[Abstract]

Background

Poor distribution of already inadequate numbers of health professionals seriously constrains equitable access to health services in low- and middle-income countries. The Senegalese Government is currently developing policy to encourage health professionals to remain in areas defined as 'difficult'. Understanding health professional's preferences is crucial for this policy development.

Methods

Working with the Senegalese Government, a choice experiment (CE) was developed to elicit the job preferences of physicians and non-physicians. Attributes were defined using a novel mixed-methods approach, combining interviews and Best-Worst Scaling (Case 1). Six attributes resulted, categorised as 'individual (extrinsic) incentive' ('type of contract', 'provision of training opportunities', 'provision of an allowance', and 'provision of accommodation') or 'functioning health system' ('availability of basic equipment in health facilities' and 'provision of supportive supervision by health administrators') attributes. Using face-to-face interviews, the CE was administered to 55 physicians (3,909 observations) and 246 non-physicians (17,961 observations) randomly selected from those working in eight 'difficult' regions in Senegal. Conditional logit was used to analyse responses. This is the first CE to both explore the impact of contract type on rural retention and to estimate value of attributes in terms of willingness-to-stay (WTS) in current rural post.

Results

For both physicians and non-physicians, a permanent contract is the most important determinant of rural job retention, followed by availability of equipment and provision of training opportunities. Relative importance of an allowance is low, suggesting health professionals value stability in employment more than financial incentives. Retention probabilities suggest policy reform affecting only a single attribute is unlikely to encourage health professionals to remain in 'difficult' regions.

Conclusion

Contract type was a key factor impacting on retention; relative importance of a financial allowance is low. This has led the Senegalese Health Ministry to introduce a new rural assignment policy that recruits permanent staff from the pool of annually contracted healthcare professionals on the condition they take up rural posts. While this is a useful policy development, further effort, considering both personal incentives and the functioning of

health systems, is necessary to ensure health worker numbers are adequate to meet the needs of rural communities.

Authors:

Ayako Honda, Sophia University, Tokyo, Japan Nicolas Krucien, University of Aberdeen, Aberdeen, the United Kingdom Mandy Ryan, University of Aberdeen, Aberdeen, the United Kingdom Ibrahima Ska Ndella Diouf, Ministère de la Santé et de l'Action Sociale du Sénégal, Dakar, Senegal Malick Salla, Ministère de la Santé et de l'Action Sociale du Sénégal, Dakar, Senegal Mari Nagai, National Centre for Global Health and Medicine, Tokyo, Japan Noriko Fujita, National Centre for Global Health and Medicine, Tokyo, Japan