, could help alleviate distress.