of the opportunities in other (more affluent) countries.[2,4,5]

Migration is influenced by many macro (environmental, social, economic, political) and micro (personal characteristics) factors that lead to cross-border movements. These are commonly referred to as 'push' and 'pull' factors.[6] Migration trends are an important concern for policy makers in donor and host countries worldwide. As such, migratory movement of medical staff from low-income countries (LIC) leads to a shortage of staff in the country of origin. Countries in Africa, in particular, have voiced their concerns on migration of their physicians to high income countries (HIC).[7] To address this important matter in the global health agenda, in 2010 the World Health Assembly adopted the World Health Organization (WHO) Global Code of Practice for the International Recruitment of Health Personnel.[8] The code aims to address health professionals' migration from countries with a limited workforce, to comparatively wealthier countries.[9]

(5) In Psychiatry there is a great disparity in human resources between HIC and LIC. About 70% of the global mental health professional workforce is working in HIC, with half of them working in Europe.[10] According to the WHO Mental Health Atlas, HIC had 6.6 psychiatrists per 100 000 population in 2014 and this number increased to 11.9 psychiatrists per 100 000 population in 2017. On the other hand, in the same period, the proportion was stable at less than 0.1 per 100 000 population in LIC.[10,11]

Portugal is a HIC and it was reported to have approximately 4.49 psychiatrists per 100 000 population in 2014.[11] Further to the creation of the European Community through the Treaty of Rome in 1957, in 1993 the borders started to become more permeable. Since then, the Portuguese (as other EU) citizens have had the freedom to move across borders within Europe. Some data has suggested that this balance has been negative to Portugal with few health workers moving to Portugal and more Portuguese moving abroad.[12] However, little is known about the migratory intentions of junior doctors in Portugal, and their 'push' and 'pull' factors.

This paper aims to understand the patterns of migration of psychiatric trainees in Portugal, including previous mobility experiences, intentions for future migration and their push and pull factors.

MATERIAL AND METHODS

Study design

This cross-sectional survey was conducted as part of the EFPT Brain Drain study.[13] Data from individual psychiatric trainees were collected through an anonymous semi-structured self-administered questionnaire. The questionnaire consisted of 61 questions, covering demographics, experiences of short-term mobility (defined as lasting between three months and one year), experiences of long-term migration (defined as lasting more than one year) and attitudes towards migration. Migratory tendency was assessed in a hierarchical manner with three questions: 'ever' considered leaving, considering leaving 'now' and taking 'practical steps' towards migration. More information about the questionnaire can be retrieved elsewhere.[13]

Data collection

The questionnaire was written in English, as trainees were deemed to have adequate command of the language to reliably answer the questions. The only inclusion criteria was that participants had to be psychiatric trainees, defined as a fully qualified medical doctor under the nationally recognised Psychiatry specialist training program in Portugal. According to official data from the Portuguese Health Central System Administration (ACSS) from 2011, there were 193 psychiatric trainees in Portugal.[14] All participants were required to give informed consent before the assessment. Data was collected between 2013 and 2014.

The link of the questionnaire was either sent via e-mail to the national contact database mailing list of psychiatric trainees from the Association of Psychiatric Trainees (APIP), or a printed copy of the questionnaire was given to psychiatric trainees during educational events. The survey was conducted according to the principles of good scientific practice, which was supported by a national ethics committee approval in Switzerland and approved by the Ethics Committee of beider

(6) Basel / EKBB beider Basel / EKBB (Request 144/13).

Statistical analysis

The statistical analyses were carried out using R version 3.4.2 (https://cran.r-project.org/). Descriptive statistics consisted of frequencies and percentages. All variables from the dataset were categorical, except for age. Three Fisher's exact tests were performed with a significance level (alpha) of 0.05 comparing current plan to work abroad with the outcomes: previous migration, marital status and having children.

RESULTS

Sample characteristics

From all the psychiatric trainees in Portugal contacted (n = 193), 104 trainees completed the survey (response rate of 53.9%).

(7) Demographics are reported in Table 1. Most of the respondents were originally from one of the main cities in Portugal: