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Social exclusion and perceptions of health care providers on migrants in Gauteng public health facilities, South Africa --Manuscript Draft--

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Full Title:	Social exclusion and perceptions of health care providers on migrants in Gauteng public health facilities, South Africa
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Keywords:	health care providers; migrants; social exclusion; public health
Abstract:	<p>Background : The draft global action plan on migrant health focuses on achieving universal health coverage (UHC) for all people, regardless of citizenship. In South Africa, the proposed National Health Insurance system is the primary UHC reform. Health workers are central to the achievement of UHC, and their attitudes, behaviour or practices could either advance or constrain UHC for migrants. Using a theory of social exclusion, the aim of this study was to examine the perspectives of health care providers on delivering health services to migrants in public health facilities in the Gauteng Province of South Africa.</p> <p>Methods : We used stratified, random sampling to select 13 public health care facilities in Gauteng Province. On the randomly selected fieldwork days, all health care providers in ambulatory care were invited to complete a self-administered questionnaire. In addition to socio-demographic information, the questionnaire measured discrimination against migrants and social exclusionary views or practices. Stata® was used to analyse the data, weighted by type of facility and health care provider category.</p> <p>Results : We recruited 277 health care providers, with a refusal rate of 10%. The majority of participants were female (77.6%), nurses (51.9%) and had worked for an average of 6.8 years in their facilities. 21.0% of health care providers reported that they had witnessed discrimination against migrants, while 22.6% reported differential treatment of migrant patients. Enrolled nurses and nursing assistants were significantly more likely to agree with social exclusionary views or practices ($p < 0.001$). The predictors of less exclusionary views were health care providers born outside South Africa ($p < 0.05$).</p> <p>Conclusion : Health care providers are central to UHC, inclusive of migrants. Social exclusionary views or practices must be addressed through a multi-pronged approach, including training in culture-sensitivity, ethics and human rights; and advocacy to ensure that health care providers uphold their professional obligations to all patients.</p>
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1 **Social exclusion and perceptions of health care providers on migrants in**
2 **Gauteng public health facilities, South Africa**

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23 **Abstract**

24 **Background:** The draft global action plan on migrant health focuses on achieving
25 universal health coverage (UHC) for all people, regardless of citizenship. In South
26 Africa, the proposed National Health Insurance system is the primary UHC reform.
27 Health workers are central to the achievement of UHC, and their attitudes, behaviour or
28 practices could either advance or constrain UHC for migrants. Using a theory of social
29 exclusion, the aim of this study was to examine the perspectives of health care
30 providers on delivering health services to migrants in public health facilities in the
31 Gauteng Province of South Africa.

32 **Methods:** We used stratified, random sampling to select 13 public health care facilities
33 in Gauteng Province. On the randomly selected fieldwork days, all health care providers
34 in ambulatory care were invited to complete a self-administered questionnaire. In
35 addition to socio-demographic information, the questionnaire measured discrimination
36 against migrants and social exclusionary views or practices. Stata® was used to analyse
37 the data, weighted by type of facility and health care provider category.

38 **Results:** We recruited 277 health care providers, with a refusal rate of 10%. The
39 majority of participants were female (77.6%), nurses (51.9%) and had worked for an
40 average of 6.8 years in their facilities. 21.0% of health care providers reported that they
41 had witnessed discrimination against migrants, while 22.6% reported differential
42 treatment of migrant patients. Enrolled nurses and nursing assistants were significantly
43 more likely to agree with social exclusionary views or practices ($p < 0.001$). The
44 predictors of less exclusionary views were health care providers born outside South
45 Africa ($p < 0.05$).

46 **Conclusion:** Health care providers are central to UHC, inclusive of migrants. Social
47 exclusionary views or practices must be addressed through a multi-pronged approach,
48 including training in culture-sensitivity, ethics and human rights; and advocacy to
49 ensure that health care providers uphold their professional obligations to all patients.

50

51 **Introduction**

52 This millennium has been marked by mass migration [1], with an estimated 70 million
53 displaced people globally in 2019 [2]. In this paper, migrants refer to people who have
54 moved across an international border away from their habitual place of residence,
55 regardless of their legal status, causes of the movement or whether it was voluntary or
56 involuntary [2]. Worldwide, the unmet health needs of migrants and their lack of access
57 to essential health services are of concern [3]. Consequently, the 2019-2023 draft
58 global action plan on the health of migrants focuses on achieving universal health
59 coverage (UHC) for all people, regardless of citizenship [3]. Some of the key priorities in
60 the draft action plan are the mainstreaming of migrant health into country-level reform
61 agendas, the promotion of migrant-sensitive health policies [3], and the development of
62 health systems that are responsive to their needs [4]. Within the context of UHC,
63 human resources for health (HRH) are central to its achievement [5]. This is because
64 health care providers are the personification of any health system and its
65 responsiveness. Health worker attitudes, behaviour or practices could either advance or
66 constrain the achievement of UHC for vulnerable individuals, such as migrants [6].

67 In South Africa, there is contestation about the number of migrants, but the **2010**
68 census estimated around 2.2 million immigrants [7]. Legally, there is a constitutional
69 right to health care for all individuals regardless of nationality, but access to health
70 services for migrants is complex, especially for those without formal documentation [6].
71 This is partly due to the significant challenges faced by government in providing high-
72 quality health care in the public health sector [8]. The proposed National Health
73 Insurance (NHI) system is the country's primary UHC reform, aimed at addressing the

74 entrenched inequities in its two-tiered health [9]. Although the NHI policy document
75 lacks clarity on health care for migrants and refugees [9], Chapter 2 of the 2019 NHI
76 bill makes provision for coverage of permanent residents, refugees, asylum seekers and
77 conditional cover for “illegal foreigners” [10].

78 In this paper, we draw on the conceptual framework on social exclusion of the Social
79 Exclusion Knowledge Network (SEKN) to examine the experiences and perspectives of
80 health care providers on migrants utilising public health services in the Gauteng
81 Province of South Africa. The SEKN defines social exclusion as the “dynamic,
82 multidimensional processes driven by unequal power relationships interacting across
83 four main dimensions-economic, political, social and cultural-and at different levels
84 including individual, household, group, community, country and global levels”
85 [11][p36]. In this study, we examined social exclusion at the health system level,
86 specifically the interactions between migrants (a potentially excluded group), and health
87 care providers as the personification of the health system.

88 Research on migration has focused on the legal instruments for protecting the human
89 rights of migrants and refugees [12], health inequities and unmet health needs of
90 migrants and refugees [13], health policy or system deficiencies [4] and migrant or
91 refugee experiences and perceptions of health services in the host countries [14]. A
92 systematic review on health care provider experiences of care provision to migrants and
93 refugees found major challenges related to diverse cultural beliefs, limited institutional
94 capacity, and the contradiction between health professional ethics and country-specific
95 legislation that limit migrants’ right to health care [15]. Another systematic review that
96 explored challenges and facilitators for health professionals providing primary health

97 care (PHC) for refugees and asylum seekers in high-income countries found that
98 political decisions affect frontline clinical practice, resourcing priorities, health
99 professional roles and healthcare access [16]. The health professionals reported that
100 health care encounters with migrants were influenced by cultural differences, and lack
101 of knowledge of disease conditions in the host country, exacerbated by health system
102 challenges such as a lack of training, insufficient time or professional support to
103 manage complex health problems, referral difficulties, increased costs, and staff
104 shortages [16]. All of these challenges were experienced within a fluid and changing
105 policy environment, and widespread hostility of policymakers [16, 17].

106 In Africa, a 2018 WHO report underscored the dearth of empirical information on health
107 care to migrants and the ethical responsibilities or professional duties of health care
108 providers [18]. In South Africa, Matlin *et al* [6] have pointed out that despite an
109 enabling legal framework, health care access for migrants is variable in practice and
110 influenced by health system factors, health managers' responsiveness and xenophobic
111 attitudes by health professionals. In a 2011 qualitative study with Zimbabwean migrants
112 in Cape Town and Johannesburg, Crush and Tawodzera coined the term "medical
113 xenophobia", defined as the "negative attitudes and practices of health sector
114 professionals and employees towards migrants and refugees on the job" [19][p.655].
115 Medical xenophobia included the insistence by managers or health care providers that
116 patients show identity documentation prior to receiving care [19]. It also includes delay
117 or denial of treatment on the basis of nationality, refusal to communicate with patients
118 in a common language (such as English) or to allow the use of translators, and/or
119 verbal abuse and xenophobic statements and insults [19]. A 2017 qualitative study in

120 Durban, South Africa described the medical xenophobia faced by refugees from the
121 Democratic Republic of Congo (DRC), such as insistence on documentation, insensitive
122 comments and other discriminatory practices from providers [20]. Another, small
123 qualitative study that explored the experiences of eight women refugees and their
124 attempts at utilising reproductive health care services in Durban's public sector also
125 reported incidents of medical xenophobia [21].

126 However, all of these South African studies were qualitative in design and none of these
127 studies explored the views of health care providers. The aim of this study was to
128 examine the perspectives of health care providers on delivering health services to
129 migrants in public health facilities in the Gauteng Province of South Africa. The paper
130 contributes to an **emerging body of literature** that examines quality UHC for migrants
131 from the perspective of health care providers.

132 **Material and Methods**

133 **Study design and setting**

134 This is a cross-sectional analytical study conducted in public health care facilities in the
135 Gauteng Province of South Africa.

136 The study setting was all the public health care facilities in Gauteng Province. The
137 province is the most densely populated in South Africa, host to **a large number** of
138 migrants, and has an estimated total population of 14.7 million [22].

139 In Gauteng Province, the public health care system consists of four central hospitals,
140 that provide highly specialised quaternary and/or tertiary services, serve as referral

141 hospitals for lower level facilities, and are attached to university health science faculties
142 that train health professionals [23]. There are also two regional tertiary hospitals that
143 are attached to health science faculties and provide some tertiary and other specialised
144 services, and nine regional hospitals that provide specialised secondary services in
145 internal medicine, general surgery, paediatrics, obstetrics and gynaecology and general
146 surgery. The province has one specialised mother-and child-hospital that functions at
147 the level of a regional hospital, with some tertiary services. The 11 district hospitals in
148 the province provide general, inpatient hospital services, and the six specialised
149 hospitals provide psychiatric services, tuberculosis services, infectious diseases and
150 rehabilitation services [23]. The primary health care (PHC) system consists of a
151 network of 30 community health centres (CHCs) and 290 PHC clinics that provide
152 ambulatory care services. The CHCs tend to have midwife-obstetric units that are open
153 24 hours per day, seven days per week, while the PHC clinics are day clinics, open from
154 Monday to Friday.

155 The study population was all health care providers that provide ambulatory care
156 services. This population included medical doctors (both generalists and specialists),
157 professional nurses (with four years of training), enrolled nurses (with two years of
158 training), and nursing auxiliaries or assistants (with one year of training), dentists,
159 occupational therapists, physiotherapists, pharmacists, who render ambulatory care in
160 Gauteng public health care facilities [24].

161 **Sampling of facilities**

162 We used stratified, random sampling to select the public health care facilities from the
163 master list of health care facilities in Gauteng Province (obtained from the Gauteng

164 Department of Health), which were categorised as follows: central hospital, regional
165 tertiary hospital, regional hospital, district hospital, community health centres, PHC
166 clinics, and a mother and child hospital. We selected two facilities randomly from each
167 stratum, except in the case of the mother and child hospital, where there is only one.
168 Hence we sampled 13 public health care facilities in Gauteng.

169 **Measures**

170 Following an extensive literature review, we designed a self-administered questionnaire
171 that obtained information on the socio-demographic profile of health care providers,
172 and that measured social exclusionary views or practices. We also included an open-
173 ended question to allow for any additional comments on migrants and their health care
174 utilisation, but the qualitative information is excluded from this paper.

175 The socio-demographic questions elicited information on age, gender, marital status,
176 and whether they have children, category of health care provider, and number of years
177 worked in the health care facility. We measured social exclusionary views or practices
178 among health care providers in two ways: firstly, health care provider experiences of
179 discrimination against, or differential treatment of, migrants (two questions measured
180 by yes or no response); secondly, asking health care providers to rate statements on
181 social exclusionary views or practices (seven questions). The seven statements that
182 measured social exclusionary views or practices of health care providers, focused on
183 examples of medical xenophobia, health professional obligations in relation to migrants,
184 and whether the NHI system should provide cover to migrants. Two of the questions
185 were phrased positively and four were phrased negatively. These were measured using
186 a seven-point Likert scale from strongly disagree (1) to strongly agree (7).

187 We piloted the questionnaire with five health care providers of different categories at a
188 hospital, clinic and community health centre that were not part of the selected facilities
189 to determine clarity of questions and the time taken to complete the questionnaire.
190 Based on the feedback we received, no changes to the provider SAQ were required.

191 **Data collection**

192 We conducted the study between April and December 2018. At each of the 13 selected
193 public health care facilities, we contacted the health facility manager to plan data
194 collection. For primary health care clinics, we selected three days randomly between
195 Monday and Friday. In the case of community health centres and hospitals, we selected
196 two days randomly between Monday and Friday, and one day randomly on the
197 weekend.

198 The principal researcher (JW) assisted by another trained fieldworker, recruited eligible
199 health care providers on the randomly selected fieldwork days at each of the selected
200 facilities. The eligibility criteria for participation in the study included a health care
201 provider working in ambulatory care in the hospital outpatient or emergency medical
202 department or in the community health centre and PHC clinics; and the provision of
203 voluntary, informed, written consent.

204 The research team approached all eligible health care providers on duty on the
205 randomly selected fieldwork days in the health care facilities. We informed potential
206 participants that study participation was voluntary, and that they could withdraw from
207 taking part at any point, without prejudice or negative consequences. Following
208 informed consent, the health care provider completed the self-administered

209 questionnaire (SAQ) using a tablet, with direct data entry into Research Electronic Data
210 Capture (REDCap), a secure web-based programme hosted at the University of
211 Witwatersrand [25]. The refusal rate was less than 10%.

212 **Statistical analysis**

213 We used STATA® 15 to analyse the data. Frequency tabulations were done to describe
214 the socio-demographic and employment characteristics of the study participants.

215 The analysis took account of the complex sampling design. All analyses were weighted
216 to reflect the distribution of health care providers, by type of health facility and health
217 worker category, at the provincial level. In the case of the type of facility, we
218 combined: central hospitals, regional tertiary hospitals and specialised mother and child
219 facility into one category, called "tertiary hospitals"; and clinics and community health
220 centres into "primary health care (PHC) facilities". In the case of health care provider,
221 we combined all the enrolled nurses and nursing assistants into one category, called
222 enrolled nurses and nursing assistants.

223 We used frequency tabulations to show the proportion of health care providers
224 reporting that they witnessed discrimination against, or differential treatment of,
225 migrants. We computed the mean and standard deviations for the 7-point Likert scale
226 items that measured social exclusionary views or practices. Bivariate analysis was done
227 to investigate the relationship between the socio-demographic and employment
228 characteristics of health care providers and each of the responses on social exclusionary
229 views or practices. All the factors found to be statistically significant at a conservative

230 level of 20% level were included in the multiple regression models. All tests were
231 conducted at 5% significance level.

232 **Ethical considerations**

233 We obtained ethical approval from the Human Research Ethics Committee (Medical) of
234 the University of the Witwatersrand in Johannesburg (Certificate #: M170988). We also
235 obtained permission from the Gauteng Department of Health, district health
236 committees, hospital chief executive officers, and managers of community health
237 centres and PHC clinics. All participants received a detailed study information sheet, and
238 provided written consent, via REDCap (Research Electronic Data Capture) a secure,
239 web-based application for research studies [25]. We complied with the Singapore
240 Declaration of research integrity [26] and adhered to all ethical procedures, including
241 informed consent, voluntary participation, confidentiality and anonymity.

242 **Results**

243 **Socio-demographic characteristics of health care providers**

244 A total of 277 health care providers participated in the study (Table 1), the vast
 245 majority were women (77.6%), with a mean age of 36.2 (SD 11.4) and a median age of
 246 33 years (range 19-68). The mean age of professional nurses was 45.0 years (SD 11.9),
 247 while allied health professionals had a mean age of 28.8 (SD 6.9). Nurses constituted
 248 the majority of study participants (51.9%) and the majority were South African
 249 (94.8%). A quarter of all study participants worked at central hospitals (25.1%). The
 250 mean years worked at any of the selected facilities was 6.8 years (SD 8.4).

251 **Table 1. Demographic and employment characteristics of survey participants**

Variable	n	%
Age median (range)	33 (19-68)	
Age by category of health care professional mean (SD)		
Professional nurses	45.0 (11.9)	
Enrolled nurses and nursing assistants	38.3 (9.6)	
Medical doctors	30.8 (7.1)	
Allied health professionals	28.8 (6.9)	
All participants	36.2 (11.4)	
Age (years)		
< 25	42	15.4
25-34	109	40.0
35-44	55	20.1
45-54	35	12.8
55+	32	11.7
Gender		
Female	215	77.6
Male	62	22.4
Place of birth		

South Africa	254	94.8
Outside South Africa	14	5.2
Marital status		
Single	124	44.8
Living together	25	9.0
Married	108	40.0
Divorced/ Widowed	20	7.2
Category of health care professional		
Nurses:		
Enrolled nurses	30	10.8
Nursing assistants	33	11.9
Professional nurses	81	29.2
All categories of nurses	144	51.9
Medical doctors	70	25.3
Allied health professionals:		
Clinical associate	1	0.4
Social workers	2	0.7
Dieticians/ Dietician assistants	9	3.2
Pharmacists/ Pharmacist interns/ Pharmacist assistants	24	8.7
Radiographers	6	2.2
Rehabilitation therapists (audiologists, speech therapists)	5	1.8
Type of health care facility		
Central hospital	72	25.1
Clinic	27	5.0
Community health centre	24	8.7
District hospital	36	13.0
Regional hospital	65	23.5
Regional Tertiary hospital	51	18.4
Specialised Mother & Child hospital	15	5.4
Median years (range) worked in facility	3 (0.08-39)	
Mean years (SD) worked in facility	6.8 (8.4)	

Number of years worked in facility		
< 2 years	82	29.6
2-4 years	81	29.2
5-9 years	57	20.6
10-14 years	20	7.2
15+ years	37	13.4

252

253 **Health care provider reported discrimination or differential treatment**

254 The majority of health care providers surveyed (79.0%) reported that they did not
255 witness any discrimination nor differential treatment (77.3%) of migrants in their work
256 settings (Fig.1). Although more medical doctors reported that they witnessed
257 discrimination (31.4%) or differential treatment (31.4%) compared to other categories
258 of health professional (Fig. 1). When compared using a chi-square test, there was no
259 association between health care providers reporting of witnessed discrimination ($\chi^2 =$
260 4.97; $p = 0.11$) and differential treatment ($\chi^2 = 5.08$; $p = 0.39$).

261 INSERT FIG.1 HERE

262 **Social exclusionary views or practices**

263 Table 2 shows health care providers' mean scores of social exclusionary views or
264 practices by total score, socio-demographic and employment characteristics. Items (or
265 statements) are arranged in the table from positively worded statements on the left to
266 negatively worded statements on the right. More exclusionary scores are indicated by
267 disagreement with 3 positive statements (scores 1-3) and agreement with 4 negative
268 statements (scores 4-7).

269 *Positively-worded statements*

270 Providers obtained an overall mean score of 4.4 for the item on being sensitive to the
271 health care needs of migrants and refugees. Providers reporting more exclusionary
272 views for this item, included: the age category of 45 – 54 years (M 3.8; SD 1.8);
273 enrolled nurses and nursing assistants (M 3.7; SD 1.6) and those working in a health
274 care facility for a period of 5 – 9 years (M 3.8; SD 2.0). Conversely, providers born

275 outside of South Africa (M 6.5; SD 0.8); medical doctors (M 5.5; SD 2.1) and allied
276 health professionals (M 5.1; SD 3.1) showed less exclusionary views.

277 The highest overall mean score was obtained for the item on providing the same quality
278 of care to migrants and refugee as to South Africans was 6.1 (SD 1.5). Similar mean
279 scores were reported from participants in the age categories 35 – 44 years (M 5.8; SD
280 1.6) and 45 – 54 years (M 5.9; SD 1.5); those who were single (M 5.8; SD 1.9); and
281 enrolled nurses/ nursing assistants (M 5.8; SD 1.3). Providers working in a health care
282 facility for periods between 10 and 14 years (M 5.7; SD 1.1) and periods of more than
283 15 years (M 5.9; SD 1.5) also showed less exclusionary views.

284 Providers obtained an overall mean score of 3.4 (SD 2.0) for the item on NHI coverage
285 for migrants and refugees, indicating more exclusionary views. Similarly, providers aged
286 45-54 years (M 2.8; SD 1.7), those who are allied health professionals (M 2.7; SD 2.6),
287 and those working in the facility for 10-14 years (M 2.8; SD 1.8) also reported more
288 exclusionary views. The highest mean score – indicating less exclusionary views - was
289 obtained for providers born outside of South Africa (M 5.2; SD 2.1).

290 *Negatively-worded statements*

291 Overall, providers showed less exclusionary views for the item on discriminating against
292 migrant and refugee patients with a mean score of 1.7 (SD 1.1) (Table 2). Mean scores
293 for this item did not vary by much from the overall mean score, with the highest
294 obtained for providers working in a health care facility between 10-14 years (M 2.3; SD
295 1.0), still indicative of less exclusionary views.

296 Providers showed less exclusionary scores for the item on delaying health care to
297 patients because of their migration status, with an overall mean score of 1.7 (SD 1.2)
298 (Table 2). Similarly, other mean scores for this item also showed less exclusionary
299 views, with the highest mean score being 2.2 (SD 1.5), obtained from providers in the
300 age category of 55 years and older.

301 Overall, providers obtained a mean score of 3.4 (SD 2.1) for the item that migrants and
302 refugees should return to their home country for health care. Slightly lower mean
303 scores were obtained for: male participants (M 2.6; SD 1.9); those younger than 25
304 years old (M 2.7; SD 2.5), those born outside of South Africa (M 1.4; SD 1.6); medical
305 doctors (M 2.7; SD 2.3) and allied health professionals (M 2.5; SD 2.8).

306 Providers obtained an overall mean score of 4.0 (SD 2.2) for the item on migrants and
307 refugees only coming to South Africa for health care services. Providers born outside
308 South Africa (M 2.6; SD 2.2); and allied health professional (M 4.2; SD 3.0) reported
309 less exclusionary views for this item.

310 **Table 2: Table 2: Providers' mean scores (standard deviations) of social exclusionary**
 311 **views or practices by socio-demographic and employment characteristics**

Variable		I am sensitive to the health care needs of migrants and refugees	I provide the same quality of care to migrants and refugees as I do to South Africans.	I believe migrants and refugees should be covered under the NHI.	I discriminate against migrant and refugee patients.	I have delayed health care to patients because of their migrant or refugee status.	I believe migrant and refugee patients should go back to their home country for health care.	I believe that migrant and refugee patients only come to South Africa for health care services.
		Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)	Mean (SD)
Total		4.4 (2.1)	6.1 (1.5)	3.4 (2.0)	1.7 (1.1)	1.7 (1.2)	3.4 (2.1)	4.0 (2.2)
Gender	Male	4.5 (2.1)	6.0 (1.8)	4.0 (2.2)	1.5 (1.0)	1.5 (1.2)	2.6 (1.9)	3.1 (2.2)
	Female	4.4 (2.1)	6.1 (1.4)	3.3 (2.0)	1.7 (1.1)	1.7 (1.2)	3.6 (2.1)	4.1 (2.1)
Age Group	< 25 years	4.9 (2.7)	6.7 (0.7)	4.0 (2.7)	1.1 (0.4)	1.3 (1.0)	2.7 (2.5)	3.7 (2.3)
	25-34 years	4.5 (2.0)	6.1 (1.6)	3.7 (2.1)	1.7 (1.3)	1.6 (1.1)	3.3 (2.1)	3.5 (2.4)
	35-44 years	4.2 (2.1)	5.8 (1.6)	3.4 (2.0)	1.7 (0.7)	1.5 (0.6)	3.2 (2.1)	4.1 (2.0)
	45-54 years	3.8 (1.8)	5.9 (1.5)	2.8 (1.7)	2.0 (1.0)	2.0 (1.2)	3.7 (2.0)	4.5 (1.8)
	55+ years	4.7 (1.8)	6.2 (1.1)	3.4 (1.7)	1.7 (0.8)	2.2 (1.5)	4.0 (1.7)	4.0 (2.0)
Origin	Born in South Africa	4.3 (2.0)	6.1 (1.5)	3.3 (2.0)	1.7 (1.1)	1.7 (1.2)	3.5 (2.1)	4.0 (2.2)
	Born outside South Africa	6.5 (0.8)	6.0 (2.2)	5.2 (2.1)	1.3 (0.5)	1.2 (0.5)	1.4 (1.6)	2.6 (2.2)
Marital Status	Single	4.2 (2.2)	5.8 (1.9)	3.2 (1.9)	1.7 (1.0)	1.7 (1.3)	3.5 (2.2)	4.2 (2.3)
	Living together	4.5 (1.8)	6.5 (0.9)	4.0 (2.3)	1.6 (1.1)	1.5 (0.6)	3.3 (2.0)	3.3 (1.9)
	Married	4.5 (2.2)	6.3 (1.2)	3.8 (2.2)	1.6 (0.9)	1.8 (1.3)	3.2 (2.2)	3.8 (2.2)
	Divorced/Widowed	4.2 (1.7)	6.0 (1.2)	3.4 (1.7)	2.0 (1.0)	1.8 (1.0)	3.7 (1.8)	2.6 (1.6)
HCP Category	Professional nurse	4.5 (1.9)	6.1 (1.4)	4.3 (2.0)	1.6 (0.8)	1.7 (1.1)	3.8 (2.0)	3.2 (1.8)
	Enrolled nurse/ Nursing assistant	3.7 (1.6)	5.8 (1.3)	4.0 (1.7)	2.0 (1.0)	2.0 (1.0)	3.4 (1.6)	3.4 (1.6)
	Medical doctor	5.5 (2.1)	6.4 (1.5)	3.4 (2.4)	1.3 (0.9)	1.3 (0.9)	2.7 (2.3)	3.8 (2.6)
	Allied health professional	5.1 (3.1)	6.6 (1.4)	2.7 (2.6)	1.3 (1.0)	1.3 (1.2)	2.5 (2.8)	4.2 (3.0)
Type of facility	Tertiary hospital	4.2 (2.1)	6.0 (1.6)	4.1 (2.3)	1.8 (1.1)	2.0 (1.5)	3.6 (2.2)	3.2 (2.1)
	Regional hospital	4.5 (2.2)	6.0 (1.3)	3.8 (2.1)	1.8 (1.2)	1.6 (0.8)	3.0 (2.0)	3.5 (2.0)
	District hospital	4.2 (1.8)	6.4 (0.5)	3.4 (2.0)	1.4 (0.6)	1.5 (0.9)	3.2 (1.9)	3.9 (2.1)
	PHC facilities	5.0 (2.1)	6.0 (2.0)	3.8 (2.1)	1.3 (0.6)	1.4 (1.0)	3.6 (2.2)	3.8 (1.8)
Years working at facility	< 2 years	5.1 (2.3)	6.0 (2.3)	3.8 (2.6)	1.4 (1.2)	1.4 (1.1)	3.1 (2.7)	3.5 (2.5)
	2-4 years	4.6 (2.0)	6.3 (1.1)	3.5 (2.0)	1.6 (1.2)	1.5 (1.0)	3.0 (2.0)	3.5 (2.2)
	5-9 years	3.8 (2.0)	6.1 (1.3)	3.7 (2.0)	1.7 (0.8)	1.8 (1.1)	3.4 (1.9)	4.4 (2.0)
	10-14 years	4.4 (1.6)	5.7 (1.1)	2.8 (1.8)	2.3 (1.0)	2.0 (1.0)	4.6 (1.9)	4.5 (1.9)
	15+ years	4.4 (1.6)	5.9 (1.5)	3.0 (1.5)	1.7 (0.9)	2.0 (1.3)	3.7 (1.8)	4.0 (1.8)

313 **Predictors of social exclusionary views or practices among health care** 314 **providers**

315 Table 4 shows the results of the multiple regression analyses on the predictors of social
316 exclusionary views or practices among health care providers. A negative co-efficient on
317 the positively worded statements (first three in table) and a positive co-efficient on the
318 negatively worded statements (last four in table) indicates more exclusionary views
319 (Table 4).

320 Participants born outside of South Africa had a significantly higher score ($p < 0.05$) than
321 those born in South Africa on being sensitive to the health care needs of migrant and
322 refugee patients, indicative of less exclusionary views. Enrolled nurses and nursing
323 assistants had a significantly lower score ($p < 0.001$) on being sensitive to the health
324 care needs of migrant and refugee patients, indicating more exclusionary views.

325 Participants aged 35-44 years and enrolled nurses and nursing assistants held more
326 exclusionary views on providing the same quality of care to migrant and refugee
327 patients ($p < 0.05$). With regard to the inclusion of migrants under the NHI, single
328 participants had significantly lower mean scores ($p < 0.05$), suggesting relatively more
329 exclusionary views with regard to NHI coverage. Gender, age, category of health care
330 professional, and years worked in health care facility were no longer significant
331 contributors in the regression model.

332 Providers aged 25-34 years, 55 years and older, and enrolled nurses and nursing
333 assistants were significantly more likely to indicate agreement with having discriminated
334 against migrant patients ($p < 0.05$). In contrast, providers working in district hospitals, in

335 PHC facilities; and providers working in the health care facility for a period of between
336 10-14 years agreed less with having discriminated against migrant patients ($p < 0.05$).

337 **Category of health care professional and type of health care facility were significant**
338 **predictors of participants' views on delaying care because of migration status.** In
339 particular, enrolled nurses and nursing assistants had a significantly higher score
340 indicating agreement with delaying care because of migration status ($p < 0.05$). On the
341 other hand, participants who disagreed with this view on delaying care included
342 providers working in regional hospitals ($p < 0.001$), district hospitals ($p < 0.05$), PHC
343 facilities ($p < 0.05$).

344 In terms of the view that migrants and refugees should return to their home country for
345 health services, gender, category of health care professional, and place of birth were
346 **predictors.** Female participants, professional nurses, enrolled nurses and nursing
347 assistants had significantly higher scores than any other category of health care
348 professional ($p < 0.05$). Providers born outside of South Africa had significantly lower
349 scores than those born in South Africa ($p < 0.001$), indicating less exclusionary views.

350 Female providers had a significantly higher score than male providers on the view that
351 migrants only come to South Africa for health care services ($p < 0.05$). Similarly, single
352 participants also held more exclusionary views for this item than others in the marital
353 status category ($p < 0.05$). Professional nurses, ($p < 0.001$), enrolled nurses and nursing
354 assistants ($p < 0.05$), and medical doctors ($p < 0.05$) had higher scores, indicating
355 agreement with this view on migrants only coming to South Africa for health care.

Table 3: Predictors of social exclusionary views or practices among health care providers

Variable	I am sensitive to the health care needs of migrants and refugees.		I provide the same quality of care to migrants and refugees as I do to South Africans.		I believe migrants and refugees should be covered under the NHI.		I discriminate against migrant and refugee patients.		I have delayed health care to patients because of their migrant or refugee status.		I believe migrant and refugee patients should go back to their home country for health care.		I believe that migrant and refugee patients only come to South Africa for health care or services.	
	β	p-value	β	p-value	β	p-value	β	p-value	β	p-value	β	p-value	β	p-value
Gender	Reference: Male													
	Female													
	-	-	-	-	-0.65	0.18	0.15	0.37	0.09	0.73	0.95	0.005*	0.87	0.033*
Age Group	Reference: < 25 years													
	25-34 years													
	0.27	0.49	-0.50	0.08	-0.32	0.28	0.46	0.016*	0.04	0.83	0.40	0.36	-0.46	0.36
	35-44 years													
	0.04	0.94	-0.77	0.040*	-0.71	0.12	0.18	0.34	-0.10	0.75	-0.02	0.96	-0.03	0.97
	45-54 years													
	0.23	0.69	-0.70	0.16	-1.19	0.07	0.48	0.05	0.29	0.50	0.10	0.86	0.40	0.51
	55+ years													
	1.36	0.16	-0.35	0.38	-0.45	0.51	0.59	0.004*	0.78	0.11	0.55	0.50	0.02	0.98
Marital Status	Reference: Married													
	Single													
	-	-	0.22	0.56	-0.82	0.010*	-	-	0.00	0.98	-	-	0.69	0.045*
	Living together													
	-	-	-0.60	0.17	0.01	0.98	-	-	-0.13	0.65	-	-	-0.32	0.45
	Divorced/Widowed													
	-	-	-0.33	0.46	-0.74	0.23	-	-	-0.25	0.57	-	-	-0.78	0.30
Born in/ out South Africa	Reference: Born in SA													
	Born outside SA													
	1.58	0.001*	-	-	-	-	0.01	0.97	-0.02	0.92	-1.36	p<0.001	-1.17	0.026*
HCP Category	Reference: Allied health professional													
	Professional nurse													
	-0.64	0.13	-0.48	0.08	-0.77	0.15	0.00	0.98	0.21	0.32	1.23	0.029*	1.91	0.001*
	Enrolled nurses & nursing assistants													
	-1.32	p< 0.001	-0.73	0.010*	-0.64	0.18	0.54	0.012*	0.49	0.030*	1.13	0.009*	1.42	0.033*
	Medical doctor													
	-0.13	0.67	-0.19	0.44	-0.56	0.23	-0.08	0.71	0.06	0.78	0.69	0.22	1.65	p<0.001
Type of facility	Reference: Tertiary hospital													
	Regional hospital													
	-	-	0.10	0.72	-	-	0.01	0.98	-0.40	p<0.001	-	-	-	-
	District hospital													
	-	-	0.45	0.06	-	-	-0.46	0.015*	-0.37	0.010*	-	-	-	-
	PHC facility													
	-	-	-0.00	0.99	-	-	-0.37	0.042*	-0.52	0.001*	-	-	-	-
Years working at facility	Reference: < 2 years													
	2-4 years													
	-0.06	0.81	-	-	-0.21	0.61	-0.08	0.66	-0.07	0.73	-0.55	0.25	0.01	0.98
	5-9 years													
	-0.46	0.27	-	-	0.41	0.48	-0.10	0.58	0.13	0.74	-0.26	0.65	0.63	0.27
	10-14 years													
	-0.01	0.98	-	-	-0.31	0.64	0.58	0.027*	0.31	0.40	0.72	0.20	0.45	0.52
	15 or more years													
	-1.16	0.21	-	-	0.01	0.98	-0.23	0.59	-0.18	0.74	-0.41	0.34	-0.26	0.38
Constant	5.13	p<0.001	7.26	0.000**	5.55	p<0.001	3.73	0.001	1.43	0.018	1.73	0.001	1.54	0.022

Only predictor variables statistically significant at 20% in the bivariate analysis were included in the multiple regression models. *p<0.05

358 Discussion

359 This is one of the first surveys in South Africa, and indeed in Africa, that examined the
360 perspectives of health care providers on public health care services to migrants. Most of
361 the study participants were female (77.6%) and nurses (51.9%). This is not surprising
362 as the majority of health care providers in South Africa are nurses, and women [27].
363 Our study showed that predictors of providers' more exclusionary or less exclusionary
364 views included female gender, single status, 25 years and older, category of health care
365 provider, type of facility and years worked in a health care facility.

366 In our study, providers obtained a score of 3.4 for the item on sensitivity to the health
367 needs of migrants; and a score of 6.1 for providing the same quality of care. As with a
368 previous study, we showed that providers born outside South Africa reported greater
369 sensitivity to the needs of migrants [28]. This finding makes sense because these
370 providers are themselves migrants. The Canadian study showed that those providers
371 born outside Canada expressed greater cultural sensitivity and were more comfortable
372 with immigrant patients compared to their counterparts from Canada [28]. In contrast,
373 enrolled nurses and nursing assistants in our study had lower scores for sensitivity to
374 the needs of migrants, suggesting more exclusionary views. Possible explanations for
375 these exclusionary views could be related to insufficient or lack of training on culturally-
376 responsive health care, as enrolled nurses undergo two years of training and nursing
377 assistants undergo only one year of training. Other studies in Canada and Australia,
378 albeit with physicians, found that cultural barriers mitigated against the provision of
379 migrant-sensitive health care services [29-31]. Several studies in Canada and Australia
380 demonstrated the benefits to migrant patient outcomes when health care providers

381 received culture-sensitivity training [32], as the training enhanced their expressed
382 sensitivity [33, 34], empathy [35] and cultural humility [36]. Although the context of
383 these studies cited are different from that of South Africa, there would be value in
384 ethics and culture-sensitivity training for health care providers in the South African
385 public service, focusing on enrolled nurses and nursing assistants.

386 The overall mean score for the item on discrimination against migrants was 1.7. This
387 means that health care providers in our study indicated disagreement with this
388 statement. Similarly, the mean score for delayed care to migrants - a form of
389 discrimination - was 1.7. These responses are encouraging. In the regression analysis,
390 providers aged 25-34, older than 55, enrolled nurses and nursing assistants, and
391 working in a health care facility for between 10 and 14 years reported greater
392 agreement with this discriminatory statement, and thus more exclusionary views.
393 Interestingly, working in a district hospital and PHC facility was a predictor of less
394 exclusionary views. Of additional concern is that one in five health care providers
395 (21.0%) reported that they had witnessed discrimination, and 22.6% reported that they
396 had witnessed differential treatment of migrants in their work settings. These reported
397 discrimination and differential treatment are an example of the attitudes and behaviours
398 associated with medical xenophobia in the South African public health system [37]. A
399 South African study among medical students found that 10% reported that they had
400 witnessed discriminatory behaviour of providers against patients on the basis of race,
401 ethnicity or age [38]. Studies in Europe [39, 40] that examined health care providers'
402 experiences of discrimination found both a reluctance to talk about discrimination, and
403 evidence of discriminatory attitudes towards migrant patients. However, another study

404 in Greece found a mixed picture of the interaction between providers and migrants,
405 with some providers prioritizing the health care of citizens over migrants, while others
406 provided unrestricted health care access to undocumented migrants despite restrictive
407 laws [41].

408 South Africa's Constitution outlaws discrimination [42] because of the country's
409 apartheid history, where there were gross violations of the rights of black people [43].
410 Health care providers are required to uphold professional and ethical standards of care
411 [44, 45]. The various health professional Oaths emphasis service to humanity,
412 practising with conscience and with dignity, pursuing justice and advocating on behalf
413 of vulnerable and disadvantaged patients [46, 47]. Although the majority of health care
414 providers in our study appear to meet their professional obligations, it is unacceptable
415 that a minority of providers expressed social exclusionary views. A combination of
416 strategies is needed to ensure that migrant-sensitive health services are provided, and
417 that all patients in the Gauteng public health service are treated with respect and
418 dignity, regardless of nationality. These strategies include advocacy training and
419 campaigns that emphasise the rights and responsibilities of providers, engagement of
420 civil society organisations, and clear communication about the complaints mechanisms,
421 including the toll-free number of the Health Ombud [48]. There should also be adverse
422 consequences for those health care providers that continue discrimination against
423 migrants, and they should be reported to the relevant health professions council for
424 possible disciplinary action.

425 The mean score for the item that migrants should return to their home country for
426 health care was 3.4, and that migrants only come to South Africa for health care was

427 4.0. Female providers, professional nurses and enrolled nurses and nursing assistants
428 had significantly higher agreement than the other categories, suggesting more social
429 exclusionary views. These views could explain the mean score of 3.4 for NHI coverage
430 for migrants, suggesting that participants did not agree with the inclusion of migrants
431 and refugees in the proposed NHI. In the regression, single status was the only
432 predictor of a more exclusionary view. **It is unclear why** single participants had these
433 views and highlight this finding as an unusual finding in our study. Despite this
434 anomaly, it is still of concern that more health care providers hold this view, given that
435 they have a critical role to play in the achievement of UHC [49]. Scholars have
436 suggested that health care providers work in constrained conditions, exacerbated by
437 migrant-unfriendly regulatory frameworks, policies and political rhetoric [50]. This
438 context might explain the social exclusionary views of some of these health workers
439 surveyed views. Moreover, the understanding that migrants only come to South Africa
440 for health care may not necessarily be indicative of exclusionary views. In other words,
441 it may reflect the reality of migrants who because of virtual collapse of health care in
442 home countries, such as the case in Zimbabwe, will make decisions about survival and
443 that is to seek health care in South Africa.

444 The study is limited by its cross-sectional nature, and the self-reported information
445 obtained from health care providers. However, the self-administered questionnaire
446 using tablets, allowed providers to express their views in a confidential manner. The
447 study was only conducted in Gauteng Province, and the findings might not apply to
448 other provinces. However, there are numerous study strengths. This is one of the first
449 surveys that examined the views of health care providers on migrants utilising public

450 health facilities, rather than the systemic barriers or challenges in the interactions
451 between migrants and providers [15, 16, 51]. The random sampling of facilities and
452 fieldwork days gives robustness to our findings. The questionnaire could be adapted by
453 other researchers in similar settings, and complemented with qualitative research to
454 add depth to the quantitative findings. Future research could include a larger sample of
455 public health facilities in Gauteng, as well as comparisons with other provinces.

456 As South Africa moves towards the implementation of the NHI, discrimination and other
457 social exclusionary views or practices of health care providers will undermine progress.
458 The United Nations has called on Member States to put an end to discrimination of
459 migrants in health care settings, through a joint statement outlining three key priority
460 areas of action: supporting the rights of both patients and providers; tackling
461 discrimination through an evidence base and appropriate legal frameworks that ensure
462 accountability; and lastly, collaboration between governments, civil society and
463 communities to address the determinants of discrimination [52]. Health care providers
464 are the foundation of quality UHC. Our study findings suggest the complexity of the
465 interaction between providers and migrant patients in Gauteng rather than a
466 straightforward or "single" narrative. Given its economic importance, Gauteng should
467 take the lead in implementing the UN recommendations, and to develop more inclusive
468 health policies to the benefit of all patients, in support of the achievement of UHC.

469 **Conclusion**

470 Health care providers, specifically medical doctors and nurses, are at the front-line of
471 health care delivery and are thus integral to the provision of migrant-sensitive health
472 care. Given this criticality, providers' perspectives on social exclusionary views or

473 practices are important in shaping inclusive health policies. Using a lens of social
474 exclusion, we have generated new knowledge on health care provider-migrant
475 interactions in Gauteng Province. This study has shown that health care providers, in
476 most instances enrolled nurses and nursing assistants, have significantly more
477 exclusionary views of migrants within the context of health care services. Social
478 exclusionary views or practices must be addressed at all levels through a multi-pronged
479 approach, that includes training in culture-sensitivity, ethics and human rights;
480 promoting health care providers as advocates for migrant patients and their rights; and
481 recognising the importance of an enabling health system.

482

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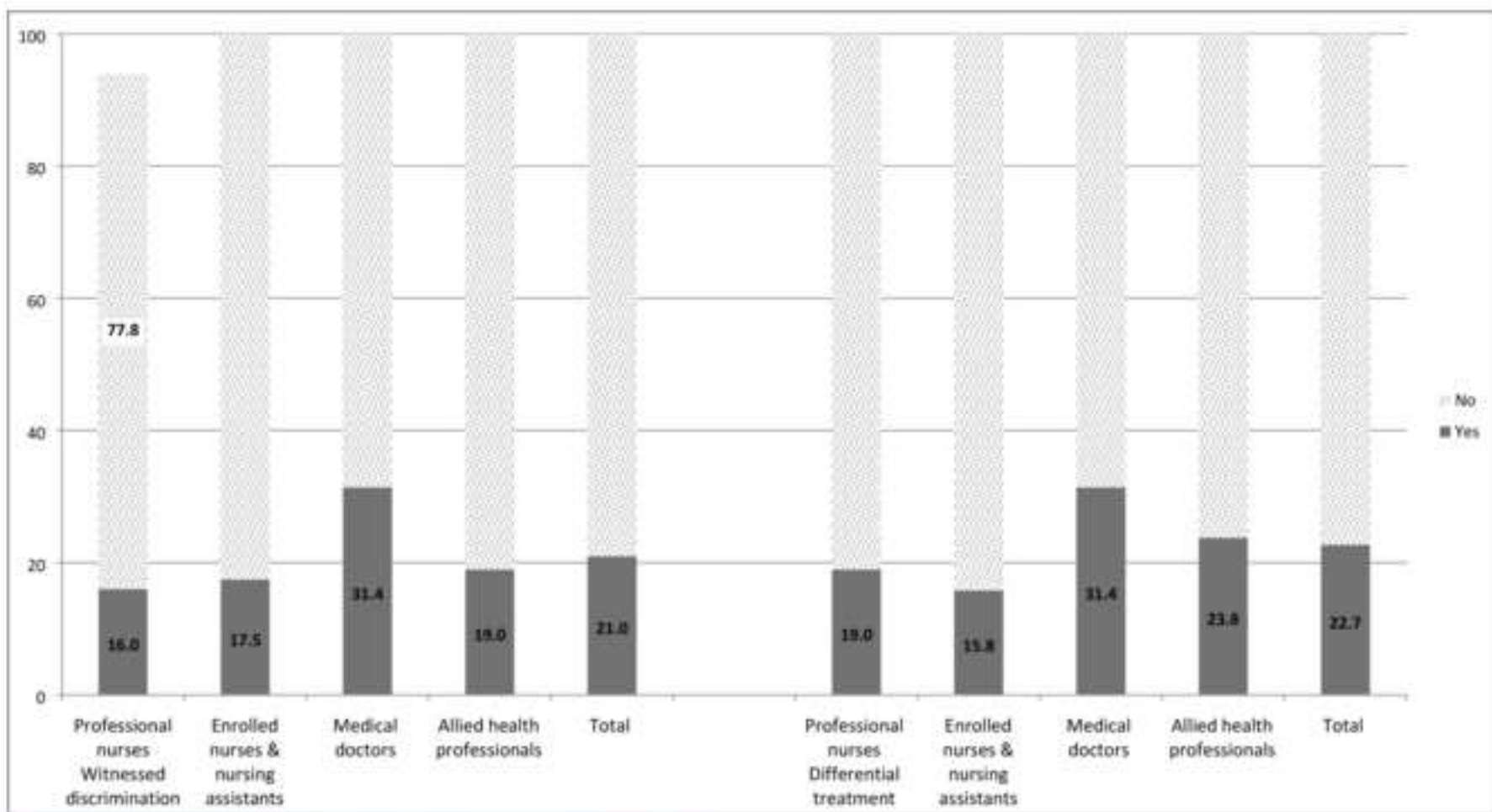


Figure 1: Reported discrimination or differential treatment witnessed by health care providers