

UNDERSTANDING NURSING STUDENTS' ATTITUDES TOWARD WORKING IN RURAL AREAS IN SOUTH AFRICA: THE RESULTS OF A COHORT STUDY

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INTRODUCTION

Much has been made of the crisis in human resources in low- and middle-income countries. The difficulty of attracting and retaining health workers, particularly in rural areas, is a key policy concern at international and national levels and different interventions are being developed to address this.

This research investigated the factors influencing the career choices of a cohort of nursing graduates in South Africa. It also sought to describe the characteristics of the health worker labour market and policy environment in South Africa, and to understand nurses' attitudes towards working in rural areas. Similar studies were carried out in Kenya and Thailand. The cohort study followed-up nurses over time which made it possible to evaluate whether nurses' actual career choices differ from their initial preferences.

This policy brief provides findings from the baseline for this research. It is hoped that this will help the South African government to understand better their health workforce and assess the appropriateness of future interventions to improve the recruitment and retention of health workers in rural areas.

METHODS USED

- Cohort members were recruited from nursing training institutions located in two provinces: North West (a comparatively rural province) and Gauteng (a completely urbanised setting). The institutions included nursing colleges and universities.
- The nursing training institutions were identified through discussions with provincial-level nursing managers in North West and Gauteng.
- In each institution, final-year professional nursing students were approached with the consent of the institution and asked to volunteer to take part in the study.
- 377 final-year nursing students were recruited to the cohort at the time of baseline data collection. Baseline data collection took place between July 2008 and October 2008.
- A discrete choice experiment was used to assess the relative importance of different factors to the decisions that people make. The discrete choice experiment questionnaire was developed as a result of a literature review of policy interventions, two focus group discussions with nursing students, and a pilot study.
- Using statistical software a final questionnaire was developed with 16 questions where the cohort had to choose between a rural job and an urban job with different combinations of incentives for example, faster promotion or a car allowance.
- A self-administered questionnaire was used to collect information on personal and demographic characteristics; nursing training, preferences for community service and work preferences after community service; reasons for choosing nursing; feelings about working and living in rural areas; and attitudes towards certain aspects of nursing.
- Focus groups discussions with 6-8 participants were conducted in order to explore themes such as the factors influencing nurses' choice of jobs, the meaning of 'rural area' and possible interventions to attract nurses to rural areas.

KEY FINDINGS

CHARACTERISTICS OF THE COHORT

There were many more women than men, but there was quite a high proportion of men among the college students from North West. Most of the cohort members were black/African, although quite a high number of the university students were white. The mean age of the cohort members was 31 years, the university

students were on average substantially younger. Not only were the university students younger, but more of them were also single compared to the college students from Gauteng and North West. About a third of the cohort members were married. 61% of cohort members had at least one child, although this figure was substantially lower for university students (34%) and higher for North West college students (74%). Just fewer than 50% of the cohort members said they were born in rural areas.

CAREER CHOICES

Why did the cohort choose nursing?

Surprisingly, the self-administered questionnaire responses suggested that nursing was not the first career choice of around 60% of the cohort. There was a statistically significant difference between men and women, with 80% of men saying nursing was not their first career choice, compared to 57% of women. When asked why they chose the nursing profession, the cohort as a whole agreed most strongly with the statement that this choice was about wanting to help others. A second reason for choosing the nursing profession that the cohort identified had to do with always being able to find a job. This was followed by the desire to earn money. Overall, the cohort members did not show a clear preference for leaving nursing altogether in the future.

Where would they like to do community service?

Nurses in South Africa have to complete one year of compulsory community service after graduating. North West college students were very significantly more likely to both identify a rural area as their first choice for community service and to identify only rural areas as their preferred community service destinations than other cohort members.

Public vs. private sector

Of the total cohort, about 87% said they would prefer to work in the public sector after they had fulfilled their initial community service and contractual obligations to government, with 10.4% opting for the private for-profit sector and 1.9% for the private not-for-profit sector. The Gauteng and North West college students leaned much more towards the public sector than the university students (92.6% and 88% vs. 73.9%). They were, however, less likely than university students to favour private sector jobs (6.8% and 10.2% vs. 20.3%).

Migration

There was not a very strong desire to work abroad. However, of those who expressed this as a preference, university students expressed the strongest inclination to work abroad, followed by North West college students and then Gauteng college students.

Rural vs. urban areas

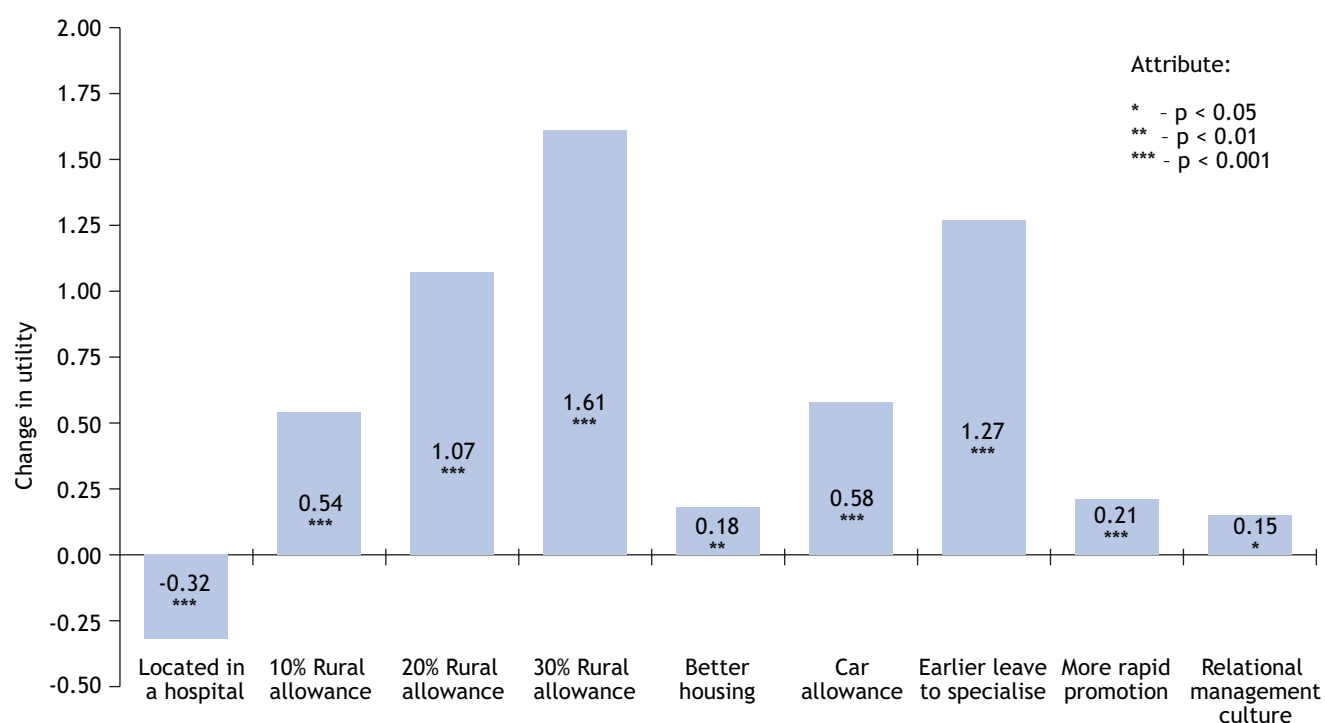
The overall picture is not one of unequivocal enthusiasm for working in the rural areas. As a whole, the cohort agreed that it was stressful to work in rural areas and they didn't think that rural quality of life was good, that the rural lifestyle was less appealing (except North West college students) and that rural social life was less enjoyable. On the upside, they thought that one can earn more money and get faster career advancement in rural areas, associated working in rural areas with support from colleagues and supervisors and thought that it was, to some extent, easy to raise children in rural areas. The self-administered questionnaire also suggested that the presence of good housing and the ability to choose which rural area might be of some relevance in persuading more nurses to work in rural areas.

WHAT INCENTIVES WOULD ENCOURAGE THE STUDENTS TO WORK IN RURAL AREAS?

The discrete choice experiment showed that in the absence of any interventions 33.2% of students would choose a rural job. The sex, age and race of the students did not influence this choice. However, students that were single, those that had any children, and those from university were less likely to choose a rural job. On the other hand, students born in a rural area, and those studying in the North West province were statistically more likely to choose the rural alternative.

When asked about incentives it was found that a 30% rural allowance would have the most impact on persuading nursing graduates to take up a rural job, see Figure 1. But making

Figure 1: Relative importance of different attributes on choice of rural job



it easier to specialise was more important to students than a 20% increase in salary. It was interesting that providing a car allowance was more important to participants than a 10% increase in salary even though it was actually worth less money. Better housing, more rapid promotion and changing to a more relational management culture were less important to these respondents. The fact that the facility attribute is negative indicates that the respondents preferred a job in

a clinic to a job in a hospital. See Table 1 for a breakdown of how different packages of incentives might affect the cohorts' preferences.

Interestingly, non-financial improvements could have a similar impact to a large increase in salary. A practical combination of financial and non-financial interventions would result in 85.3% of respondents choosing a rural job.

Table 1: Modelling the Impact of Different Policy Interventions

Scenario	Package of Interventions	Details	Percentage who choose Rural Job
1	None	• No interventions	33.2%
2	Minimal financial	• 10% rural allowance	45.9%
3	Maximal financial	• 30% rural allowance	71.2%
4	Non-financial	• No rural allowance • Better housing • Earlier study leave • More rapid promotion • Relational management culture	75.2%
5	All interventions	• Located in clinic • 30% rural allowance • Better housing • Car allowance • Earlier study leave • More rapid promotion • Relational management culture	97.8%
6	Practical package	• Located in clinic • 10% rural allowance • Better housing • Earlier study leave • Relational management culture	85.3%

CONCLUSION AND POLICY RECOMMENDATIONS

- Job security, economic considerations and the desire to help people affected the decision to study nursing. However, nursing was not the first choice of career for the majority of the cohort. The apparent ambivalence of the cohort towards staying in or leaving nursing suggests that future research on career trajectory will be useful in understanding the factors that support staff retention.
- The majority of the cohort wanted to work in the public sector after training and there was not a very strong desire to work abroad. This is a heartening finding given the negative effects of the 'brain drain'.
- The cohort could see positive and negative aspects to working in rural areas and in the absence of any incentives 33.2% of students would choose a rural job. Financial incentives were popular amongst the cohort. However, modelling shows that a package of financial and non-financial incentives could have equivalent impacts on the desire to work in the rural areas.

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