# Discrimination in Healthcare as a Barrier to Care: Experiences of socially disadvantaged populations in France

Joshua Rivenbark, Duke University

Mathieu Ichou, Institut National d'études démographiques

#### **Introduction and Background**

There are great inequalities in the health and life expectancy of those "at the top" versus those "at the bottom", both within individual countries and across the world (Baron, Steege, Marsh, Menéndez, & Myers, 2013; Murray & Lopez, 2013). Starting even before birth and continuing throughout the life course, an individual's social, economic, and psychological experiences and characteristics are strong predictors of their health outcomes (Adler & Stewart, 2010). Those who are most likely to suffer from relatively worse health or a shorter lifespan are often members of socially disadvantaged groups, such as people of low socioeconomic standing, minority race, minority religion, female gender, or immigrant status. The health status of minority populations is a topic of increasing policy and scientific relevance in many countries around the world (Braveman, 2011; Hamel & Moisy, 2015; Rechel, et al. 2013).

People within minority or otherwise disadvantaged groups are confronted with a multilevel web of structural barriers and interpersonal experiences that operate to maintain their relative social disadvantage. Among these factors, research has increasingly focused on discrimination and how it may relate to individuals' health and wellbeing (Lewis, Cogburn, & Williams, 2015; Williams & Mohammed, 2009). In addition to a direct influence on health via physiologic stress pathways, experiences of discrimination are also thought to influence health indirectly via behavioral responses (Clark, Anderson, Clark, & Williams, 1999; McEwen, 2007). Indeed, a meta-analysis reported a significant association between perceptions of discrimination and health-related behaviors such as diet, exercise, sleep, or substance use (Pascoe & Smart Richman, 2009). However, one health-related behavior that has received comparatively less attention in terms of its association with discrimination is the utilization of and engagement with healthcare.

#### **Theoretical Reasoning and Study Aims**

Individuals who have experienced discrimination in the past may be more reluctant to seek health care, as they may perceive it as a setting of increased risk for discrimination (i.e., refusal of service or lower quality of care). This may be especially true for those who have experienced discrimination within the health care setting itself. Perhaps the strongest evidence of a negative association between healthcare-related discrimination and engagement with care comes from research on people living with HIV, which has consistently shown that higher perceptions of HIV-related discrimination and stigma within care settings is associated with lower retention in care – an important factor in the health of people with HIV (Geng et al., 2010; Valenzuela et al., 2015). Experiences of discrimination within healthcare settings, however, are not confined only to discrimination based on health status. For example, data from a representative health survey in the US state of California indicate that both racial/ethnic minority status and immigrant status were independently associated with higher rates of discrimination in healthcare, though associations between discrimination and engagement with healthcare were not investigated (Lauderdale, Wen, Jacobs, & Kandula, 2006).

We build on this area of research using data from a nationally representative study in France, and we address the following aims:

1) Describe experiences of discrimination within healthcare settings across the population of France and by gender, migrant status, country of origin, and religion.

2) Examine the rates of foregoing healthcare across groups, and test for experiences of discrimination as a potential explanatory factor in group differences in foregoing care.

### **Data and Methods**

Data come from the Trajectories and Origins (TeO) study (Beauchemin, Hamel, Simon, 2015), a largescale, cross-sectional nationally representative survey conducted from 2008 to 2009 across France, which includes approximately 22,000 migrants, native-born children of migrants, and native-born children of native-born parents.

The TeO survey includes measures on whether participants have ever experienced discriminatory treatment by doctors or other healthcare workers, as well as whether they have foregone receiving healthcare within the past 12 months; these constitute our two key variables of interest. Because we are interested in group differences, we also identify various demographic factors, including gender, migrant status (first generation, second generation, or native-born to native-born parents), country of origin (grouped into relevant geographical categories), and religion. Further, measures of socioeconomic status (income, educational attainment, and employment status) and health status (self-rated health, chronic illnesses, and healthcare visits in the last year) are used as covariates when appropriate.

Analyses proceed in two steps. First, we describe rates of discrimination in healthcare settings as predicted probabilities of experiencing discrimination based on demographic characteristics. We calculate predicted probabilities from logistic regression models of healthcare discrimination and contrast coefficient estimates against a reference group for statistical comparison. For each demographic factor of interest, we construct three nested models: the first one includes the demographic predictor, with age and gender (if gender is not the factor investigated) as covariates; the second model adds covariates for socioeconomic status; the third model adds covariates for health status. Second, we report average marginal effects (AMEs) of various demographic characteristics of interest on the predicted probability of foregoing healthcare, and then examine the potential explanatory role of discrimination in any of the group differences initially observed. We do this by modeling reports of foregone healthcare across five nested logistic regression models: the first includes only the demographic factor of interest; the second adds discrimination; the third adds other demographic characteristics; the fourth adds socioeconomic status; the fifth adds health status. In Models 2 through 5, we report the percentage of the Model 1 AME explained by the addition of predictor variables, so that: % explained =  $1 - (AME_{Model k} / AME_{Model 1})$ .

# Results

The predicted probabilities of experiencing discrimination in healthcare settings are visualized in **Figure 1** by gender, migrant generation, country of origin, and religion. From the baseline Model 1, we observe that those who are female, a first- or second-generation migrant, from Africa, Turkey, or one of the French overseas territories, or Muslim are more likely to experience discrimination in healthcare settings when compared to their reference groups (respectively, males, native children of native parents, respondents born in metropolitan France, and respondents with no religion). In contrast, those who are from Portugal, Italy, or Spain, or of Christian religion, were less likely to experience discrimination than their reference counterparts. Furthermore, examination of patterns across models shows that these group differences are robust to the addition of socioeconomic and health status covariates.

# Figure 1: Predicted probabilities of experiencing discrimination in healthcare, by demographic characteristics



Note: Bar colors represent statistical significance in regression: blue = reference group; black = (p < .05); grey = (p > .05). Models are described in the text.

The results from logistic regression analyses of foregoing healthcare are displayed in **Table 1**, and illustrate three main findings. First, analyses of the baseline models show that factors associated with a higher likelihood of having foregone healthcare are female gender, second-generation migrant status, origin in Africa, a French overseas territory, or a mix of countries of origin, and Muslim religion. Second, discrimination in healthcare settings is strongly associated with having foregone healthcare across Models 2 through 5. In the fully adjusted Model 5, the AME of discrimination is 0.14 - the largest effect size of all covariates, corresponding to a 14-percentage point increase in the predicted probability of foregoing care. Third, the addition of discrimination as a predictor in Model 2 explains between 5.9% and 38.0% of the significant positive associations between foregoing healthcare and

demographic factors seen in Model 1. More specifically, discrimination explains 17.9% of the association between female gender and foregoing healthcare, between 18.9% and 38.0% of the association between origins in an African country and foregoing healthcare, and 26.2% of the association for Muslim religion.

	Model 1		Model 2		Model 3		Model 4		Model 5	
						%	%			
	AME	% Expl.	AME	% Expl.	AME	Expl.	AME	Expl.	AME	% Expl.
Male (ref)	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Female	0.020**	0.0%	0.016*	17.9%	0.019**	5.4%	0.016	19.3%	0.012	41.0%
No Discrim. (ref)			ref	ref	ref	ref	ref	ref	ref	ref
Discrim.			0.217***	0.217*** 0.209*** 0.180***			0.140***			
Metro FR (ref)	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
DOM/COM	0.037***	0.0%	0.032**	15.2%	0.031**	18.0%	0.029**	22.7%	0.027**	27.2%
North Africa	0.037***	0.0%	0.030***	18.9%	0.016	56.4%	0.009	74.5%	0.013	65.1%
Sahelian/SS Africa	0.021*	0.0%	0.013	38.0%	0.006	72.9%	0.001	96.4%	0.008	62.0%
Turkey	0.002	-	-0.005	-	-0.014	-	-0.027*	-	-0.024	-
SE Asia	-0.027**	0.0%	-0.028**	-4.0%	-0.014	49.3%	-0.021	21.5%	-0.024	11.2%
Other Asia	-0.019	-	-0.018	-	-0.021	-	-0.018	-	-0.011	-
Americas	-0.015	-	-0.019	-	-0.022	-	-0.014	-	-0.003	-
PortItaly-Spain	0.020	-	0.023	-	0.024	-	0.021	-	0.020	-
Other Europe	-0.001	-	-0.001	-	-0.005	-	-0.003	-	0.003	-
Mixed (some FR)	0.025*	0.0%	0.025*	0.2%	0.025*	2.9%	0.028**	-9.4%	0.029**	-12.2%
Mixed (no FR)	0.044**	0.0%	0.044**	0.5%	0.045**	-3.2%	0.047**	-8.2%	0.050**	-14.1%
No Discrim. (ref)			ref	ref	ref	ref	ref	ref	ref	ref
Discrim.			0.219***		0.209***		0.180***		0.140***	-
Native (ref)	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
2nd Gen	0.039***	0.0%	0.036***	5.9%	0.033***	13.3%	0.034***	12.5%	0.035***	9.4%
1st Gen	0.008	-	0.005	-	0.000	-	-0.001	-	0.002	-
No Discrim. (ref)			ref	ref	ref	ref	ref	ref	ref	ref
Discrim.			0.219***		0.209***		0.179***		0.140***	-
No religion (ref)	ref	ref	ref	ref	ref	ref	ref	ref	ref	ref
Christian	-0.016	-	-0.013	-	-0.014	-	-0.013	-	-0.013	-
Muslim	0.020*	0.0%	0.015	26.2%	0.004	78.7%	-0.010	100+%	-0.008	100+%
Jewish	-0.024	-	-0.020	-	-0.023	-	-0.051*	-	-0.055**	-
Buddhist	-0.053**	0.0%	-0.059***	-10.5%	-0.056**	-4.2%	-0.048	10.2%	-0.037	30.1%
Hindu/Sikh	0.017	-	0.018	-	0.029	-	0.012	-	-0.003	-
Other Religion	0.105	-	0.099	-	0.086	-	0.081	-	0.075	-
Refuse/NSP	0.016	-	0.020	-	0.022	-	0.054	-	0.047	-
No Discrim. (ref)			ref	ref	ref	ref	ref	ref	ref	ref
Discrim.			0.216***		0.209***		0.180***		0.140***	-

<b>T1114</b>	•	3.5 1 1	T100 4 0		1. 0 /	•	• 1	1 1/1
TODIO I.	Δυρκοσο	Morging	Hittoota ot	domogrou	nhia taatam	a on to	POGOING	haalthaara
ташет.	AVELAYE	<b>WALZINA</b>	PALIEUIS OF	пешолія	оппстастог	<b>\ ()     </b>	перонну	еаниате
		TARGE PRESS	THE COLOR OF	actino El ca				

Note: Models are logistic regressions; covariates are described in the text; AMEs calculated as marginal effects. \*: p < .1; \*\*: p < .05; \*\*\*: p < .01.

# Conclusions

Disadvantaged social groups – particularly females, those of African origin, and Muslim religion – are more likely to have experienced discrimination in healthcare settings, and for these groups, discrimination in healthcare settings also partially explains their increased likelihood of having foregone healthcare in the past 12 months. Separately, those of Turkish or mixed origins are more likely to have experienced discrimination in healthcare settings, but this had no relation to their likelihood of foregoing healthcare. Researchers and policymakers who aim to improve the health of disadvantaged groups should consider that some barriers to healthcare for those groups may lie in the experiences of healthcare itself.

# Next Steps

We plan to test the statistical significance of the change in the AME of group membership (in **Table 1**) across nested models.

#### References

- Adler, N. E., & Stewart, J. (2010). Health disparities across the lifespan: Meaning, methods, and mechanisms. Annals of the New York Academy of Sciences, 1186, 5–23.
- Baron, S. L., Steege, A. L., Marsh, S. M., Menéndez, C. C., & Myers, J. R. (2013). CDC Health Disparities and Inequalities Report- United States, 2013. Morbidity and mortality weekly report. Surveillance summaries (Washington, D.C.: 2002).
- Beauchemin, C., C. Hamel, and P. Simon. 2015. Trajectoires et origines. Enquête sur la diversité des populations en France. Pp. 624. Paris: Éditions de l'Ined.
- Braveman, P. A., Kumanyika, S., Fielding, J., LaVeist, T., Borrell, L. N., Manderscheid, R., & Troutman, A. (2011). Health disparities and health equity: The issue is justice. American Journal of Public Health, 101(SUPPL. 1), 1–7.
- Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans. A biopsychosocial model. The American psychologist, 54(10), 805–816.
- Geng, E. H., Nash, D., Kambugu, A., Zhang, Y., Braitstein, P., Christopoulos, K. A., Muyindike, W., et al. (2010). Retention in care among HIV-infected patients in resource-limited settings: Emerging insights and new directions. Current HIV/AIDS Reports, 7(4), 234–244.
- Hamel, C.and M. Moisy. 2015. "Migration et conditions de vie : leur impact sur la santé." Pp. 263-287 in Trajectoires et origines. Enquête sur la diversité des populations en France, edited by C. Beauchemin, C. Hamel, and P. Simon. Paris: Éditions de l'Ined.
- Lauderdale, D. S., Wen, M., Jacobs, E. A., & Kandula, N. R. (2006). Immigrant Perceptions of Discrimination in Health Care: The California Health Interview Survey 2003. *Medical Care*, 44(10), 914–920.
- Lewis, T. T., Cogburn, C. D., & Williams, D. R. (2015). Self-reported experiences of discrimination and health: scientific advances, ongoing controversies, and emerging issues. Annual review of clinical psychology (Vol. 11).
- McEwen, B. S. (2007). Physiology and neurobiology of stress and adaptation: Central role of the brain. Physiological Reviews, 87, 873–904.
- Murray, C. J. L., & Lopez, A. D. (2013). Measuring the Global Burden of Disease. New England Journal of Medicine, 369(5), 448–457.
- Pascoe, E. A., & Smart Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. Psychological Bulletin, 135(4), 531–554.
- Rechel, B., P. Mladovsky, D. Ingleby, J.P. Mackenbach, and M. McKee. 2013. "Migration and health in an increasingly diverse Europe." The Lancet 381(9873):1235-1245.
- Valenzuela, C., Ugarte-Gil, C., Paz, J., Echevarria, J., Gotuzzo, E., Vermund, S. H., & Kipp, A. M. (2015). HIV Stigma as a Barrier to Retention in HIV Care at a General Hospital in Lima, Peru: A Case–Control Study. AIDS and Behavior, 19(2), 235–245.
- Williams, D. R., & Mohammed, S. A. (2009). Discrimination and racial disparities in health: Evidence and needed research. Journal of Behavioral Medicine, 32(1), 20–47.