Age at Arrival and Healthcare Use among Migrants in France

Juste Lekstyte

Introduction

Immigration plays a significant role in a person's use of healthcare services. Studies, including a systematic review by Norredam et al. (2010), show that first-generation migrants are less likely to engage in preventive screenings and more dependent on general practitioners. Additionally, research by Lebano et al. (2020) and Credé et al. (2018) shows underuse of mental and dental health compared to native-born individuals, and a pattern of migrants using emergency departments for non-emergency issues during off-hours, highlighting significant barriers to accessing primary care.

Age at arrival is an important factor as it marks the life stage when immigrants begin their new lives in a different country. This factor is important because individual attitudes and behaviours are shaped more by where one grows up and spends adolescence rather than the place of birth (Piore, 1979). Several studies have shown that age at arrival is an important factor influencing the acculturation process (Gubernskaya, 2015; Honkaniemi et al., 2020; Leão et al., 2009). Younger migrants display a higher ability to learn new languages, adapt to new social norms, and form connections with people without a migration background compared to older migrants (Guven & Islam, 2015; Leu et al., 2008). As a result, younger migrants tend to be more immersed in the residence country's mainstream culture rather than their native culture, which would lead them to adopt health behaviours similar to those of the native-born.

Although there are numerous studies on the association between immigration and healthcare use, less is known about how the age at arrival influences it. To address this gap, this study aims to assess whether age at arrival has an impact on healthcare use in France and how the impact varies according to an individual's gender. To achieve this, I use the Trajectories and Origins 2 (TeO2) survey from France, which oversamples migrants and their descendants, providing a unique source of information for studying these populations (Beauchemin et al., 2023).

Data and method

I use data from the Trajectoires et Origines 2 (TeO2) survey, which was conducted between 2019 and 2020 (Beauchemin et al., 2023). TeO2 is a large-scale, nationally representative, face-to-face survey in France that targets migrants and their children residing in metropolitan

France, but additionally provides information on natives with no direct migration background. I exclude respondents born in France's overseas territories and their descendants from my sample because this is a distinct type of internal/international migration that deserves separate attention. As a result, the study sample comprises 16,752 individuals aged 17–60 years.

Healthcare use is measured by considering several different variables, each capturing different dimensions of healthcare use. Foregoing healthcare provides valuable insights into access barriers and unmet healthcare needs, as it reflects situations when individuals do not seek healthcare when they perceive it as necessary. It is influenced by various factors, including agency and accessibility of services, and is a critical component of effective health coverage (Feral-Pierssens et al., 2020). Foregone health care is determined by a yes/no question: "During the past 12 months, have you foregone health care for yourself?" and is measured dichotomously. Additionally, I evaluate healthcare use through visits to a general practitioner or a specialist in the last 12 months, and cervical smear tests for women in the last three years. Specialist visits include dentists, ophthalmologists, psychiatrists, psychologists, or other specialist visits.

The main independent variable is age at arrival. Age at arrival is calculated for first-generation migrants (individuals born outside of France with at least one parent born abroad) using the year of birth and the year of migration variables. A categorical variable is created to distinguish native-born individuals (reference category), childhood migrants (arriving at 0-9 years old), adolescent migrants (arriving at 10-17 years old), and adult migrants (arriving after 18 years of age). These categories are chosen to capture the different life stages.

Results

Table 1 presents the average marginal effect (AME) coefficients from a gender-stratified logistic analysis for healthcare use. The findings for foregoing healthcare show that women who arrived in France after age 18 are 6.86 percentage points less likely to report having foregone healthcare compared to native-born women. Similarly, men who arrived as adults are 4.94 percentage points less likely to forego healthcare than native-born men. Migrant women who came to France between the ages of 10 and 17 are 6.09 percentage points less likely to forego healthcare than native-born women. In contrast, for individuals (both men and women) who migrated between the ages of 0 and 9, the results are not statistically significant, indicating that their healthcare use patterns are similar to those of native-born individuals.

Regarding general practitioner visits, the results suggest that only those who arrived in France during childhood are significantly less likely to visit a general practitioner compared to native-born individuals. The AME coefficients for both adolescent and adult migrants are not statistically significant. For specialist visits, the results show that women who arrived in France during adolescence and after age 18 are 5.93 and 5.49 percentage points less likely to visit a specialist than native-born women. No statistically significant differences are found among men. Lastly, the results show that migrant women are less likely to have undergone a cervical smear in the previous three years compared to native-born women, with the likelihood decreasing further the older they were at the time of arrival to France.

In the next stages of the article, perceived discrimination will be examined for its potential role in mediating healthcare use based on the age of migration. Additionally, the analysis will assess the variation in results based on the country of origin.

Table 1 Average marginal effects (AMEs) coefficients for migration status across nested logistic models predicting healthcare use

	Foregoing health care		General practitioner visit		Specialist visit		Cervical smear
	Male	Female	Male	Female	Male	Female	Female
Migration status (ref.: native-born)							
Age at arrival (0 - 9)	-0.000881	-0.0146	-0.0444**	-0.0336*	-0.0157	-0.0249	-0.0524**
	(0.0219)	(0.0222)	(0.0211)	(0.0187)	(0.0277)	(0.0246)	(0.0209)
Age at arrival (10 - 17)	-0.0256	-0.0609***	-0.0160	-0.00557	0.0420	-0.0593**	-0.0661***
	(0.0275)	(0.0208)	(0.0291)	(0.0217)	(0.0353)	(0.0271)	(0.0245)
Age at arrival (18+)	-0.0494***	-0.0686***	0.0270	-0.00375	-0.0298	-0.0549***	-0.0742***
	(0.0151)	(0.0148)	(0.0200)	(0.0119)	(0.0214)	(0.0160)	(0.0161)
Observations	7,916	8,836	7,911	8,822	7,911	8,822	8,589

Notes: Standard errors in parentheses *** $p<0.01$, ** $p<0.05$, * $p<0.1$. Age, living status, number of children in the household, educational attainment, employment status, self-reported health, chronic illnesses, insurance and availability of healthcare in the district are included as controls. Source: Trajectoires et Origines 2

References

Beauchemin, C., Ichou, M., Simon, P., Team, the T. survey design, & Dutreuilh, C. (2023). Trajectories and Origins 2 (2019–2020): A Survey on Population Diversity in France. *Population*, *78*(1), 11–28.

Credé, S. H., Such, E., & Mason, S. (2018). International migrants' use of emergency departments in Europe compared with non-migrants' use: A systematic review.

European Journal of Public Health, *28*(1), 61–73. https://doi.org/10.1093/eurpub/ckx057

Feral-Pierssens, A.-L., Rives-Lange, C., Matta, J., Rodwin, V. G., Goldberg, M., Juvin, P., Zins, M., Carette, C., & Czernichow, S. (2020). Forgoing health care under universal health insurance: The case of France. *International Journal of Public Health*, *65*(5), 617–625. https://doi.org/10.1007/s00038-020-01395-2

Gubernskaya, Z. (2015). Age at Migration and Self-Rated Health Trajectories After Age 50: Understanding the Older Immigrant Health Paradox. *The Journals of Gerontology: Series B*, *70*(2), 279–290. https://doi.org/10.1093/geronb/gbu049

Guven, C., & Islam, A. (2015). Age at Migration, Language Proficiency, and Socioeconomic Outcomes: Evidence From Australia. *Demography*, *52*(2), 513–542. https://doi.org/10.1007/s13524-015-0373-6

Honkaniemi, H., Juárez, S. P., Katikireddi, S. V., & Rostila, M. (2020). Psychological distress by age at migration and duration of residence in Sweden. *Social Science & Medicine*, *250*, 112869. https://doi.org/10.1016/j.socscimed.2020.112869

Leão, T. S., Sundquist, J., Johansson, S.-E., & Sundquist, K. (2009). The influence of age at migration and length of residence on self-rated health among Swedish immigrants: A cross-sectional study. *Ethnicity & Health*, *14*(1), 93–105. https://doi.org/10.1080/13557850802345973

Lebano, A., Hamed, S., Bradby, H., Gil-Salmerón, A., Durá-Ferrandis, E., Garcés-Ferrer, J., Azzedine, F., Riza, E., Karnaki, P., Zota, D., & Linos, A. (2020). Migrants' and refugees' health status and healthcare in Europe: A scoping literature review. *BMC Public Health*, *20*(1), 1039. https://doi.org/10.1186/s12889-020-08749-8

Leu, J., Yen, I. H., Gansky, S. A., Walton, E., Adler, N. E., & Takeuchi, D. T. (2008). The association between subjective social status and mental health among Asian immigrants: Investigating the influence of age at immigration. *Social Science & Medicine*, *66*(5), 1152–1164. https://doi.org/10.1016/j.socscimed.2007.11.028

Norredam, M., Nielsen, S. S., & Krasnik, A. (2010). Migrants' utilization of somatic healthcare services in Europe—A systematic review. *European Journal of Public Health*, *20*(5), 555–563. https://doi.org/10.1093/eurpub/ckp195

Piore, M. J. (Ed.). (1979). The migrants. In *Birds of Passage: Migrant Labor and Industrial Societies* (pp. 50–85). Cambridge University Press. https://doi.org/10.1017/CBO9780511572210.004