Own and cross wage elasticities: the impact of nurse and non-nurse wages on the nurse labor supply

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Abstract

Many countries have faced the persistent shortage of nursing staff. Therefore, examining the labor supply decisions by nurses would help develop a policy to secure sufficient nurse labor supply. Although most previous studies found that labor supply with respect to wage is low, it has been pointed out that one of drawbacks of these studies is a failure to take into account the option to work in non-nurse occupations. Our study aims to revisit the labor supply elasticity of nurse with respect to wage among the US representative registered nurse (RN) population, taking the outside nursing option into consideration. We estimate not only the own wage elasticities on the participation of nursing profession with respect to nursing wage but also the cross elasticity with respect to non-nurse wage using the US National Sample Survey of Registered Nurses (NSSRN) 2008 data. Our sample includes those who are qualified to work as a RN but are not employed in nursing professions, in addition to those who are working as RNs. Our preliminary results show that the labor force participation in nursing profession is inelastic to changes in wages of both nurse and non-nurse. The own-wage elasticity is 0.284 and the cross-wage elasticity is -0.063, statistically significantly different from 1.

Key words: Nursing profession, Labor supply elasticity, polychotomous choice

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