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### **Research**

My research interests are in the field of medical education, particularly the factors that influence medical school performance. In attempting to predict performance on the COMLEX examinations, I have investigated the relationship of preadmission academic variables and individual course grades to COMLEX-USA scores. COMLEX-USA Level 1 performance predictive models used preadmission variables combined with the year 1 and year 2 course grades. The year 2 courses' model had a higher predictive value for COMLEX-USA Level 1 performance ( $R^2 = 0.81$ ) than the year 1 courses' model ( $R^2 = 0.77$ ). Significant predictors of COMLEX-USA Level 1 performance in the combined year 1 and 2 courses' model were the pharmacology II, neuropathology, and pulmonary pathology grades, and the verbal and physical MCAT MCAT subscores ( $R^2 = 0.820$ ).

Male and female performance data from seven classes (1,258 students) were combined for analysis. Male students had higher total MCAT scores than women in the combined group and performed better than female students on COMLEX Level 1. There were no significant differences between women and men in their year 1 & 2 GPAs or COMLEX Level 2 scores. Women and men performed equally well on clinical clerkship examinations, while women had significantly higher clinical evaluations.

### **Selected Publications**

Dixon D, Adams K, Chen D, Rappe S. Gender and medical performance. J Am Osteopath Assoc. 2005;105:344. (Abstract)

Dixon D. Relationship between variables of preadmission, medical school performance, and COMLEX-USA Levels 1 and 2 performance. J Am Osteopath Assoc. 2004;104:332-336.

Dixon D. Correlation of preadmission variables with medical school performance and Level 1 COMLEX-USA scores. J Am Osteopath Assoc. 2002;102:510. (Abstract).

Dixon-Shanies D, Shaikh N. Growth inhibition of human breast cancer cells by herbs and phytoestrogens. Oncology Reports 1999; 6:1383-1387.

Shanies, DD, Shaikh N. The effects of dietary isoflavones and herbal remedies on human breast cancer cells. J Am Osteopath Assoc. 1997; 97:481. (Oral presentation).