





# P©LICY BRIEF

No.**01** 

 $\underline{Wi}$ ts longitudinal  $\underline{S}$ tudy to  $\underline{D}$ etermine the  $\underline{O}$ peration of the labour  $\underline{M}$ arket among its health professional graduates



# Baseline characteristics of the WiSDOM health professional cohort

# **HIGHLIGHTS**

- WiSDOM is the first cohort study of health professionals at a South African or African University.
- 13.1% of WiSDOM members were born in a rural area.
- 11.9% and 8.0% completed their primary and secondary schooling in a rural area respectively.
- 45.0% of WiSDOM participants had attended a private school, the majority of their fathers (77.1%) and mothers (69.1%) had completed tertiary education.
- Almost one quarter (24.9%) of cohort members indicated that they had taken out a loan to finance their studies.
- Although 86.3% of all cohort members indicated that they plan to stay in their chosen profession, this ranged from 13.6% for clinical associates to 100% for dentists.

## INTRODUCTION

Health workers, also known as human resources for health (HRH), are the personification of any health system. South Africa has higher ratios of health professionals than the minimum World Health Organization (WHO) norms, when compared to many countries in Africa, Asia and South America. We have wellestablished training institutions, skilled health professionals, tight regulation of health professional training and practice, and sufficient fiscal space for relatively high remuneration levels in the public health sector.

Despite these strengths, we have a health workforce crisis in South Africa, manifested in different ways. We experience staff shortages, inequities and maldistribution of HRH between urban and rural areas and between the public and private health sectors; there is ineffective and sub-optimal management and leadership at all levels of the health system; and there is evidence of unprofessional behaviour, poor staff motivation, sub-optimal performance, and unacceptable attitudes of health workers towards patients. Human resource information systems are fragmented, and unable to inform health workforce planning and training.

There is a dearth of research on the health labour market in low- and middle-income countries particularly in Africa. WiSDOM (Wits longitudinal Study to Determine the Operation of the labour Market among its health professional graduates) is a pioneering study that aims to generate new knowledge on the health labour market in South Africa, in order to contribute to health policy change.

## **METHODS**

WiSDOM is a prospective longitudinal cohort study. Following ethical approval, the first cohort for each of eight (8) professional groups was established at the University of the Witwatersrand (Wits) during 2017. These cohorts are: clinical associates (CA), dentists (DT); doctors (MD); nurses (NS), occupational therapists (OT), oral hygienists (OH), pharmacists (PH) and physiotherapists (PT). The 8 cohorts will be followed up for a period of 15 years. For the baseline data collection, each final year health professional student completed an electronic self-administered questionnaire (SAQ) on REDCap (Research Electronic Data Capture), a secure, web-based, programme. The SAQ collected information on a range of issues, including demographic characteristics, financing of training, career intentions, and job location intentions. Survey data were analysed using STATA® 14.

# **RESULTS**

### **DEMOGRAPHIC CHARACTERISTICS**

We obtained an 89.5% response rate, and 511 final year health professional students completed the baseline survey. The majority of cohort members (55.2%) were medical students.

The mean age of all participants was 24.1 years, with a range of 19.8 to 37.2 years. Women comprised the majority of WiSDOM participants (71.8%).

In terms of geographical distribution, 13.1% of WiSDOM members were born in a rural area, while 11.9% and 8.0% completed their primary and secondary schooling in a rural area respectively (Figure 1).

# EDUCATIONAL BACKGROUND OF WISDOM COHORT MEMBERS AND THEIR PARENTS

WiSDOM health professional graduates came from relatively privileged backgrounds. Almost one in two WiSDOM cohort members had attended a private school (45.0%), ranging from 22.7% for clinical associates to 63.9% for occupational therapists (Figure 2). The majority of their fathers (77.1%) and mothers (69.1%) had completed tertiary education (Figure 3).

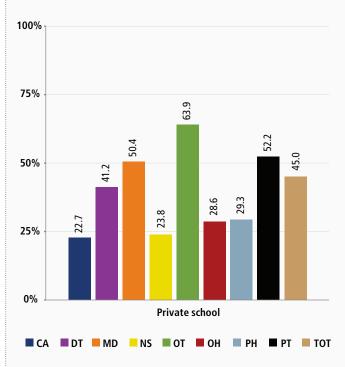
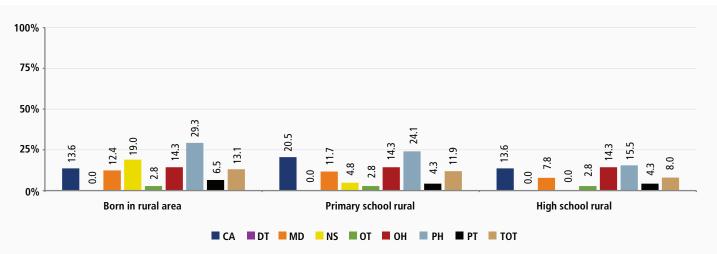


Figure 2: Extent of private schooling among WiSDOM cohort members



CA: clinical associate; DT: dentist; MD: doctor; NS: nurse; OH: oral hygienist; OT: occupational therapist; PH: pharmacist; PT: physiotherapist

Figure 1: Rural birth and schooling of WiSDOM cohort members

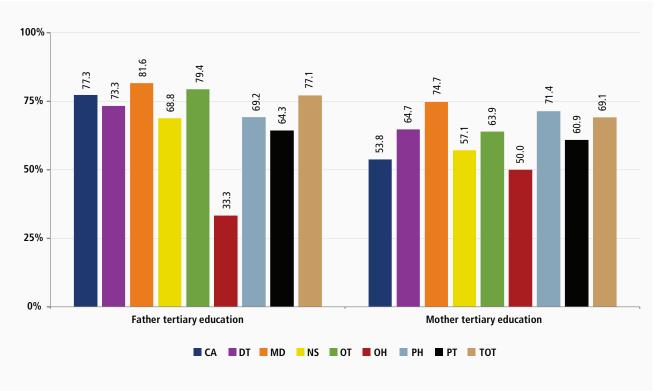


Figure 3: Parental education of WiSDOM cohort members

### **FINANCING OF TRAINING**

Almost one quarter (24.9%) of all cohort members indicated that they had financed their studies partly through loans: this differed from a low of 13. 9% for occupational therapy students, to a high of 57.1% for

oral hygiene students. 12.7% of all cohort members had financed their studies through the National Student Finance Aid Scheme (NSFAS): this ranged from a low of 2.8% for occupational therapy students to a high of 28.6% for nursing and oral hygiene students (Figure 4).

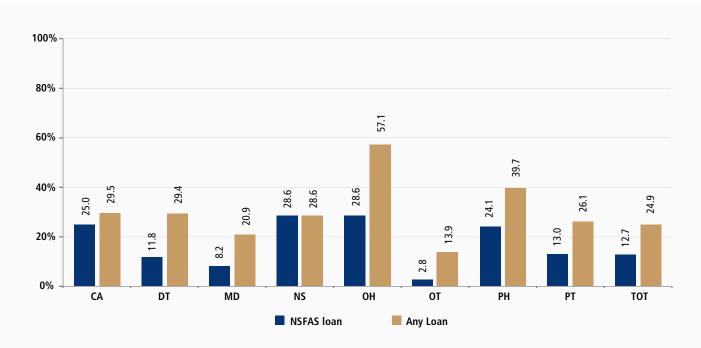


Figure 4: Loan financing of studies of WiSDOM cohort members

### **CAREER INTENTIONS**

63.6% of WiSDOM cohort members indicated that the profession in which they graduated was their first choice: this ranged from 0% for oral hygiene students to 87.2% for medical students. Although 86.3% of all cohort members indicated that they plan to stay in their chosen profession, this ranged from 13.6% for clinical associates to 100% for dentists (Figure 5).

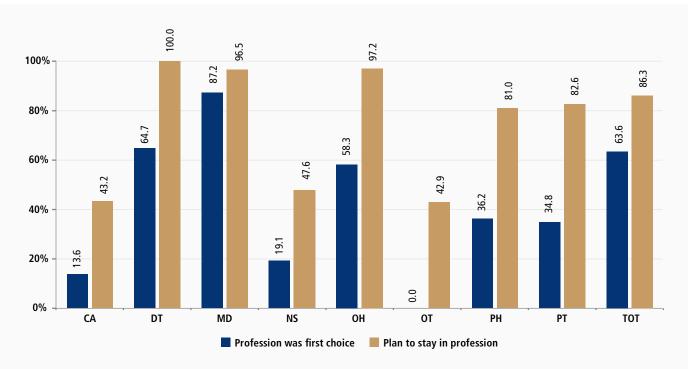


Figure 5: Choice of profession and intention to stay in profession

WISDOM Policy Briefs aim to make our research accessible to participants and stakeholders by summarising the key findings and policy implications.

References available on request.

The DST/NRF SARChI provided funding for the study

We thank all cohort members for their participation, and the numerous stakeholders at Wits University and the provincial and national Departments of Health for their support that enabled this study.

#### **June 2018**

### **FURTHER INFORMATION:**

Prof. Laetitia Rispel on +27 (11) 717 2043 or laetitia.rispel@wits.ac.za Dr Duane Blaauw on +27 (11) 717 3422 or duane.blaauw@wits.ac.za

http://www.wits.ac.za/hrhsarchi/ https://www.wits.ac.za/wisdom/

# **CONCLUSION**

- WiSDOM is the first cohort study in Africa that will observe multiple health professionals' career intentions and job location decisions, and the factors that influence these.
- Although WiSDOM cohort members are relatively privileged, almost one quarter used some form of loans to finance their studies, with differences across cohort groups.
- The low retention rates expressed among nurses, clinical associates and oral hygienists are of concern, and appear to be linked to whether the career was their first choice.
- In the long term, WiSDOM findings will inform Wits University's health professional education reforms and South Africa's health workforce strategies.