**บทความวิจัย**

# สุขภาวะทางจิตและปัจจัยที่เกี่ยวข้องของกลุ่มแรงงานข้ามชาติ ในเขตพื้นที่เศรษฐกิจพิเศษ จังหวัดเชียงราย

# Mental Health Status and Related Factors among Migrant Workers in Special Economic Zones, Chiang Rai

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## บทคัดย่อ

**บทนำ:** แรงงานต่างด้าวเป็นกลุ่มเปราะบางต่อปัญหาสุขภาพจิตเนื่องจากต้องเผชิญหน้ากับการปรับตัวในสภาพสังคม วัฒนธรรม ภาษา และสิ่งแวดล้อมใหม่ที่แตกต่างไปจากเดิม

**วัตถุประสงค์:** เพื่อสำรวจและศึกษาปัจจัยที่เกี่ยวข้องกับภาวะสุขภาพจิตของแรงงานต่างด้าว

**ระเบียบวิธี:** การศึกษานี้เป็นการศึกษาเชิงภาคตัดขวางดำเนินการเก็บข้อมูลทั่วไปและปัจจัยที่มีผลต่อสุขภาวะทางจิตด้วยแบบสอบถามที่มีโครงสร้างประเมินระดับสุขภาวะทางจิตโดยใช้แบบทดสอบดัชนีชี้วัดทางสุขภาพจิตคนไทย-15 (TMHI-15) และใช้การทดสอบทางสถิติ Multiple Logistic Regression วิเคราะห์เพื่อหาความสัมพันธ์ระหว่างตัวแปร

**ผลการวิจัย:** กลุ่มตัวอย่างจำนวน 405 คน ส่วนใหญ่เป็นเพศหญิง (ร้อยละ 57.53) มีอายุเฉลี่ย 32 ปี เป็นชาวพม่า (ร้อยละ 97.28) แต่งงานแล้ว (ร้อยละ 75.80) จบการศึกษาระดับประถมศึกษา (ร้อยละ 3.83) ระยะเวลาที่อยู่อาศัยในประเทศไทยเฉลี่ย 6 ปี รายจ่ายต่อเดือน 10,001 บาท (ร้อยละ 66.22) ไม่มีทักษะภาษาไทยในการฟัง พูด อ่าน เขียน (ร้อยละ 77.78 50.40 58.55 และ 78.03 ตามลำดับ) มีประสบการณ์การทำงานเฉลี่ย 5 ปี และสุขภาวะทางจิตอยู่ในระดับต่ำ (ร้อยละ 40.25) ผลการทดสอบ ปัจจัยที่มีความสัมพันธ์กับสุขภาพจิต พบว่า อายุ ระดับการศึกษา ระยะเวลาที่อาศัยในประเทศไทย การสูบบุหรี่ จำนวนชั่วโมงการทำงาน ประสบการณ์การทำงาน และทักษะการพูดภาษาไทย มีความสัมพันธ์กับภาวะสุขภาพจิตที่ $\alpha$<.05

**สรุปผล:** แรงงานต่างด้าวเผชิญกับปัจจัยที่ส่งผลต่อสุขภาวะทางจิตทั้งจากตัวบุคคลและสังคม ดังนั้นการวางแผนและการจัดโปรแกรมส่งเสริมสุขภาวะทางจิตที่มีประสิทธิภาพ บุคลากรทางด้านสุขภาพจำเป็นต้องมีความเข้าใจและคำนึงถึงปัจจัยเหล่านั้นด้วย

**ข้อเสนอแนะ:** ผลการวิจัยนี้สามารถนำไปใช้เป็นแนวทางในการจัดโปรแกรมการป้องกัน ดูแล และติดตาม ปัญหาทางสุขภาพจิตของแรงงานข้ามชาติ เพื่อให้เกิดการดำเนินการทางด้านสาธารณสุขอย่างมีประสิทธิภาพ

**คำสำคัญ:** สุขภาวะทางจิต แรงงานต่างด้าว เขตเศรษฐกิจพิเศษ

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## Abstract

**Introduction:** Migrant workers are a vulnerable population with regard to mental health problems because they are frequently forced to adapt to a new community, a new culture, a new language, and an environment that differs from the one in which they grew up.

**Objective:** The objective of this study was to survey and determine the factors associated with mental health status among migrant workers.

**Research Methodology:** This study is a cross-sectional study. Demographic and factors associated with mental health problems were collected by a structured questionnaire, mental health was assessed by using the Thai Mental Health Indicator-15 (TMHI-15) and Multiple Linear Regression was used to analyze associations between the variables.

**Results:** The population was 405 participants, the majority of whom were female (57.5%), with an average age of 32 years, Burmese (97.28%), married (75.80%), and who had completed primary school (53.83%). The average number of years of residency in Thailand was 6, the average monthly expenditure was 10,001 baht (66.22%). The participants could not listen, speak, read and write the Thai language were 77.78%, 50.40%, 58.55% and 78.03% respectively. The average work experience was 5 years, and 40.2% had poor mental health. The study results revealed that mental health status was significantly associated with age, educational level, year of residence in Thailand, smoking, working hours, and Thai language speaking skills at $\alpha \leq .05$.

**Conclusions:** Migrant workers are exposed to factors that affect their mental health, both from individuals and socialization. Therefore, when planning and organizing an effective mental health promotion program, health care providers need to understand and recognize the above mentioned factors.

**Implications:** The study's findings can be applied on programs for mental health prevention, care, and follow-up, in order to develop and improve public health management.


**Keywords:** mental health, migrant worker, Special Economic Zones

## Introduction

Mental health refers to an individual's state of well-being in which they realize their abilities, can manage stress and/or their abilities to live a normal life happily in society.[1] There are two determinants of mental health: 1) personal characteristics factors, such as conceptions, emotions, behaviors, and interaction with others and 2) social, cultural, economic, political, and environmental factors, such as national policies, social protections, quality of life, subsistence, working environments and community support. According to the Global Situation of Mental Health Report, in 2017 there are 947.27 million people with mental illness. In 2018, the number of people with mental illnesses increased to 970 million people. 284 million people suffered from anxiety disorders and 264 million people suffered from major depressive disorder.[2] The consequences of mental health affect the individual's feelings, lead to unhappiness, boredom, less social interactions, which might lead to severe consequences such as suicide.[3]

Previous studies revealed that migrant workers are more vulnerable to mental health problems than non-migrant workers[3,4] because they are exposed to many challenges, including language and cultural differences[4], difficulties in adjusting to a new environment or society, and adverse experiences.[5] In addition, other factors such as type of job, length of stay[6], work conditions, and lack of social support[7] can also affect the mental health of migrant workers. All these factors are the determinants of mental health. Furthermore, migrant workers are often treated as being inferior, which can lead to inequitable discrimination and exploitation.[8] Banerjee[10] explains that no one wants to work far from the hometown because people have a profound relationship with their hometown where they have grown up. Although at the hometown, they are poor and have a lack of economic opportunity, they still do not want to move out. So, the main factor which makes people decide to move out of the hometown and away from their country is a dangerous situation such as internal conflict and war. Thus, they leave with uncomfortable feelings, which include stress and anxiety. Therefore, migrant workers who cannot cope with unfamiliar situations and being far from their hometown face mental health problems such as sleeping disorders, stress, anxiety, and major depressive disorder.[9]

In the literature review, many studies revealed factors associated with the mental health problems of migrant workers in different regions. He and Wong[10], whose studies of migrant workers in four provinces of China found that age, education level, salary, and working hours had a relationship with mental health problems, which was supported by Lu.[11] In addition, Lu discovered that other factors such as living alone, low income, poor living conditions, and limited access to health and insurance information are also associated with mental health problems. Moreover, a study of Laotian migrant workers in Thailand by Nilvarangkol et al.[12] reported that significant stressors were non-standard income, having restricted choices, work-related stress, lack of social support, and financial concerns. Similarly, Zhong[13] revealed that migrant workers who had low education, poor living conditions, migrated before being mature, having various jobs, and poor self-perceived physical health were all risk factors for mental health problems.

The policy of organizing migrant workers who work in Thailand in 2014 and the policy of

establishing Special Economic Zones phase 2 (2015-2016) led to an increase in the number of labor migrants to Chiang Rai from 9,457 people in 2016 to 23,179 people in 2018.[14] This leads Chiang Rai to be in the third rank in the average number of labor migration following Chiang Mai and Tak provinces. Although previous studies have shown that migrant workers from the Shan State are of the Thai Yai ethnicity, which has a culture and language similar to those of Chiang Rai, they still face social and work condition challenges, such as receiving lower wages than the legal requirement/the standard minimum wage.[15] Therefore, creating a policy or program to promote good mental health and prevent mental health problems among migrant workers will be able to support them to live and work happily in Thailand. However, at present, there is no study about mental health problems and factors that affect mental health among migrant workers in the border area, especially in the Chiang Rai Special Economic Zone. This study fills a gap in knowledge and provides guidelines which propose policy recommendations for further assessment, prevention, and surveillance of mental health problems among migrant workers who work in the Special Economic Zone.

## Methods

### Study design

A cross-sectional, correlational study design was conducted between February 2019 to August 2020.

### Study population

The study was conducted among migrant workers who worked at enterprises in the Special Economic Zone of Chiang Rai province in Chiang Saen district, Mae Sai district, and Chiang Khong district, according to the Immigration Act, 2522 B.E. (1979 A.D.).[16] 8,579 migrant workers had received work permitted from Department of Labour Protection and Welfare, Chiangrai. A total of 61 workplaces in three districts' special economic zones were selected, and 12 workplaces were willing to participate in this study.

### Study sample and sample size calculation

The study sample size was calculated for 368 people based on the Krejcie and Morgan calculation formula[17], with a statistical error protection value of 10 percent, obtaining a total sample size of 405 people. The study sample was selected by purposive sampling following the inclusion criteria as follows, male or female migrant workers aged at least 20 years old, having worked in Chiang Saen, Mae Sai, or Chiang Khong districts for at least 3 months before collecting the data and willing to participate in the study. Unwillingness to participate in the study and not giving complete answers were exclusion criteria.

### Research instruments

Two questionnaires were used in this study. The first questionnaire was used to collect the demographic characteristics, health history, health behavior, and occupational information. It was developed by reviewing different literature sources of information, and its validity and reliability were assessed before used. The second questionnaire was the standardized test for mental health status using the Thai Mental Health Indicator-15 (TMHI-15) for mental health status. It classified into 3 groups; poor (score less than 43), fair or normal (44-50), and good (more than 51).

The questionnaires were used in the Thai language and collected by the researcher assistants, who had interview training and could communicate in the Myanmar language.

**Statistical analyses**

Descriptive statistics were used to present the data values as percentages, frequency, mean, and standard deviations to describe the participants' general characteristics, occupational information, and mental health status. Inferential statistics were used to determine the factors associated with mental health status by multivariate logistic regression.

**Ethical considerations**

The Mae Fah Luang University Research Ethics Committee on Human Research authorized this study for human research ethics (No. REH-62052). All participants were given an information sheet regarding the study before it began, and a consent form was collected voluntarily.

## Results

The total of 405 participants in this study were 57.53% female, 44.90% were aged 20-29 years old, the average age was 32 years old, 97.28% were of Myanmar nationality, 75.80% were married, 53.83% had graduated from primary school, the average years of residency in Thailand was 6 years, 82.22% earned less than 10,000 baht per month, and 66.22% spent more than 10,001 baht per month. Participants who could not listen, speak, read, and write the Thai language were 77.78%, 50.40%, 58.55 and 78.03%, respectively. 90.12% had no underlying disease, 60.74% had a sleeping hours average of 6-8 hours, 71.36% did not smoke, 79.26% did not drink alcohol, and 66.42% did not exercise. 82.72% were contract workers in the manufacturing industry, and the rest were housekeepers and drivers, with 10.62% and 6.67%, respectively. 77.54% had working hours less than or equal to 8 hours, 55.31% had 5 working days per week, 71.60% had no shift work, and the average number of years of working experience was 5 years.

The mental health assessment found that 40.25% of participants had a poor level of mental health, 39.50% had a fair level of mental health, and 20.25% had a good level of mental health. (Table 1.)

**Table 1** Mental Health level of participants (n=405)

| level | n | % |
|---|---|---|
| Poor mental health | 163 | 40.25 |
| Fair mental health | 160 | 39.50 |
| Good mental health | 82 | 20.25 |

In the multiple logistic regression analysis, seven variables were found to be associated with mental health problems in migrant workers at $p < .05$. The migrant workers aged between 30-39 years old had 1.88 times (95% CI = 1.03-3.42) greater odds of mental health problems than the migrant workers who were aged less than 30 years old. The migrant workers who were more than 39 years old had 0.33 times (95% CI = 0.12-0.76) fewer odds of mental health problems than the migrant workers who were aged less than 30 years old. Those with lower odds of mental health problems than migrant workers did not complete primary school. The migrant workers who had a residency in Thailand between 7-12 years and more than 12 years had 0.42 times (95% CI = 0.19-0.91) and 0.24 times (95% CI = 0.08-0.74) had fewer odds of mental health problems than the migrant workers who had a residency in Thailand less than 7 years. The migrant workers who smoked had 4.27 times (95% CI = 1.72-10.55) greater odds of mental health problems than the migrant workers who did not smoke. The migrant workers who worked more than 8 hours per day had 0.24 (95% CI = 0.74-0.83) fewer odds of mental health problems than the migrant workers who worked less than 8 hours per day. The migrant workers who had work experience between 6-10 years had 1.90 times (95% CI = 0.94-3.87) greater odds of mental health problems than the migrant workers who had more than 10 years work experience had 0.10 times (95% CI = 0.02-0.43) fewer odds of mental health problems than the migrant workers who had work experience of less than 5 years. The migrant workers who could speak the Thai language had 0.63 times (95% CI = 0.42-0.96) fewer odds of mental health problems than the migrant workers who could not speak the Thai language. (Table 2)

**Table 2** Univariate and multivariate analyses of the factors associated with mental health among migrant workers (n = 405)

| Variables | Mental health status: Low | | Normal/High | | OR | 95%CI | p-value | $OR_{adj}$ | 95%CI | p-value |
|---|---|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | | | | | | |
| **Gender** | | | | | | | | | | |
| Male | 114 | 66.3 | 58 | 33.7 | 1 | | | | | |
| Female | 128 | 54.9 | 105 | 45.1 | 1.61 | 1.07-2.42 | 0.022 | | | |
| **Age (Year)** | | | | | | | | | | |
| < 30 | 109 | 59.9 | 73 | 40.1 | | | | 1 | | |
| 30-39 | 116 | 72.5 | 44 | 27.5 | 4.04 | 2.15-7.58 | <0.001 | 1.88 | 1.03-3.42 | 0.038 |
| > 39 | 17 | 27.0 | 46 | 73.0 | 7.13 | 3.70-13.74 | <0.001 | 0.30 | 0.12-0.76 | 0.012 |
| **Marital status** | | | | | | | | | | |
| Single | 44 | 44.9 | 54 | 55.1 | 1 | | | | | |
| Married | 198 | 64.5 | 109 | 35.5 | 2.23 | 1.40-3.53 | 0.001 | | | |

**Table 2** Univariate and multivariate analyses of the factors associated with mental health among migrant workers (n = 405)

| Variables | Mental health status | | | | OR | 95%CI | p-value | $OR_{adj}$ | 95%CI | p-value |
|---|---|---|---|---|---|---|---|---|---|---|
| | Low | | Normal/High | | | | | | | |
| | n | % | n | % | | | | | | |
| **Education level** | | | | | | | | | | |
| < Primary | 77 | 77.0 | 23 | 23.0 | 1 | | | 1 | | |
| Primary | 128 | 41.3 | 90 | 58.7 | 0.43 | 0.25-0.73 | 0.002 | 0.239 | 0.075-0.760 | 0.015 |
| Secondary | 37 | 42.5 | 50 | 57.5 | 0.22 | 0.12-0.42 | <0.001 | 0.119 | 0.029-0.485 | 0.003 |
| **Residency year (Year)** | | | | | | | | | | |
| <7 | 156 | 67.8 | 74 | 32.2 | 1 | | | 1 | | |
| 7-12 | 79 | 60.3 | 52 | 39.7 | 0.64 | 0.42-1.00 | 0.002 | 0.424 | 0.197-0.913 | 0.028 |
| >12 | 7 | 15.9 | 37 | 84.1 | 0.22 | 0.04-0.19 | <0.001 | 0.245 | 0.081-0.745 | 0.013 |
| **Income (Baht/ month)** | | | | | | | | | | |
| ≤10,000 | 203 | 61.0 | 130 | 39.0 | 1 | | | | | |
| >10,001 | 39 | 54.2 | 33 | 45.8 | 0.76 | 0.45-1.26 | 0.281 | | | |
| **Expenditure (Baht/ month)** | | | | | | | | | | |
| ≤10,000 | 94 | 69.1 | 42 | 30.9 | 1 | | | | | |
| ≤10,000 | 148 | 55.0 | 121 | 45.0 | 0.55 | 0.35-0.85 | 0.007 | | | |
| **Underlying disease** | | | | | | | | | | |
| No | 225 | 61.6 | 140 | 38.4 | 1 | | | | | |
| Yes | 17 | 42.5 | 23 | 57.5 | 0.46 | 0.24-0.81 | 0.021 | | | |
| **Sleeping hour (hour/ day)** | | | | | | | | | | |
| <6 | 25 | 49.0 | 26 | 51.0 | 1 | | | | | |
| 6-8 | 130 | 52.8 | 116 | 47.2 | 1.17 | 0.64-2.13 | 0.619 | | | |
| >8 | 87 | 19.4 | 21 | 19.4 | 4.31 | 2.08-8.91 | <0.001 | | | |
| **Smoking** | | | | | | | | | | |
| No | 159 | 55.0 | 130 | 45.0 | 1 | | | 1 | | |
| Yes | 83 | 71.6 | 33 | 28.4 | 2.06 | 1.29-3.27 | 0.002 | 4.272 | 1.729-10.557 | 0.002 |
| **Alcohol use** | | | | | | | | | | |
| No | 192 | 59.8 | 129 | 40.2 | 1 | | | | | |
| Yes | 50 | 59.5 | 34 | 40.5 | 0.99 | 0.61-1.61 | 0.962 | | | |
| **Exercise** | | | | | | | | | | |
| No | 164 | 61.0 | 105 | 39.0 | 1 | | | | | |
| Yes | 78 | 57.4 | 58 | 42.6 | 0.86 | 0.57-1.30 | 0.484 | | | |

**Table 2** Univariate and multivariate analyses of the factors associated with mental health among migrant workers (n = 405)

| Variables | Mental health status: Low | | Normal/High | | OR | 95%CI | p-value | $OR_{adj}$ | 95%CI | p-value |
|---|---|---|---|---|---|---|---|---|---|---|
| | n | % | n | % | | | | | | |
| **Work position** | | | | | | | | | | |
| Housekeeper | 15 | 55.6 | 12 | 44.4 | 1 | | | | | |
| Driver | 21 | 48.8 | 22 | 51.2 | 0.76 | 0.29-2.01 | 0.584 | | | |
| Operation | 206 | 61.5 | 129 | 38.5 | 1.28 | 0.58-2.82 | 0.544 | | | |
| **Working hour** | | | | | | | | | | |
| ≤8 | 196 | 62.4 | 118 | 37.6 | 1 | | | 1 | | |
| >8 | 46 | 50.5 | 45 | 49.5 | 0.62 | 0.38-0.99 | 0.043 | 0.249 | 0.07-0.83 | 0.024 |
| **Working day (day/week)** | | | | | | | | | | |
| 5 | 142 | 63.4 | 118 | 37.6 | 1 | | | | | |
| 6 | 100 | 55.2 | 45 | 49.5 | 0.71 | 0.48-1.06 | 0.097 | | | |
| **Shift work** | | | | | | | | | | |
| No | 187 | 64.5 | 103 | 35.5 | 1 | | | | | |
| Yes | 55 | 47.8 | 60 | 52.2 | 0.59 | 0.38-0.91 | 0.017 | | | |
| **Work experience (Year)** | | | | | | | | | | |
| ≤ 5 | 135 | 60.3 | 89 | 39.7 | 1 | | | 1 | | |
| 6-10 | 103 | 72.5 | 39 | 27.5 | 1.74 | 1.10-2.75 | 0.017 | 1.908 | 0.94-3.87 | 0.074 |
| >10 | 4 | 10.3 | 35 | 89.7 | 0.08 | 0.03-0.22 | <0.001 | 0.106 | 0.03-0.43 | 0.002 |
| **Listening Thai Language skill** | | | | | | | | | | |
| Yes | 196 | 62.4 | 118 | 37.6 | 1 | | | | | |
| No | 46 | 50.5 | 81 | 49.5 | 0.62 | 0.39-0.99 | 0.043 | | | |
| **Speaking Thai Language skill** | | | | | | | | | | |
| Yes | 142 | 63.4 | 82 | 36.6 | 1 | | | 1 | | |
| No | 100 | 55.2 | 81 | 44.8 | 0.71 | 0.48-1.06 | 0.097 | 0.638 | 0.40-0.97 | 0.034 |
| **Reading Thai Language skill** | | | | | | | | | | |
| Yes | 54 | 65.9 | 28 | 34.1 | 1 | | | | | |
| No | 188 | 58.2 | 135 | 41.8 | 0.72 | 0.44-1.1.20 | 0.208 | | | |
| **Writing Thai Language skill** | | | | | | | | | | |
| Yes | 91 | 53.8 | 78 | 46.2 | 1 | | | | | |
| No | 151 | 64.0 | 85 | 36.0 | 1.52 | 1.02-2.28 | 0.041 | | | |

## Discussion

This study was conducted to investigate the prevalence of mental health problems among migrant workers on the Thailand–Myanmar border in Chiang Rai Province, and to determine the contributing factors to the risk of mental health problems. Overall, the present study found that 40.25% of migrant workers had poor mental health, which was a higher prevalence than in the previous studies[21] which reported the prevalence was between 29.40% and 36.50%.

Study findings argue that personal factors, including age, educational level, year of residence, and language skills, were associated with migrant workers' mental health, which supported both the studies in Thailand and international studies.[18,19] Similarly, Zhong et al.[20] demonstrated the association between young adults and mental health problems of migrant workers in Shenzhen, China.

Previous research has found that education level is related to mental health problems.[18,19] Loret De Mola et al.[21] found the prevalence of mental health problems was 39.40% in migrants with a low education level because low education might lead people to miscommunicate with others and misunderstand safety procedures and safety policy. It can also lead to poor health or self-care[18], as well as a lack of awareness of mental health.[3] Moreover, Zhong et al.[13] studies showed that one of the risk factors for long-term mental anguish is a low level of education. Furthermore, this factor is well related to the health or health behaviors of migrant workers, as supported by Sirida et al.,[18] who assumed that migrant workers with low education tend to show poor health behaviors such as smoking.

These studies found an association between smoking and mental health problems, which is consistent with the study by Hua Yang et al.[22] People with mental health problems often became dependent on smoking[23] because they believed it could help them relax and relieve stress symptoms. The previous study revealed that work-related stress and language barriers contribute to migrant mental health problems and unhealthy lifestyles.[3] Therefore, these factors should be considered by related organizations and the government in order to promote good health behaviors and enhance mental health in those groups.

In addition, the amount of time that migrant workers spend in Thailand and their work experience are also associated with mental health. This is directly attributable to their ability to learn and adapt to new environments and societies. Zhong et al.[24] found that new migrants and people who migrate alone have more health problems than migrants who have lived longer in the country because they have fewer social networks. For example, they lack friends who speak the same language and worker networks in the same community as those who have worked or stayed for a long time, which is supported by Phoenix K.H. Mo et al.[25] Similarly, Lu Yao et al.[26] revealed that the prevalent causes of mental health problems are lack of social support in the family and workplace. Moreover, lack of social support causes mental health problems of the migrant workers and also affects their ability to work. Therefore, we can assume that social support from family and friends or social connections can reduce the severity of mental health problems and improve quality of life.[27,28]

The present study showed that occupational factors or work-related stress, such as long working hours, were associated with the mental health of migrant workers. Similarly, Lu[11] found that working hours affect the mental health of rural-urban migrants in Indonesia. Yang et al.[6] and Wong[10] also supported this perspective. Many previous studies revealed workloads cause mental health problems such as depression, insomnia, and suicide attempts.[29] Winkelman et al.[30] showed that long working hours without a break cause musculoskeletal disorders among Latino migrants and seasonal farmworkers. For example, they can cause head tension, which may lead to stress.

Consistent with the findings of Hridaya et al.[31] and Laurence et al.[4] the research showed that skills in the language of the destination country were a significant factor that affected the mental health of migrant workers. Culture influences the ability to adapt socially. If people cannot adapt to the new community, they will face mental health problems. Similarly, previous studies revealed that cultural differences are a risk factor for the mental health problems of migrants.[32] Furthermore, language is a necessary skill for living: communicating what they want and how they live, for work: assigning a job, teaching or explaining how to accomplish tasks, informing when they encounter a health hazard or when an emergency occurs, and especially, for making relationships with others or receiving social support which is an essential factor of good mental health.

## Implications for practice

1. Agencies in charge of migrant workers need to create a policy for evaluating the migrant workers' mental health prior to employment and to conduct annual follow-ups. They also need to be aware of the dynamic elements affecting mental health status.

2. The study's findings can be applied to programs that prevent, care, and monitor mental health issues in order to maintain good public health management.

## Implication for future research

1. Future research needs to examine the different types of mental health issues that migrant workers experience in order to prioritize issues, assess their severity, and use that information as a basis for developing appropriate mental health care plans.

2. Future research needs to utilize qualitative or mixed-method research when gathering in-depth data and information that may be used to understand the causes or other factors that contribute to the mental health problem.

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