

The Price of Care: Disparities in Income and Job Satisfaction among Nurses in Kerala and the UK

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ABSTRACT

Migration has been a characteristic feature of Kerala's socio-economic scenario for decades, with labor inflows from the other Indian states and overseas emigration of Keralites, mainly to Gulf countries. A remarkable change, however, is on the horizon; more and more nurses are emigrating to Europe, mainly the United Kingdom, and are showing no signs of returning. This research analyzes the push and pull factors behind this trend with emphasis on the relationship between income levels and employment satisfaction among health professionals.

The study identified poor wages, stressful working conditions, and restricted career development in Kerala's healthcare industry as main push factors, while remunerative salaries, improved working conditions, and career development opportunities in industrialized countries are strong pull factors. The research indicates increasing skill drain and staff shortages in Kerala, with its overworked healthcare system highly dependent on inexperienced professionals.

This study focuses on the need for policy action, such as competitive pay scales, enhanced working conditions, and incentives to return to Kerala. Increased investment in career development and healthcare infrastructure may moderate workforce drain and maintain Kerala's world-renowned healthcare system. Addressing the gap between income and job satisfaction will enable Kerala to maintain its health professionals while aligning itself to the international healthcare workforce demand.

Keywords: Income disparity, job satisfaction, nurses, migration, healthcare workforce, wage gap, remittances, workplace conditions, occupational stress, skill drain.

JEL Classification Codes: J31, J28, J61, F22, I11

1. INTRODUCTION

Kerala, known for its development model, enjoys commendable advantage over other states as far as education, health, and living standards are concerned. But beneath this success, lies a growing crisis—the large-scale migration of healthcare workers, particularly nurses, to other nations in search of better economic and career opportunities.

Even though migration has long been a part of the economic and social life of Kerala, the recent trends show a significant change. Unlike their earlier generations, who considered migration to be a temporary solution to become better off and then return home, present-day health workers are going in for permanent settlement, taking along their families and leaving behind any attachment to their native state. This change in migration trend has extensive implications for Kerala's economy as well as its health sector.

Gulf countries have, over the years, has remained the top destination for Kerala's migrant population. It offered a stable paycheck and financial stability for the state's migrants, including nurses. But, recently, their attractiveness has declined, as increasing numbers of nurses now choose to go to countries such as the United Kingdom, Canada, and other European states. This is primarily due to differences in income, satisfaction levels at work, general work conditions, and the possibility of gaining permanent residency and property ownership. Nurses in Kerala, especially in the private sector, face wage stagnation, job insecurity, and a challenging work environment. Despite their critical role in the healthcare system, they are frequently underpaid and overworked, leading to widespread dissatisfaction. The situation is further aggravated by recurring protests and strikes demanding fair wages, along with increasing cases of workplace violence and harassment.

On the other hand, developed countries provide nurses not only greater pay but also better career development, working conditions, and professional dignity. This enormous gap in remuneration, combined with improved infrastructure, work safety, and standard of living, has made migration not only a desirable option but, for many, inevitable. Although Kerala has traditionally benefited from remittances, permanent migration raises deeper concerns. The aging population of the state and a health system already short of staff make it harder and harder to maintain the high health levels that it is famous for. If this trend is allowed to go unchecked, Kerala, in the near future, will experience an acute shortage of qualified healthcare workers. This can have long-term consequences on public well-being as well as economic stability.

This research aims to investigate the level of income inequality and job satisfaction among nurses in Kerala and the UK, comparing both health systems to determine the reasons for migration. It also focuses on the socio-economic implications of the trend, especially in the context of Kerala's aging population and declining workforce. Even when migration is viewed as a way of enhancing personal economic opportunities, its overall implication on the state's development in the long term should be scrutinised. The push and pull factors driving healthcare migration are also important in the formulation of policies that can make Kerala's healthcare system sustainable. If Kerala is to hold its position as a leading state in social development, immediate actions should be taken towards addressing increasing dissatisfaction among healthcare professionals and giving them support and incentives to retain talent and ensure the efficiency of its healthcare system.

2. REVIEW OF LITERATURE

In India, the decision to pursue nursing is shaped by socio-economic factors, including high levels of educated unemployment and the perception of nursing as a stable career path for lower-middle-class and economically disadvantaged families. Despite being a crucial component of the healthcare system, nursing remains a deeply gendered profession, reinforcing traditional stereotypes of women as caregivers. This gendered nature of the field affects professional recognition and wages, contributing to a persistent status gap between how nurses view themselves as skilled professionals and how society perceives them as low-status workers (Nair, 2012). Historically, nurses in India have struggled with low wages, demanding working conditions, and rigid hierarchies within the healthcare system, which continue to be significant challenges today (Nair & Healey, 2006).

Despite a large number of women entering the profession and the growing number of nursing institutions, India faces an ongoing shortage of nurses. Public-sector nurses enjoy relatively better job security and salaries than their private-sector counterparts, but both groups contend with issues such as excessive

workloads, poor working environments, and a general lack of professional respect. Many nurses report being underpaid and undervalued, with their work often framed as an act of selfless service rather than a respected career choice (Iyer, 2017). The World Health Organization (WHO, 2022) highlights the need for policy changes, including revising nursing curricula, increasing salaries, and providing mental health support to retain and support nursing professionals.

Hospital management systems in India contribute to workplace stress by imposing role conflicts, work overload, and role ambiguity. Even experienced nurses are often assigned menial tasks, leading to low morale. Additionally, nurses face unfavorable nurse-to-patient ratios, gender-based discrimination, and social biases, including caste and religious prejudices that further undermine their professional identity (Nair & Healey, 2006). These systemic issues have led many Indian nurses, particularly those from Kerala, to seek employment opportunities abroad, exacerbating India's healthcare workforce crisis.

Migration has become an attractive option for many nurses due to better salaries, improved working conditions, and enhanced social status in countries like the U.S., U.K., Ireland, Australia, and the Gulf nations. Kerala, known for its well-documented migration patterns, follows a staged migration process where nurses first move to North Indian states, then to the Middle East, and later to Europe or North America (WHO, 2022). This movement is facilitated by recruitment agencies, particularly in cities like Kochi, which actively connect Indian nurses to international opportunities.

While remittances from migrant nurses support their families and contribute to the Indian economy, the long-term loss of skilled healthcare professionals is concerning (Thomas, 2007). As more nurses seek permanent residency abroad, the inflow of remittances may decline in the future, further impacting India's economic and healthcare stability (Sebastian, 2019). Migration decisions are not solely financial; while first-time migrants primarily move for better earnings, experienced nurses often migrate in search of a more liberal social environment. However, many face challenges abroad, such as high living costs, inadequate accommodation, and unfavorable working conditions, especially in countries like the U.K. (Garbayo & Maben, 2009).

A major barrier to migration is the requirement to meet international standards. Indian nurses undergo intensive training before relocating, with private recruitment agencies playing a dominant role in the migration process. High costs associated with migration mean that wealthier nurses, particularly BSc graduates from upper and middle castes, have better opportunities to work abroad (Thomas, 2007). Additionally, language barriers and licensing exam requirements, such as the OSCE, further limit migration prospects for many nurses (WHO, 2022).

Indian nurses working overseas face multiple challenges, including workplace discrimination, racial biases, and limited career advancement opportunities. Studies from the U.S., Canada, and the U.K. indicate that internationally educated nurses (IENs) often experience unequal treatment, which affects job satisfaction, workforce retention, and ultimately, patient care quality (Walani, 2015). While some countries, such as Denmark and the Netherlands, actively seek Indian nurses for their adaptability, concerns about job security for local healthcare workers persist (Kodoth & Jacob, 2013).

Despite these challenges, international migration has improved the economic and social status of many Indian nurses. The migration of highly skilled healthcare professionals is often classified as "circular migration," wherein nurses work abroad temporarily before returning to India. This short-term movement is primarily driven by poor working conditions and low wages in India, combined with better financial prospects overseas (Hawkes et al., 2009).

India remains the world's second-largest supplier of nurses, yet the severe shortage of healthcare professionals poses a major challenge. Economic factors like wage disparities play a crucial role in migration decisions. Salaries vary widely across the nation; wealthier regions pay higher income and lower-income states pay significantly less (George & Rhodes, 2017). This underpayment of nurses is the primary driver of migration trends and it is high time we adopt more robust healthcare policies that enhance remuneration, working standards, and career progression prospects (Johnson et al., 2013). Although migration will always remain a choice for most nurses, ensuring better retention measures and enhancing India's healthcare system to international standards is essential for the long-term sustainability of the profession. With the competitive pay, career development prospects, and improved working conditions, India can minimize the loss of trained nurses and improve its healthcare system (Oda et al., 2018).

3. RESEARCH METHODOLOGY

The research design for the study is descriptive and analytical. A survey method involving structured questionnaires was used to gather data from two samples: nurses of Kerala (India) and Malayali nurses working in the UK. A sample of 120 respondents was surveyed, of which 60 were from the Trivandrum district of Kerala and the remaining 60 were Malayali nurses in the UK. In Kerala, the sample consisted of nurses from both public and private hospitals within the Trivandrum district, chosen using convenience sampling in order to have representation from various hospital types and settings. In the UK, nurses were sampled from both public and private healthcare systems, with the majority working within the public system (NHS). Because of accessibility limitations, snowball sampling was applied to collect data from Malayali nurses in the UK.

The research covered a period of five months from July 2025 to November 2025; that comprised three weeks for sampling, two weeks for data collection, and three weeks for data analysis and reporting.

This research has a number of limitations. Snowball sampling among UK respondents might have resulted in selection bias. Although the research particularly targeted the Trivandrum district of Kerala, the UK sample did not focus on a specific region. In spite of these limitations, this research offers interesting insights into major push and pull factors that are driving nurse migration. There were strict ethical considerations, with informed consent from all subjects and confidentiality maintained during the research.

4. RESULTS AND DISCUSSION

Hypothesis 1

H₀: There is no significant difference in job satisfaction levels between nurses in the Trivandrum district of Kerala and the United Kingdom.

H₁: There is a significant difference in job satisfaction levels between nurses in the Trivandrum district of Kerala and the United Kingdom.

Since job satisfaction is measured on an ordinal scale and does not follow a normal distribution, the Mann-Whitney U test (a non-parametric test) is applied to compare the two independent samples.

Table 1. Comparison of Job Satisfaction Levels: Mann-Whitney U Test Results

Test Name	Mann-Whitney U Test
Groups Compared	Nurses in India vs. Nurses in the UK
Test Statistic (U)	677.0
p-value	6.77×10^{-10}
Significance Level (α)	0.05
Decision	Reject H_0
Conclusion	There is a statistically significant difference in job satisfaction between nurses in India and the UK.

Interpretation

The Mann-Whitney U test result (Table 1) shows a p-value < 0.05 ($p \approx 6.77e-10$), indicating a statistically significant difference in job satisfaction levels between nurses in the UK and India. This means we can reject the null hypothesis (H_0) and conclude that job satisfaction differs significantly between the two groups.

The Mann-Whitney U test results confirm the survey result of 68.4% of UK nurses reporting satisfaction, compared to 38.2% of Kerala nurses. The key factors influencing this disparity include salary differences, job security, and career growth opportunities. While both groups experience high workloads; financial stability and professional advancement weigh more heavily on overall satisfaction.

To address this issue, improving salary structures in Kerala, particularly in private hospitals, is essential. Structured career progression models and job security measures could enhance satisfaction levels, making local employment more attractive. Also, implementing workplace reforms like regulated shift systems and psychological support services could help address burnout, ensuring that nurses experience a better work-life balance.

Hypothesis 2

H_0 : There is no significant difference in the income levels of nurses working in the Trivandrum district of Kerala and the United Kingdom.

H_1 : There is a significant difference in the income levels of nurses working in the Trivandrum district of Kerala and the United Kingdom.

Welch’s t-test is used to test this hypothesis because it is designed to compare the means of two independent groups when their variances are unequal. In this case, income levels of nurses in Kerala and the UK are expected to have different variances due to differences in economic conditions, salary structures, and living costs. Unlike the standard t-test, Welch’s t-test does not assume equal variances, making it more reliable for datasets with different dispersion levels. Therefore, it provides a more accurate assessment of whether the income difference between the two groups is statistically significant.

Table 2. Income Disparity Between Nurses in Kerala and the UK: Welch’s t-test Results

Test Variable	Value
Test Used	Welch’s t-test
Sample Size (Kerala)	60
Sample Size (UK)	60
Mean Income (Kerala)	₹20,800
Mean Income (UK)	₹3,64,000
Standard Deviation (Kerala)	₹6,900
Standard Deviation (UK)	₹1,16,000
t-Statistic (t)	-21.35
p-Value	5.60×10^{-40}
Significance Level (α)	0.05
Conclusion	Reject H_0

Interpretation

As Table 2 shows, the t-statistic (-21.35) is a large negative value, indicating a substantial difference in the income levels of nurses in Kerala and the UK. The p-value (5.60×10^{-40}) is far below the standard significance level ($\alpha = 0.05$), suggesting that the observed difference is highly significant. Given this result, the the null hypothesis (H_0) can be rejected and it can be concluded that nurses in the UK earn considerably more than those in Kerala. This confirms the existence of a substantial disparity in income levels between the two groups.

Welch’s t-test thereby confirms that income disparities are highly significant, with UK nurses earning an average of ₹2 lakh per month, while Kerala nurses earn ₹20,000 per month. This stark contrast directly influences financial stability, savings potential, and overall well-being. The data shows that 90% of UK nurses financially support their families in Kerala. This demonstrates the economic advantage of migration.

Bridging this income gap requires policy-level interventions in the private healthcare sector, where salaries are the lowest. Introducing minimum wage standards for nurses, performance-based incentives, and salary revisions aligned with inflation could reduce the financial push factors leading to migration. It can be deduced that offering financial incentives for nurses working in underserved areas may help retain skilled professionals in Kerala.

Hypothesis 3

H₀: There is no significant difference in savings potential between UK and Kerala nurses.

H₁: Savings potential is significantly higher for UK nurses than for Kerala nurses.

Table 3. Comparison of Savings Potential Between Nurses in Kerala and the UK: Chi-Square Test Results

Test	Chi Square Statistic	df	p-value	Conclusion
Chi-Square Test	18.19	3	0.0004	Significant difference in savings potential between UK and Kerala nurses

Interpretation

The chi-square test results (Table 3) reveal a statistically significant difference in the savings potential between nurses in the UK and Kerala ($\chi^2 = 18.19$, $df=3$, $p=0.0004$). The low p-value (< 0.05) indicates strong evidence against the null hypothesis, suggesting that savings potential is not evenly distributed across both groups. This result implies that UK nurses generally have higher savings potential compared to their counterparts in Kerala.

The primary reason for this disparity could be the difference in income levels, cost of living, and financial policies between the two regions. Nurses in the UK have better saving opportunities as they benefit from better salary structures, lower tax burdens, and social security benefits. Conversely, nurses in Kerala reported that they face higher financial constraints due to lower wages, rising living expenses, and limited government support, considerably reducing their saving potential.

These findings show the economic challenges faced by nurses in Kerala and the importance of policy interventions aimed at improving salary scales, reducing financial burdens, and ensuring better savings opportunities for healthcare professionals in the state.

Hypothesis 4

H₀: There is no significant difference in the influence of better pay and job satisfaction on migration decisions.

H₁: Either better pay or job satisfaction is the most significant factor influencing migration decisions.

Table 4. Determinants of Migration Intent Among Nurses: Regression Results

Variable	Coefficient (β)	Standard Error	p-value	Interpretation
Monthly Pay	-0.0003	0.0001	0.021	Higher salary in Kerala decreases migration intent. Significant at 5% level.
Job Satisfaction	-0.92	0.15	<0.001	Higher job satisfaction in Kerala strongly reduces migration intent. Significant at 1%

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Interpretation

As seen in Table 4, the result of logistic regression analysis reveals that both job satisfaction and monthly pay influence migration intent among nurses, but job satisfaction plays a stronger role. The negative coefficients indicate that as either job satisfaction or salary increases, the likelihood of migration decreases. However, job satisfaction has a much larger impact, with a coefficient of -0.92 compared to -0.0003 for salary. Additionally, job satisfaction is highly statistically significant ($p < 0.001$), whereas salary, though significant ($p = 0.021$), has a weaker effect. This suggests that dissatisfaction with working conditions, career growth, or workplace environment is a greater push factor for migration than salary alone. While higher pay can reduce migration intent to some extent, addressing workplace dissatisfaction is likely a more effective strategy in retaining nurses.

The logistic regression analysis aligns with the survey result that job dissatisfaction notably increases migration intent, with 46 out of 60 Kerala nurses already planning to migrate. Among them, 63% prefer the UK, primarily due to better salaries, career growth opportunities, and structured work environments. The highest migration interest is observed among private-sector nurses in rural Kerala, where salary disparities and job insecurity are most pronounced.

To counteract this trend, improving job security through structured career pathways and professional development opportunities is necessary. Providing research grants, leadership roles, and global training programs for nurses in Kerala could reduce the extent of migration.

5. CONCLUSION

The permanent emigration of Kerala nurses to Western nations is not merely a labour force problem—it is a critical threat to the health infrastructure of the state. The sudden reduction of the number of experienced nurses has raised the dependence on insufficiently qualified staff for healthcare. This has threatened the quality of patient care, resulting in delayed treatment, congested hospitals, and deterioration of public health outcomes. This trend is especially concerning in Kerala because of the high rate of the aging population, in the demography of the state. To address this crisis, a multi-level policy response is needed. Short-term interventions must focus on enhanced salary structures, particularly in the private sector, to render domestic opportunities more enticing. Greater labor protections, the enforcement of equitable working conditions, and opportunities for career progression are essential in retaining talent. Targeted incentives in the form of monetary bonuses, housing allowances, and tax exemptions can also be used to motivate return migration as well.

Apart from providing immediate solutions, Kerala will have to undertake long-term structural changes. These involve investing in world-class healthcare infrastructure, increasing opportunities for research, and making nursing a career choice. Public-private partnerships have to be promoted to enhance working conditions and harmonize scales of pay within the industry. There has to be a proper workforce planning strategy in place to ensure that future shortages are anticipated and enough healthcare professionals are trained to keep pace with increasing demand.

Kerala has been a social development and progressive policy model for centuries. In order to uphold its legacy, action should be taken immediately to reduce the migration of skilled nurses and strengthen the foundation of the healthcare system. Placing high priority on retaining workers, providing fair pay and

good working conditions, not only protects Kerala's healthcare system but also reasserts its commitment to provide affordable, high-quality health care for everyone.

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