Predictors of Quality of Life Among Migrant Workers in Northern Sabah

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ABSTRACT

Background: Migrant workers are exposed to various socio-economic and occupational challenges that may adversely affect their health and quality of life (QoL). In Malaysia, particularly in Northern Sabah, limited evidence exists on the determinants influencing well-being among this population. This study aimed to identify predictors of health and quality of life among migrant workers in Northern Sabah.

Methods: A cross-sectional study was conducted among 392 migrant workers using a structured questionnaire. Quality of life was assessed using the WHOQOL-BREF instrument. As data were not normally distributed, median and interquartile range (IQR) were reported, and non-parametric tests (Mann–Whitney U and Kruskal–Wallis) were used for group comparisons. Multiple linear regression analysis was performed to identify independent predictors of overall quality of life.

Results: The median scores indicated moderate levels of quality of life across domains, with psychological health showing the highest median (69.00; IQR = 25), followed by physical health (63.00; IQR = 19), while lower scores were observed in social relationships (56.00; IQR = 32) and working management (56.00; IQR = 25). Multiple regression analysis revealed that social relationships ($\beta = 0.495$, $p < 0.001$) and working management ($\beta = 0.455$, $p < 0.001$) were the strongest predictors of overall quality of life. Physical health ($\beta = 0.324$, $p < 0.001$) and psychological health ($\beta = 0.309$, $p < 0.001$) were also significant predictors. Gender and country of origin were not significantly associated with quality of life.

Conclusion: Quality of life among migrant workers in Northern Sabah is primarily influenced by social and workplace-related factors. Interventions aimed at strengthening social support and improving management practices may significantly enhance well-being in this population.

Keywords: Migrant workers, Quality of life, WHOQOL-BREF, Sabah, Predictors

INTRODUCTION

Migrant workers constitute a significant proportion of the global workforce and often face multiple socio-economic and occupational challenges that may adversely affect their health and quality of life (QoL). These challenges include physically demanding work, limited access to healthcare, and suboptimal living conditions. In Malaysia, particularly in Northern Sabah, migrant workers are heavily represented in sectors such as construction, plantations, and services, yet empirical evidence on their well-being remains limited.

Quality of life is a multidimensional concept encompassing physical health, psychological well-being, social relationships, and environmental conditions. Previous studies have shown that migrant workers' QoL is influenced not only by individual characteristics but also by broader social and occupational factors. The Social Determinants of Health fram370ework emphasizes that structural and environmental conditions play a central role in shaping health outcomes.

Recent literature highlights the importance of social support and workplace conditions in determining migrant well-being. However, findings remain inconsistent across regions, and there is limited context-specific evidence from Sabah. Understanding these factors is essential for developing targeted interventions to improve migrant worker health.

Therefore, this study aimed to identify the predictors of health and quality of life among migrant workers in Northern Sabah.

METHODS

Study Design and Population

A cross-sectional study was conducted among migrant workers in Northern Sabah. Participants were recruited from various employment sectors, including construction, plantation, and service industries.

Data Collection

Data were collected using a structured questionnaire. Quality of life was assessed using the WHOQOL-BREF instrument, which measures four domains: physical health, psychological health, social relationships, and environmental/working conditions.

Variables

The dependent variable was overall health and quality of life. Independent variables included socio-demographic characteristics (gender, country of origin) and QoL domains (physical health, psychological health, social relationships, and working management).

Statistical Analysis

Data analysis was performed using statistical software. Normality was assessed using the Shapiro–Wilk test, which indicated non-normal distribution. Therefore, median and interquartile range (IQR) were reported for continuous variables. Mann–Whitney U and Kruskal–Wallis tests were used for group comparisons. Multiple linear regression analysis was conducted to identify independent predictors of overall quality of life. Statistical significance was set at $p < 0.05$.

Table 1: Normality test on Quality of Life Domains

Domains	Shapiro-Wilk	
	Statistic	Sig.
Age	.979	<.001
Physical_Health	.952	<.001
Psychological Health	.932	<.001
Social_Relationship	.962	<.001
Working_management	.964	<.001

RESULTS

The median age of participants was 28 years (IQR = 8), indicating a relatively young workforce. The median scores for quality of life domains were as follows: physical health (63.00; IQR = 19), psychological health (69.00; IQR = 25), social relationships (56.00; IQR = 32), and working management (56.00; IQR = 25).

These findings indicate moderate levels of quality of life across domains, with relatively lower scores observed in social relationships and working management.

Table 2: Median and IQR on QoL domains

		Age	Physical Health	Psycological_Health	Social_ Relationship	Working_ management
Median		28.00	63.00	69.00	56.00	56.00
Minimum		18	13	19	5	10
Maximum		50	88	88	94	94
Percentiles	25	24.00	50.00	50.00	43.00	44.00
	75	32	69	75	75	69
	IQR	8	19	25	32	25

Multiple linear regression analysis revealed that social relationships ($\beta = 0.495$, $p < 0.001$) and working management ($\beta = 0.455$, $p < 0.001$) were the strongest predictors of overall quality of life. Physical health ($\beta = 0.324$, $p < 0.001$) and psychological health ($\beta = 0.309$, $p < 0.001$) were also significant predictors. In contrast, gender and country of origin were not significantly associated with overall quality of life.

Table 3: Analysis of relationship between the QoL domains and sociodemographic on overall of Quality of Life

Predictor	B	Beta	Sig.
(Constant)	9.653		<.001*
Gender	-.806	-.034	-1.908
Country of origin	0.181	0.012	0.515
Physical Health	5.417	0.324	<.001*
Psychological Health	4.513	0.309	< .001*
Social Relationship	6.618	0.495	< .001*
Working management	6.852	0.455	< .001*

DISCUSSION

This study examined the determinants of health and quality of life (QoL) among migrant workers in Northern Sabah. Overall, migrant workers reported moderate to relatively high levels across physical health, psychological well-being, social relationships, and working environment domains. These findings may appear counterintuitive given the well-documented challenges faced by migrant populations, including physically demanding work and limited healthcare access. However, they are consistent with the "healthy migrant effect," whereby migrant

workers are typically younger, physically capable, and more resilient upon arrival. The median age of 28 years in this study supports this explanation.

Psychological well-being was observed to be relatively high, which may reflect adaptive coping mechanisms among migrant workers. Communal living arrangements and strong peer networks, commonly observed in migrant communities, likely contribute to emotional resilience and reduced social isolation. This is supported by recent literature indicating that social connectedness plays a critical role in maintaining mental well-being among migrant populations.

Despite moderate overall scores, comparatively lower median values in social relationships and working management domains highlight potential areas of vulnerability. These domains are particularly important as they represent modifiable environmental and relational factors. Variability in management practices, communication, and supervision may contribute to inconsistent workplace experiences, which in turn influence workers' overall well-being.

Regression analysis provided further insight into the determinants of QoL. Social relationships emerged as the strongest predictor ($\beta = 0.495$, $p < 0.001$), indicating that interpersonal support and social integration play a central role in shaping migrant workers' well-being. This finding reinforces growing evidence that social support may be more influential than traditional socioeconomic factors in determining quality of life among vulnerable populations.

Working environment and management were also strong predictors ($\beta = 0.455$, $p < 0.001$). Migrant workers often rely heavily on employers and supervisors not only for job security but also for access to resources and support. Supportive and fair management practices can therefore significantly enhance job satisfaction, reduce stress, and improve overall quality of life.

Physical health ($\beta = 0.324$, $p < 0.001$) and psychological health ($\beta = 0.309$, $p < 0.001$) were also significant contributors, underscoring the interrelated nature of health domains. Poor physical or mental health can directly reduce functional capacity, productivity, and life satisfaction, reinforcing the need for holistic health interventions.

In contrast, socio-demographic factors such as gender and country of origin were not significant predictors in the multivariate model. Although some differences were observed at the bivariate level, these findings suggest that structural and environmental factors particularly social support and working conditions play a more dominant role in determining overall quality of life. This aligns with the Social Determinants of Health framework, which emphasizes that health outcomes are largely shaped by social and environmental conditions rather than individual characteristics.

Overall, the findings indicate that interventions aimed at improving migrant workers' quality of life should prioritize strengthening social support systems and enhancing workplace management practices. Addressing these modifiable factors may yield more substantial improvements in well-being compared to focusing solely on demographic or individual-level characteristics.

Implications

The findings of this study highlight the importance of addressing modifiable social and occupational factors to improve migrant workers' quality of life. Workplace-level interventions that promote supportive management practices and strengthen social support networks may be particularly effective. These strategies can enhance well-being without requiring substantial structural changes.

Limitations

This study has several limitations. First, the cross-sectional design limits causal interpretation of the findings. Second, data were based on self-reported measures, which may introduce response bias. Additionally, the study was conducted in Northern Sabah, which may limit the generalizability of the findings to other regions.

CONCLUSION

Quality of life among migrant workers in Northern Sabah is significantly influenced by social relationships, working management, and health-related factors. Interventions targeting these domains are essential to improve overall well-being and reduce health disparities in this population.

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