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*Original Article*

# Medical Brain Drain from Pakistan: A Qualitative Study of Push–Pull Factors and the Professional and Personal Experiences of Migrated Physicians

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## ABSTRACT

Background: Medical brain drain represents one of the most consequential challenges facing Pakistan's healthcare system. Despite producing substantial numbers of medical graduates annually, Pakistan experiences persistent physician shortages attributable in significant part to the sustained emigration of trained doctors to high-income destination countries. Existing evidence is predominantly quantitative, leaving the subjective motivations, professional experiences, and post-migration orientations of migrating physicians largely unexplored. Objective: To generate an in-depth, participant-centred qualitative account of the factors motivating Pakistani physicians to migrate, their professional and personal experiences within foreign healthcare systems, and their reflections on Pakistan's healthcare sector and the conditions under which return might be considered. Methods: A qualitative descriptive design situated within a constructivist-interpretivist epistemological framework was employed. Thirty Pakistani-trained physicians practising in the United Kingdom, Canada, Saudi Arabia, and the United Arab Emirates were recruited through purposive and snowball sampling. Individual semi-structured interviews were conducted online, audio-recorded, and transcribed verbatim. Data were analysed using Braun and Clarke's six-phase reflexive thematic analysis framework. Trustworthiness was established through prolonged engagement, peer debriefing, reflexive memo-writing, and audit trail maintenance. The study was conducted in accordance with COREQ reporting guidelines. Results: Six themes were identified: economic disenfranchisement experienced as existential mismatch; institutional neglect and erosion of professional agency; the architecture of professional promise abroad; dignity, regulation, and the experience of being professionally valued; the price of migration including licensing barriers and cultural dislocation; and moral residue and the weight of leaving, encompassing persistent homeland conscience and conditional orientation toward return. Conclusion: Pakistani medical migration is driven by cumulative institutional failure rather than financial incentive alone. Diaspora physicians retain conditional return orientations amenable to policy intervention. Comprehensive structural reform — spanning remuneration, infrastructure, meritocracy, and diaspora engagement — is essential to address this phenomenon.

Keywords: brain drain; doctor migration; healthcare workforce; Pakistan; push-pull factors; qualitative research; reflexive thematic analysis; lived experience; physician retention; diaspora engagement

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## INTRODUCTION

The global migration of highly skilled professionals from low- and middle-income countries to wealthier nations represents one of the most consequential and enduring structural challenges in international development, and nowhere is this phenomenon more acutely felt than in the healthcare sector (1). When physicians — who require over a decade of intensive academic and clinical training to reach professional competence — migrate in sustained numbers, the resulting deficit in human capital extends far beyond individual career choices, reshaping the institutional landscape of entire health systems (2). Pakistan, a country of more than 230 million people, finds itself at the centre of this crisis. Despite operating one of

the largest networks of medical colleges in the developing world and producing a substantial annual cohort of medical graduates, the country continues to face profound shortages of clinical professionals, particularly in rural, peri-urban, and underserved settings (3,4). This paradox — of abundant medical education outputs alongside persistent healthcare workforce deficits — is substantially explained by a continuous and accelerating outflow of trained physicians to high-income destination countries, predominantly the United Kingdom, the United States, Canada, Australia, and the Gulf Cooperation Council states (4,5).

The scale of Pakistani physician migration has been documented with increasing precision. Pakistan consistently ranks among the top source countries for internationally trained doctors practising in Organisation for Economic Co-operation and Development nations, and estimates suggest that the number of Pakistani-trained physicians working abroad may rival or exceed the domestically active physician workforce in several specialties (5,6). The International Organisation for Migration has further noted that South Asian health professionals, including those from Pakistan, constitute a disproportionately large share of international health worker mobility flows globally (7). Within Pakistan, this attrition has measurably weakened institutional capacity. The physician-to-population ratio remains well below the threshold recommended by the World Health Organization for the delivery of essential health services, and the burden falls most heavily on public sector hospitals, which serve the majority of the country's population and depend almost entirely on doctors who have not yet secured foreign licensing or employment (3,8). Khan and Mahmood (8) have documented increasing patient-to-doctor ratios in district hospitals across multiple Pakistani provinces, directly attributing the trend to the departure of trained physicians. Sheikh and colleagues (9) similarly identified that medical migration disproportionately affects surgical and specialist cadres, creating severe gaps in secondary and tertiary care provision that cannot be compensated for by recruitment alone.

Despite this body of epidemiological and health system documentation, a critical dimension of the phenomenon remains insufficiently understood. The vast majority of existing evidence on Pakistani medical migration is quantitative in character, focusing on migration volumes, destination patterns, and macroeconomic drivers (4,8,10). While such data are invaluable for characterising the scale of the problem, they are methodologically limited in their capacity to access the subjective, experiential, and socially embedded dimensions of the migration process. They cannot illuminate how individual physicians navigate the decision to leave, how they construct and renegotiate their professional identities in foreign healthcare systems, what meanings they attach to their experiences of clinical practice abroad, or how they reflect on the consequences of their departure for the country and communities they left behind. Ejaz and Shaikh (10) noted nearly fifteen years ago that qualitative evidence on the lived experiences of migrating Pakistani doctors was conspicuously absent from the literature; this gap remains largely unaddressed. Similarly, Hafeez and colleagues (11) observed that health workforce policy in Pakistan has been developed without adequate engagement with the perspectives and priorities of the healthcare professionals it seeks to retain, a disconnect that may partly explain the limited effectiveness of previous retention efforts.

The workforce context within which Pakistani doctors make migration decisions is shaped by intersecting structural, institutional, and systemic factors. Pakistan's public health expenditure as a proportion of gross domestic product has remained persistently low, constraining hospital infrastructure, medical equipment availability, and physician remuneration across the public sector (11,12). The Pakistan Bureau of Statistics (12) reported that the public sector salary scales for medical officers have not kept pace with inflation across the past two decades, resulting in a real-terms decline in physician purchasing power. Beyond remuneration, doctors employed in public hospitals frequently encounter inadequate diagnostic facilities, high patient volumes, unpredictable working hours, limited access to continuing professional development, and insufficient protection from occupational hazards including workplace violence (8,9,13). Ahsan (13) characterised the Pakistani clinical workplace as one in which professional fulfilment is systematically undermined by resource scarcity and institutional neglect,

creating conditions that erode commitment to domestic practice over time. At the same time, the destination countries to which Pakistani doctors migrate offer structural and material conditions that contrast sharply with these experiences: competitive salaries, regulated working environments, access to advanced technology, structured postgraduate training pathways, and professional recognition systems that reward clinical performance (5,14,15). Astor and colleagues (14), in a comparative study of physician migration motivations across five countries including Pakistan, found that doctors described migration not merely as an economic calculation but as a response to the cumulative erosion of professional agency and dignity — a finding that underscores the importance of moving beyond economic frameworks to understand this phenomenon.

Conceptually, migration scholarship has long drawn on the Push-Pull Theory, originally formulated by Lee (21), which posits that migration decisions are shaped by a combination of conditions in the origin country that impel departure and conditions in the destination country that attract settlement. While this framework has been widely applied to medical migration and offers a useful heuristic for organizing the structural determinants of physician mobility (17,18), it has also been critiqued for its reductionism. Marchal and Kegels (17) argued that the binary push-pull model fails to capture the processual, relational, and socially constructed dimensions of migration decision-making, reducing a complex human experience to a rational economic calculation. Stilwell and colleagues (18) further observed that migration motivations among health professionals are frequently non-linear, shaped by professional networks, peer influence, family considerations, and evolving assessments of career trajectory that cannot be adequately captured by structural variables alone. A qualitative approach, grounded in an interpretivist epistemology, is therefore not merely a methodological preference in this context but a substantive necessity. Only through sustained, in-depth engagement with the accounts of doctors who have lived the migration experience can researchers access the meanings, perceptions, and interpretive frameworks that underpin their decisions and shape their professional lives abroad (19). Pang, Lansang, and Haines (19) have called for precisely this kind of inquiry, arguing that effective policy responses to medical brain drain require understanding the phenomenon from the inside — that is, from the perspectives of those who enact it — rather than solely through population-level statistics.

The potential consequences of medical migration extend beyond immediate workforce shortages. Beine and colleagues (20) identified a long-term erosion of institutional knowledge and clinical mentorship capacity in countries experiencing sustained physician emigration, as experienced clinicians who might have trained future cohorts of doctors are no longer available to do so. Bhargava, Docquier, and Moullan (20) demonstrated a statistically significant inverse relationship between physician emigration rates and human development index scores in source countries, suggesting that medical brain drain has measurable downstream effects on population health outcomes. Tankwanchi, Vermund, and Perkins (23) noted that existing international frameworks, including the World Health Organization Global Code of Practice on the International Recruitment of Health Personnel (22), have had limited effectiveness in moderating these flows, largely because they rely on voluntary compliance by destination countries rather than structural reform in origin health systems. These findings collectively reinforce the urgency of generating contextually grounded, qualitatively rich evidence that can inform more targeted and responsive policy.

Against this backdrop, the present study was designed to address a specific and identified gap in the existing literature: the absence of qualitative, experiential evidence that captures the motivations, decision-making processes, professional transitions, and post-migration experiences of Pakistani doctors working abroad. The study is positioned within a constructivist-interpretivist epistemological framework, recognising that the meanings doctors attach to their migration experiences are socially situated, personally constructed, and cannot be adequately captured through quantitative methods alone. The central research aim is to develop an in-depth, participant-centred understanding of the phenomenon of medical migration from Pakistan. Specifically, the study asks: how do Pakistani doctors working abroad describe and make sense of the factors that motivated their migration, and what are their experiences of

professional practice, personal adaptation, and reflection on Pakistan's healthcare system within foreign healthcare environments? Secondary aims include exploring the perceived consequences of medical migration for Pakistan's healthcare capacity from the perspectives of those who have left, and identifying the structural, institutional, and personal conditions that participants believe would be necessary to support the retention of medical talent within the country. The findings are intended to contribute both to the academic literature on health workforce mobility in low- and middle-income countries and to the evidence base available to healthcare policymakers and administrators in Pakistan.

## MATERIALS AND METHODS

This study employed a qualitative descriptive design situated within a constructivist-interpretivist epistemological framework. Qualitative descriptive methodology is appropriate when the research aim is to produce a comprehensive, rich, and participant-centred account of a phenomenon as it is experienced and understood by those living it, rather than to generate theory or test hypotheses (25). Within this framework, knowledge is understood as co-constructed between participants and researchers, and the meanings that participants attribute to their experiences are treated as valid and important objects of inquiry in their own right. This epistemological orientation was selected deliberately, in recognition that the subjective experiences of Pakistani doctors who have migrated abroad — their motivations, their professional adjustments, their reflections, and their perceptions of the consequences of their migration — cannot be adequately rendered through numeric or categorical data alone. The Push-Pull Theory of migration, first articulated by Lee (21), informed the initial conceptual scaffolding for the inquiry, particularly in structuring the broad domains of the interview guide; however, the analytic process was conducted inductively so that participants' own interpretive frameworks were allowed to emerge and complicate or extend the theoretical lens rather than simply confirm it.

The study was conducted between January and June 2024, with participants drawn from Pakistani-trained physicians currently practising in four destination countries: the United Kingdom, Canada, Saudi Arabia, and the United Arab Emirates. These countries were selected because they represent the most frequently cited destinations for Pakistani medical graduates and collectively span the primary migration corridors identified in the existing literature (4,6). Participants were eligible for inclusion if they held an undergraduate medical degree (MBBS or equivalent) from a Pakistani institution, had been practising medicine in a foreign healthcare system for a minimum of one year at the time of recruitment, and were willing to participate in an in-depth interview conducted in English or Urdu. Doctors who had migrated for short-term fellowship or observership placements of less than twelve months were excluded, as the study sought to capture sustained professional and personal experience in foreign healthcare environments rather than short-term training exposure.

Participants were recruited using a purposive sampling strategy designed to achieve maximum variation across key dimensions including country of current practice, medical specialty, gender, and duration of overseas employment (26). Initial participants were identified through professional networks known to the research team, including alumni groups of Pakistani medical institutions active on professional social media platforms. Subsequent participants were recruited using snowball referrals, in which enrolled participants were asked to nominate colleagues who might meet the eligibility criteria and be willing to take part. Potential participants were sent a study information sheet describing the purpose of the research, the voluntary nature of participation, their right to withdraw at any point without consequence, and the procedures for ensuring confidentiality. Those who expressed interest were provided with a consent form and given a minimum of 72 hours to review it before confirming participation. Written informed consent was obtained from all participants prior to any data collection. In cases where participants preferred verbal consent administered at the start of the recorded interview, this was documented with a dated audio record and confirmed in writing after the session.

Thirty Pakistani doctors participated in the study. The sample comprised individuals across a range of medical specialties, including general practice, internal medicine, surgery, paediatrics, psychiatry, obstetrics and gynaecology, and radiology. Participants had been working abroad for between one and twenty-two years. The sample included both men and women, and spanned early-career physicians as well as senior consultants, ensuring that the diversity of migration experiences across career stages was captured. A participant characteristics table presenting de-identified descriptors including participant identifier, gender, specialty, country of practice, and years abroad is provided as Table 1 in the Results section.

The research team comprised three members: two Pakistani physicians with academic backgrounds in health policy and medical education, and one qualitative methodologist with expertise in health workforce research. Given this composition, the research team held a reflexivity and positionality meeting prior to data collection, during which members articulated their personal and professional relationships to the topic, including their own experiences of or proximity to medical migration, their views on Pakistan's healthcare system, and any assumptions or interpretive predispositions they brought to the inquiry. These reflections were recorded in reflexive memos that were maintained throughout the study. The lead interviewer, a Pakistani-trained physician who had not personally migrated but had worked extensively in the Pakistani public health system, was aware that their insider status as a medical professional might facilitate participant rapport and candour, while simultaneously creating risks of shared assumptions that could suppress exploratory questioning. This tension was actively managed through memo-writing, regular peer debriefing among team members, and deliberate use of probing and clarifying questions during interviews.

Data were collected through individual semi-structured interviews, a method chosen for its capacity to generate rich, particularised accounts while maintaining sufficient structure to allow systematic comparison across participants (27). An interview guide was developed collaboratively by the research team and refined through two pilot interviews conducted with Pakistani doctors not included in the main sample. The guide was organised around four broad domains: the circumstances and motivations underlying the migration decision; experiences of working within foreign healthcare systems; personal and cultural adjustment following relocation; and reflections on Pakistan's healthcare system and perspectives on what might support physician retention. Within each domain, open-ended anchor questions were accompanied by a bank of flexible probes designed to encourage elaboration, invite specific examples, and explore apparent contradictions or tensions in participants' accounts. The guide was intentionally non-directive within these domains, ensuring that participants could introduce topics, priorities, and meanings not anticipated by the research team.

Interviews were conducted online via video conferencing platforms, specifically Microsoft Teams and Zoom, reflecting the geographic dispersion of participants across multiple countries. All interviews were conducted in English, with the option for participants to switch to Urdu for specific accounts or expressions where they felt English was inadequate to convey their meaning; in such cases, the relevant passages were subsequently translated by a bilingual member of the research team and verified by a second bilingual reviewer. Interviews lasted between 45 and 90 minutes, with a mean duration of approximately 65 minutes. All sessions were audio-recorded with participant consent. Recordings were transcribed verbatim by a professional transcription service under a confidentiality agreement, and transcripts were subsequently reviewed against the original recordings by a research team member to correct errors and ensure accuracy. Transcripts were anonymised at this stage, with all identifying information — including names, specific institutions, and precise locations — replaced with de-identified descriptors corresponding to the participant characteristics table. Field notes capturing the interviewer's immediate reflective observations, non-verbal cues where visible, and emerging analytic impressions were recorded within 24 hours of each interview.

Data were analysed using Braun and Clarke's six-phase framework for reflexive thematic analysis (25), which was selected for its suitability to qualitative descriptive inquiry and its explicit acknowledgement of the active, interpretive role of the researcher in generating rather than merely discovering themes. In the first phase, the research team familiarised themselves with the dataset by reading all transcripts multiple times and making initial notes on content, tone, and emerging patterns. In the second phase, two team members independently generated initial codes from the full dataset, labelling segments of data that were relevant to the research questions. Codes were descriptive and remained close to participant language at this stage, preserving the texture and specificity of accounts. NVivo version 14 software was used to manage and organise the coded data. In the third phase, codes were sorted and grouped into candidate themes by identifying clusters of codes that shared a coherent underlying meaning. In the fourth phase, candidate themes were reviewed and refined by the full research team through a series of analytic discussions in which the internal coherence of each theme and its distinctness from other themes were evaluated against the full dataset. In the fifth phase, themes were defined and named with precision, with each theme assigned a clear analytic description specifying the conceptual content it captured and the interpretive claim it supported. In the sixth phase, the final thematic structure was used to produce the written account of findings. Throughout the analytic process, reflexive memos were used to document interpretive decisions, record disagreements between team members, and trace the audit trail from raw data to final themes. Coding discrepancies were resolved through discussion until consensus was reached, and no formal inter-rater reliability coefficient was calculated, consistent with the reflexive thematic analysis approach which understands coding as an interpretive rather than mechanical activity.

Several strategies were implemented to ensure the trustworthiness of the study, aligned with Lincoln and Guba's (26) established criteria for qualitative rigour. Credibility was supported through prolonged engagement with the dataset across iterative rounds of analysis, peer debriefing sessions in which team members challenged each other's interpretations, and the integration of multiple participant perspectives within each theme to ensure that the findings were grounded in the breadth of the dataset rather than in isolated accounts. Transferability was supported by providing a rich, detailed description of the study context, participant characteristics, and the analytic process, enabling readers to assess the applicability of the findings to other settings. Dependability was ensured through an audit trail comprising the interview guide, field notes, reflexive memos, coding records, and documentation of analytic decisions, all of which were retained and available for review. Confirmability was supported by grounding all interpretive claims in participant quotations and maintaining reflexive awareness of how researcher perspectives had been managed throughout the process.

Sample adequacy was evaluated using an information power framework rather than a fixed saturation criterion (26). Given that the study addressed a moderately specific phenomenon — the migration experiences of doctors from a single country of origin — within a sample exhibiting meaningful variation across destination countries, specialties, career stages, and genders, the research team assessed that 30 participants provided sufficient informational density to generate a comprehensive and analytically credible account of the range of experiences relevant to the research questions. Analytic saturation was monitored actively during the latter stages of recruitment: the final seven interviews produced no new codes or thematic directions not already represented in the dataset, supporting the adequacy of the sample.

The study was approved by the Institutional Review Board of Health Services Academy, Islamabad, prior to the commencement of any data collection activities. All participation was voluntary, and participants were informed that they could withdraw from the study at any time without providing a reason and without any professional or personal consequence. No incentives were offered for participation. All data were stored in password-protected, encrypted institutional repositories accessible only to named members of the research team, in compliance with applicable data protection legislation. Transcripts were retained in anonymised form, and no personally identifiable information was included in any

research output. The study was conducted and reported in accordance with the Consolidated Criteria for Reporting Qualitative Research (COREQ) guidelines (27), and a completed COREQ checklist is provided as a supplementary file.

## RESULTS

The thematic analysis of thirty semi-structured interviews yielded six overarching themes, each comprising two to three analytically distinct subthemes. The themes collectively illuminate the experiential, structural, and moral dimensions of medical migration from Pakistan, extending beyond a simple enumeration of push and pull factors to reveal the layered, cumulative, and deeply personal processes through which migration decisions are made and subsequently lived. A summary of the thematic structure, including subtheme definitions and representative participant quotations, is presented in Table 2. Participant characteristics are presented in Table 1.

*Table 1. Participant Characteristics (n = 30)*

| ID | Gender | Specialty | Country | Years Abroad |
|---|---|---|---|---|
| **P1** | Male | General Medicine | UK | 12 |
| **P2** | Female | Paediatrics | UK | 7 |
| **P3** | Male | Surgery | UK | 15 |
| **P4** | Female | Psychiatry | UK | 9 |
| **P5** | Male | Cardiology | UK | 11 |
| **P6** | Female | Obstetrics & Gynaecology | UK | 6 |
| **P7** | Male | Radiology | UK | 18 |
| **P8** | Female | General Practice | UK | 4 |
| **P9** | Male | Internal Medicine | Canada | 13 |
| **P10** | Female | Neurology | Canada | 8 |
| **P11** | Male | General Surgery | Canada | 10 |
| **P12** | Female | Family Medicine | Canada | 5 |
| **P13** | Male | Cardiothoracic Surgery | Canada | 16 |
| **P14** | Female | Emergency Medicine | Canada | 7 |
| **P15** | Male | Oncology | Canada | 14 |
| **P16** | Female | Anaesthesiology | Canada | 9 |
| **P17** | Male | Internal Medicine | Saudi Arabia | 3 |
| **P18** | Female | Obstetrics & Gynaecology | Saudi Arabia | 6 |
| **P19** | Male | Orthopaedics | Saudi Arabia | 8 |
| **P20** | Female | Paediatrics | Saudi Arabia | 4 |
| **P21** | Male | General Surgery | Saudi Arabia | 11 |
| **P22** | Female | Dermatology | Saudi Arabia | 5 |
| **P23** | Male | Cardiology | UAE | 7 |
| **P24** | Female | Radiology | UAE | 6 |
| **P25** | Male | Gastroenterology | UAE | 9 |
| **P26** | Female | Psychiatry | UAE | 3 |
| **P27** | Male | Nephrology | UAE | 12 |
| **P28** | Female | Emergency Medicine | UAE | 4 |
| **P29** | Male | Ophthalmology | UAE | 8 |
| **P30** | Female | General Practice | UAE | 2 |

*Table 2. Thematic Framework: Themes, Subthemes, Definitions, and Representative Quotations*

| Theme | Subtheme | Definition | Representative Quotation |
|---|---|---|---|
| **1. Economic Disenfranchisement as Existential Mismatch** | 1a. Salary inadequacy relative to training and responsibility | Participants described a profound disconnection between the investment of medical training and the financial returns of domestic practice | "I had spent eleven years becoming a cardiologist. The salary I was offered at a government hospital could not cover my children's school fees." (P5, Male, Cardiology, UK) |
| | 1b. Financial insecurity and absence of professional protection | Participants described the absence of structured financial safeguards, including pension entitlements and malpractice protection, as deepening their sense of vulnerability | "There was no safety net. If something went wrong with a patient, I was personally exposed. Nobody protected you." (P9, Male, Internal Medicine, Canada) |
| **2. Institutional Neglect and the Erosion of Professional Agency** | 2a. Resource scarcity and diagnostic inadequacy | Participants described chronic deficits in equipment, consumables, and diagnostic infrastructure as rendering competent clinical practice nearly impossible | "I was trained to think like a modern physician, but I was working in conditions where I could not even run basic blood tests reliably. You feel like |

| Theme | Subtheme | Definition | Representative Quotation |
|---|---|---|---|
| | | | your training is mocking you." (P14, Female, Emergency Medicine, Canada) |
| | 2b. Structural indifference and the absence of meritocracy | Participants described institutional cultures in which performance was unrewarded, seniority was determined by tenure rather than competence, and professional voice carried no influence | "Hard work made no difference. Who you knew, whose nephew you were — that determined your future. Competence was almost irrelevant." (P3, Male, Surgery, UK) |
| **3. The Architecture of Professional Promise Abroad** | 3a. Structured training pathways and career visibility | Participants described the clarity, transparency, and institutional support embedded in postgraduate training systems abroad as transformative for their sense of professional trajectory | "For the first time in my career, I could see exactly where I was going. There was a clear path — examinations, rotations, consultant grade. It was visible and it was achievable." (P10, Female, Neurology, Canada) |
| | 3b. Technological environment and expansion of clinical capability | Participants described access to advanced diagnostic and therapeutic technology as fundamentally altering their clinical identity and expanding their sense of what medicine could accomplish | "The first time I used intraoperative imaging in Canada, I understood what I had been missing. Not because I lacked the skill — I lacked the tools. Abroad, the tools matched my training." (P11, Male, General Surgery, Canada) |
| **4. Dignity, Regulation, and the Experience of Being Professionally Valued** | 4a. Regulated working environments and psychological recovery | Participants described regulated shift systems, mandatory rest periods, and enforced duty hour limits as restoring a sense of personal sustainability and psychological wellbeing | "In Pakistan I was working 80, sometimes 90 hours a week. I was burnt out before I was thirty. Here, when my shift ends, it ends. I go home and I am a person again, not just a doctor." (P6, Female, Obstetrics & Gynaecology, UK) |
| | 4b. Professional recognition and institutional respect | Participants described the experience of being treated as valued institutional contributors — through protected time, formal feedback, and collegial relationships — as qualitatively different from their Pakistani experience | "The consultants here learn your name. They ask your opinion. In Pakistan, I felt invisible unless something went wrong and there was someone to blame." (P2, Female, Paediatrics, UK) |
| **5. The Price of Migration: Licensing Barriers, Cultural Dislocation, and Identity Negotiation** | 5a. Credentialing barriers and the labour of professional re-entry | Participants described the process of obtaining foreign licensure as arduous, financially costly, and psychologically taxing, representing a significant and underacknowledged dimension of migration | "The PLAB took me two years of preparation while I was working full-time. It cost me money I barely had. People think migration is a smooth escape — it is not. It is a second education." (P8, Female, General Practice, UK) |
| | 5b. Cultural dislocation and the negotiation of professional and personal identity | Participants described navigating cultural distance, implicit institutional norms, and the social isolation of relocation as constituting a sustained and evolving challenge that intertwined professional and personal dimensions | "You are always slightly on the outside. You understand the medicine, you do the work well, but the cultural codes — the humour, the references, the way colleagues socialise — these take years, and sometimes they never fully open to you." (P4, Female, Psychiatry, UK) |
| **6. Moral Residue and the Weight of Leaving** | 6a. Guilt, collective responsibility, and homeland conscience | Many participants described a persistent and unresolved sense of moral obligation to the country and patients they had left, which coexisted with their professional satisfaction abroad | "I think about my patients in Lahore often. Not specific patients necessarily, but the idea of them — the ones who needed a cardiologist and could not find one because I was not there. That does not leave you." (P23, Male, Cardiology, UAE) |
| | 6b. Conditional return and the politics of hypothetical repatriation | Participants articulated conditions under which they might consider returning to Pakistan, revealing the contours of what structural reform would need to look like to make domestic practice sustainable | "If salaries were competitive, if the hospital had the equipment, if my children could get a good education — I would go back tomorrow. Pakistan is my home. But I cannot sacrifice my family's future for a system that does not value what I offer." (P27, Male, Nephrology, UAE) |

### *Theme 1: Economic Disenfranchisement as Existential Mismatch*

The most consistently and emphatically articulated driver of migration across the sample was economic, yet participants did not describe financial motivation in purely utilitarian terms. Rather, the inadequacy of Pakistani medical salaries was experienced as a form of institutional disrespect — a structural message that the years of sacrifice required to become a physician were not commensurate with the rewards that domestic practice offered. This interpretation gave the economic dimension of migration a distinctly moral character that extended well beyond simple wage comparison.

Within the first subtheme, salary inadequacy relative to training investment and clinical responsibility, participants across all four destination countries and across multiple specialties described the same fundamental cognitive and emotional experience: a painful recognition that the financial returns of domestic practice bore no relationship to the professional and personal costs of medical education. P5,

a cardiologist with eleven years of NHS experience in the United Kingdom, articulated this with particular force, stating: "I had spent eleven years becoming a cardiologist — five years of medical school, two years of house officer postings, four years of specialization. The salary I was offered at a government hospital in Lahore could not cover my children's school fees. Not because I was greedy, but because the numbers simply did not work." P1, a general physician who had been practising in the UK for twelve years, described his reaction to his first domestic pay slip after completing his FCPS examination: "I remember thinking this cannot be real. I had just passed one of the hardest examinations in Pakistani medicine, and the salary was less than what a junior office worker earned in the private sector. How do you stay motivated after that?" These accounts were not isolated; the majority of participants described similar calculations in which the financial unsustainability of domestic practice had become inescapable, not as an abstract concern but as a lived daily reality.

The second subtheme, financial insecurity and the absence of professional protection, captured a related but distinct dimension of economic vulnerability. Beyond salary levels, participants described the structural absence of protections that they came to regard as fundamental in foreign healthcare systems: occupational pension arrangements, professional indemnity coverage, sick pay entitlements, and regulated salary progression. P9, an internal medicine physician practising in Canada for thirteen years, described this as a form of institutional abandonment: "There was no safety net. If something went wrong with a patient — a bad outcome, a family complaint — I was personally exposed. The hospital would not protect you. The medical council would investigate you. And nobody, no union, no institution, would stand beside you." P19, an orthopaedic surgeon in Saudi Arabia who had previously practised in Pakistan's private sector for four years before migrating, observed that even private hospital employment in Pakistan offered little structural security: "Private hospitals in Pakistan used doctors as a resource, not as professionals. If patient volumes fell, you were asked to leave. There was no contract, no notice period, no severance. You were disposable." This sense of institutional disposability contributed to what participants collectively described as a fundamental incompatibility between the conditions of domestic practice and a sustainable professional life.

### *Theme 2: Institutional Neglect and the Erosion of Professional Agency*

Closely interwoven with economic disenfranchisement, but analytically distinct from it, was a second cluster of experiences centred on the structural environment of clinical practice within Pakistan. Participants described with consistency and specificity a set of institutional conditions that they experienced not merely as inconvenient but as actively corrosive of their professional identity and clinical capability. These conditions were organised into two subthemes: resource scarcity and diagnostic inadequacy, and structural indifference manifested in the absence of meritocracy.

The first subtheme captured the lived clinical reality of practising in environments where the tools of modern medicine were chronically unavailable or unreliable. Participants described shortages of diagnostic imaging, laboratory reagents, essential medications, surgical consumables, and basic monitoring equipment as constituting the permanent background condition of Pakistani hospital medicine. P14, a female emergency physician who had completed her postgraduate training in Pakistan before migrating to Canada seven years ago, described the psychological dimension of this scarcity with precision: "I was trained to think like a modern physician. I knew what investigations to order, what the differential diagnosis should be, how to manage a critically ill patient. But I was working in conditions where I could not even run basic blood tests reliably. You feel like your training is mocking you — you know what should be done and you cannot do it." P21, a general surgeon in Saudi Arabia with eleven years overseas experience, described the impact of equipment shortages on surgical safety in terms that he found difficult to articulate without evident emotion: "I have done operations in Pakistan that I would never have been allowed to perform in Saudi Arabia in the same conditions. You improvise, you adapt, and sometimes it works out. But you carry the risk of that improvisation entirely alone, and you know that a patient's life is depending on your ingenuity rather than on a functioning system."

The second subtheme addressed the institutional cultures within which participants had worked in Pakistan, which the majority described as characterised by opacity, patronage, and the systematic irrelevance of professional merit. P3, a surgeon with fifteen years of NHS experience who had completed both his MBBS and FCPS in Pakistan before migrating, offered a particularly pointed account: "Hard work made no difference. You could be the most competent surgeon in the department, publishing research, training juniors, arriving first and leaving last. Who you knew, whose nephew you were — that determined your promotion and your future. Competence was almost irrelevant." P7, a radiologist practising in the UK for eighteen years and among the most senior participants in the study, described a similar pattern: "I watched colleagues who were clearly less skilled receive appointments and positions that I had worked harder for. Not because there was anything wrong with them as people, but because the system had no mechanism for recognising quality. There was no performance review, no transparent criteria, no accountability. It was deeply demoralising." Several participants noted that the intersection of resource scarcity and institutional indifference created a professional environment in which the only rational strategy was departure: when both the tools and the institutional structures for professional growth are systematically absent, the calculus of migration becomes, in the words of P25 (Gastroenterology, UAE, nine years abroad), "not a choice between staying and going, but a choice between going and being slowly destroyed."

### *Theme 3: The Architecture of Professional Promise Abroad*

If the first two themes describe the conditions that made domestic practice unsustainable, the third theme captures what participants encountered upon arrival in foreign healthcare systems and why those environments were experienced as genuinely and qualitatively transformative rather than simply financially superior. Two subthemes emerged: the experience of structured training pathways and career visibility, and the expansion of clinical capability through access to advanced technology.

The first subtheme reflected participants' accounts of the clarity, structure, and institutional coherence of postgraduate medical training systems in destination countries. Many participants described encountering, for the first time, a training environment in which the pathway to specialisation was explicitly mapped, progress was formally assessed, and mentorship was institutionally embedded. P10, a neurologist who had been practising in Canada for eight years after completing her postgraduate training in Pakistan, described this transition in terms of professional reorientation: "For the first time in my career, I could see exactly where I was going. There was a clear training programme — examinations at defined intervals, clinical rotations designed to build specific competencies, a consultant grade that was achievable through a defined process. It was visible, it was fair, and it was achievable regardless of who you knew." P16, an anaesthesiologist in Canada, described the contrast with her Pakistani training experience: "In Pakistan, training happened if you were lucky enough to be assigned to a good supervisor and if that supervisor had time for you. It was entirely informal. Here, every rotation has learning objectives, a supervisor with allocated teaching time, and a structured assessment. You are not just working — you are demonstrably progressing." For participants practising in Gulf states, the pull of structured training was somewhat less salient than for those in the UK and Canada, as several Saudi Arabia and UAE-based participants noted that their migration had been motivated more by salary and resource availability; nonetheless, even within this group, several described the experience of working within clearer institutional hierarchies and more coherent hospital governance systems as a significant improvement over the Pakistani context.

The second subtheme captured the transformative impact of access to advanced clinical technology, which multiple participants described as fundamentally altering their experience of clinical practice and their understanding of what medicine could accomplish. P11, a general surgeon in Canada with ten years of overseas experience, articulated this with particular force: "The first time I used intraoperative imaging guidance in Canada, I understood in a completely different way what I had been missing in Pakistan. And I want to be very precise — it was not that I lacked the skill or the training to use it. I

lacked the machine. Abroad, for the first time, the tools actually matched my training, and it changed everything about what I could offer a patient." P15, an oncologist in Canada who had practised for three years in Pakistan's largest cancer centre before migrating, described access to genomic diagnostics and targeted therapies as revealing the full scope of what he had been trained to know: "In Pakistan I was treating cancer with protocols from the 1990s because that was what was available. Here, I practise evidence-based oncology. There is no comparison in terms of what the patient receives and what I feel as a professional."

### *Theme 4: Dignity, Regulation, and the Experience of Being Professionally Valued*

A fourth and deeply significant cluster of findings concerned the quality and structure of the working environment itself, independent of salary or technology. Participants described, often with striking emotional intensity, the experience of working within regulated, humane, and professionally respectful institutional cultures as something they had not anticipated would matter as much as it did. This theme comprised two analytically distinct subthemes: regulated working environments and psychological recovery, and professional recognition and institutional respect.

The first subtheme reflected the near-universal description among participants of how the structure of working hours in destination countries had been experienced as personally restorative. P6, an obstetrician-gynaecologist who had migrated to the UK six years earlier after working for three years in a busy Pakistani tertiary hospital, described the contrast with particular clarity: "In Pakistan I was regularly working 80, sometimes 90 hours a week. I was chronically sleep-deprived. I missed my daughter's first steps because I was on call for the forty-eighth consecutive hour. I was burnt out before I was thirty. Here, when my shift ends, it ends. There is a rota, there is a cover system, and I go home and I am a person again — not just a doctor waiting for the next emergency." P28, a female emergency physician in the UAE with four years of overseas experience, noted that the psychological impact of unregulated working hours in Pakistan had extended beyond fatigue into what she described as a sustained erosion of her sense of self: "You stop having a life outside medicine. You stop reading, socialising, exercising. Everything that makes you a rounded human being disappears. And when you are psychologically depleted, your clinical performance suffers too, which is ultimately bad for patients. Regulated hours are not a luxury — they are a patient safety issue."

The second subtheme captured an aspect of the foreign professional experience that many participants described as unexpected in its emotional significance: the experience of institutional recognition and collegial respect. Multiple participants described the shift from an environment in which their work was invisible and their voice was irrelevant to one in which their clinical contributions were acknowledged, their professional opinions were solicited, and their development was treated as a matter of institutional concern. P2, a paediatrician practising in the UK for seven years, offered an account that was echoed by several other participants: "The consultants here actually learn your name in your first week. They ask your opinion in ward rounds. When I started my training in the UK, my consultant said to me, 'You have a different perspective from your training in Pakistan — what do you see that we might be missing?' Nobody had ever asked me that before. In Pakistan, I was invisible unless something went wrong and there was someone to blame." P4, a psychiatrist in the UK, described a similarly formative moment: "I presented at a departmental meeting in my first month. Afterwards, my clinical director came to me privately and told me my contribution was valuable and asked if I had considered academic psychiatry. That single conversation changed my trajectory. I had never once in five years of training in Pakistan been told that I was capable of more."

### *Theme 5: The Price of Migration — Licensing Barriers, Cultural Dislocation, and Identity Negotiation*

While the preceding themes might suggest a straightforward narrative of escape from adverse conditions to enabling ones, a fifth theme revealed the substantial and often underestimated costs associated with the migration process itself. Participants consistently described migration not as a fluid transition but as

a prolonged, effortful, and frequently painful process of professional and personal re-establishment, organised across two subthemes: credentialing barriers and the labour of professional re-entry, and cultural dislocation and the negotiation of identity.

The first subtheme captured the experiences of participants navigating foreign licensing requirements, which were described unanimously as demanding, time-consuming, financially costly, and psychologically taxing. P8, a female general practitioner in the UK who had completed PLAB whilst working full-time as a junior doctor in Pakistan, described the experience with measured frankness: "The PLAB Part 1 and Part 2 took me two years of preparation alongside a full-time job. The examination fees, the revision courses, the study materials — it cost me money I did not comfortably have. And after passing, there was the application process, the visa, the initial months of working below my qualification level while the system assessed me. People talk about migration as if it is a smooth escape. It is not. It is a second education, with your own money, in your own time, with no institutional support whatsoever." P13, a cardiothoracic surgeon in Canada who had spent four years completing his Royal College of Surgeons examinations and Canadian residency equivalency process, described the emotional toll with particular candour: "There were months when I genuinely questioned whether it was worth it. I was in my mid-thirties, I had already completed a full surgical training in Pakistan, and I was being assessed as if I were a medical student. It was professionally humiliating at times, even though I understood intellectually why the process existed." Participants in Gulf states described credentialing barriers that were somewhat less onerous than those in North America or the UK, but nonetheless noted that the Dataflow verification process and periodic licence renewal requirements created sustained administrative burdens.

The second subtheme addressed the cultural and social dimensions of migration that participants described as constituting an ongoing rather than resolved challenge. Unlike licensing barriers, which most participants had eventually overcome, the experience of cultural dislocation was described as more diffuse, less amenable to resolution through effort alone, and intertwined with fundamental questions of professional and personal identity. P4, a psychiatrist who had practised in the UK for nine years, offered one of the most nuanced accounts in the dataset: "You become competent in the clinical culture relatively quickly. You learn the guidelines, the referral pathways, the communication style with patients. But the social and institutional culture — the humour, the unspoken hierarchies, the way colleagues relate to each other in the corridor or in the mess room — these take years, and I am not sure they ever fully open to you." P30, a female general practitioner in the UAE with only two years abroad, described a related experience of cultural code-switching that created exhaustion alongside professional satisfaction: "I spend a great deal of energy managing how I present myself. Here I work with colleagues from fifteen countries and patients from thirty. Every consultation requires a different cultural register. I have learned so much from this, but it is genuinely tiring in a way that is hard to explain to people who have not experienced it." Several participants described the intersectionality of cultural dislocation and gender, with female participants noting that they navigated not only national cultural differences but also gender dynamics that varied substantially between destination countries — most notably between Gulf states and Western healthcare systems.

### *Theme 6: Moral Residue and the Weight of Leaving*

The sixth and most emotionally complex theme to emerge from the analysis concerned the moral and existential dimensions of migration that persisted alongside — and sometimes in tension with — participants' professional satisfaction abroad. This theme was distinctive in that it did not map straightforwardly onto either push or pull factors; rather, it captured what participants experienced after the migration decision had been made and enacted, and what remained with them as a consequence. Two subthemes were identified: guilt, collective responsibility, and homeland conscience, and conditional return and the structural politics of hypothetical repatriation.

Within the first subtheme, many participants described a persistent, largely unresolved sense of moral obligation to the patients, communities, and health system they had left behind. This was not, characteristically, expressed as acute guilt that disrupted daily functioning, but rather as a low-level, chronic moral awareness that accompanied professional satisfaction and personal wellbeing. P23, a cardiologist practising in the UAE for seven years, described this experience with a precision that resonated across multiple other accounts: "I think about my patients in Lahore often. Not specific patients necessarily, but the idea of them — the ones who needed a cardiologist and could not find one, or who found one but had to wait three months. That awareness does not leave you. You carry it." P15, an oncologist in Canada, described a more acute version of this moral residue: "There are moments in my work here — when I offer a patient a treatment option that would not exist for them in Pakistan — when the feeling is almost unbearable. Not because I regret being here, but because I understand with complete clarity what the absence of people like me means for people like my patients back home." A minority of participants reported that this moral weight had become a source of active engagement: P5 (Cardiology, UK) and P13 (Cardiothoracic Surgery, Canada) both described involvement in telemedicine initiatives providing specialist consultation to Pakistani hospitals, and P10 (Neurology, Canada) had co-founded a continuing medical education programme for neurologists in Pakistan. These forms of transnational professional engagement represented, in the words of P10, "an imperfect but meaningful way of not entirely abandoning the system I came from."

The second subtheme captured an analytically important dimension of participants' orientations toward Pakistan that complicated any simple narrative of permanent departure: the articulation of explicit, often highly specific conditions under which return would be considered. The majority of participants stated, with varying degrees of conviction, that their migration was not experienced as irrevocable, and that particular structural changes to Pakistan's healthcare system would meaningfully alter their calculation. P27, a nephrologist in the UAE with twelve years abroad, offered a formulation that was representative of the broader pattern: "If salaries were genuinely competitive with the cost of living, if public hospitals had the equipment to practise modern nephrology, if my children could access a quality education — I would return to Pakistan. I want to be clear: Pakistan is my home, it is where I belong, and it is where my knowledge is most needed. But I cannot sacrifice my children's futures and my professional sanity for a system that, as it currently stands, does not create the conditions for a sustainable life." P20, a female paediatrician in Saudi Arabia with four years abroad, described a related tension: "My parents are getting older and I think about being close to them. I think about my nieces and nephews growing up not knowing me properly. The pull of home is real and powerful. But every time I visit Pakistan and I see the hospitals, I remember why I left, and the thought of going back to those conditions is genuinely frightening." These accounts collectively revealed that Pakistani medical migration is better understood as a contingent and conditionally reversible process than as a permanent, irreversible rupture — a distinction with significant implications for retention policy.

Table 2 presents the study's complete thematic framework and functions as the primary analytic map of the findings. The table reveals a coherent structure in which the six themes are organised across three conceptual planes. The first plane — comprising Themes 1 and 2 — represents the structural conditions of Pakistani medical practice that collectively constitute what participants described as an unsustainable professional environment. The themes are analytically complementary: economic disenfranchisement operates at the level of financial and material reality, while institutional neglect operates at the level of professional agency and organisational culture. Together, they illuminate how the conditions of domestic practice are experienced as both economically irrational and professionally corrosive, creating a cumulative pressure toward departure that no single factor alone could produce. The second plane — comprising Themes 3 and 4 — represents the structural and experiential conditions of foreign healthcare systems that attract and retain Pakistani doctors. These themes similarly complement each other: structured training and technological access address the professional dimensions of the foreign environment, while regulatory dignity and recognition address its human and institutional dimensions.

The juxtaposition of Themes 1 and 2 against Themes 3 and 4 reveals the full depth of the structural asymmetry that Pakistani physicians navigate — not simply a salary differential, but a comprehensive divergence in the institutional conditions of professional life. The third plane — comprising Themes 5 and 6 — introduces the complexity and moral texture that the push-pull framework alone cannot capture.

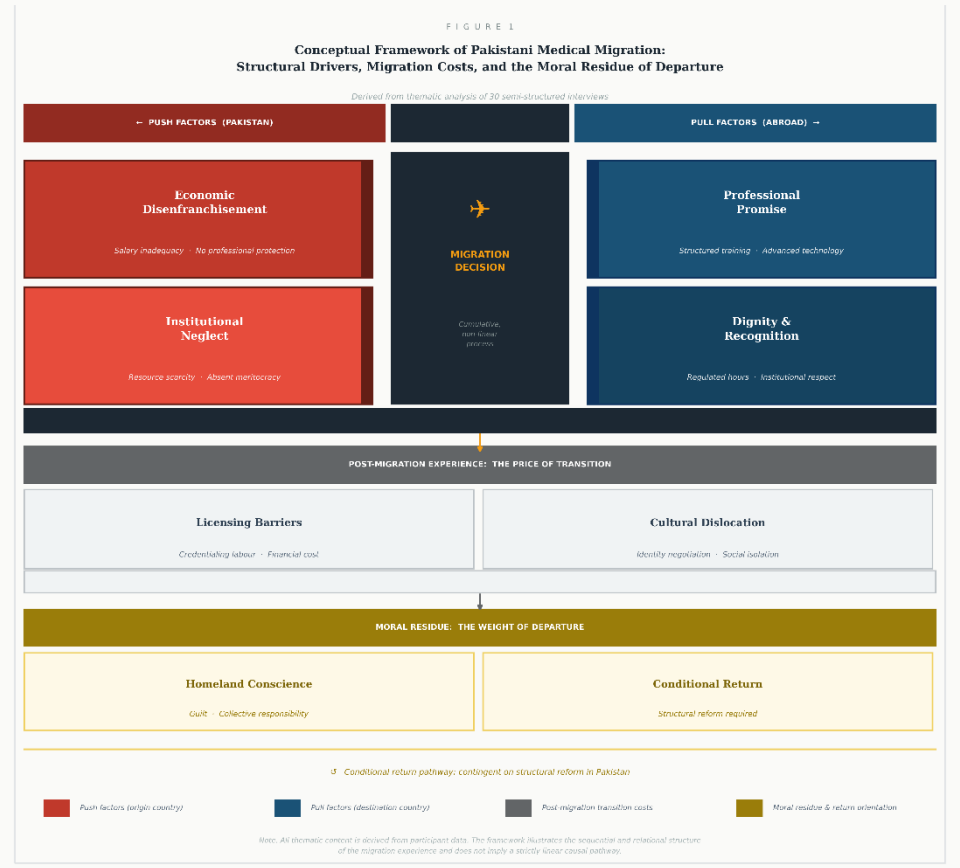


*Figure 1 Thematic Illustration*

Theme 5 reveals that migration is not a cost-free transition but an arduous process with its own financial, psychological, and identity-related burdens. Theme 6 reveals that the moral dimensions of leaving a resource-constrained health system do not dissipate after migration but persist as a form of professional conscience, and that the conditions for return remain articulable and structural rather than emotional or nostalgic. Taken together, the six themes present a portrait of Pakistani medical migration that is simultaneously structurally overdetermined and personally nuanced — driven by forces that are systemic and predictable yet experienced in ways that are irreducibly individual.

## DISCUSSION

The findings of this qualitative descriptive study offer an interpretively rich and empirically grounded account of medical migration from Pakistan that substantially extends existing knowledge beyond what quantitative enumeration of migration volumes and macroeconomic drivers has been able to provide. Thirty Pakistani physicians, practising across four destination countries and spanning the full range of medical specialties and career stages, described a migration experience that is simultaneously structurally overdetermined and irreducibly personal — shaped by institutional forces that are systemic and predictable, yet lived in ways that are distinctly individual. The central interpretive insight emerging from the analysis is that Pakistani medical migration is not best understood as a straightforward rational response to a wage differential, but rather as the cumulative product of a sustained erosion of professional dignity, institutional trust, and personal sustainability that makes domestic practice not merely less rewarding than practice abroad, but genuinely untenable as a long-term life project. This

reframing has significant implications for how the phenomenon is theorised, studied, and — most importantly — addressed through policy.

The first and most pervasive theme — economic disenfranchisement experienced as an existential mismatch — confirms and deepens findings reported in prior quantitative studies documenting the salary gap between Pakistani physicians and their counterparts in destination countries (4,5,8). However, the qualitative data reveal a dimension that financial comparisons alone cannot capture: participants did not describe low salaries primarily as an economic problem but as a moral one, interpreting their remuneration as an institutional signal that their years of training, their clinical expertise, and their professional sacrifice were not regarded as valuable by the state that educated them. This moral reading of material conditions aligns with Arah, Ogbu, and Okeke's (28) conceptualisation of physician migration as a response to perceived social contract failures between health professionals and their home governments, and extends it to the Pakistani context with specificity. Ahsan's (5) survey-based documentation of salary dissatisfaction among Pakistani medical graduates similarly identified financial factors as primary, but could not access the interpretive layer — the sense of institutional disrespect — that the present study reveals. The clinical and policy significance of this distinction is considerable: salary increases alone, without accompanying changes to the institutional cultures within which physicians practise, may be insufficient to alter migration calculations if the underlying experience of professional devaluation persists.

The second theme — institutional neglect and the erosion of professional agency — similarly extends beyond what existing literature has documented. Resource scarcity in Pakistani public hospitals has been quantitatively catalogued by Hafeez and colleagues (11) and the Pakistan Bureau of Statistics (12), but participants in the present study described the psychological experience of practising in resource-depleted environments with a precision that aggregate data cannot convey. The feeling of being trained to a standard of care that the available infrastructure renders undeliverable — what one participant described as training that mocks you — represents a form of professional identity disruption that has not previously been characterised in the Pakistani literature. This finding resonates with Dovlo's (29) analysis of health workforce demoralisation in sub-Saharan African contexts, where the inability to practise to the standard of one's training was identified as a stronger predictor of emigration intent than salary dissatisfaction alone, and suggests that comparable dynamics operate in the Pakistani setting. The related subtheme of absent meritocracy — in which patronage networks rather than clinical competence determined career advancement — was described with particular emotional intensity by participants who had invested heavily in postgraduate qualifications and research output only to observe that these investments carried no institutional currency. Marchal and Kegels (17) identified institutional culture as an undertheorised determinant of health worker migration, arguing that structural approaches focused exclusively on remuneration systematically underestimate the role of professional environment in migration decision-making; the present findings provide qualitative evidence supporting this claim from a Pakistani perspective.

The third and fourth themes — professional promise abroad and the experience of dignity and recognition — together reveal that destination countries offer Pakistani physicians not merely better compensation but a fundamentally different institutional relationship. Participants described structured training pathways, access to advanced technology, regulated working environments, and collegial professional recognition as collectively reconstituting their sense of professional identity in ways that were experienced as transformative rather than merely convenient. These findings are consistent with Astor and colleagues' (14) multi-country qualitative study, which identified professional agency and institutional respect as drivers of physician migration that operated independently of financial incentives, and with Stilwell and colleagues' (16) observation that health worker migration is motivated by the search for environments in which professional values can be enacted rather than merely by salary maximisation. The present study, however, adds an important nuance: for several participants, the experience of professional recognition abroad was described not simply as preferable to their Pakistani

experience but as revelatory — they reported having had no prior reference point for what institutional recognition felt like, because it had been entirely absent from their training and early career. This suggests that the aspiration to be professionally valued is not a luxury preference among Pakistani doctors but a fundamental professional need that the domestic system has not historically sought to meet.

The fifth theme — the price of migration — introduces a dimension that is frequently elided in policy and public discourse about medical brain drain. Participants across all four destination countries described the process of obtaining foreign licensure as arduous, financially costly, and psychologically taxing, often requiring years of additional examination preparation and professional re-entry processes that unfolded without institutional support. Hagopian and colleagues (30) noted in their study of sub-Saharan African physicians in the United States that the costs of credential recognition are systematically invisible in migration statistics, which record arrivals but not the years of preparation and intermediate steps that precede them. The present findings extend this observation to Pakistani physicians in the UK, Canada, and Gulf contexts, and suggest that the labour of professional re-entry constitutes a significant hidden tax on migration that complicates any straightforward portrayal of international medical mobility as an unambiguous individual benefit. The cultural dislocation subtheme similarly revealed that the social and identity-related costs of migration are ongoing and cumulative rather than resolved through initial adaptation, with participants describing sustained experiences of cultural code-switching and social partial-belonging that persisted even among those with the longest overseas tenures. Female participants additionally described navigating gender-related cultural differences that varied substantially between destination countries, introducing an intersectional dimension to the migration experience that warrants dedicated qualitative investigation in future research.

The sixth and most conceptually distinctive theme — moral residue and the weight of leaving — represents the study's most original contribution to the literature and challenges the assumption, implicit in much brain drain scholarship, that migration constitutes a definitive rupture between the physician and their country of origin. Participants consistently described a persistent, low-level moral awareness of the healthcare system they had left and the patients who remained within it — a homeland conscience that coexisted with professional satisfaction rather than being displaced by it. This finding has no direct counterpart in the existing Pakistani medical migration literature, where the post-departure experiences of migrated physicians have been almost entirely neglected in favour of documenting migration rates and estimating the economic cost of lost training investment (8,9). The conditional return subtheme was equally significant: the majority of participants articulated specific, structural conditions under which return to Pakistan would be a rational and actively considered option, positioning repatriation not as nostalgia but as a policy-addressable phenomenon. Beine, Docquier, and Schiff (20) have argued theoretically that diaspora physician populations represent underutilised human capital assets for source countries, and that the conditions for engaging diaspora expertise — whether through return migration, telemedicine, or knowledge transfer — are amenable to policy design. The present findings provide qualitative evidence that Pakistani physicians abroad not only retain an orientation toward the home system but are prepared to articulate the reform conditions that would make return viable, offering policymakers a rare empirical window into the structural parameters of a conditional return calculus.

Taken together, the six themes substantially complicate the Push-Pull Theory of migration as originally formulated by Lee (21). While the framework usefully organises the structural determinants of physician mobility, participants' accounts reveal that migration decisions are neither instantaneous nor straightforwardly rational: they unfold over years of cumulative professional frustration, are shaped by peer networks and informal information sharing, are tempered by significant transition costs, and are accompanied by moral dimensions that persist indefinitely after departure. Marchal and Kegels (17) and Stilwell and colleagues (16) have both critiqued the binary push-pull model for its failure to capture

these processual and relational dimensions, and the present findings provide granular qualitative support for that critique while simultaneously demonstrating that the framework retains heuristic value as a first-order organising structure for the structural determinants of the migration decision. Future theoretical work in this area might productively integrate the push-pull framework with identity theory — specifically with accounts of professional identity threat and repair — to better capture the subjective dimensions of migration motivation that the present study has revealed.

Several methodological considerations warrant acknowledgment. The purposive sampling strategy, while designed to maximise variation across key dimensions, was constrained by the reliance on professional networks and snowball referrals, which may have produced a sample somewhat skewed toward physicians who are professionally established, digitally connected, and willing to reflect openly on their migration experiences. Physicians who migrated under more precarious circumstances, those in career difficulty abroad, or those who have returned to Pakistan may hold perspectives that are not adequately represented in the current dataset. The online interview format, while enabling access to geographically dispersed participants, precluded the depth of rapport and the observation of non-verbal communication that in-person interviews can facilitate. The study was also conducted in English, with Urdu as a supplementary option; while this was appropriate for a professionally educated sample, it may have introduced subtle expressive constraints for participants whose most nuanced reflections were more naturally formulated in their first language. The research team's composition — including Pakistani-trained physicians with professional familiarity with the domestic healthcare system — conferred the interpretive advantages of insider knowledge while simultaneously creating a risk of confirmatory bias in the analysis. This risk was actively managed through reflexive memo-writing and systematic peer debriefing, but cannot be fully eliminated, and readers should assess the findings with this in mind. Finally, consistent with the epistemological commitments of qualitative descriptive inquiry, the findings are not intended to be statistically generalisable to all Pakistani physicians working abroad; rather, they offer analytic transferability — the potential to illuminate dynamics that may be recognisable and applicable across comparable contexts — which readers are invited to assess against their own knowledge of similar settings (26).

The implications of this study are significant for both policy and practice. At the level of health workforce policy, the findings suggest that retention strategies focused exclusively on salary increases, while necessary, are unlikely to be sufficient if not accompanied by fundamental reforms to the institutional culture, meritocratic structures, and professional governance systems within which Pakistani physicians work. Investment in diagnostic infrastructure, regulated working hour frameworks, transparent promotion systems, and formal professional recognition mechanisms — all of which emerged from participant accounts as decisive differentiators between domestic and foreign practice — should be treated as retention policy imperatives alongside remuneration reform. At the level of diaspora engagement, the finding that many Pakistani physicians abroad retain a conditional orientation toward return, and are actively involved in transnational professional activities such as telemedicine and continuing medical education, suggests that diaspora physician communities represent a strategic resource that has been substantially underutilised by Pakistani health authorities. Structured diaspora engagement programmes — modelled on examples from countries such as India, the Philippines, and Ghana that have developed formal mechanisms for connecting overseas health professionals with domestic needs — could represent a productive complement to domestic retention efforts (31). Future qualitative research should explore the experiences of female physicians specifically, given the intersectional gender dimensions identified in the present study; investigate the experiences of Pakistani physicians who have returned to Pakistan after overseas practice; and examine the perspectives of medical students and early-career physicians who are considering migration but have not yet departed, in order to identify intervention points earlier in the migration trajectory.

## CONCLUSION

This study offers the first in-depth, participant-centred qualitative account of the motivations, experiences, and post-departure orientations of Pakistani physicians working abroad, and its central finding is one that quantitative migration data alone could not have revealed: that medical migration from Pakistan is driven not simply by the rational pursuit of financial advantage but by the cumulative experience of professional disenfranchisement — a sustained institutional failure to provide physicians with the conditions, resources, recognition, and respect that are indispensable to a sustainable and dignified professional life. Participants' accounts illuminate a healthcare system in which clinical competence is structurally unrewarded, institutional cultures are resistant to merit, resource environments undermine the enactment of professional training, and the working conditions that sustain long-term practice are absent. Against this backdrop, the discovery that the majority of migrated physicians retain a persistent moral orientation toward Pakistan — expressed as homeland conscience, active transnational professional engagement, and a conditional willingness to return if structural conditions change — is perhaps the most important and hopeful finding the study offers, because it reveals that the social compact between the Pakistani state and its diaspora physicians has not been permanently severed but remains available for policy-informed repair. Realising this potential requires not incremental adjustments but comprehensive structural reform: investment in clinical infrastructure, genuine meritocracy in institutional governance, regulated and humane working conditions, and diaspora engagement mechanisms that treat overseas Pakistani physicians as a resource to be cultivated rather than a population that has already been lost.

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