DISSERTATION

Current working and living conditions of foreign health care personnel – facilitators and barriers

Derzeitige Arbeits- und Lebensbedingungen von internationalem Gesundheitspersonal - fördernde und hemmende Faktoren

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Table of Contents

List of Figures

List of Tables

Abstract (German)

Ziel

Die Erfassung der Arbeits- und Lebensbedingungen von im Ausland geborenem Gesundheitspersonal an der Charité Universitätsklinikum Berlin als Grundlage für die Etablierung konkreter Maßnahmen zur Erleichterung des beruflichen Alltags internationaler Fachkräfte im deutschen Gesundheitssektor.

Methodik

Eine Online-Umfrage mit dem Ziel, erleichternde und hemmende Faktoren der beruflichen Integration von im Ausland geborenen Beschäftigten der Charité zu ermitteln, war die Grundlage für eine quantitative Analyse. Die Umfrage bezog sich auf die Themen beruflicher Werdegang, Sprachkenntnisse, Arbeitsumfeld einschließlich Gleichbehandlung und Diskriminierungserfahrungen, familiäre und finanzielle Situation, Leben in Deutschland und Bewertung von Unterstützungsstrukturen.
142 vollständige Fragebögen von Beschäftigten in der Gesundheits- und Krankenpflege, der medizinischen und technischen Assistenz sowie von Ärzt*innen und Wissenschaftlichen Mitarbeiter*innen wurden ausgewertet.

Ergebnisse

Die wichtigsten Hindernisse für die berufliche Integration von im Ausland geborenen Gesundheitspersonals waren unzureichende berufsspezifische Sprachkenntnisse, diskriminierendes Verhalten und unzureichende institutionelle Unterstützung.
Trotz hoch eingeschätzter deutscher Sprachkenntnisse, die meisten Befragten gaben C1 oder C2-Niveau an, berichtete die Hälfte der Teilnehmenden von Schwierigkeiten im Berufsleben aufgrund mangelnder Sprachkenntnisse. Von diesen gaben 70 % (N=69) negative Auswirkungen auf ihre beruflichen Fähigkeiten an. Diskriminierungserfahrungen in den letzten 6 Monaten traten bei allen Berufsgruppen auf, wurden aber signifikant häufiger von Pflegekräften und medizinisch-technischen Angestellten angegeben (p=0,006). Die Diskriminierung beruhte in den meisten Fällen auf den Faktoren Sprache, Nationalität, *race* / ethnische Herkunft und Gender / Geschlecht. Die Zufriedenheit mit dem Arbeitsplatz war bei Angabe von Diskriminierungserfahrungen durch Kolleg*innen derselben Berufsgruppe (p=0,006), Kolleg*innen anderer Berufsgruppen (p=0,003) und Vorgesetzte (p=0,018) signifikant geringer.

Die bestehende institutionelle Unterstützung war für die meisten Teilnehmer entweder nicht zugänglich oder nicht hilfreich. 78,3 % (N=129) der Befragten forderten weitere Unterstützung, insbesondere in Bezug auf Formalitäten, administrative Verfahren, Weiterbildung und den Erwerb von Sprachkenntnissen.

Diskussion

Die Studie bestätigt Ergebnisse früherer internationaler Studien und qualitativer Analysen, die auf die Notwendigkeit einer systematischen Datenerhebung zur Migration von Gesundheitspersonal in Deutschland sowie auf Maßnahmen mit Fokus auf berufsspezifischen Spracherwerb, individuellere Unterstützungsstrukturen und Maßnahmen zur Vermeidung von Rassismus und diskriminierendem Verhalten am Arbeitsplatz hinweisen.

Abstract (English)

Objective

To assess the working and living conditions of foreign-born health care personnel at the Charité University Hospital Berlin as a basis for establishing concrete measures to facilitate the professional life of international employees in the German health sector.

Methods

A quantitative analysis of facilitators and barriers of the professional integration of foreign-born employees of the Charité was conducted via an online-based survey covering the topics of professional career, language skills, working environment including equal treatment and experiences of discrimination, family and financial situation, life in Germany and the evaluation of support structures. 142 complete questionnaires from employees in nursing and health care, medical / technical assistance, clinicians, scientists as well as junior staff were evaluated.

Results

The main barriers to professional integration for foreign health care personnel were insufficient job-specific language skills, discriminatory behaviour, and insufficient institutional support.

Despite highly rated German language skills, with most responders reporting C1 or C2 levels, half of the participants indicated difficulties in their professional life due to a lack of language skills. Of these, 52.2% (N=69) had had those difficulties within the past 6 months and 70% (N=69) affirmed resulting negative consequences on their professional skills.

Experiences of discrimination within the past 6 months existed for all occupational groups, but was indicated significantly more often by nurses and technologists (p=0.006). Discrimination was mainly based on language, nationality, race / ethnicity, and sex / gender. In case of indicated experiences of discrimination, workplace satisfaction was significantly lower regarding discrimination by colleagues of the same profession (p=0.006), colleagues from other professions (p=0.003), and superiors (p=0.018).

Institutional support was either not accessible or not helpful for most participants. 78.3% (N=129) of respondents demanded further support, especially regarding formalities, administrative procedures, further training, and acquisition of language skills.

Discussion

The study confirms results from previous international studies and qualitative analyses implying the need for systematic data collection on migration of health care personnel in Germany as well as measures on workplace integration focussing on job-specific language learning, more individualised supporting structures and measures preventing racism and discriminatory behaviour at work.

Introduction

The German health care sector is currently facing increasing labour shortages. The latest progression report (*Fortschrittsbericht)* of 2017 by the German Federal Ministry of Labour (*Bundesministerium für Arbeit und Soziales, BMAS*) indicates a lack of skilled workers in the professions human medicine, dentistry, nursing and elderly care, medical assistance, emergency services and obstetrics.(1)

As in most member countries of the Organisation for Economic Co-operation and Development (OECD), these shortages have been increasingly addressed by promotion of immigration as well as active international recruitment of foreign health care personnel fostered by the state.(2) Consequently, this has resulted in a global migration flow of health care workers mainly from the Global South to the Global North.

While there are various studies analysing macro-level effects on health care provision in 'sending' as well as 'receiving countries', there is a lack of research on consequences on the micro-level, meaning current working and living conditions of foreign health care workers.(3, 4)

A few, mostly qualitative findings suggest several barriers for integration, such as consistent experiences of discrimination and inequality at workplace and in private, and insufficient supporting structures.(5, 6, 7, 8, 9)

German health care labour market

During the COVID-19 pandemic, the impact of staff shortages, particularly in hospital-based health care, came into socio-political focus in Germany. High hospital admissions and additional staff absences led to critical staff shortages, particularly in intensive care units and in geriatric care.(10, 11)

However, there was already a shortage of skilled workers in many medical fields before the pandemic, leading to poor working conditions and high levels of job dissatisfaction.

Nursing and elderly care

The most significant shortfall is in the field of nursing and elderly care.

In June 2018, 1.6 million nurses were employed subject to social insurance, with 1.1 million in nursing and 583,000 in elderly care, which was an increase of 3% over the previous year.(12)

The specialist shortage analysis by the Federal Employment Agency from 2018 reports deficiencies for qualified nurses in 12 Federal States and indicators for shortages in 4 Federal States (Hamburg, Saxony-Anhalt, Thuringia, and Saxony).(12)

Deficiencies of specialists in elderly care are existent in all 16 Federal States.(12)

Job offers for certified nurses are vacant for an average of 154 days in nursing and 183 days in elderly care (36% and 63% respectively more than the average period of vacancy for all professions, medical and non-medical).(12)

Both nursing and elderly care are characterized by a high demand for qualified workers exceeding the potential of unemployed people holding these qualifications and low unemployment rates.(12) In contrast, there is no shortage of nursing assistants, accounting for 50% of employees in elderly care and 16% in nursing.(12)

Doctors

By the end of 2019, there were 402,119 working physicians registered in Germany.(13) While this number merely increased by 2.5% from the previous year, the number of doctors working in occupations not directly involved in patient care rose by 6%.(13)

The increasing number of physicians is not sufficiently leading to more capacities of medical care, as the number of doctors working part-time is continuously rising (18.5% in 1991, 38.6% in 2019).(13)

The average physician density in Germany of 207 citizens per doctor (2019) is relatively high in comparison with other OECD countries. Still, there are regional differences: Whereas in urban areas, especially in the City States Berlin, Hamburg and Bremen, there is an oversupply of doctors, certain rural parts of Germany are affected by a shortage of physicians.(14)

As of June 2017, the shortage of doctors has especially affected Lower Saxony, Brandenburg, Thuringia, Rhineland-Palatinate, and Bavaria. There are indicators of deficiencies in Schleswig-Holstein, Saxony-Anhalt, North Rhine-Westphalia, Hesse, Saxony, and Baden-Württemberg. No explicit shortages have been noted in Berlin.(1)

Consequences of staff shortages

Staff shortages in health care have profound consequences on the working conditions of employees and the quality of medical care as well as patient safety.
A cross-sectional survey of patients and nurses in 12 European countries and the United States (US) by Aiken et al. from 2012 (15) measured hospital staffing, work environments, dissatisfaction, patient safety and quality of care as well as patient outcomes. In terms of hospital staffing, Germany had the highest patient-to-nurse ratio, with an average of 13 patients per nurse, directly followed by Spain (12.6 patients per nurse), Belgium, Poland, and Greece. The US (5.3 patients per nurse) and Norway (5.4 patients per nurse), for example, had very low nurse staffing ratios.(15)
At the same time, it was shown that lower patient-to-nurse ratios and improved work environments were associated with higher quality care and increased patient safety.(15)
This was later reinforced by a retrospective observational study on more than 400,000 surgical patients of 300 hospitals in nine European countries from 2014: an increase of one patient per nurse (from six to seven patients) increased the mortality rate in hospital and up to 30 days after discharge by 7%.(16)
A US study of 799 hospitals with 6.2 million patients from 2002 found a significant association between decreasing nurse care hours and the occurrence of urinary tract infections, pneumonias, gastrointestinal bleeding and circulatory complications.(17)

Even before the COVID-19 pandemic, caregivers in Germany began to organize and demand a reduction in their workload. In June 2015, for example, the largest protest action to date in the German health care system took place - staff shortages were highlighted in front of almost all German hospitals. In the following year, employees of the Charité University Hospital in Berlin demanded staffing levels in accordance with the collective wage agreement and, in this context, developed a form of hospital strike in which patient care continued to be ensured.(18)
During the COVID-19 pandemic, the shortage of staff was increasingly brought to the attention of the public. As a result of the worsening situation in hospitals, employees in some places organized themselves and fought for work relief, in some cases going on strike for several weeks, for example in Berlin in 2021 and North Rhine-Westphalia in 2022.(19, 20)

However, staff shortages are also causing higher workloads and discontent among physicians.(21) In a 2021 online survey by the Marburger Bund, one of the largest physicians' unions in Germany, 84 percent of the 3,238 participating residents named staff shortages as the number one factor hindering good further education.(22) Recently, doctors at the Charité University Hospital in Berlin also went on strike for better working conditions.(23)

Prognosis

The gap in the German health care provision is predicted to widen even further considering demographic changes and the increase of chronic diseases as well as more serious courses of illnesses at an advanced age.(24)
In addition, there are certain social developments, such as an increase in single-person households, changing family constellations and the increasing employment of women, traditionally performing unpaid care and reproduction work in private.(25)
A study by the Federal Statistical Office (*Statisches Bundesamt*) and the Federal Institute for Vocational Education and Training (*Bundesinstitut für Berufsbildung*) from 2010 estimates that by 2025 there will be a shortage of 470,000 to 523,000 full-time workers in health professions excluding doctors in Germany. The supply projection considering professional flexibility predicts a shortage of 255,000 to 265,000 employees.(26)
For nursing professions, a projection derived from the predicted demand analysed two scenarios. The first scenario, based on the status quo and merely considering population trends (leading to an increase in demand for full-time nurses of 27.3% from 2005 to 2025), states that there will be a shortage of 193,000 to 214,000 full-time workers in 2025.(26) The second scenario, assuming falling treatment rates as people would become ill or dependent on care at a correspondingly later age with rising life expectancy, predicts a gap of 135,000 to 157,000 full-time employees by 2025.(26)

Demographic changes are also leading to a higher demand for medical treatments by doctors. Considering the age development of doctors, with 8% being older than 65 years and another 12% between 60 and 65 years, the supply gap of doctors will probably increase to a high extent in future.(13)

Migration of health care personnel

The gap of health care professions is increasingly being filled with foreign health care workers.

The number of migrant workers in nursing increased from 5% in 2014 to 7% in 2018. In the field of elderly care, an increase of migrant workers from 8% to 12% between 2014 and 2018 was recorded.(12)

Simultaneously, the total amount of foreign doctors increased by 164% in the past 10 years, from 19,841 in 2009 to 52,361 in 2019. The number of doctors that migrated abroad was significantly lower (1,898 in 2019).(13)

In 2019, the share of foreign doctors registered in Germany was around 13%.(13)

The largest number of working doctors come from Syria, Romania, Greece, Austria and Russia.(13)

This development is part of a worldwide migration pattern of health workforces. A report by the World Health Organisation (WHO) from 2006 suggested a shortage of 4.3 million health professionals worldwide. The greatest shortfalls were reported in Sub-Saharan Africa and South-East Asia.(4)

Regarding the WHO's definition of a minimum supply of 2.28 doctors, nurses, and midwives per 1,000 citizens, only countries with 'critical shortages' were taken into account. As regional differences, discrepancies in demand and other health care professions were not considered, the lack of health care personnel is estimated to be even higher.(27)

Simultaneously, globalization and liberalization of labour markets have been leading to worldwide migration of health care workers. Increasing personal opportunities of mobility as well as state-intended active international recruitment of labour in the health care sector have led to a global pattern of migration. This pattern basically consists of sending countries being especially from the Global South, and receiving countries being of the Global North.(2)

Sending and receiving countries

Receiving countries are mainly OECD countries with a high proportion or large absolute inflows of migrant health workers. According to OECD data, this applies for many EU

countries, such as Austria, Germany, France, Ireland, the Netherlands, Portugal, and Sweden as well as the US, the United Kingdom (UK), Canada, and Australia. Sending countries are defined as countries with high expatriation rates or high numbers of health workers in OECD countries, including a few EU states (Lithuania, Poland, Bulgaria, and Romania) and many non-EU states, for example India and the Philippines.(2)

Global South and Global North

The term Global South is often used when referring to regions mainly located in the Southern hemisphere and formerly known as ‘third world’ or ‘developing economies’, including some countries in Asia, Africa, and Latin America. Others understand the concept of Global South (and Global North) not as spatially clearly distinguishable regions, but as overlapping networks that have developed and are changing due to certain historical circumstances.(28)
In this context, the term Global South should be seen as a relational concept to the Global North, thus offering the possibility to examine inequalities within countries and regions worldwide.

English-speaking countries account for the majority of countries receiving international health care professionals. Analysing migration patterns within OECD countries, these being mainly receiving countries, the main country of destination continues to be the US. In 2015/16, of all foreign-born nurses and doctors practising in OECD countries, 45% of nurses and 42% of doctors were working in the US.(29)
For nurses, Germany is the second country of destination with 15% of all foreign-born nurses in 2015/16, followed by the UK with 11%, whereas 13% of all foreign-born doctors who work in OECD countries are working in the UK and 11% in Germany (2015/16).(29)

Besides concerns over serious labour shortages in several countries, the statistics for OECD countries show an overall increase in absolute numbers of practising nurses and doctors as well as rising nurse-per-population and doctor-per-population ratios since 2000.(29) Domestically trained workers are attributed to most of these growing numbers. Still, the share of foreign-born nurses increased by 20% between 2010/11 and 2015/16, while the total number of nurses merely increased by 10% during this period.(29)

For doctors, there is a similar development, with an increase of foreign-born doctors in 18 OECD countries (including Germany) of more than 20%. The general increase of doctors in these countries was by 10% from 2010/11 to 2015/16.(29)
The share of foreign-born nurses in OECD countries for 2015/16 was 16.2% (an increase of 1.5% in comparison to 2010/11) and 27.2% for doctors (+3.1%).(29)

This shows that existing gaps in many OECD countries' health care labour markets are increasingly being filled with foreign-born nurses and doctors. For half of the OECD countries, immigration accounts for more than 33% of the overall increase in practising nurses. In Germany, it is responsible for 25%.(29)

International recruitment of health care personnel

Worldwide

The decision to migrate is, of course, the result of very personal motivational reasons within a complicated framework of push and pull factors as well as stick and stay factors. These may vary widely between different sending and receiving countries, professions and individual situations.(2)
However, immigration policies and active international recruitment by private or public stakeholders play a great role in forming certain patterns of migration.

In the UK, for example, foreign-born employees account for 22% of nursing staff and 35% of doctors, while making up for only 14% of all employees.(30) This high percentage of immigrant workers within the health care system is result of an active recruitment of international health care personnel by the government. Bilateral agreements with several countries including India, the Philippines and Spain are supposed to increase the international workforce in the National Health System (NHS), especially concerning nurses and doctors. Additionally, private employers within the country's health care provision are able to recruit international workers, who switch to work for the NHS after a period of work experience in the private sector.(30)

Germany

The shortage of skilled health care staff in Germany is also being addressed by increasing the recruitment of foreign workers. As part of the strategy for securing skilled workers in occupations with labour shortages, including nursing professions, numerous efforts have been made by German state institutions to create a legal basis for the immigration of specific trained workers and recognition of their qualifications.

The eastern expansion of the EU in 2004 and 2007 as well as intra-EU immigration policies, e.g., for the recognition of nursing qualifications acquired within the EU from 2012 and the expiry of transitional arrangements for Bulgaria and Rumania in 2014, led to a great increase in freedom of movement for workers.

For non-EU citizens, obtaining residence and work permits as well as the recognition of qualifications and credentials is more complicated. However, there are intentions to facilitate the immigration of qualified workers for jobs that are needed in the German labour market.(31)

The 'Blue Card', implemented in 2012, facilitates the immigration of academics into the EU.(32) Another employment regulation from 2013 ensures the immigration of skilled workers from non-EU countries for non-academic professions. A prerequisite for immigration is a qualification requiring a vocational training for at least two years in an occupation experiencing labour shortages in Germany.(33)

Furthermore, several projects by state actors facilitating the immigration of workers with qualifications for specific occupations were essential for the beginning of recruiting labour from non-EU countries.

The '*Triple Win*' project is a cooperation of the Central International and Specialist Agency (*Zentrale Auslands- und Fachvermittlung, ZAV*) of the Federal Employment Agency (*Bundesministerium für Arbeit und Soziales, BMAS*) and the German Society for International Cooperation (*Deutsche Gesellschaft für internationale Zusammenarbeit, GIZ*) for the recruitment of international nurses.(34)

From 2013 to October 2020, the project recruited more than 2,600 qualified nurses from Serbia, Bosnia-Herzegovina, the Philippines, and Tunisia. Additionally, young people with previous experience in nursing have been recruited from Vietnam for a three-year general nursing training course in Germany and subsequent further employment since 2019. While the ZAV organizes application procedures, the GIZ is responsible for language,

nursing, and orientation courses in the country of origin as well as labour market admission, visas, and resettlement. It supports workers during the integration and recognition process in Germany. Employers pay a fee of € 5,500 for these services of recruiting, training, coordinating and consulting in addition to individual travel costs and costs of the recognition procedure (including a B2 language course).(34)
In September 2019, the German Federal Ministry of Health (*Bundesministerium für Gesundheit, BMG*) started a cooperation with the Mexican government for the immediate recruitment of health care professionals to Germany and upcoming qualification measures in Mexico. The newly opened office of the German Agency for Health and Nursing Professionals (*Deutsche Fachkräfteagentur für Gesundheits- und Pflegefachkräfte, DeFa*) is supposed to facilitate immigration to Germany by qualified nurses (e.g., visa application, recognition of qualifications, residence, and work permits). Furthermore, it supports private stakeholders such as hospitals, nursing homes or agencies in recruiting qualified nurses from Mexico. The planned qualification measures are intended to adjust nursing qualifications in Mexico to German standards.(35)

Private stakeholders have been playing a major role in the international recruitment of health care personnel for Germany.(36)
DEKRA, for example, has recruited more than 4,000 trained nurses for health care facilities or hospitals such as the Charité in Berlin.(37) According to its own information, over 3,000 qualified nurses are currently being prepared for the German labour market at private schools owned by DEKRA in Serbia, Albania, Bosnia Herzegovina, Macedonia, and the Ukraine. Recently, the agency started recruiting nurses also from the Philippines, Mexico and Brazil.(37)

This development resulted in an increase in applications for recognition of foreign acquired nursing qualifications from 1,611 in 2012 to 15,507 in 2018. The number of workers from non-EU countries rose from 30% to over 80% during this period. In 2018, most applicants came from countries cooperating with German institutions, e.g. as part of the *Triple Win* project.(36)

The migration policies and recruitment strategies of countries from the Global North led to a wave of criticism.

When analysing immigration patterns in the UK, Portugal, or the US, clearly the highest inflows of health care personnel are from former colonies.(3)

In some cases, like the newest agreements between Germany and Mexico, receiving countries are actively involved in establishing educational standards meeting the demands of their own health care provision.(2)

Concerning bilateral agreements, unequal bargaining power, for example between the EU and countries from the Global South, as well as state elites, that are not reliant on public health services, making decisions without being affected by their consequences, are harshly criticised.(3)

Hansen and Johnson describe this phenomenon of high-income countries, mostly being former colonial powers having extremely restrictive regulations for immigration from non-OECD countries while simultaneously aiming to access specific labour solely in areas with staff shortages as ‘demographic colonialism’.(38)

However, it is not only in relation to the explicit recruitment of health professionals from former colonies that a postcolonial perspective cannot be absent from health science research.(39, 40, 41)

Migration patterns of health care personnel from the Global South to the Global North should be analysed in a postcolonial context, aiming to deconstruct 'established knowledge' (from the Global North) regarding its racist and Eurocentric foundations and making colonial continuities in society visible.

Costs and benefits of migration for the national health care systems (macro-level effects)

The effects of this migration pattern on the respective national health care system have been largely analysed and discussed internationally in the context of sustainability and social justice.

Especially, the situation of the health care systems of sending countries, where costs of emigration are generally exceeding benefits, have been rising concerns in the perspective of global health. The most important costs and benefits for sending and receiving countries are briefly presented here.

Sending countries

Sending countries are mostly low- to middle-income countries of the Global South. Their health care system is usually characterized by less advanced technology, lack of financing and enduring staff shortages, while having to face major health problems such as epidemics and war. Further emigration of health care personnel therefore leads to an even more insufficient health care provision for their populations.(3)
The African continent for example, home to 10% of the world's population, is facing 25% of the world’s load of diseases while having less than 3% of the global health workforce according to the world health report from 2006.(4)
As a result of lacking resources in funding, training, and specialisation, working conditions become even worse, creating additional push factors for emigration.
Furthermore, all investments and subsidies in the training of medical professionals are lost with emigration, especially in case the workers do not remigrate.(3)
The benefits of emigrating health care personnel can be seen in the form of remittances sent back to the country of origin or, in case of temporary migration, in the form of gaining highly skilled workers after having obtained further qualifications abroad.

There is reasonable doubt that these benefits compensate for the costs of the ‘brain drain’ phenomenon experienced by sending countries as described above.
First, remittances are sent to private households, and therefore not available for the public health sector. Second, most emigrating health care workers are not predicted to return to their home country. If they do so, lack of technology and standards in the sending country may prevent them from using newly acquired skills.(3)

Receiving countries

For receiving countries, the benefits generally exceed the costs of immigration.
The main benefits are the reduction of labour shortages, resulting in improved health care provision, tax-income from working immigrants and increasing competitiveness within their labour markets.
Costs may occur in active recruitment, immigration procedures and resettlement of workers. Some stakeholders claim that immigration of ‘cheap labour’ leads to more precarious job conditions in general, therefore also affecting domestic workers. It is also

discussed whether quality of health care suffers from increasing numbers of foreign workers due to differences in professional or language skills.(3)

Working and living conditions of foreign health care workers (micro-level effects)

While macro-level consequences of recent trends in health care migration have been largely analysed on a global scale, there is a scarcity of research on micro-level effects. This chapter presents the main results of previous research on the current living situation and working conditions of immigrated health workers in their country of destination.

Global North

Most studies that exist in this context have analysed processes of integration and adjustment of foreign-born and / or foreign-trained nurses in English-speaking countries. An integrative literature review by J. Kawi and Y. Xu from 2009 (8) analyses the main facilitators and barriers to adjustment of international nurses, including 29, mostly qualitative, studies in Australia, Canada, Iceland, the UK, and the US.

Initially, insufficient information on administrative procedures was experienced as very challenging.(8) Adjusting to their new workplace, the main facilitators reported by international nurses were strong a work ethic and persistence as well as psychological and logistical support. As official support structures were mostly perceived as inadequate and non-migrant specific, helpful support was mainly received informally from other international nurses or private social networks.(8)

This study was then reinforced by a more recent integrative literature review from 2017 by L. Pung and Y. Goh (9), including 24 studies analysing challenges faced by nurses after migration.

The main challenges for workplace integration reported by both studies were communication barriers. Insufficient language skills, especially concerning job-related terms and sociocultural aspects of language, lead to difficulties in communicating with colleagues or patients, documentation, phone calls and addressing psychological aspects of health. Further consequences were less efficient work, discrimination and social exclusion.(8, 9)

Further barriers resulted in differences in working procedures, nursing practices and social interaction, leading to feelings of disappointment, isolation and, in some cases, ‘cultural displacement’ as reported by J. Kawi and Y. Xu.(8, 9)
Additional challenges faced by international nurses related to non-work related essentials like housing, transport, health provision, finances etc.(9)
Consequently, both studies suggested an improvement of institutional support structures including logistics and specific aid for international workers during the induction period.(8, 9)

A systematic review from 2018 by Viken et al. (6) analysed 17 qualitative studies on foreign educated nurses’ work experiences. The main theme was 'Being an outsider at work', referring to not being accepted and valued as a team member by peers. Two major aspects where then emphasised: 'Cultural dissonance' and 'Unfamiliar nursing practice'. In the context of 'Cultural dissonance', the sub-themes 'Loneliness and discrimination' as well as 'Communication barriers' were brought up.(6)

Discrimination experiences

Discrimination is defined as a disadvantage without a justifiable reason, based on an external attribution to a certain socially constructed group. This categorisation is often based on race or ethnicity, physical appearance, language and nationality, and is accompanied by a hierarchisation.(42)
Discrimination can occur on an individual, institutional, or structural level. While on the individual level, discriminatory acts are attributable to individual persons, the starting point of institutional discrimination is not the personal characteristics of the acting individual, but the role prescribed for the person by the institutional context, e.g., by internal regulations, guidelines, or routines. Structural discrimination is often referred to as disadvantaging a group systematically and across all spheres of life.(42)

Both individual and institutional discrimination appear to be a major challenge in the context of migration of health care personnel: Mistreatment, lack of respect, different forms of discrimination and racism by superiors, colleagues and patients were continuously reported throughout the health care sector, including nurse education and academic medicine faculties.(5, 6, 7, 8, 9, 43, 44, 45, 46)

On a structural level, studies show inequality in working hours, allocation of tasks, wages and possibilities of further training and promotion in comparison to domestically born and trained workers.(8, 9) Institutional racism hinders opportunities for further education, preventing not only individual professional development but also career options.(5, 6)
Discrimination on an individual level includes racist comments, bullying, harassment, and racially-motivated refusal of care by patients among many other things.(5, 6, 8)
These experiences of discrimination are shown to have negative impacts on self-confidence, work-efficiency, and patient safety.(6, 9, 45, 47)

To improve the adjustment of international health workers, respectful, equal and fair treatment in the workplace should be achieved.(9) Likewise, sufficient and individual support during the process of orientation were suggested.(8, 9)

However, discrimination not only exists on racial or ethnic grounds but also many other externally assigned attributes, for example religion, disability, gender, sexual orientation, age and economic status.(42)
In the context of migration studies, an intersectional approach should therefore not be missing. The term intersectionality, originally established by Kimberlé W. Crenshaw, describes different, simultaneous and overlapping forms of discrimination against one person, creating experiences of discrimination that cannot be reduced to only one form of discrimination.(48)

Gender related aspects

Regarding the high numbers of migrating women in health professions, a process also described as ‘feminisation of migration’, there is also lack of research on women-specific challenges after migration to a different country.(49)
As reported by several studies, migrating women experience further challenges relating to their gender role. Being responsible for care and reproduction work in their own families, which applies to women from low- to middle-income countries to a higher extent than women from high-income countries, leads to increased psychological strain. However, family situations and social networks at home as well as in destination countries are highly varying.(49)

Concerning academic medicine, there are several studies suggesting high rates of gender-based discrimination: In the US, for example, recent data suggests 47% to 70% of female medical students and 70% to 77% of female physicians experience discrimination based on their gender.(50, 51) Similar rates were reported by a cross-sectional survey on abuse and discrimination against internal medicine house staff in Canada during residency training: More than 70% of female residents experienced gender discrimination by patients, attending physicians and nurses.(43)

A qualitative study by Halley et al. analysed woman physicians' experiences of discrimination with regard to their motherhood.(51) Besides gender inequalities regarding finances, job expectations and career-opportunities, further challenges like work-life balance and lack of motherhood-specific support were reported.(51)

On the way to achieving gender equality in academic medicine, there must also be a focus on gender parity, which is linked to, but of course not sufficient for, ensuring gender equality. A recent paper by Raj et al. (52) shows that despite gender parity at medical schools, female representation among active physicians in the US is relatively low (35% in 2017), though varying between different specialities. The speciality with the lowest percentage of women, orthopaedic surgery, also appears to be the one with the lowest amount of workers from ethnic or racial minorities, suggesting a linkage between improving the representation of women and ethnic or racial minorities.(52)

Germany

Due to differences in the degree of integration between (even intra-European) countries resulting from varying migration policies, health systems and sociocultural factors, the findings of the studies mentioned above cannot, of course, be directly transferred to the situation of health workers in Germany.(53)
However, despite rapidly growing numbers of foreign health personnel, there is hardly any data for micro-level effects in German speaking areas.
A few, mostly qualitative studies suggest several challenges for international health workers. These consisted of non-transparent and non-standardized procedures for receiving a work permit and the recognition of qualifications as well as difficulties at work

due to a lack of language skills, devaluation and low acceptance by colleagues, and experiences of racism and discriminatory behaviour at work.(53, 54, 55)

Discrimination against racialized persons exists and has existed in Germany in all areas of life, both on an individual and institutional level. However, in terms of systematic research and documentation, and especially institutionalized anti-discrimination work, Germany is far behind when compared internationally. Since 2006, the German law called 'Allgemeines Gleichbehandlungsgesetz' (General Equal Treatment Act) has provided a legal framework for equal treatment at work.(56) Externally attributed grounds of discrimination, such as race, ethnic origin, gender, religion or belief, disability, age, sexual orientation and identity are protected by the law. However, there is still a long way to go before the anti-discrimination measures required by law are fully implemented.(57)

To address this scarcity of research, a quantitative survey on the working and living conditions of foreign-born health care personnel was conducted at the Charité University Hospital Berlin in order to assess barriers and facilitators of workplace integration. The survey was later followed by a similar survey at the UKE, University Hospital Hamburg-Eppendorf.

The hypotheses prior to the survey were: I) barriers and discrimination against foreign health workers exist or are subjectively perceived to exist, and these potentially affect general satisfaction and work performance. II) migrated women are exposed to a double burden in everyday and professional life or are more vulnerable to it.

Referring to the hypotheses, the aims of this study were: I) to explore barriers to foreign-born employees with a focus on labour market access, language, and discrimination experiences, and how they affect workplace satisfaction and work performance. II) to analyse differences between various groups, based on gender, occupation, and country of origin.

Finally, this work evaluates existing institutional and non-institutional supporting structures as well as individual needs for further support in order to point out possibilities for concrete action towards facilitating the professional life of international employees in the German health sector.

Methods

Study design

The cross-sectional quantitative study was conducted in the form of a survey, with data being gathered via two separate online-based questionnaires at the Charité University Hospital Berlin and the UKE, University Hospital Hamburg-Eppendorf.
The target group of the survey were employees in nursing and health care, medical / technical assistance, clinicians, scientists as well as junior staff.
The requirements for participation were employment at the Charité or UKE, and a place of birth outside Germany. Exclusion criteria were the lack of consent to store and pass on pseudonymised data within the trial as well as incomplete questionnaires.
Employees at both hospitals received a link for participation via E-Mail as well as a reminder after two and six weeks. The questionnaire was available online from October 2020 to January 2021 for Charité staff and from March to June 2021 for employees at the UKE.

This dissertation provides detailed results of data from Charité staff in order to explore barriers and facilitators of workplace integration of foreign health care personnel at this particular institution. A comparison of results concerning discrimination experiences and equal treatment from both University Hospitals is covered in a health research publication. Data protection support was given, and the study was approved by the General Staff Council of the Charité as well as the Ethics Board under reference EA4/124/20.

Questionnaire

The survey was conducted via LimeSurvey (https://www.limesurvey.org/en/). The items were developed with the support of the Institute for Biometry and the Integration and Anti-Racism Commissioner of UKE. A pilot study to test the questionnaire was conducted prior to the survey.

The questionnaire consisted of different types of questions, including closed-ended questions with one or more answer options, Likert scale and multiple-choice questions as well as open-ended questions requiring numerical or text input. Participants were able to give no answer (NA) and leave comments for each section.

Questions were logically linked, meaning that in some cases different answer options led to various sub-questions to minimize the questions for each responder. The total amount of questions ranged between 61 and 97. This resulted in varying sample sizes for different items.

Participants were able to switch between an English and a German version. It took an average time of 30 to 45 minutes to complete the survey. The answers of all participants were pseudonymized.

The main part of the questionnaire was divided into seven subsections: Demographics, professional career, language skills, working environment, family and financial situation, life in Germany and supporting structures.

Demographics

Demographics included age, sex, country of birth, year of arrival in Germany, citizenship, and residence status.

Professional career

Questions on the professional career referred to details on employment (profession, hierarchical level, etc.) and qualifications. Participants indicating having completed their training or studies abroad were asked about their perception of the recognition procedure in Germany. Whether job qualifications were recognized unproblematically, whether employees felt well informed about the recognition procedure, and whether they experienced discrimination by employees of the administrative bodies were all assessed with the help of Likert scales.

Language skills

In the language section, native languages, self-assessed German language skills, language learning and translation requests at work were analysed.
Participants were able to choose between the levels *C2 (close to mother tongue), C1 (competent speech application), B1 and B2 (good and independent speech application),* and *A1 and A2 (basic knowledge)* or *lower*.
Language-related difficulties at work were then queried, and responders specified whether these occurred within the last 6 months, what they had had difficulties with (for

example communication with patients or colleagues, documentation, etc.), and the corresponding impacts on professional performance.

Working environment

Concerning their working environment, participants were asked to evaluate job satisfaction and relationships in the workplace, and indicate experiences of discrimination and their perception of equal treatment at work.

Job satisfaction was subdivided into the following aspects: current employment in general, working hours, payment, working environment and the distribution of tasks within the team. For each item, the participants were able to choose between: *very satisfied, satisfied, part/part, not satisfied, very dissatisfied,* or *not specified*.

Regarding relationships at work, participants were asked to which extent certain statements applied to them within the past 6 months. These statements included being respected by colleagues and the appreciation of work performance by colleagues, patients, and supervisors, respectively, as well as the feeling of having to prove oneself in front of colleagues as well as patients. The answer options were*: not true, rather not true, true,* and *not specified*.

Experiences of discrimination by colleagues at the same professional level, colleagues from other professions, patients and superiors within the last 6 months were asked using yes / no questions. An explanation of the term discrimination according to the Federal Anti-Discrimination Agency was provided[1]. Respondents who answered in the affirmative were asked to indicate what they thought the discriminatory behaviour was based on, with multiple answers possible. The given answer options were *age, disability or chronic disease, economic reasons or social class, language, name, nationality, physical appearance, race / ethnicity, religious beliefs, sex / gender, sexual orientation, other* and *not specified.* In case of *other*, the answer could be specified in an open field. The impact of these discrimination experiences on self-confidence and professional performance were evaluated using Likert scales.

Questions about whether or not the participants felt they were treated equally in

[1] https://www.antidiskriminierungsstelle.de/EN/about-discrimination/what-is-discrimination/what-is-discrimination-node.html; Latest access: 31.12.22, 12 pm.

comparison to their (white German) colleagues were differentiated regarding their *contract, weekly working hours, working times (night and weekend shifts)* and *payment, the distribution of tasks within their team, the appreciation of work performance by colleagues, superiors* and *patients,* respectively, as well as *opportunities for further training and promotion* and *the opportunity to express one's opinion in discussions among colleagues.*

Family and financial situation

Questions on the family and financial situation covered partnerships, children, and financial and non-financial support of family members or acquaintances in and outside of Germany.

The section on private life included off-work discrimination experiences during the past 6 months in public places (public transport, shops, etc.) as well as in their own social environment (e.g., by friends and acquaintances). The same discriminatory features as mentioned above were queried to specify what these experiences of discrimination were based on, with multiple answers possible.

Support

To evaluate existing supporting structures, participants were asked to evaluate the support through several institutions at the Charité: the Welcome Centre, Commissioner for Integration, Human Resources division, professional and staff council, trade union and others (open entry). For each institution, it was possible to indicate whether it was *extremely helpful, very helpful, somewhat helpful, only partly helpful, not helpful at all* or *unknown*. Further questions referred to additional and private support, what participants were supported in, and what they have wished to be further supported in, with multiple answers possible.

Options for action

At the end of the survey, there was a voluntary second part, in which respondents were able to answer openly formulated questions concerning personal suggestions and options for actions for the Charité as an employer.

Statistical analysis

The data was analysed using IBM SPSS Statistics Version 27 for Mac OS X (SPSS Inc., Chicago, Ill., USA). Metric variables were presented using mean, standard deviation (SD), Minimum (Min.), and Maximum (Max.). Categorical variables were presented as frequencies and percentages (%) of number of cases (N). Variation in sample size for different items of the questionnaire derived from intelligent linkages of questions and missing answers.

The data was tested for a normal distribution using the Kolmogorov-Smirnov and Shapiro-Wilk Test. A large part of the data showed normal distribution. Therefore, differences in means of specific groups were analysed by independent sample t-tests. In the case of non-normally distributed data, the individual items were examined regarding differences in certain subgroups using the Mann-Whitney U Test (MWU Test) with independent samples. For this purpose, groupings were made using metric variables or the data were divided into two halves by visual classification.

Furthermore, Spearman correlation analyses were carried out between the items with indications of correlation (r) and 2-sided significance (p).

To compare differences in frequencies of variables including at least one categorical variable, cross tabulations and Chi-square tests were implemented. When 0 cells had less than 5 expected counts, a Pearson chi-square test was conducted. In the case of one or more cells with expected counts below 5, an exact test by Fisher-Freeman-Halton and Monte Carlo Simulation (2-sided; based on 100,000 sampled tables) were performed.

A statistically significant difference was assumed at $p < 0.05$.

Results

Study population

Personnel statistics from January 2021 indicate that of 11,668 Charité employees in the professions nursing and health care, medical / technical assistance as well as scientific staff, 18.3% (2,140) were born outside Germany.
From these, 148 fully completed questionnaires were received. Six were excluded due to exclusion criteria. Consequently, a total of 142 questionnaires were analysed.

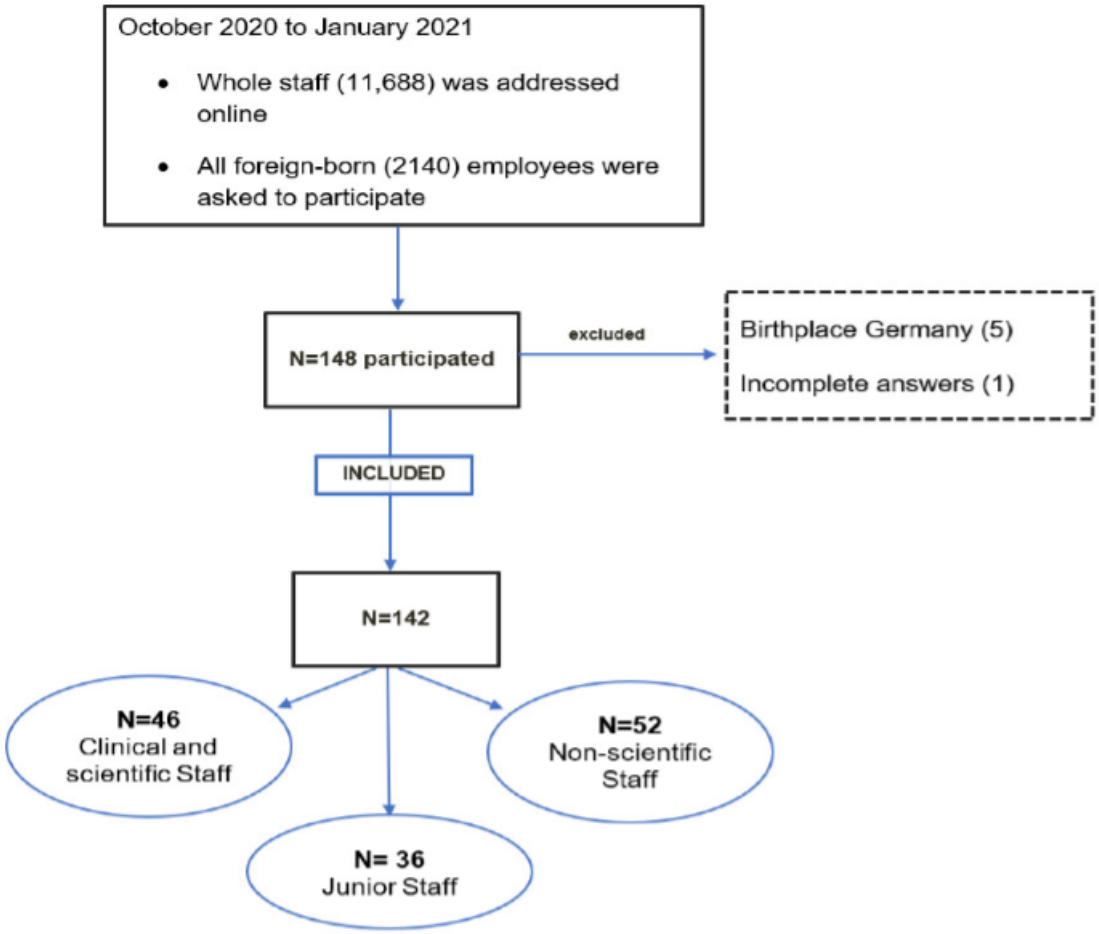

Figure 1: Flowchart of questionnaires showing in- and exclusion of participants

Published in: Can, E.; Konrad, C.M.; Khan-Gökkaya, S.; Molwitz, I.; Nawabi, J.; Yamamura, J.; Hamm, B.; Keller, S. Foreign Healthcare Professionals in Germany: A Questionnaire Survey Evaluating Discrimination Experiences and Equal Treatment at Two Large University Hospitals. Healthcare 2022, 10,2339. https://doi.org/10.3390/ healthcare10122339.(58)

The questionnaire was completed in German by 71.8% (N=142) of the participants and in English by 28.2% (N=142).

The median age of responders was 36 years (range: 22 to 59 years, N=132). 10 participants did not indicate their age.

When asked about the country of birth, 48 different states were indicated (N=121) and 21 participants did not give an answer to this question. The highest proportion of participants were born in South-Eastern Europe (38%, N=121) and in the Middle East (26%, N=121). Another 15% (N=121) were born in Asia, 5% (N=121) on the African continent, and 4% (N=121) in Central and South America. A few responders indicated a country from North-Western Europe (7%, N=121) or the US, Canada, and Australia (5%, N=121) as their place of birth.

33.1% (N=121) of responders were from EU countries and 66.9% (N=121) from non-EU countries. Further information on the indicated places of birth are provided in Figure 2 and Table 1.

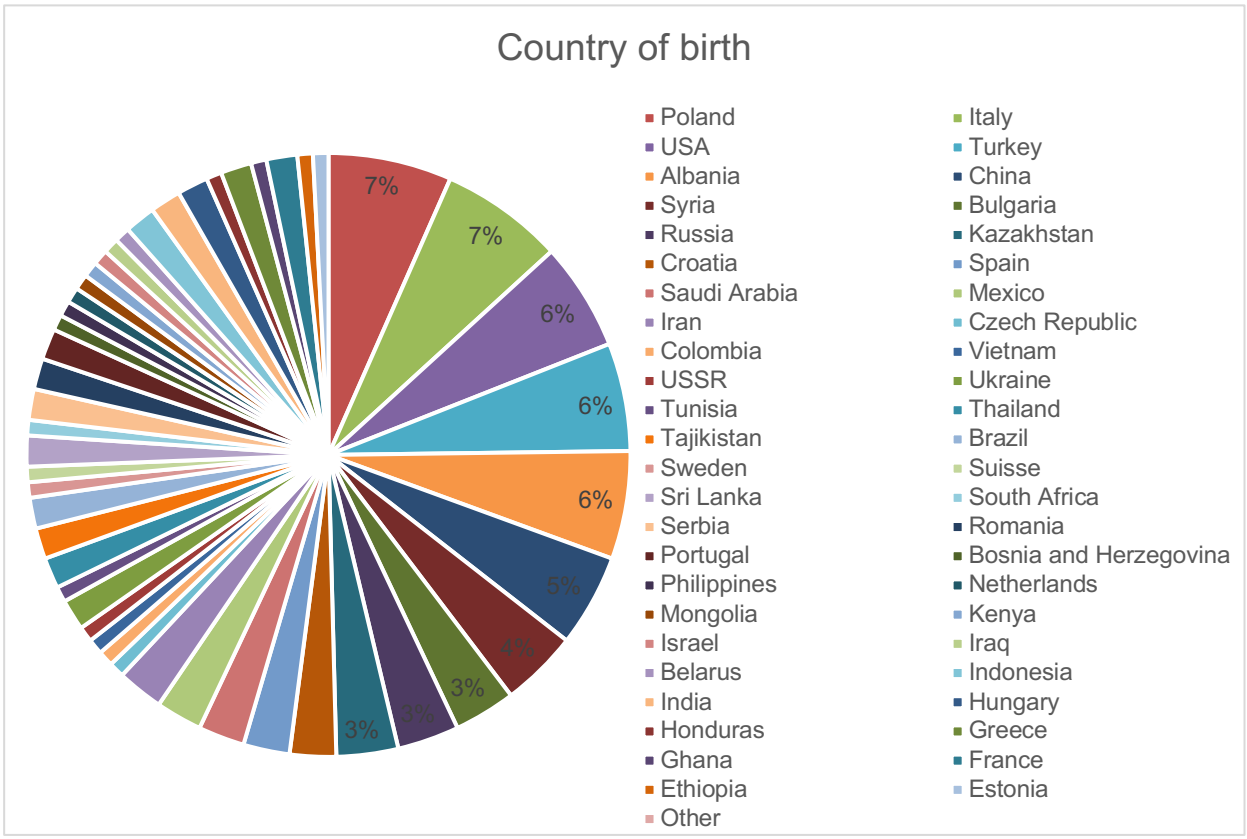

Figure 2: Indicated countries of origin of survey participants (N=121)

Country of birth		Frequency (N)	Percentage (%)	Valid Percentage (%)
Valid	Albania	7	4.9	5.8
	Belarus	1	0.7	0.8
	Bosnia and Herzegovina	1	0.7	0.8
	Brazil	2	1.4	1.7
	Bulgaria	4	2.8	3.3
	China	6	4.2	5.0
	Colombia	1	0.7	0.8
	Croatia	3	2.1	2.5
	Czech Republic	1	0.7	0.8
	Estonia	1	0.7	0.8
	Ethiopia	1	0.7	0.8
	France	2	1.4	1.7
	Ghana	1	0.7	0.8
	Greece	2	1.4	1.7
	Honduras	1	0.7	0.8
	Hungary	2	1.4	1.7
	India	2	1.4	1.7
	Indonesia	2	1.4	1.7
	Iran	3	2.1	2.5
	Iraq	1	0.7	0.8
	Israel	1	0.7	0.8
	Italy	8	5.6	6.6
	Kazakhstan	4	2.8	3.3
	Kenya	1	0.7	0.8
	Mexico	3	2.1	2.5
	Mongolia	1	0.7	0.8
	Netherlands	1	0.7	0.8
	Philippines	1	0.7	0.8
	Poland	8	5.6	6.6
	Portugal	2	1.4	1.7
	Romania	2	1.4	1.7

	Russia	4	2.8	3.3
	Saudi Arabia	3	2.1	2.5
	Serbia	2	1.4	1.7
	South Africa	1	0.7	0.8
	Spain	3	2.1	2.5
	Sri Lanka	2	1.4	1.7
	Suisse	1	0.7	0.8
	Sweden	1	0.7	0.8
	Syria	5	3.5	4.1
	Tajikistan	2	1.4	1.7
	Thailand	2	1.4	1.7
	Tunisia	1	0.7	0.8
	Turkey	7	4.9	5.8
	Ukraine	2	1.4	1.7
	USA	7	4.9	5.8
	Russia	1	0.7	0.8
	Vietnam	1	0.7	0.8
	Total	121	85.2	100.0
NA		21	14.8	
Total		142	100.0	

Table 1: Indicated birth countries of survey participants (corresponding to Figure 2)

*Published in: Can, E.; Konrad, C.M.; Khan-Gökkaya, S.; Molwitz, I.; Nawabi, J.; Yamamura, J.; Hamm, B.; Keller, S. Foreign Healthcare Professionals in Germany: A Questionnaire Survey Evaluating Discrimination Experiences and Equal Treatment at Two Large University Hospitals. Healthcare **2022**, 10,2339. https://doi.org/10.3390/ healthcare10122339.(58)*

69% (N=142) of the participants did not have German citizenship, and 43.2% (N=98) of these workers had a temporary residence status. This subgroup consisted exclusively of personnel born outside of the EU.

61% (N=136) of the study population were female, while a significantly higher number of female workers were found in nursing and medical / technical assistance (77.6%, N=49) compared to scientific staff (52.5%, N=80), (*χ^2: p=0.004).*

Representativeness

Representativeness of the study population could only be assessed regarding birth country and profession as further personnel data was not accessible.

A comparison of the study population versus total foreign-born staff as well as the most frequently indicated countries of birth are shown in Figure 3.

Of all 2,140 foreign-born employees, nearly 36% were born within the EU, most frequently in Poland, Italy, and Austria. 64% were born in non-EU countries, especially in Albania, Russia, and Turkey.

The study population showed a similar distribution of birthplaces. 33.1% (N=121) were born in EU states, of which 20% (N=40) indicated Italy and Poland, respectively, and 10% (N=40) indicated Bulgaria as their place of birth. None of the participants was born in Austria.

66.9% (N=121) were born outside of the EU, with the most common states being Albania (9%, N=81), Turkey (9%, N=81), and the US (9%, N=81). 4.9% (N=81) indicated Russia as their place of birth.

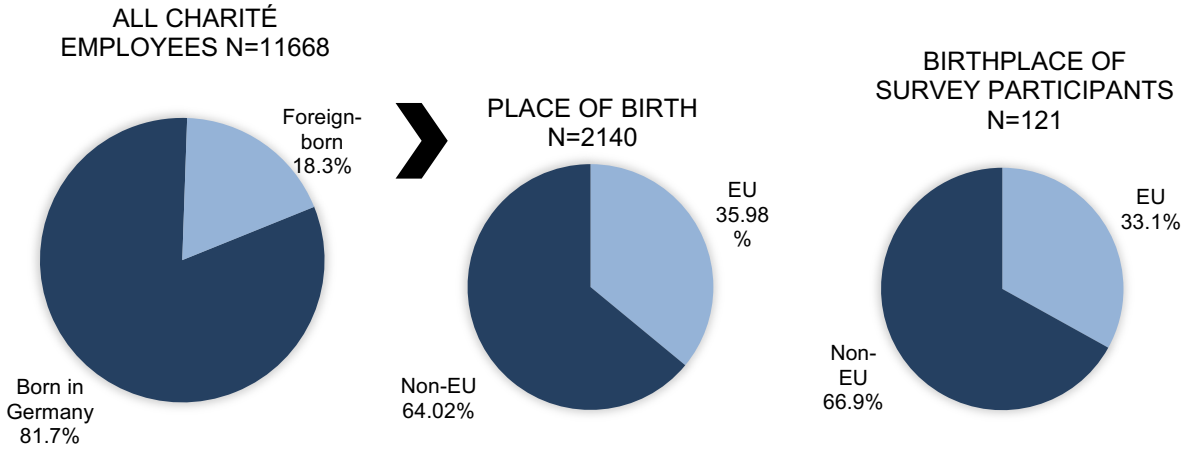

Figure 3: Distribution of indicated birthplaces of total staff vs. study population

Regarding the occupational status, there is a similar distribution of professions, as shown in Figure 4. The personnel data mentioned above did not differentiate between scientific staff working as clinicians or as junior staff. When combined, 57.8% (N=139) of the study

population consists of scientific staff, comparable to the 56% (N=2140) of all foreign-born workers employed as scientific staff at the Charité. However, staff in nursing and health care were slightly underrepresented (27.5% in the study population vs. 37% at Charité) while medical / technical assistants were overrepresented (9.2% vs. 7%).

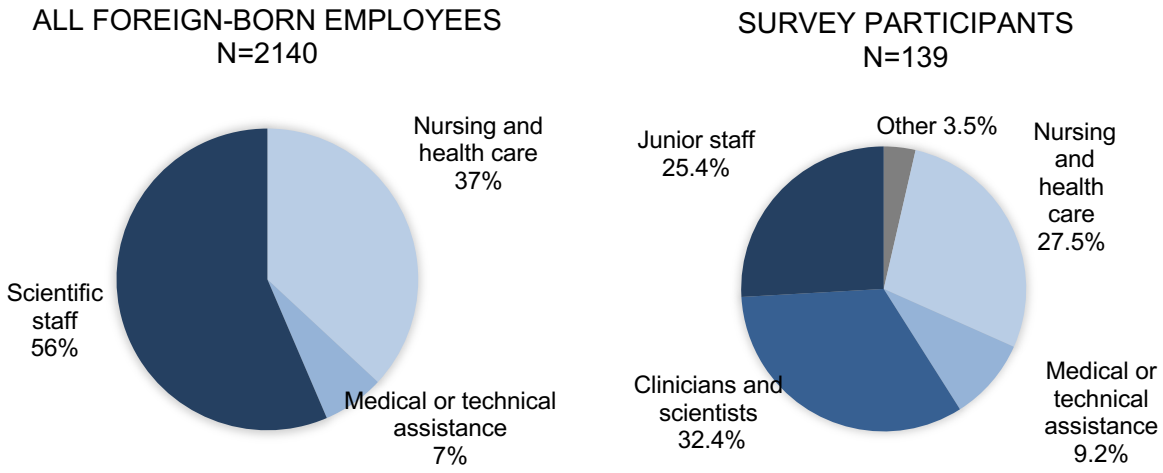

Figure 4: Distribution of professions of foreign-born employees: Charité vs. study population

Professional career

Employment status

The average employment time of responders was 6 years (range: 1 to 37 years, N=141). The workplaces were subdivided into four categories: Clinicians and scientists, junior staff, non-scientific staff and other. The majority of responders were employed as scientific staff: a third as clinicians and scientists, and a quarter as junior staff. Non-scientific staff, including nurses and technologists made up for more than a third of participants. 3.5% (N=142) did not fit into one of these categories ('Other') and 2.1% (N=142) did not give an answer.

Detailed information on the occupational status is provided in Table 2.

Profession	Frequency (N)	Percentage (%)
Clinicians and scientists	46	32.4
Junior staff	36	25.4
Non-scientific staff	52	36.6
Other	5	3.5
No answer	3	2.1
Total	142	100
Clinicians and scientists		
Resident	22	47.8
Specialist doctor	10	21.7
Researcher	13	28.3
Other	1	2.2
No answer	0	0
Total	46	100
Junior staff		
PhD student	14	38.9
Postdoc	13	36.1
Other	6	16.7
No answer	3	8.3
Total	36	100
Non-scientific staff		
Nursing	39	75
Medical / technical assistance	13	25
Total	52	100

Table 2: Professional categories and subgroups of survey participants

Published in: Can, E.; Konrad, C.M.; Khan-Gökkaya, S.; Molwitz, I.; Nawabi, J.; Yamamura, J.; Hamm, B.; Keller, S. Foreign Healthcare Professionals in Germany: A Questionnaire Survey Evaluating Discrimination Experiences and Equal Treatment at Two Large University Hospitals. Healthcare 2022, 10,2339. https://doi.org/10.3390/ healthcare10122339 (adapted).(58)

17.9% (N=140) of respondents worked part time and 12.9% (N=132) were employed in leading functions. There was no significant difference between male and female workers in either case.

A total of 57.2% (N=138) indicated having a temporary working contract. A comparison between the different professions showed a significant difference between scientific 87.5%; N=80) and non-scientific staff (13.5%; N=52), (*χ^2 Fisher-Freeman-Halton exact test: p<0.001).*

13 (9.5%; N=137) of responders indicated that they took part in a guided programme, for example a scholarship or the *Triple Win* Programme by the GIZ.

Qualification

When asked about the participants' qualifications, multiple responses were possible. 17.6% (N=142) had completed an apprenticeship and 77.5% (N=142) of all responders had a university degree.

78.8% (N=127) of participants stated that their current professional activity corresponds to their qualification. 2.2% (N=127) indicated being employed in a position above their qualification and 19% (N=127) considered themselves as overqualified for their current job.

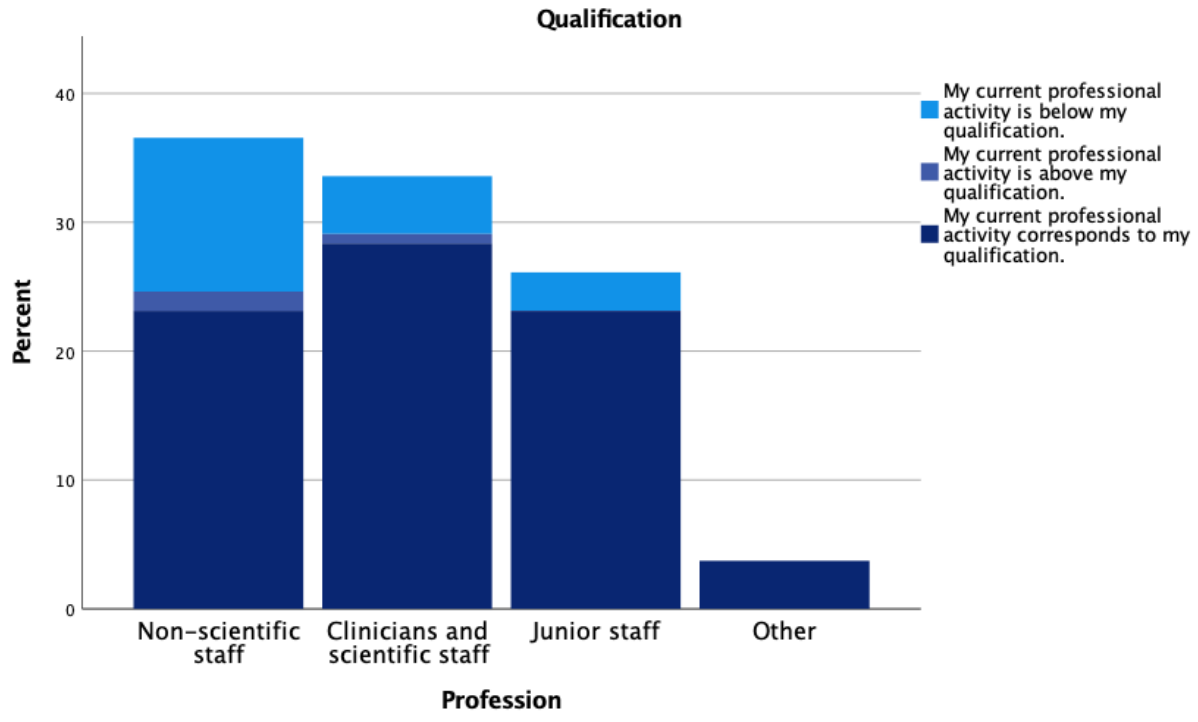

Figure 5: Relation of current professional activity with qualification (N=127)

While 41.9% (N=136) of participants completed their training or studies in Germany, 55.1% (N=136) gained their qualifications abroad. For 2.9% (N=136), both applied, or they were still studying or in training.

Labour market access

More than half of participants obtained their professional qualifications abroad and therefore had to go through a recognition procedure. This procedure was perceived as transparent and smooth by most responders. However, it consisted of discrimination experiences for a third of the participants.

Considering the recognition of qualifications obtained abroad, 50% (N=74) claimed that their job qualifications were recognized without any problems. For 17.6% (N=74), this was more likely to be true, and for the rest rather not true (9.5%, N=74) or not true at all (22.9%, N=74).

Most responders (70.3%, N=74) felt well informed about the recognition procedure. However, a third of workers (33.8%, N=71) having had their qualifications recognized, felt discriminated against by employees of the administrative bodies.

The average time between submission of documents and recognition of qualifications took an average of 6.37 months (SD=6.244, range: 0 – 24 months, N=65) and differed significantly between employees from within the EU (3.65 months; SD=3.316, N=17) and workers from non-EU countries (8.15 months, N=41), *(MWU Test: p=0.012).*

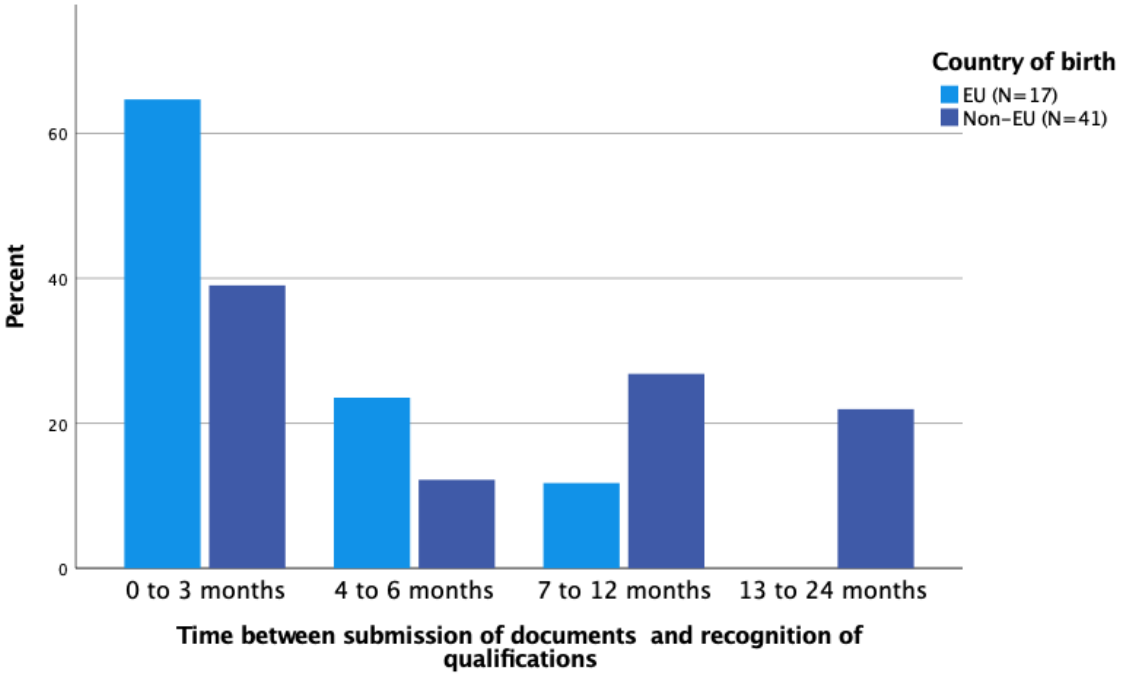

Figure 6: Time between submission of documents to local authorities and recognition of qualifications (in months): EU vs. non-EU

Language

Language skills

The data showed a variety of different native languages as shown in Figure 7.
Self-evaluated German language skills were generally good, as most participants indicated C1 or C2 levels and this was shown to have a significant impact on workplace satisfaction. Employees with direct patient contact showed higher levels of language competence than junior staff.

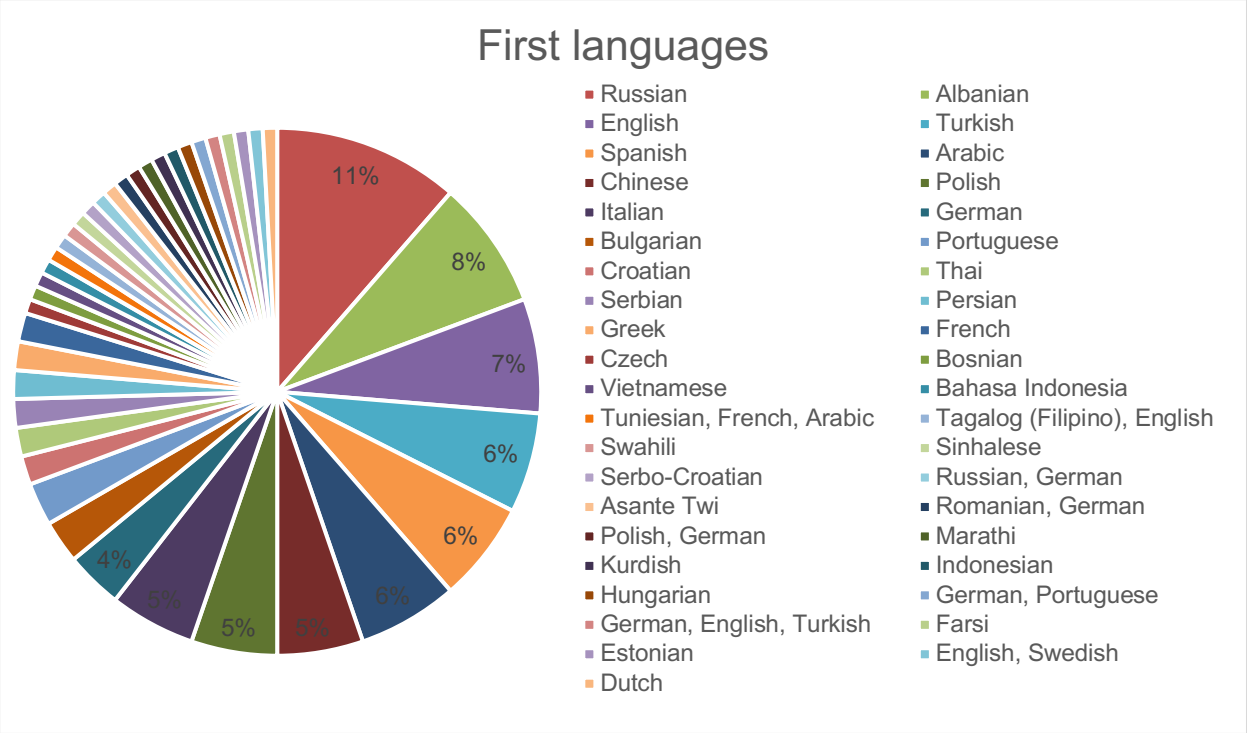

Figure 7: Percentages of indicated first languages (N=114)

Less than 10% (N=114) of participants indicated German as their first or one of two native languages. In some cases, more than one first language was entered.
56.8% (N=139) of participants had already started learning German in their home country. Of these, the majority indicated having learned German in private language schools (50.6%, N=79) as well as public (27.8%, N=79) and private schools (16.5%, N=79).
58% (N=50) of employees in nursing and medical / technical assistance and 55.6% (N=45) of clinicians were required to provide proof of German language skills by the German authorities, while this only applied for 20% (N=35) of junior staff.
Self-evaluated German language skills by the different groups of professions are shown in Figure 8.

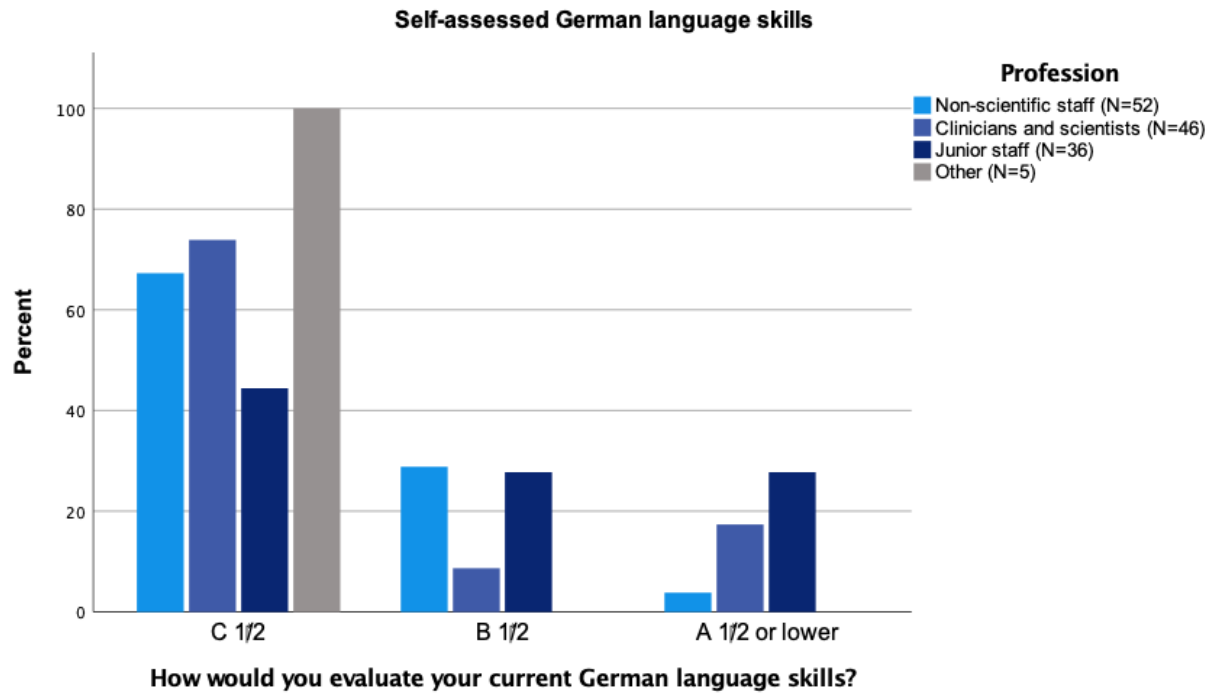

Figure 8: Self-estimated German language skills

Throughout all occupational groups, most responders reported C1 or C2 levels. However, the indicated German language skills of nurses, medical / technical assistants, and clinicians were significantly higher than that of junior staff (*χ^2: p=0.011, N=134).*

Participants with better German language skills generally were shown to be more satisfied with their current employment (*χ^2 Exact Fisher Test: p=0.005, N=141).*
Regarding language skills other than German, 36% (N=136) of respondents indicated having been asked to translate for colleagues within the past 6 months. Of these, 29.2% (N=48) were asked at least once per week.

Language courses

61.6% (N=138) of the participants attended a language course regardless of the requirements of the authorities. Most of these language courses took place in Germany (85%, N=85), and 20% (N=85) were organized by the Charité.
Only a few of these courses (16.9%, N=85) were job specific.
41.9% (N=74) of responding persons perceived financing the language course as challenging. Merely 16% (N=81) of participants received financial support in this context.

Language-related barriers

Difficulties at work due to a lack of German language skills were reported by half of all participants, related to various fields of work, and were shown to have a negative impact on work performance and professional skills.

Half of the participants (N=138) indicated difficulties in their professional life due to a lack of language skills. Of these, 52.2% (N=69) had those difficulties within the past 6 months and 70% (N=69) affirmed resulting negative consequences on their professional skills. Responders with higher levels of German language skills indicated language-related difficulties less frequently (*χ^2: p<0.001, N=138).*

No significant difference was found regarding sex / gender (*χ^2: p=0.641, N=138)*, profession *(χ^2 Exact Fisher Test: p=0.606, N=135)*, or between indicated birth countries within or outside of the EU (*χ^2: p=0.07, N=118)*.

Participation in a language course did not necessarily lead to less language-related difficulties at work. While 61.9% (N=84) of participants that attended a language course indicated difficulties due to their language skills, this was only affirmed by 30% (N=50) of those who did not attend a language course. (*χ^2: p<0.001, N=134)*

The German language skills of the 13 participants that took part in a guided programme (e.g., *Triple Win*) were significantly better than of others: 61.5% (N=13) at C1/2 level and 38.5% (N=13) at A1/2 or lower (*χ^2: p=0.014, N=137*) However, this was not shown to have a significant impact on whether participants experienced language-related difficulties (*χ^2: p=0.366, N=133).*

Concrete difficulties occurring due to a lack of language skills were documentation (68.1%, N=69), phone calls (59.4%, N=69), communication with colleagues (53.6%, N=69) as well as patients (20.3%, N=69), and conflictual discussions (43.5%, N=69).

Working environment

Satisfaction

The participants' satisfaction with various aspects of their workplace was generally high. Concerning workplace satisfaction, about 71.9% (N=141) of respondents were satisfied to very satisfied, 19.9% (N=141) partly, and 9.1% (N=141) not satisfied or very dissatisfied.

Similar distributions of frequencies were found regarding satisfaction with working hours, payment, working environment, and distribution of tasks within the team.

As shown in Figures 9 to 13, levels of satisfaction differed only in nuances between the three occupational groups. These differences did not show statistical significance regarding general workplace satisfaction *(χ^2 Exact Fisher Test: p=0.933, N=133)* as well as satisfaction with working hours *(χ^2 Exact Fisher Test: p=0.146, N=127)*, payment *(χ^2 Exact Fisher Test: p=0.229, N=125)*, working environment *(χ^2 Exact Fisher Test: p=0.232, N=132),* and distribution of tasks within the team *(χ^2 Exact Fisher Test: p=0.690, N=131)*.

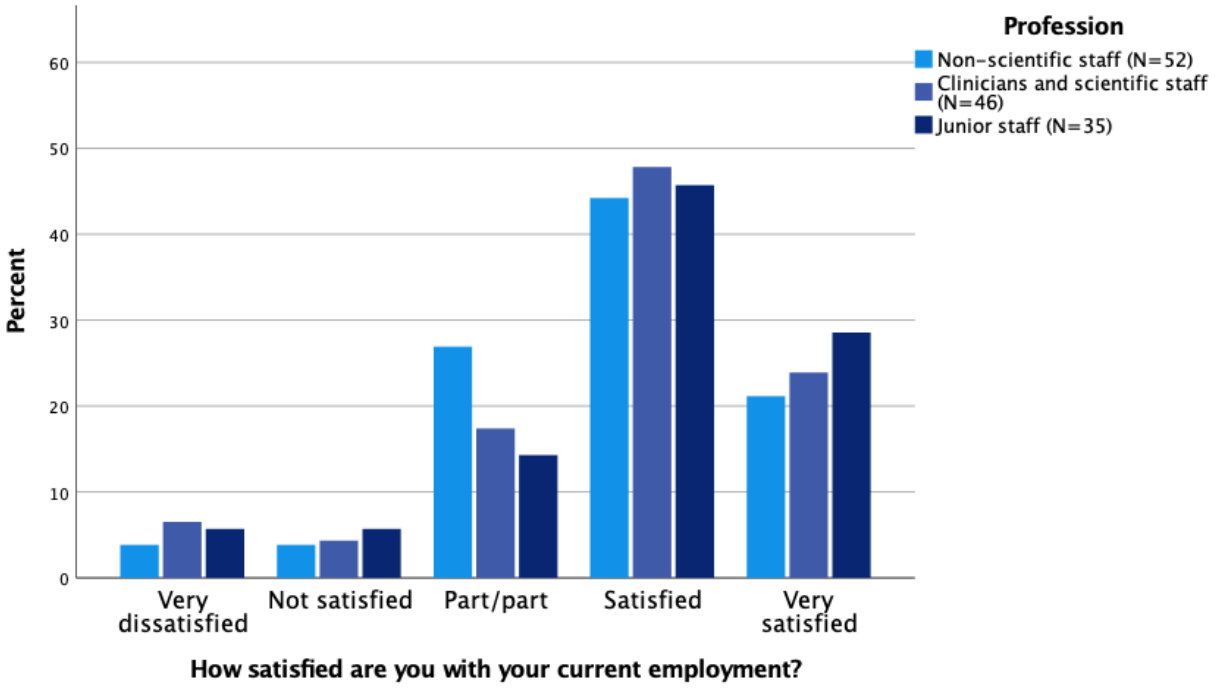

Figure 9: Workplace satisfaction (current employment)

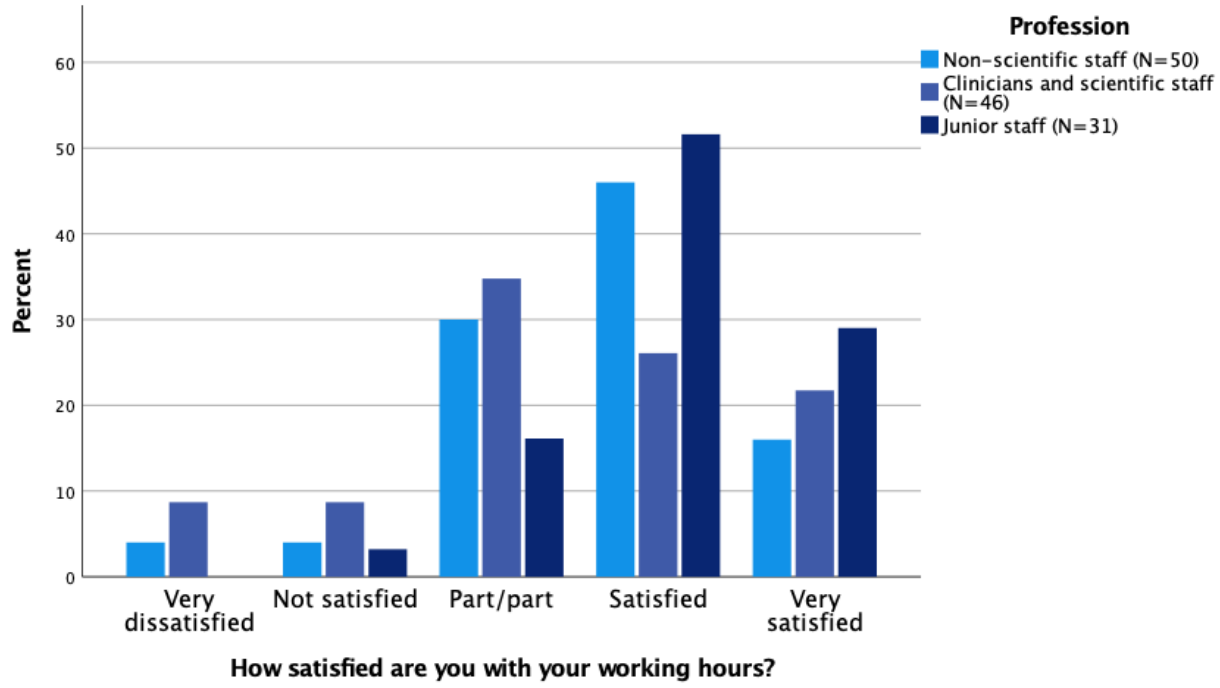

Figure 10: Workplace satisfaction (working hours)

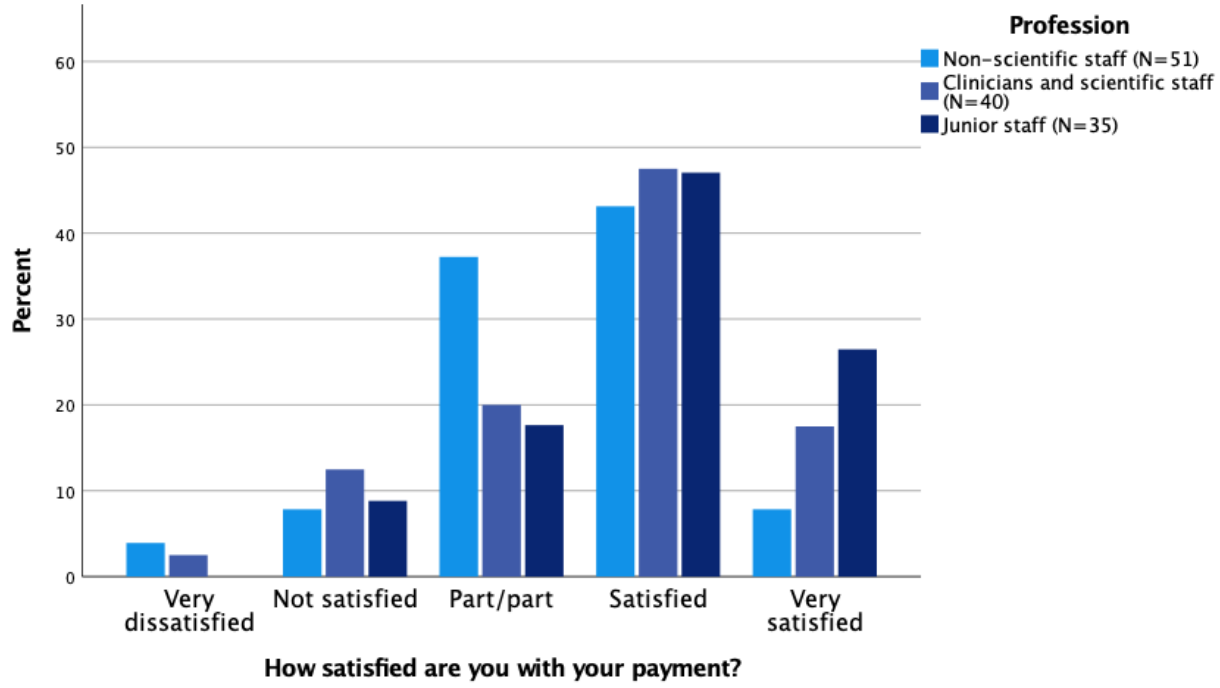

Figure 11: Workplace satisfaction (payment)

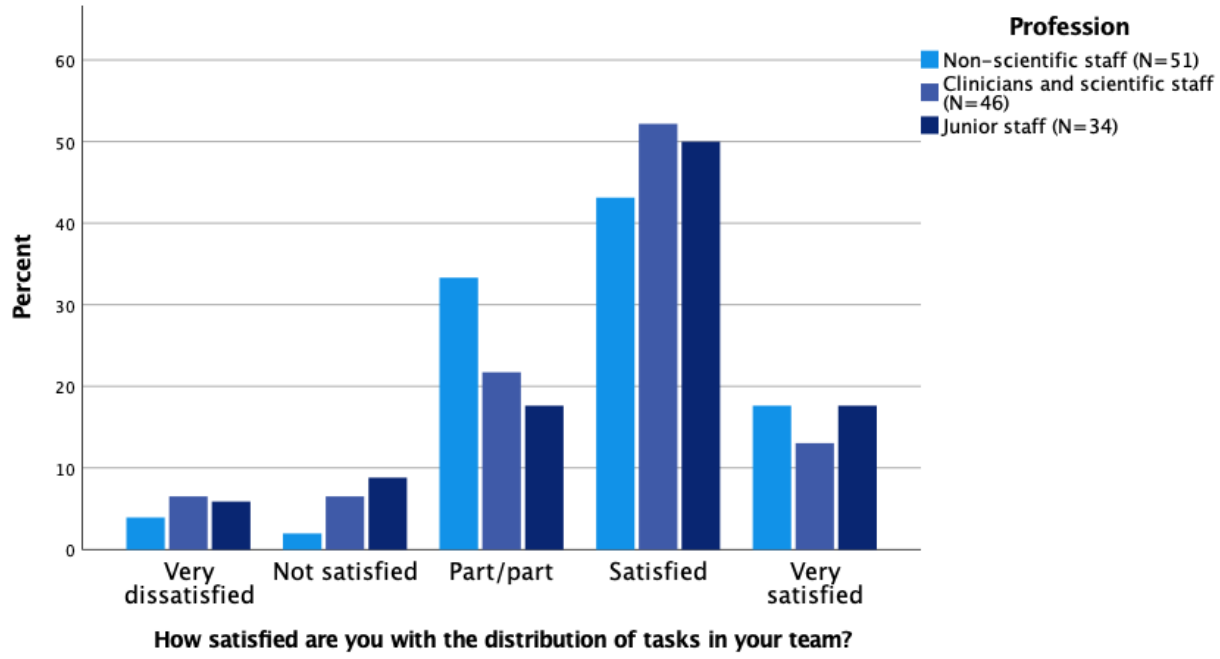

Figure 12: Workplace satisfaction (distribution of tasks)

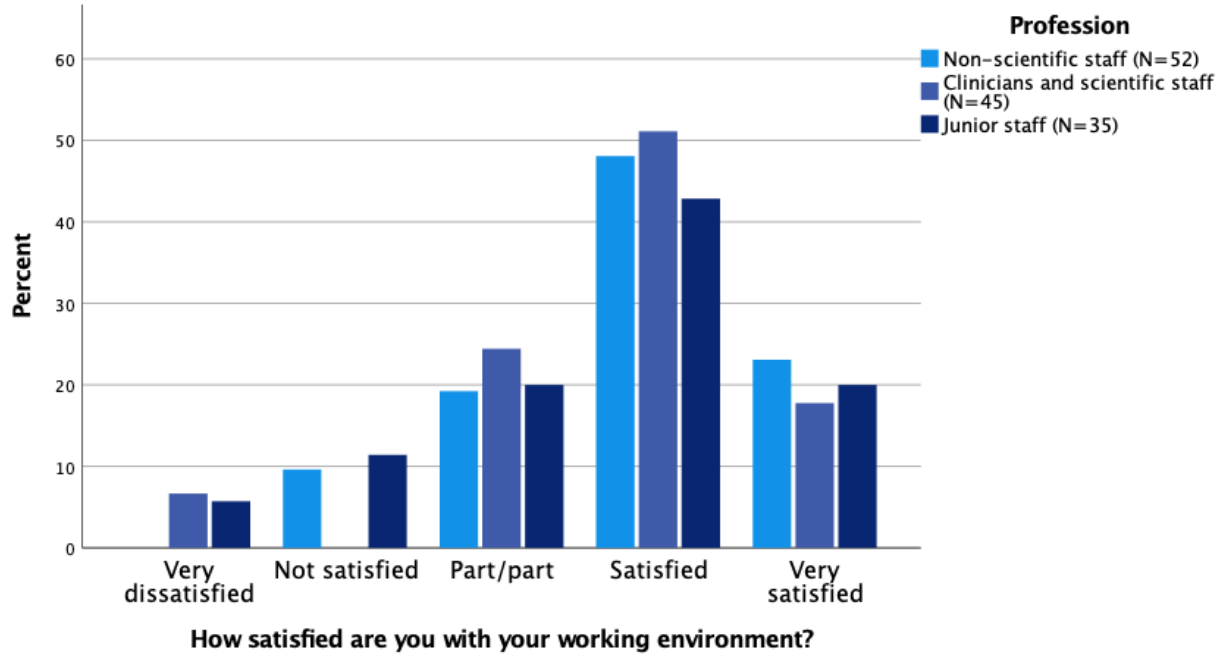

Figure 13: Workplace satisfaction (working environment)

Relationships at workplace

Concerning relationships at work, most participants indicated a respectful and appreciative approach among colleagues. But for many, there was a need for competition among peers.

When asked whether their opinion was respected and appreciated by colleagues within the past 6 months, 86.1% (N=137) of respondents stated that this was true or more likely to be true. For 13.9% (N=137), this was rather not true or not true at all.
Regarding the appreciation of work performance, 84.3% (N=140) felt appreciated by colleagues, 94.7% (N=95) by patients, and 77.9% (N=136) by superiors, while 15.7% (N=140), 5.3% (N=95) and 22.1% (N=136) respectively indicated that this was rather not or not true.

However, participants indicating negative experiences concerning relationships at work were shown to be less satisfied with their current employment.
A negative correlation with workplace satisfaction was found with disrespect and non-appreciation by colleagues *($r = -0.496$; $p<0.001$; $N=136$)* as well as non-appreciation of work performance by colleagues *($r = -0.547$; $p<0.001$; $N=139$)*, by patients *($r = -0.279$; $p=0.008$; $N=95$),* and by superiors *($r = -0.530$; $p<0.001$; $N=135$).*
21.3% (N=136) of participants affirmed having to prove themselves in front of colleagues. For 30.9% (N=136), this was more likely to be true, while less than half of responders (47.8%, N=136) denied this statement. A total of 36.7% (N=136) indicated having to prove themselves in front of patients.

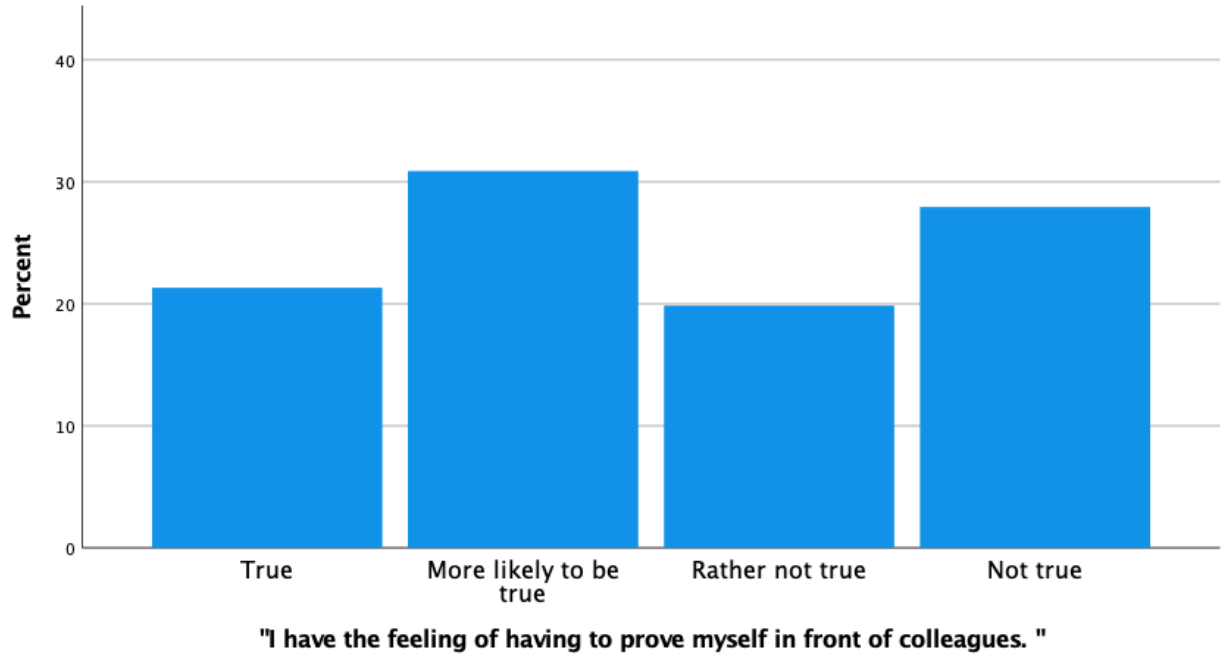

Figure 14: Evaluation of relationships at work during the 6 months prior to survey (N=136)

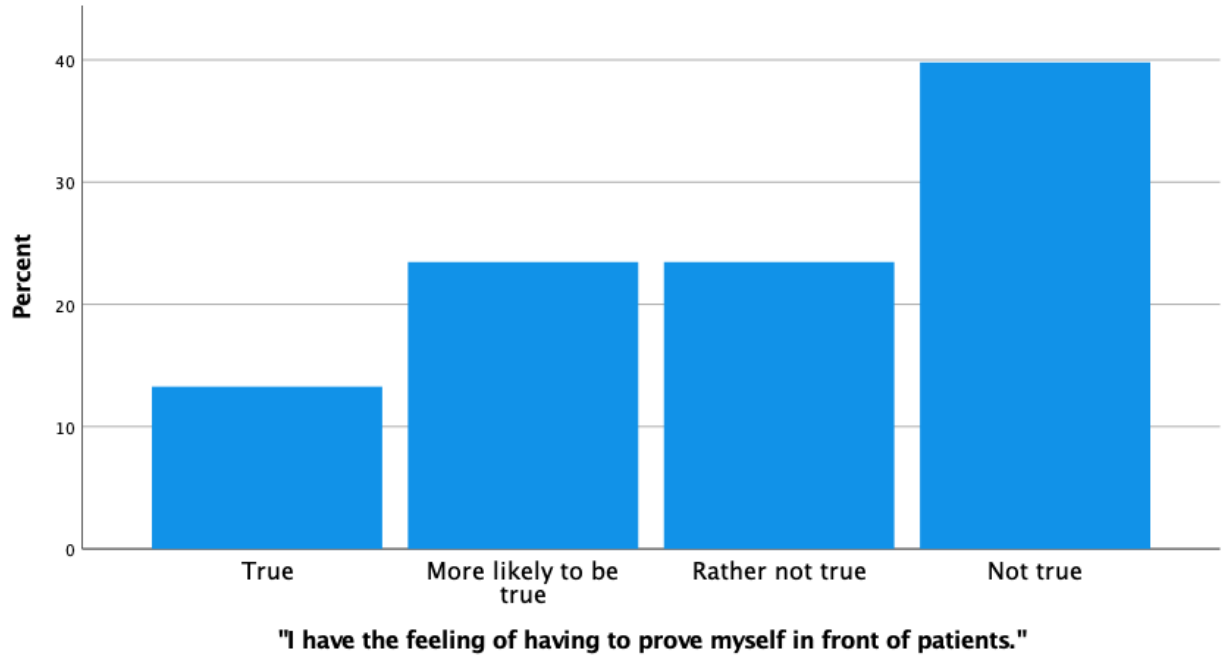

Figure 15: Evaluation of relationships at work during the 6 months prior to survey (N=136)

Discrimination experiences

Regarding discrimination experiences at work, the survey covered respondents' perception of discrimination by different actors (colleagues of the same professional level, colleagues from other professions, superiors, and patients) within the 6 months prior to participation.

As shown in Figure 16, as well as Tables 3 and 4, discrimination was experienced throughout all professional groups and was shown to have many different possible causes. The most frequently indicated discriminatory features were language, nationality, race / ethnicity, and sex / gender.

Discrimination by peers was reported significantly more often by non-scientific staff, including mainly nurses and technologists, than by scientific and junior staff. Regarding discrimination experiences by colleagues from other professions, patients, and superiors during the past 6 months, there was no significant difference between professional groups. Differences in sex / gender, country of origin, and self-evaluated German language skills were not shown to have a significant impact on discrimination experiences.

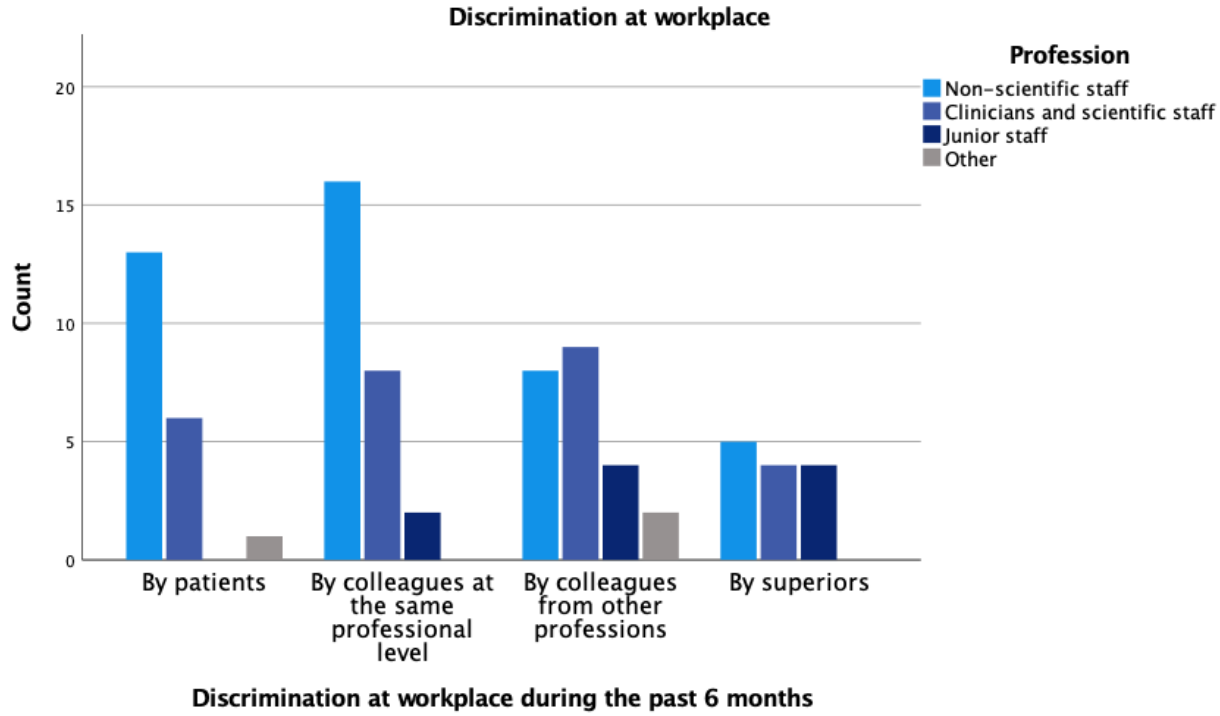

Figure 16: Number of indicated experiences of discrimination during the past 6 months

Discrimination experiences during the past 6 months	Yes	No	NA
	Number (%)	Number (%)	Number (%)
By colleagues at the same professionals level	26 (18.3%)	112 (78.9%)	4 (2.8%)
By colleagues from other professions	24 (16.9%)	109 (76.8%)	9 (6.3%)
By superiors	13 (9.2%)	119 (83.8%)	10 (7%)
By patients	20 (14.1%)	85 (59.9%)	37 (26.1%)

Table 3: Indicated experiences of discrimination during the past 6 months prior to survey

Discrimination experiences during the past 6 months	By colleagues at the same professional level (N=26)	By colleagues from other professions (N=24)	By superiors (N=13)	By patients (N=20)
	Number (%)	Number (%)	Number (%)	Number (%)
Age	4 (15.4%)	2 (8.3%)	-	6 (30%)
Physical appearance	4 (15.4%)	5 (20.8%)	-	6 (30%)
Disability	1 (3.8%)	-	-	-
Sex / gender	7 (26.9%)	3 (12.5%)	1 (7.7%)	4 (20%)
Name	4 (15.4%)	6 (25%)	-	5 (25%)
Economic / social class	4 (15.4%)	2 (8.3%)	2 (15.4%)	1 (5%)
Race / ethnicity	7 (26.9%)	10 (41.7%)	5 (38.5%)	11 (55%)
Religion	4 (15.4%)	1 (4.2%)	-	4 (20%)
Sexual orientation	-	-	-	2 (10%)
Language	13 (50%)	15 (62.5%)	6 (46.2%)	5 (25%)
Nationality	8 (30.8%)	8 (33.3%)	8 (61.5%)	6 (30%)
Other	2 (7.7%)	1 (4.2%)	2 (15.4%)	-

Table 4: Indicated discriminatory features

Discrimination by colleagues

When asked whether the participants had experienced discrimination by colleagues from the same professional level during the past 6 months, 26 of all 142 participants (18.3%) answered 'Yes', 112 (78.9%) denied this statement, and 4 (2.8%) did not give an answer to this question.

Half of the respondents who experienced discrimination by colleagues (N=26) stated this was based on language. Almost a third (30.8%, N=26) indicated having experienced discrimination due to nationality and a quarter (26.9%, N=26) due to race / ethnicity as well as sex / gender. Age, physical appearance, name, social class, and religious beliefs were ticked off by 15.4% (N=26) of respondents. Two participants indicated 'other' factors, and one referred to disability or chronic disease. None of the respondents indicated sexual orientation as a discriminatory feature.

Concerning the number of employees who had experienced discrimination by colleagues from the same profession, there was a significant difference between professions*:* While almost a third of employees in nursing and medical / technical assistance affirmed this statement (32%, N=50), this was only true for 12.3% of scientific staff (N=81), *(χ^2: p=0.006).*

No significant difference between subgroups was found regarding sex / gender (*χ^2: p=0.997)*, country of origin (EU vs. non-EU states, *χ^2: p=0.882*) or German language skills (*χ^2 Exact Fisher Test:p=0.439)*.

A slightly smaller number of responders indicated discrimination experiences by colleagues from other professions (16.9%, N=142), while 6.3% (N=142) did not give an answer to this point. To the question on what the discriminatory behaviour was based on in this context, 62.5% (N=24) indicated language, 41.7% (N=24) race / ethnicity, 33.3% (N=24) nationality, 25% (N=24) name and 20.8% (N=24) physical appearance. 12.5% (N=24) indicated sex / gender as a discriminatory feature, less than 10% (N=24) indicated age, social class, religious beliefs, or others, and none referred to disability and sexual orientation.

Regarding discrimination experiences by colleagues from other professions during the past 6 months there was no significant difference between professional groups (*χ^2 Exact*

Fisher Test: p=0.382), sex / gender (*χ²: p=0.558),* country of origin (EU vs. non-EU states: *χ²: p=1.0*) or German language skills (*χ² Exact Fisher Test: p=0.704)*.

Discrimination by superiors

Discrimination by superiors was affirmed less frequently (9.2%, N=142). The vast majority (83.8%, N=142) denied experiences of discrimination in this context and 7% (N=142) did not give an answer.

In terms of discriminatory features, nationality (61.5%, N=13), language (46.2%, N=13) and race / ethnicity (38.5%, N=13) were indicated most often. A few participants named social class (15.4%, N=13), sex / gender (7.7%, N=13) or 'other' (15.4%, N=13) as a possible explanation. Other factors, like age, disability, religion, and sexual orientation were not mentioned in this context.

With regard to discrimination experiences by superiors during the past 6 months there was no significant difference between professional groups (*χ² Exact Fisher Test: p=1.0),* sex / gender (*χ² Exact Fisher Test: p=1.0),* country of origin (EU vs. non-EU states: *χ² Exact Fisher Test: p=0.716*) or German language skills (*χ² Exact Fisher Test: p=0.747)*.

Discrimination by patients

20 employees (14.1%, N=142) reported recent discrimination experiences by patients, while this was denied by 59.9% (N=142). Since not all professional groups have patient contact, this question was not answered by a quarter of participants (26.1%, N=142).

Most frequently, these discrimination experiences were based on race / ethnicity (55%, N=20), nationality, age, or physical appearance (30%, N=20), name or language (25%, N=20), religion or sex / gender (20%, N=20), and in a few cases on sexual orientation (10%, N=20), and social class (5%, N=20). Disability and other possible factors were not reported.

Similar to the cases above, no significant differences were found between subgroups regarding profession (*χ² Exact Fisher Test: p=0.110),* sex / gender (*χ²: p=0.100),* country of origin (EU vs. non-EU states: *χ²: p=0.100*) or German language skills (*χ² Exact Fisher Test: p=0.343)*.

Impacts of workplace discrimination

For most participants, the above-mentioned experiences of discrimination were shown to have a negative influence on self-confidence and satisfaction at work, but not as frequently on their work performance.

Impact on self-confidence

Of all participants indicating experiences of discrimination by colleagues from the same professional level (N=26), more than half reported a negative impact on self-confidence during the past 6 months. For 7.7% (N=26) this was true and for another 50% (N=26) more likely to be true. 42.3% (N=26) stated this was rather not or not true.

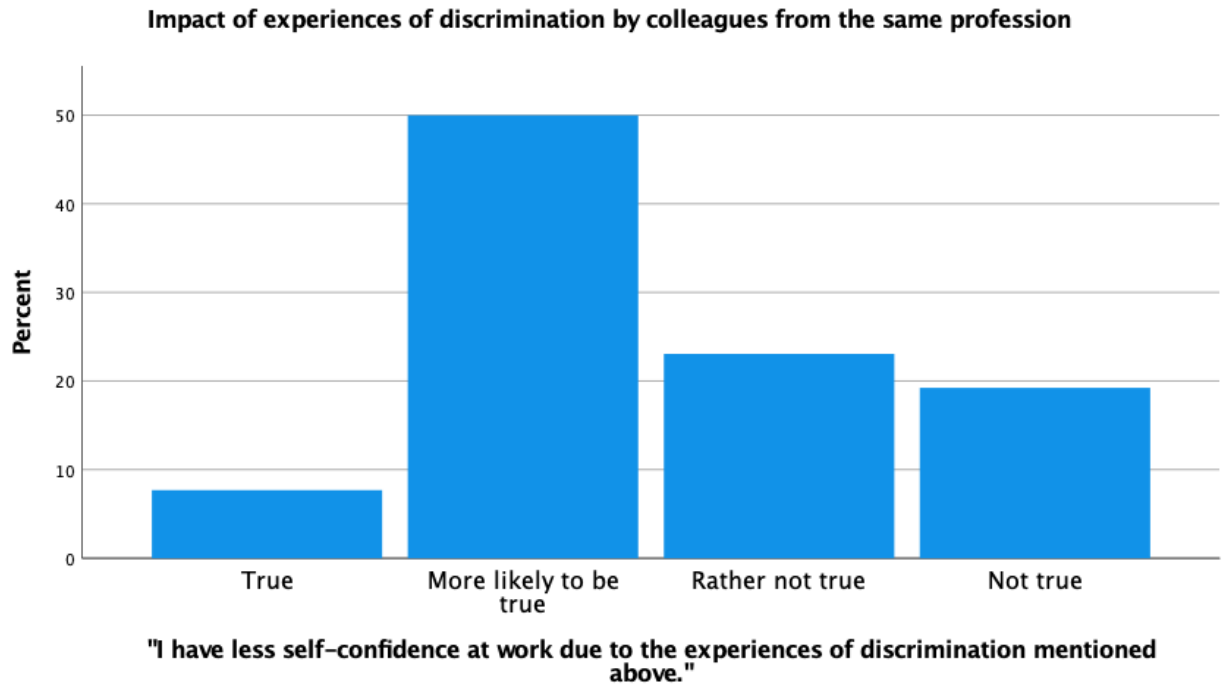

Figure 17: Impact of discrimination by colleagues from the same profession on self-confidence during the 6 months prior to survey (N=26)

A negative influence on self-confidence within the past 6 months was also indicated by the majority of participants that reported discriminatory behaviour by colleagues from other professions (62.5%, N=24), and by superiors (61.5%, N=13). This was only true or more likely to be true for 30% (N=20) of employees with experiences of discrimination by patients.

Impact on work performance

The statement that the indicated experiences of discrimination by colleagues from the same profession led to a poorer professional performance during the past 6 months was true for 7.7% (N=26) of responders actually experiencing discrimination by peers and more likely to be true for 19.2% (N=26). For 50% (N=26) this was rather not true and definitely not true for 23.1% (N=26).

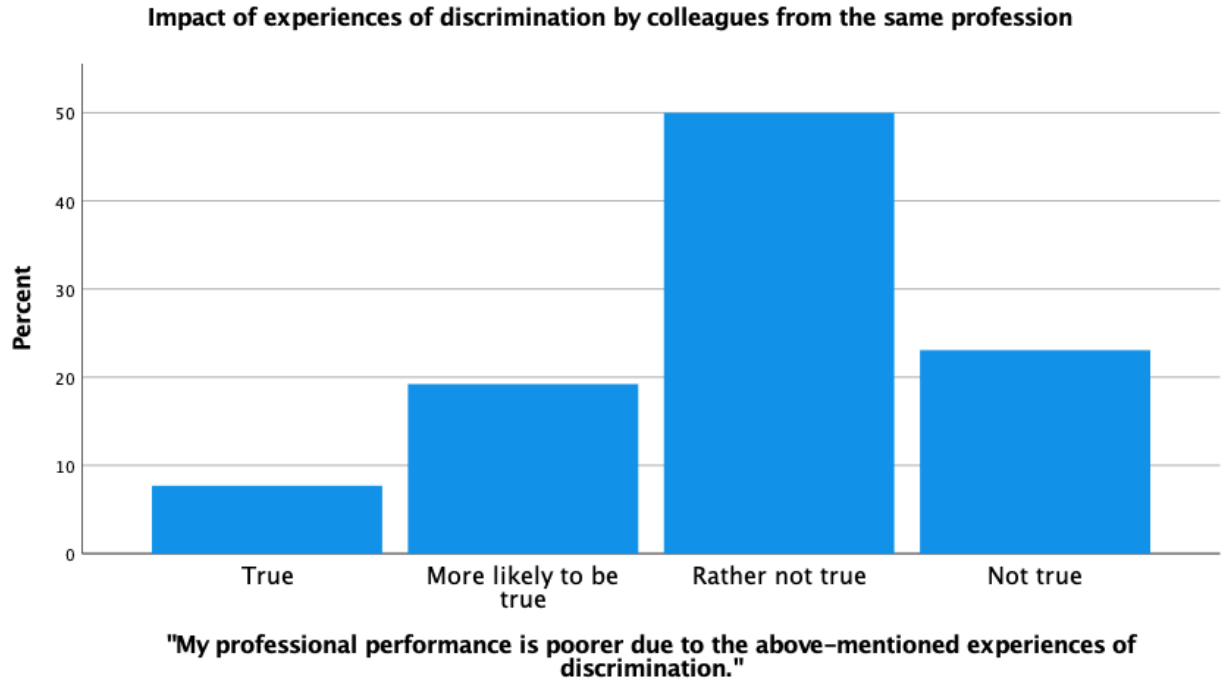

Figure 18: Impact of discrimination by colleagues from the same profession on work performance during the 6 months prior to survey (N=26)

Regarding discrimination by colleagues from other professions, negative impacts on recent work performance were affirmed by 25% (N=24) of participants and by 30.8% (N=13) in the context of discrimination by superiors. Concerning discriminatory behaviour by patients, none of the participants stated a negative impact on work performance.

Correlation analysis showed that in case of indicated experiences of discrimination, workplace satisfaction was significantly lower with regard to discrimination by colleagues of the same professional level *(p=0.006),* colleagues from other professions *(p=0.003)* and superiors *(p=0.018)*. No significant difference was found regarding discrimination by patients *(p=0.168).*

Perception of equality at work

In addition to experiences of discrimination, participants were asked whether they are treated equally to their colleagues regarding various formal and non-formal aspects of their work. The survey results show that a perception of inequality was indicated more frequently than explicitly named discrimination and had a negative impact on workplace satisfaction.

Most foreign-born employees perceived equal treatment concerning their contract (81.2%, N=138), weekly working hours (90.7%, N=140), working times (84.2%, N=120), appreciation of work performance by colleagues (82%, N=133) and patients (89.9%, N=99), and the opportunity to express one's opinion in discussions (80%, N=135). Fewer participants indicated equal treatment with regard to payment (79.4%, N=136), distribution of tasks within the team (78.1%, N=137) and the appreciation of work performance by superiors (75%, N=132). Merely 61.2% (N=129) perceived equal treatment in the context of promotion and opportunities for further training.

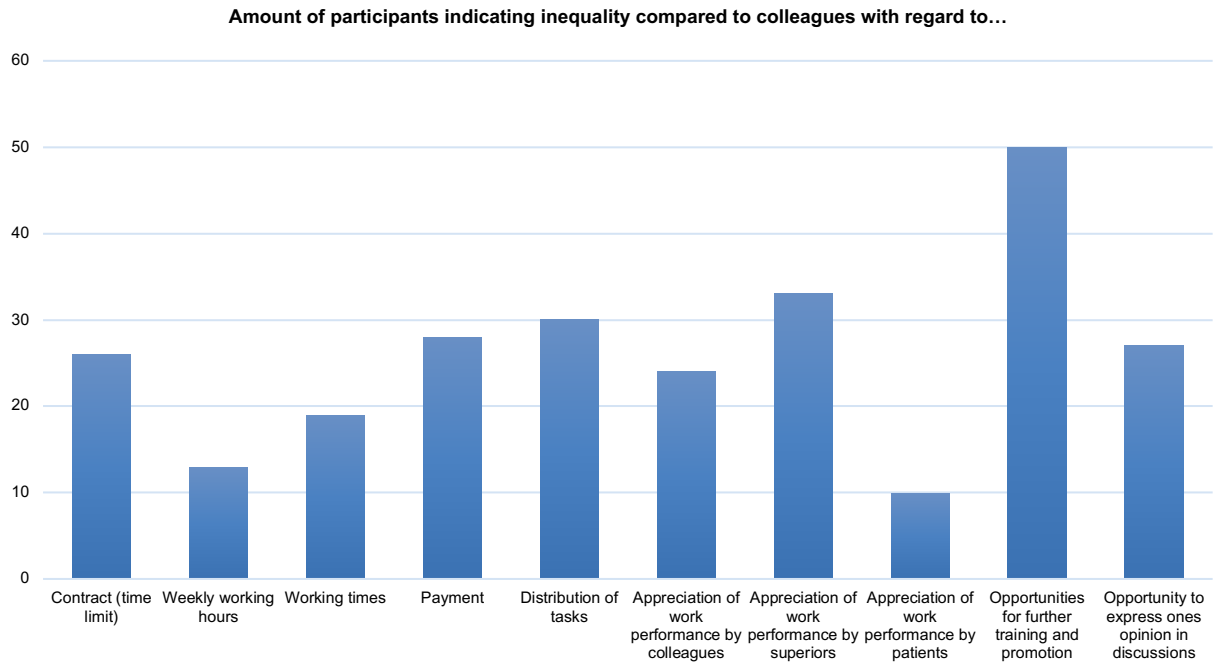

Figure 19: Number of participants indicating inequality at work

As shown in Table 5, participants indicating equal treatment concerning their contract, weekly working hours, working times, the distribution of tasks within the team, the appreciation of work performance by colleagues and superiors, the opportunity to express

their opinion in discussions, and opportunities for further training and promotion were shown to have a significantly higher satisfaction with their current employment in general and with their working environment.

Equality in the context of appreciation of work performance by patients showed a significant difference in satisfaction with the working environment. Perception of equal payment did not show any significant differences in workplace satisfaction, except from satisfaction with payment.

Responders with the perception of equal treatment regarding working hours showed significantly higher satisfaction with their weekly working hours. The same correlation existed regarding payment and distribution of tasks.

Satisfaction with / equality regarding	Current employment	Working environment	Working hours	Payment	Distribution of tasks
Contract	**0.033**	**0.050**	-	-	**-**
Weekly working hours	**0.010**	**0.020**	**0.020**	-	**-**
Working times	**0.001**	**0.004**	**-**	**-**	**-**
Payment	0.231	0.089	**-**	**0.001**	-
Distribution of tasks	**<0.001**	**<0.001**	**-**	**-**	**<0.001**
Appreciation of work performance by colleagues	**0.011**	**<0.001**	**-**	-	**-**
Appreciation of work performance by superiors	**<0.001**	**<0.001**	**-**	**-**	**-**
Appreciation of work performance by patients	0.313	**0.030**	**-**	**-**	-
Opportunities for further training and promotion	**<0.001**	**<0.001**	**-**	-	**-**
Opportunity to express one's opinion in discussions	**0.001**	**<0.001**	**-**	**-**	**-**

Table 5: Perception of equal treatment and workplace satisfaction

Exact Test by Fisher-Freeman-Halton, results of Monte Carlo Simulation (2-sided, based on 100,000 sampled tables)

Private life

Of all participants, a quarter were in a partnership and half of respondents were married or in a registered partnership. In most cases (90.4%, N=104), the partner lived in Germany as well. In 10 cases of 104, the partner lived abroad, mostly in the country of origin. Of all participants in a partnership, a quarter had to support their partner financially (25.2%, N=103), and this was indicated significantly more often by men (45.7%, N=35) than by women (15.9%, N=63), *(χ^2: p=0.001).*

A third of all participants indicated having children (33.6%, N=137), half of which were 0 to less than 10 years old. Most of the participants' children lived with them in Germany (95.7%, N=46).

35.5% of respondents (N=141) stated having to co-finance others with their income. This most often referred to parents (70.8%, N=50) and siblings (24.6%, N=50). Two thirds (68.7%, N=48) of the financially supported relatives lived in the indicated country of origin, 8.3% (N=48) somewhere else abroad, and 25% (N=48) in Germany.

Apart from financial assistance, 14.4% (N=132) of respondents were involved in the support or care of friends and relatives, especially their own parents. The average time estimated for this was about 8 hours per week (SD:7.321, range: 1 to 25 hours, N=17).

The number of persons reporting financial *(χ^2: p=0.712, N=135)* and non-financial support *(χ^2: p=1.0, N=128)* of relatives did not differ significantly between men and women.

Only 36.3% (N=135) of participants had additional old-age insurance (e.g., real estate, private pension, or life insurance).

Discrimination experiences

Discrimination experiences in public (shops, public transport, public places, etc.) in Germany during the past 6 months were indicated by 29% (N=141) of participants and thus more frequently than in work contexts. The most reported discriminatory features were physical appearance (48.8%, N=141), race / ethnicity (48.8%, N=141), language (34.1%, N=141), nationality (24.4%, N=141), sex / gender (17.1%, N=141), and religion (14.6%, N=141). Other factors, such as name (9.8%, N=141), age (7.3%, N=141), sexual orientation (7.3%, N=141), social class (4.9%, N=141), and disability (2.4%, N=141) were reported less frequently.

Discrimination in their personal social environment (e.g., by friends and acquaintances) was indicated by merely 9.2% (N=141). In this context, discriminatory behaviour was mainly based on race / ethnicity (61.5%, N=141), language (53.8%, N=141), and nationality (46.2%, N=141).

82.6% (N=121) of participants intended to stay in Germany permanently, while 17.4% (N=121) were planning on leaving, mostly aiming at returning to their home country (78.9%, N=19).

Supporting structures

Institutional support

There are various institutions at Charité University Hospital to support immigrated staff in their professional and social familiarization in Germany. However, few institutions were perceived as being helpful and many were unknown to the participants.

Institutional support	Extremely helpful	Very helpful	Some-what helpful	Only partly helpful	Not helpful at all	Un-known	Total
Welcome Centre	13 (13.1%)	10 (10.1%)	7 (7.1%)	3 (3%)	8 (8.1%)	58 (58.6%)	99 (100%)
Commission-er for Integration	4 (4.1%)	9 (9.3%)	7 (7.2%)	0 (0%)	11 (11.3%)	66 (68%)	97 (100%)
Human resources division	4 (4.4%)	11 (12.1%)	11 (12.1%)	7 (7.7%)	17 (18.7%)	41 (45.1%)	91 (100%)
Professional and staff council	2 (2.2%)	8 (8.8%)	6 (6.6%)	9 (9.9%)	10 (10.9%)	56 (61.5%)	91 (100%)
Trade union	1 (1.1%)	3 (3.4%)	4 (4.5%)	1 (1.1%)	13 (14.7%)	66 (75%)	88 (100%)

Table 6: Evaluation of institutional support structures

As shown in Table 6, the Welcome Centre offered the most support, being extremely or very helpful for 23.2% (N=99), and somewhat or partly helpful for 10.1% (N=99) of participants. It was perceived as not being helpful at all for less than 10% (N=99). However, it was unknown to more than half of respondents (58.6%, N=99).
The human resources division was perceived as extremely or very helpful by 16.5% (N=91), partly or somewhat helpful by 19.8% (N=91) and not helpful at all by 18.7% (N=91). Additionally, this institution was unknown to nearly half of participants (45.1%, N=91). The commissioner for integration, professional and staff council as well as trade unions were only helpful for less than 20% each and unknown to most respondents.

Non-institutional support

Contrasting observations were made regarding private support. Many participants indicated having received support by various people, most frequently by friends and acquaintances (67.1%, N=140), colleagues (59.3%, N=140) as well as family (45.7%, N=140) and supervisors (32.9%, N=140). 10% (N=140) indicated having received no support or did not need any assistance.
The fields that respondents were mainly supported in were the following: social and everyday life in Berlin, stated by 63.8% (N=127), formalities (53.5%, N=127), administrative procedures (49.6%, N=127), job induction training (40.2%, N=127), search for accommodation (30.7%, N=127), and vocational and further training (22%, N=127). Help in other fields, for example mobility, transport, childcare, and education of children was indicated less frequently.
When asked what else was helpful during the process of integration, networking with other international colleagues was the most frequent answer (43.1%, N=130). Some stated social networks or online communities (28.5%, N=130) and translation programmes (18.5%, N=130) as being helpful.

Further support

Further support was demanded by 78.3% (N=129) of participants. Only 21.7% (N=129) did not wish to receive more support. Participants were then able to indicate in which areas they would have needed more support, with multiple answers possible. The most frequent answers were formalities like the work contract and recognition of qualifications

(43.4%, N=127), job specifics such as vocational education and further training (38.8%, N=127) and job induction (26.4%, N=127), administrative procedures (38%, N=127) and acquisition of language skills (31%, N=127), followed by non-work-related aspects like search for accommodation (26.4%, N=127), and social life in Berlin (17.8%, N=127). Only a few participants needed further support in childcare (5.4%, N=127), mobility or transportation (3.9%, N=127), school or education of children (3.1%, N=127), or others (1.6%, N=127).

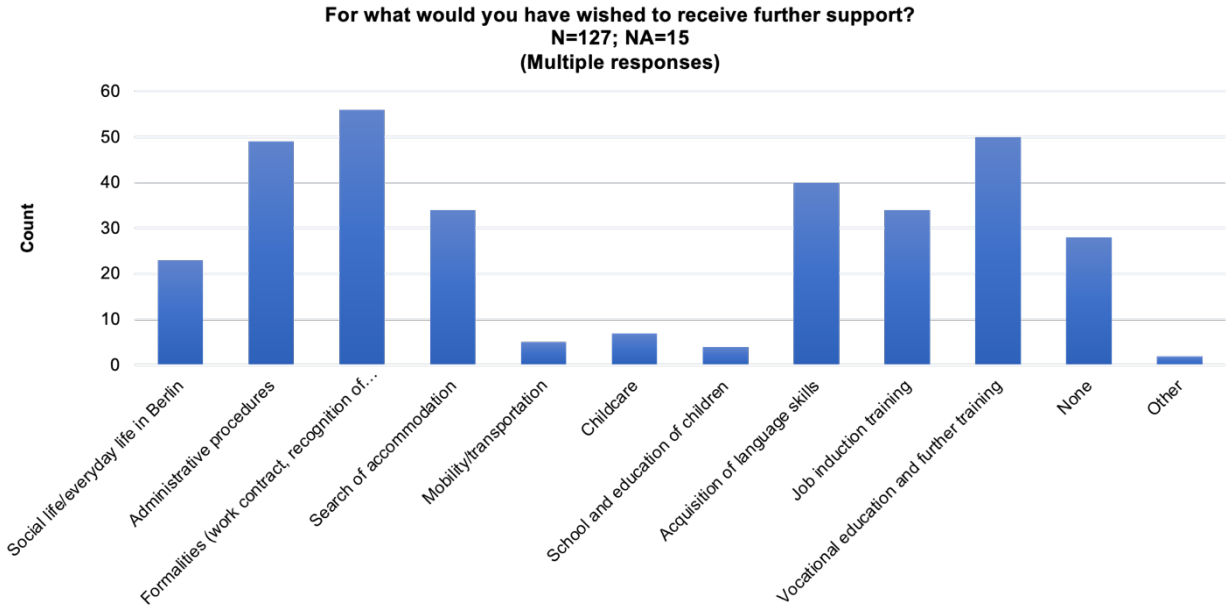

Figure 20: Number of participants demanding further support

Options for action

The second part of the survey, consisting of open-ended questions on options for action towards better workplace integration, was completed by 16 participants.

The most frequent suggestions to improve workplace satisfaction were job-specific language courses, provision of information in English, administrative support including communication with authorities, taxes, health insurance, finances, etc., and inclusion of foreign-born employees in operational strategies for integration.

Further propositions were a higher share of international and female staff in leading functions and decision-making positions as well as more communication and transparency with colleagues and supervisors. It was also proposed to provide information on how to react to discriminatory behaviour (whom to contact, how to cope with experiences of discrimination, etc.) and to offer job induction for international employees.

Other suggestions were possibilities to have regular consultations in English, and the provision of financial and technical support. One employee suggested friendly break and staff rooms for more interaction between colleagues including those from different professions.

Concerning their private life, a few participants wished for more support in housing (renting apartments and formalities), health (e.g., medical appointments), and infrastructure.

When asked what could be learned from other international institutions, responders demanded more information on supporting structures, provision of all relevant information in English, more support with formalities as well as social and daily life, detailed orientation programmes, more effort on respecting cultural differences and appreciation of workers, and social gatherings specifically for international employees.

Discussion

The aim of this study was to assess the working and living conditions of foreign-born health care personnel at the Charité University Hospital Berlin as a basis for establishing concrete measures to facilitate the professional life of international employees in the German health sector.

Major findings

More than half of responders were employed as scientific staff, including mainly clinicians and scientists as well as junior staff. Non-scientific staff, including nurses and technologists made up for more than a third of participants.
The participants were highly qualified, with about three-quarters of responders having a university degree.
Almost 20% felt overqualified for their current employment. This rate is surprisingly low compared to data from OECD countries, suggesting overqualification in 35% of high-skilled immigrant workers, as compared to 25% with those native-born.(59) In Germany, twice as many foreign-born workers are overqualified compared to native-born workers.(59) However, it must be considered that the study population consisted exclusively of employees in highly qualified professions and, therefore, skilled workers whose qualifications were not recognised after immigration were not included in the study.

More than half of participants obtained their professional qualifications abroad and, therefore, had to go through a recognition procedure. This procedure was perceived as transparent and smooth by most responders. However, one third of the participants indicated experience of discrimination during recognition processes, e.g., by local authorities. The duration of the recognition process took up to 24 months and was significantly longer for workers from non-EU states.

Self-evaluated German language skills were generally good, as most participants indicated C1 or C2 levels, and this was shown to have a significant impact on workplace satisfaction. Employees with direct patient contact showed higher levels of language competence than junior staff.
Difficulties at work due to a lack of German language skills were reported by half of all participants, even though most responders already had language competence before

their arrival and additionally participated in a language course in Germany. Only a few language courses were job specific and financial support was given less frequently than needed. Language-related difficulties related to various fields of work and were shown to have a negative impact on work performance and professional skills.
Concerning other language skills, participants showed a wide range of different native languages, and more than a third of respondents were frequently being asked to translate for colleagues.

Participants' satisfaction with their current employment, working hours, payment, and teamwork was generally high. The working environment and professional relationships were highly valued and were shown to impact on general workplace satisfaction. Still, for many there was a need for competition among peers.

Experiences of discrimination within the past 6 months existed for all occupational groups but were indicated significantly more often by nurses and technologists. Discriminatory behaviour was most often caused by colleagues from the same or other professions and patients. The experienced discrimination was based on various factors, mainly on language, nationality, race / ethnicity, and sex / gender. Discrimination experiences (except by patients) were shown to have a negative influence on self-confidence and satisfaction, but not as much on professional performance at work.
The perception of inequality was indicated by an even higher number of participants and showed a negative correlation with general workplace satisfaction.

Most support was provided by individuals from private or professional contexts and social networks. Institutional support was either not accessible or not helpful for most participants. The majority of respondents demanded further support, especially regarding formalities, administrative procedures, further training, and acquisition of language skills.

Comparison with other studies

Despite rapidly growing numbers of health workers migrating to Germany, there is a lack of institutionalized research on the working and living conditions of foreign health care personnel. In other countries like the UK, systematic data collection on discrimination and racism in public institutions has been in place for some time. The NHS (National Health

Service, England), for example, requires all health care providers to implement the ‘Workforce Race Equality Standard’ (WRES). Since 2016 an annual report on several indicators of workforce equality has been published in order to improve equality in treatment and career opportunities for employees from 'Black and minority ethnic (BME) backgrounds'.(60)

The data collection is thus not based on place of birth, but rather on assignment to a racialized group of people, which has the advantage that all employees who potentially experience racism and discrimination based on their ethnic background are included.

The latest WRES report for 2021 indicates a slightly higher amount of BME staff in the NHS (22.4%) than foreign-born staff at the Charité (18.3%). 12.6% of these had a board membership, which is, however, already an improvement to 2016, at which point it was only 7.1%.(60)

The collected data suggests that white staff were 1.14 times more likely to access job-related training than BME staff. In addition, only 69.2% of BME staff believed they had had ‘equal opportunities for career progression or promotion’, while this was affirmed by 87.3% of white staff.(60)

28.9% of BME staff reported bullying, harassment or abuse from patients, relatives and the public and a similar amount (28.8%) from staff in the past 12 months. In both cases, the number of white staff affirming these experiences was lower (25.9% and 23.2% respectively). Personal experiences of discrimination at work from either colleagues or superiors was indicated by 16.7% of BME staff and much less frequently by white staff (6.2%).(60)

Data from the NHS are of course not directly transferable to the situation at the Charité due the above-mentioned differences in selection criteria as well as socio-cultural, legal and health care system differences between Germany and England. Therefore, a few existing studies from German-speaking countries will be used for comparison.

Qualitative research on the ‘*Workplace Integration of Migrant Health workers in Germany’* in two hospitals in Hamburg by V. Kovacheva and M. Grewe from 2015 (53) analysed integration on a systemic and individual level by interviewing different stakeholders, such as employers, employees, trade unions, and professional associations. The interviewed health workers had their own experience of immigration and qualifications that were either foreign-acquired or obtained in Germany.

The highest shares of migrant workers in the hospitals investigated were found in non-medical jobs like cleaning, catering, and logistics, or in research as well as in medical / technical assistance, corresponding to research showing that foreign-born employees in OECD countries work over-proportionally in low-qualified occupations.(59)
Similar to the results from Charité staff, trained nurses were mainly employed permanently, while doctors and researchers usually had temporary contracts. Until achieving level B2 in German, many nurses were employed as nursing assistants.(53)

Concerning labour market access, especially non-EU citizens complained about the heavy burden of administrative formalities for receiving a work permit and recognition of qualifications, as they were lacking transparency and standards. For some it took several years to receive a work permit, and consequently not being able to work for this period.
As for the recognition process, major improvements were reported since the implementation of the 'Blue Card' in 2012, enabling doctors from non-EU countries to obtain a full license to practise.
However, applying for recognition of foreign-acquired qualifications was perceived as very challenging, especially in case of qualifications that do not exist in Germany as such, or in non-academic professions not covered by the Recognition Act of 2012, as well as being highly dependent on the person in charge.
In consequence, some had to start working in lower-qualified positions until their qualifications were accepted, e.g., nurses working as nursing assistants, doctors in the status of guest doctors. Some prepared for examinations, partly doing specific training courses that were appreciated to some extent, though claimed to be very time- and money-consuming. Others changed their professional orientation completely after migration.(53)

Correspondingly to the present study, the main challenges experienced by migrant health professionals during workplace integration were due to lack of language skills, especially concerning job-specific language, leading to communication problems, less self-confidence, and reduced work performance. As also demonstrated by quantitative data from Charité staff, problems occurred most frequently in documentation and phone calls. Language courses were perceived as crucial for adequate work performance, but were often insufficient and expensive. They were only financed by the employer or other

institutions in a few cases. These observations could also be confirmed by results of the present study.(53)

Further challenges in adapting to a new workplace were cultural and work-related differences to their home country as well as low acceptance of the time needed to adapt to new procedures and the acquisition of language skills by colleagues and superiors.(53)

Concerning workplace satisfaction, wages were generally perceived as sufficient, but many foreign workers reported dissatisfaction with a high workload, especially for nurses due to staff shortages, resulting in overtime and shift work. In the current study, in contrast, participants' satisfaction not only with their payment, but also with their current employment, working hours (including weekend and night shifts) and teamwork was generally high.(53)

The perceived assessment of relationships with colleagues and in their private life varied strongly between workers interviewed. Mistrust and prejudices concerning skills by colleagues and patients as mentioned above as well as feelings of unacceptance were challenging. There were cases of racism and discrimination in job interviews as well as reported distance in communication with non-migrant colleagues.(53)
These experiences of discrimination enumerated individually by the study could be quantified by the data from the Charité, where experiences of discrimination within the past 6 months existed for all occupational groups. Here, discriminatory behaviour was mainly caused by peers, colleagues from other professions or patients and less often by superiors.

Facilitators for integration at work were multicultural teams, as the presence of other foreigners led to more acceptance and support as well as good relationships with colleagues, equality between colleagues, openness, and intercultural sensitisation.(53)

Concerning private life, challenges were reported in finding housing and social contacts. Similarly to the present results on supporting structures, off-job relationships with colleagues and pre-existing family networks facilitated the process of integration.
Like the results from Charité staff, indicating the most support being non-institutional, the study by V. Kovacheva and M. Grewe shows that support during the induction phase was

mainly received on an informal basis, from colleagues or even a mentor. Some workers highlighted support in administrative formalities and documentation at work by colleagues and, in some cases, by superiors.(53)

In conclusion, the *WorkInt* project points out possibilities for concrete action towards better workplace integration of migrant workers on three levels:
1. Facilitating acquisition of job-related language skills by individual support during the induction period, professional language courses fostered by the state and multilingual digital learning platforms for health workers.
2. Intensifying individual support of workplace adaptation including extra time and resources as well as general improvement of working conditions for hospital staff.
3. Working in multicultural teams, promotion of intercultural sensitisation, public campaigns in the workplace and better information about foreign qualifications.(53)

These implications for better workplace integration of foreign health workers, focussing on I) job-specific language learning, II) more individualised support structures, especially during job induction, and III) measures preventing racism and discriminatory behaviour at work, can be supported by quantitative data from the Charité study as described in the following chapters.

More qualitative research from 2016 by Klingler et al. (54) provides data on the challenges in integration faced by migrant doctors in Germany. Results from twenty semi-structured interviews imply difficulties resulting from formal aspects of work, their own competencies, and interpersonal relationships.
Concerning institutional factors, participants complained about certain norms and established processes that were different to the organisational culture in the country of training as well as long enduring and non-transparent recognition procedures.(54)
On the part of the employees, lack of job-specific competencies, such as language skills, and cultural as well as organisational knowledge were regarded as challenging. Finally, devaluation, mistrust and discriminatory behaviour by colleagues were perceived as a barrier for workplace integration.(54)

A recent quantitative study conducted by intercultural consultant and trainer G. Lugert-Jose from 2022 (55) analysed the workplace satisfaction and various influencing factors

of 109 Filipino nurses in Germany. The study shows much higher dissatisfaction compared this survey's results: 64% of participants denied being generally satisfied with their job, and merely 17% would recommend this job to a family member or friend in their home country. The main factors causing this high level of workplace dissatisfaction were lacking appreciation by colleagues and racism.(55)

Similarly to the Charité data presented here, 22% of participants indicated experiences of discrimination and racism due to their origin. Supporting this study's findings, the German language and professional recognition were perceived as the greatest challenges and main factors for low workplace satisfaction for many respondents. Lugert-Jose therefore makes several suggestions for employers: realistic expectations of and more empathy, acceptance, and patience with new colleagues, especially during work induction, as well as intensive language support and intercultural trainings for the recently immigrated workers.(55)

Context and interpretation

This study quantified data from previous international and some mainly qualitative studies from German-speaking countries, according to which, the main barriers to professional integration for foreign health care personnel are based on language skills, unequal treatment, and discriminatory behaviour. Further challenges derive from labour market access, including recognition procedures and a lack of institutional support for immigrated employees.

Language skills

Language skills were revealed to be essential for work performance and satisfaction.

Self-evaluated German language skills were generally good, as most participants indicated C1 or C2 levels and more than half of participants had at least some command of German before arriving in Germany.

The significantly higher levels of language skills by non-scientific and clinically working scientific staff probably result from more frequent usage of the German language during work and more patient contact. Additionally, the majority of nurses, technologists and clinicians were required to provide proof of German language skills by the authorities, while this only applied for 20% of junior staff.

However, it is striking that despite generally good German language skills half of the participants (N=138) indicated language-related difficulties in their professional life. Those difficulties had a negative impact on professional skills for 70% (N=69) and were indicated less frequently by participants with high German language competencies (*p<0.001)*.

Even though most responders accomplished a German language course, this did not necessarily lead to less language-related difficulties at work (*p<0.001).* This implies that most language courses were insufficient for adequate work performance, possibly, among other reasons, because they were not job specific in most cases.

While 42% of responders indicated challenges in financing language training, only 16% received financial support. This indicates the organization of language courses being a challenge for many foreign employees, at least in financial terms, and implies a lack of structural support in this context. This fact was then reinforced by the high numbers of participants demanding further support (78%, N=129), of which 31% explicitly wished for support in the acquisition of language skills.

Discrimination experiences

Discrimination was an important part of the questionnaire and existed throughout all professions. The results of this study show that experiences of racism and discrimination are a problem affecting society as a whole and this extends to all areas of life. The highest numbers of discrimination experiences happened in public, e.g., shops, public transport, and other public places (29%, N=141) and were the lowest in the personal social environment, for example by friends and acquaintances (9.2%, N=141).

Discriminatory behaviour at work during the previous 6 months was reported by all professional groups and was performed most frequently by colleagues at the same professional level (18.3%, N=142) and from other professions (16.9%, N=142) or patients (14.1%, N=142).

Significantly, more nurses and technologists reported discrimination by peers. This could be due to the fact that nursing and medical / technical assistance are professions that experience less social prestige than doctors and scientific staff, as well as harsher working conditions.(61) However, low numbers of reported discrimination by superiors

(9.2%, N=142) suggest that discrimination experiences cannot only be attributed to the hierarchical work organisation in the hospital.

Discrimination experiences by colleagues from the same or from other professions was indicated more frequently. This could be related to results on inter-collegial relationships, suggesting high levels of competition between colleagues.
The surprisingly low levels of discrimination experiences by superiors in contrast to discrimination by colleagues and patients might derive from less frequent interaction between superiors and workers. However, lower percentages of reported discrimination in this case were also due to higher numbers of participants not giving an answer to the question (7%, versus 2.8% regarding discrimination by peers), possibly due to the fear of labour law consequences, despite pseudonymisation of the data.

Regarding the factors on which discrimination was based on, most participants referred to language, race / ethnicity, and nationality. Interestingly, the frequencies of reported discrimination did not differ regarding subgroups with different levels of language skills and countries of birth (EU versus non-EU states). This underlines the fact that discrimination is based on an external assignment to a socially constructed group.

Even though most participants did not report recent experiences of discrimination at work, more than half of responders affirmed a negative impact on self-confidence due to the respective discrimination by colleagues and superiors. Additionally, participants indicating discriminatory experiences had significantly lower levels of job satisfaction, suggesting a direct effect of discrimination on workplace satisfaction. It is a strong sign, however, that negative impacts on work performance were only reported by a quarter of responders.

(In-)Equality

Interestingly, a much higher number of employees indicated unequal treatment regarding various formal and non-formal aspects of their work than explicitly named discrimination. Inequality was perceived mainly regarding payment, distribution of tasks within the team, the appreciation of work performance by superiors, and opportunities for further training and promotion.

Similarly to experiences of discrimination, participants perceiving unequal treatment regarding most of these aspects were shown to be significantly less satisfied with their current employment in general and with their working environment.
Interestingly, whether the appreciation of work by patients was perceived as equal or not did not show a significant difference concerning general workplace satisfaction. The fact that this difference was not significant could be due to the smaller group size, as only about two-thirds of the study population had direct patient contact. However, it could also indicate that inter-collegial relationships have a stronger influence on working relationships than patient contact.

It can be assumed that the majority of reported unequal treatment is also to be considered discrimination according to the General Equal Treatment Act (AGG), i.e., disadvantage based on a specific discriminatory criterion.(56) This suggests that fewer experiences of disadvantage are actually perceived and named as ‘discrimination’.
Additionally, it shows that discrimination is not only about subjective experiences of interpersonal interactions, but also about the structural disadvantages of certain socially constructed groups.(42) This is particularly evident in the disadvantage faced by migrant workers in terms of training and career opportunities, as has already been shown in several international studies.(5, 6, 7, 8, 9)

Gender related aspects

The present study did not find any significant gender-related differences concerning job-specific or private barriers to successful workplace adjustment explicitly for female workers. However, more than a quarter of discrimination experiences by colleagues were based on their biological sex or gender. Furthermore, the professional groups experiencing most discrimination by colleagues, superiors, and patients in this study were nurses and technologists, which are likewise the occupational groups with the highest proportions of women.

A third of participants had children, more than half of which were less than 10 years old. As childcare is mainly provided by women, motherhood often poses an additional challenge to female workers and provides a basis for further discrimination.(49, 51)

A gender-focused literature review by A.D. Jones, A. Bifulco, and J. Gabe from 2009 (49) analysed the micro-level effects of work migration of female nurses from the Caribbean to the UK from an intersectional perspective.
While some Caribbean nurses, most of them being mothers, migrated to the UK to reunite with their families, many left their families behind. The often aspired reunification is hard to realise, especially due to financial and bureaucratic barriers. Family care and education of children in their home country is primarily realised by the support of other women.
The effects of this long-term family separation have hardly been investigated and should be further investigated. Few data showed high emotional distress on mothers working abroad as well as a negative impact on children left at home.(49)

Support

The results of this study reinforce previous evidence that existing support structures for foreign health care personnel are insufficient.(7, 8, 9)
At the Charité, there are several official institutions and individuals that either offer specific support for international employees, such as the Welcome Centre and the integration officer, or work in a way that is less focused on migrant workers, such as the staff council and the trade union. Especially with regard to migrant-specific institutions, it is surprising that all the institutions mentioned in the questionnaire were not known to at least half of the participants.
Regarding the evaluation of support given by these institutions, it is astonishing that at maximum, a third of respondents rated the support as at least partly helpful, in this case referring to the Welcome Centre (33.3%; N=99). This percentage was even lower in relation to the other institutions.
These results suggest a lack of information on existing support structures and that the institutions, if known, do not provide sufficient offers of support.

In consequence, most support was provided by friends and acquaintances, colleagues, and family. More than three-quarters of participants demanded further support regarding various work- and non-work-related aspects.
This implies that existing support structures need to be more accessible and better adapted to the needs of international workers, or new support structures need to be established to relieve the burden on migrant workers and their social environment.

Implications for the health care system

Germany

Although this study focuses on the micro-level effects of skilled labour migration in the health system, the macro-level consequences should not be ignored. At this point, it is important to say that recruiting skilled workers from abroad can only be a short-term solution to the staff shortages in Germany and other states of the Global North, especially regarding nursing.(62, 63)

Long-term solutions to the increasingly threatening shortages of personnel should include an improvement of working conditions for all health workers. Adequate working conditions are essential for the adequate provision of health care and patient safety.(64)

A recent nationwide study called *'Ich pflege wieder, wenn…'* (‘I will nurse again if...’) from April 2022 (65) conducted by the Bremen Chamber of Labour surveyed 12,700 nurses who had quit or worked part-time. The survey showed that at least 300,000 additional full-time nurses would be available in Germany by returning to work or increasing their working hours, provided that working conditions in health care improve significantly. More than 80 percent of this potential is based on the return of ‘dropped out’ skilled workers.(65)

The strongest motivation cited by respondents was adequate staffing that is oriented towards the needs of people requiring care. Furthermore, care workers demanded better pay and reliable working hours. Having more time for emotional care, not having to work understaffed, and binding work schedules were further key conditions for the respondents. They also wanted respectful superiors, collegial interaction with all professional groups, being more on eye level with the doctors, simplified documentation, and better remuneration for further education and training.(65)

Worldwide

When considering the effects of international migration of health care personnel on sending countries, facing even higher staff shortages and, in consequence even more insufficient health care provision due to the emigration of skilled workers, the consequences should also be drawn on a global scale.(3, 4)

The negative effects from active recruitment of foreign health professionals have resulted in international incentives to reduce the negative impacts for sending countries’ health systems, for example by the WHO and the International Organisation of Migration (IOM).(66)

The *Global Code of Practice on the International Recruitment of Health Personnel* was adopted by 193 of WHO member states in 2010 and serves as a regulatory framework for ethical recruitment of health workers and the implementation of bilateral agreements. While preventing active recruitment from countries with critical labour shortages, it promotes circular migration as being beneficial for both sending and receiving countries. Receiving countries are demanded to enhance efforts for long-term solutions for securing skilled workers for their health provision, e.g., by increasing education and training infrastructure, and therefore relying less on foreign health workers.
Concerning migrating health workers, it emphasizes freedom of choice and individual rights, encourages receiving countries to implement sufficient information and orientation programmes, and demands equal treatment in the workplace.(67)

It is, however, questioned whether the Code can achieve sustainable recruitment and migration strategies as it is voluntary, hardly monitored, and not sanctioned at all. Furthermore, it applies primarily to state actors. In countries with a mostly private health provision like the US, all private health suppliers would have to take measures according to the Code, which seems quite unrealistic. Therefore, implementing the Code's policies might be easier in countries with a large public health system, for example the UK. However, as mentioned above, the NHS also relies on health workers from the private sector that have accordingly been recruited by private health suppliers.(2)

The first review after the adoption of the *Global Code of Practice* from 2014 shows the complexity of the Code's implementation: The main challenge reported by the 25% of WHO member states that responded was the coordination of the many private and public stakeholders involved. Secondly, most countries could not provide systematic data on health migration, such as annual statistics on the migration of health workers.(68)
Consequently, to be able to monitor migration patterns and their effects as well as the implementation of regulatory frameworks to reduce the negative impacts of health care migration like the *Global Code of Practice*, international systematic data collection on the migration of health professionals should be achieved.

Limitations

The results of this survey offer insight into the working and living conditions of foreign health care personnel at Charité. However, several limitations to this study should be considered.

Regarding in- and exclusion criteria the survey only included employees in the categories of nursing and health care, medical / technical assistance as well as scientific staff. Other professions, especially lower-qualified occupations like cleaning, catering and logistics, are not represented here, though presumably having even higher shares of foreign-born workers as suggested by Kovacheva and Grewe.(53)
In consequence, there might be a selection bias concerning the results on the perception of labour market access, as foreign-trained workers who had not (yet) got their qualifications recognized were not included.
Furthermore, not all employees experiencing discrimination and racism were included, e.g., workers born in Germany but still experiencing othering based on racialisation.
There might have been a language barrier to participation for some employees as the survey was only accessible in English and German. Participation was only possible online.

A large part of the questionnaire related to explicit experiences of discrimination. Discrimination was defined as a disadvantage without a justifiable reason, for example on racial or ethnic grounds[2]. People experiencing discrimination are externally attributed to a certain socially constructed group. This categorisation is mainly based on appearance and behaviour.(42) This implies that neither do all foreign-born employees have similar experiences of discrimination, nor did the study include all workers experiencing racism and discrimination.
Also, the perception of discrimination is highly varying, the same experiences may or may not be considered as discriminatory by different individuals. Interestingly, unequal treatment at work was reported much more frequently than explicit experiences of

[2] This referred to the German Federal Anti-Discrimination Agency's (*Antidiskriminierungsstelle des Bundes*) definition of discrimination: https://www.antidiskriminierungsstelle.de/EN/about-discrimination/what-is-discrimination/what-is-discrimination-node.html; Latest access: 31.12.22, 12 pm.

discrimination, suggesting that some situations in which employees were treated worse than their colleagues were not experienced or described as discriminatory.

Questions concerning experiences of discrimination referred only to the 6 months prior to participation. As the average time of employment was 6 years, the time after arrival in Germany and job induction phase were not included for most participants. These potentially vulnerable phases concerning difficulties in workplace adjustment should be further investigated.
Similarly, questions relating to labour market access were about several years in the past for some participants, which is why there may have been a recall bias.

With regard to representativeness, it should first be mentioned that the response rate was relatively low. It can be assumed that many potential participants did not receive the messages due to long illness, sabbaticals, and maternity or parental leave.
Still, the study population was quite similar to all foreign-born staff at the Charité in terms of profession and country of origin. However, other aspects of representation could not be analysed for data protection reasons.

Results from a survey at the University Hospital in Hamburg conducted from March to June 2021 with a similar questionnaire differed only in nuances.(58) Hamburg and Berlin are both big international cities, presumably being a facilitator for establishing social contacts and participation in cultural life, as well as finding jobs for family members and language courses. Barriers to workplace integration for foreign health care personnel in more rural areas might differ to the presented results. In the context of increasing labour shortages in rural parts of Germany, further research should focus on the factors of successful labour market integration in these areas.(14)

Finally, there was no control group. In consequence, results concerning workplace satisfaction and discrimination experiences could not be compared to non-migrant workers and might also result from general working conditions. In particular, nurses have been complaining about harsh working conditions in German hospitals for years, a situation that has recently been exacerbated by the COVID-19 pandemic and increasing staff shortages.(10, 11)

Conclusion and outlook

The results of this study show that the main challenges faced by foreign health care personnel working at the Charité are language-related difficulties, unequal treatment and experiences of discrimination and racism. At the same time, there is a high demand for institutionalised support, especially regarding formalities and administrative matters, vocational and language training, and to some extent in the private sphere (housing, social life, childcare, etc.).

These results must be interpreted in the context of a long-existing social discourse on pluralistic democracy and migration in Germany. Migration has become the focus of right-wing populist movements in recent years and the devaluation of migrant 'others' has reestablished itself in the centre of the social mainstream's narrative.(69) In consequence, individual and institutional discrimination against racialised persons is still a major obstacle to becoming a pluralistic society.
According to Foroutan, social scientist and professor of research on integration and social policy at the Humboldt University in Berlin and head of the Berlin Institute for Empirical Integration and Migration Research (BIM), it is therefore necessary to focus on recognition, equal opportunities, and participation, which are also claimed as contested political goods by migrants and their descendants.(70)

Accordingly, this study can serve as a starting point for further research on challenges and facilitators for foreign health care personnel.
Larger follow-up studies should focus on different professions, as most existing studies refer to nurse migration, and more research on all health care professions should be considered. The micro-level effect of recruitment of health care personnel should be analysed, as there are several reports by recruited health workers on deficiencies in preparation as well as orientation after migration to the country of destination.(64)
Concerning foreign-trained health care personnel, further research should focus on job induction, a challenging and potentially vulnerable phase, as employees have to adjust to a new work and private social environment, often facing a lack of acceptance and support by colleagues and superiors.(64) These challenges during the transition period derive mainly from language and communication difficulties as well as socio-cultural differences, and not from a lack of professional skills.(71)

Regarding discrimination in the health care sector, the diversity of employees experiencing discrimination on the basis of racism and ethnicity should be considered, as these experiences are, of course, highly individual and may vary between certain socially constructed groups.
Furthermore, there should be a greater focus on intersectional perspectives on discrimination, including gender-related aspects.

Even though, as mentioned above, further research is needed, some concrete measures can already be derived from these results to improve the working and living conditions of migrant staff at the Charité:

Knowing that merely 20% of the participants attended a language course organized by the Charité, and regarding the indicated insufficiency and financial barriers to language courses, it is essential to promote job-specific language competences and to facilitate access to language courses, as well as to improve not only workplace satisfaction but also clinical outcome and patient safety.(6)

Concrete measures reducing discrimination and racism should be established to achieve acceptance, tolerance, fair treatment, and equal opportunities for foreign-born employees. This should also include information on how to react to discriminatory behaviour, whom to contact and how to cope with experiences of discrimination.

As concluded by several other studies, support structures need to be more accessible and more responsive to the individual needs of foreign health care personnel. They should focus on formalities and administrative procedures, further education, and language skills and orientation during job induction, but also offer psychological and logistical support.(7, 8, 9)
This support could consist of the provision of information in English and other languages, multifaceted transition programmes with mentoring or ‘buddy’ systems, clinical orientation, workshops on the local health system and policies, and networking opportunities for international workers.

To improve the participation and recognition of foreign-born employees, a higher share of international staff in leading functions and decision-making positions, the inclusion of

foreign-born employees in operational strategies for integration as well as more communication and transparency with colleagues and supervisors should be implemented.

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Eidesstattliche Versicherung

„Ich, Clara Milena Konrad, versichere an Eides statt durch meine eigenhändige Unterschrift, dass ich die vorgelegte Dissertation mit dem Thema: „Current working and living conditions of foreign health care personnel - facilitators and barriers“ (auf Deutsch: „Derzeitige Arbeits- und Lebensbedingungen von internationalem Gesundheitspersonal - fördernde und hemmende Faktoren“) selbstständig und ohne nicht offengelegte Hilfe Dritter verfasst und keine anderen als die angegebenen Quellen und Hilfsmittel genutzt habe. Alle Stellen, die wörtlich oder dem Sinne nach auf Publikationen oder Vorträgen anderer Autoren/innen beruhen, sind als solche in korrekter Zitierung kenntlich gemacht. Die Abschnitte zu Methodik (insbesondere praktische Arbeiten, Laborbestimmungen, statistische Aufarbeitung) und Resultaten (insbesondere Abbildungen, Graphiken und Tabellen) werden von mir verantwortet.
Ich versichere ferner, dass ich die in Zusammenarbeit mit anderen Personen generierten Daten, Datenauswertungen und Schlussfolgerungen korrekt gekennzeichnet und meinen eigenen Beitrag sowie die Beiträge anderer Personen korrekt kenntlich gemacht habe (siehe Anteilserklärung). Texte oder Textteile, die gemeinsam mit anderen erstellt oder verwendet wurden, habe ich korrekt kenntlich gemacht.
Meine Anteile an etwaigen Publikationen zu dieser Dissertation entsprechen denen, die in der untenstehenden gemeinsamen Erklärung mit dem/der Erstbetreuer/in, angegeben sind. Für sämtliche im Rahmen der Dissertation entstandenen Publikationen wurden die Richtlinien des ICMJE (International Committee of Medical Journal Editors; www.icmje.og) zur Autorenschaft eingehalten. Ich erkläre ferner, dass ich mich zur Einhaltung der Satzung der Charité – Universitätsmedizin Berlin zur Sicherung Guter Wissenschaftlicher Praxis verpflichte.
Weiterhin versichere ich, dass ich diese Dissertation weder in gleicher noch in ähnlicher Form bereits an einer anderen Fakultät eingereicht habe.
Die Bedeutung dieser eidesstattlichen Versicherung und die strafrechtlichen Folgen einer unwahren eidesstattlichen Versicherung (§§156, 161 des Strafgesetzbuches) sind mir bekannt und bewusst.“

Datum	Unterschrift

Anteilserklärung

Clara Milena Konrad hatte folgenden Anteil an der Publikation:

Can, E.; Konrad, C.M.; Khan-Gökkaya, S.; Molwitz, I.; Nawabi, J.; Yamamura, J.; Hamm, B.; Keller, S. Foreign Healthcare Professionals in Germany: A Questionnaire Survey Evaluating Discrimination Experiences and Equal Treatment at Two Large University Hospitals. Healthcare 2022, 10,2339.
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Beitrag im Einzelnen:
Clara Milena Konrad leistete wesentliche Beiträge zur Verfassung des Ethikantrages. Der Fragebogen wurde maßgeblich von Frau Konrad, unter dezidierter Abstimmung mit PD Dr. med. Sarah Keller und Dr. med. Elif Can entworfen und fertiggestellt.
Die Erstellung des digitalen Fragebogens via LimeSurvey erfolgte selbstständig durch Frau Konrad. Die Distribution der Umfrage an der Charité Universitätsmedizin Berlin erfolgte in größten Teilen durch Frau Konrad (wiederholte Kontaktaufnahme zu Abteilungsleiter*innen und Klinikdirektor*innen zur Distribution der Umfrage in der Abteilung). Die Erhebung und die komplette statistische Auswertung der Daten aus der Umfrage an der Charité Universitätsmedizin Berlin sowie aus der sich anschließenden Erhebung am Universitätsklinikum Hamburg-Eppendorf erfolgte ausschließlich durch Frau Konrad unter Absprache und Beratung mit dem Institut für Biometrie und Klinische Epidemiologie der Charité. Alle in der Publikation beschriebenen Ergebnisse und die erstellten Tabellen bzw. Abbildungen resultieren somit aus der Datenerhebung und statistischen Auswertung durch Frau Konrad.

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Lebenslauf

Mein Lebenslauf wird aus datenschutzrechtlichen Gründen in der elektronischen Version meiner Arbeit nicht veröffentlicht.

Komplette Publikationsliste

Can, E.; Konrad, C.M.; Khan-Gökkaya, S.; Molwitz, I.; Nawabi, J.; Yamamura, J.; Hamm, B.; Keller, S. Foreign Healthcare Professionals in Germany: A Questionnaire Survey Evaluating Discrimination Experiences and Equal Treatment at Two Large University Hospitals. Healthcare 2022, 10,2339. https://doi.org/10.3390/healthcare10122339

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Bescheinigung Statistik

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Bescheinigung

Hiermit bescheinige ich, dass Frau *Clara Milena Konrad* innerhalb der Service Unit Biometrie des Instituts für Biometrie und klinische Epidemiologie (iBikE) bei mir eine statistische Beratung zu einem Promotionsvorhaben wahrgenommen hat. Folgende Beratungstermine wurden wahrgenommen:

- Termin 1: *16.02.2021*
- Termin 2: *23.03.2021*

Folgende wesentliche Ratschläge hinsichtlich einer sinnvollen Auswertung und Interpretation der Daten wurden während der Beratung erteilt:

- Deskription der Daten durch Kreuztabellen
- Chi-Quadrat-Test nach Pearson und Test auf Zusammenhang linear-mit-linear
- Monte-Carlo-Simulationen für Kreuztabellen mit schwach besetzten Zellen

Diese Bescheinigung garantiert nicht die richtige Umsetzung der in der Beratung gemachten Vorschläge, die korrekte Durchführung der empfohlenen statistischen Verfahren und die richtige Darstellung und Interpretation der Ergebnisse. Die Verantwortung hierfür obliegt allein dem Promovierenden. Das Institut für Biometrie und klinische Epidemiologie übernimmt hierfür keine Haftung.

Datum: 23.03.2021

Name des Beraters: Dr. Konrad Neumann

[redacted]

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