Do the National Board of Medical Examiners (NBME) subject examinations predict success on the Medical Council of Canada qualifying examination (MCCQE) Part 1?

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NBME subject examinations are used by many Canadian medical schools to evaluate students during their clerkship rotations. Although studies show strong correlations between NBME scores and the American licensing examination, published research is not available comparing these examinations to scores on the MCCQE Part I. The purpose of this study is to determine if the NBME subject examination scores for pediatrics, internal medicine, surgery, psychiatry, and obstetrics/gynecology can identify students at risk of poor performance on the MCCQE Part I. Student NBME scores and MCCQE Part I scores from 4 academic years were analyzed. The MCCQE Part I scores included the total score as well as the multiple choice (MCQ), clinical decision making (CDM), and subject-specific MCQ scores. A total of 224 sets of student scores were analyzed. Moderate correlations were found between the NBME and the total MCCQE Part I score (r= 0.519-0.613, p=0.000) as well as the MCQ score (r=0.506-0.605, p=0.000). There were low-moderate correlations between each of the NBME scores and their respective subject-specific MCQ (r=0.333-0.489, p=0.000) and CDM scores (r=0.297-0.360, p=0.000). Six students failed the MCCQE Part I and 3 of these students failed at least 2 of the 5 NBME examinations. The mean scores on each of the NBME examinations were significantly lower for students who failed the MCCQE Part I than for those who passed (p<0.004). The NBME subject examinations show moderate correlations when compared to the total MCCQE Part I score and may help to predict which students are at risk of failing the Canadian licensing examination.