Are nurses good dictators?

The use of experimental economic games to study nurses' altruism in South Africa, Kenya and Thailand

M. Lagarde¹, E. Erasmus², K. Mullen³, N. Pagayia⁴, D. Blaauw²

Recent developments in behavioural economics have proved how concern for others’ well-being can drive individuals’ decisions, as opposed to the traditional economic perspective that only considers self-interest as a driving factor. Motivations going beyond narrow self-interest, such as the ‘helping the community’ or altruism (‘serving others’), have sometimes been identified as important factors to understand health workers. For example, some studies suggest that vocational and altruistic motivations matter for nurses, to the extent that they could be less sensitive to monetary incentives. Investigating such motivations can provide new insights into how to motivate new workers. This is particularly relevant in developing countries where scarce resources are allocated to the training of health workers who then leave the public sector or are reluctant to work in areas where they are needed most.

This first step in the analysis of the role of altruism in nurses’ labour market decisions provides new evidence on the nature and determinants of altruism amongst nurses in Kenya, Thailand and South Africa.

In the experimental economic literature, donations to (anonymous) fellow student recipients in the DG range from 12% to 36%, nurses are thus more generous than traditional subjects (usually economic students). Future research comparing nursing students to economic students in the same settings and experimental conditions will allow us to test whether nurses are indeed more altruistic. Other experimental studies have also found that framing recipients as needy or worthy recipients increased altruism. Furthermore, younger and male participants have also shown less generosity in other dictator games. Cross-country experiments have seldom been carried out, but when differences were found, as we did between SA and the other 2 countries, the role of social norms has often been highlighted.

This is the first study to use experimental economics combined with survey data to compare the nature and determinants of nurses’ altruism in three different developing countries, and particularly explore its link to vocational motives. Results suggest that nurses who are intrinsically motivated (more generous in DG) report less sensitivity to extrinsic rewards.

Methods

Experimental economics and the dictator game. Economic experiments have recently been promoted as measurement tools for social preferences because they ask participants to make choices for real money, which is considered as an incentive to reveal their true behaviour and avoid self-presentation bias of attitudinal questions. To measure altruism, a 2-player game called the dictator game (DG) is normally used. Following the DG rules, a 1st player, (called the “dictator”), is given a sum of money and is told to freely allocate this money, between himself and the 2nd player, who is entirely passive, and will usually not know the identity of his potential beneficiary.

Data collection. Final year nursing students from Kenya (N=345), South Africa (N=377) and Thailand (N=342) had to decide how much to give to three different recipients (called together unknown student, a patient or a poor person). In each country, the game endowment was worth the daily salary of a newly-qualified nurse (approx. £1.6 in Kenya, £6.7 in South Africa and €3.2 in Thailand). Participants were also surveyed about their socio-demographic characteristics and job intentions and vocational attitudes.

Analysis. Altruism is measured by the proportion of money given up (A1 to fellow students, A2 to a patient and A3 to a poor person). Multivariate analysis was performed to investigate the determinants of altruism, and to what extent altruism was correlated to job intentions.

Discussion

Social preferences (e.g. altruism, trust) have proved to be important in other fields and should be investigated in the field of health personnel attitudes and behaviours. The present findings represent the first step in a study that seeks to explore the role of altruism in nurses’ job choices. It already suggests a relationship altruism in DG and vocational or extrinsic motivation.

Future steps of this research will explore the relationship between altruism and stated and revealed preferences for positions in under-served areas. If altruism towards others, as measured through economic experiments, is a key underlying value driving nurses’ decisions and attitudes in their professional lives, innovative interventions could be implemented in order to nurture such values and makes sure they are not contradicted by the wrong incentives.