



# Health-Promoting Behavior and Positive Mental Health of Filipino Nurses in Michigan

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The authors declare that there is no conflict of interest.

## Abstract

**Background:** Filipino nurses represent the largest segment of the immigrant nursing workforce in the U.S. Studies showed that Filipinos have unhealthy eating habits, thus increasing their health risks, and reducing life expectancy. However, to date, there is limited data available regarding health-promotion and self-care practices among nurses, and even fewer on mental health.

**Objective:** To examine health-promoting behavior among Filipino nurses and assess the level of positive mental health of Filipino nurses working in Michigan guided by the mid-range theory of health promotion.

**Methods:** This study used a descriptive, cross-sectional survey design. The Health-Promoting Lifestyle Profile II (HPLP-II) and the Positive Mental Health (PMH) survey were used to assess health-promoting behaviors and the level of positive mental health in a sample of Filipino nurses working in Michigan. Data were analyzed using SPSS Version 25.

**Results:** Forty-three participants started the survey; 27 had complete data; mean age of the participants was 49.11 ( $SD = 15.8$ ) years old. The mean total HPLP II score was 144.30 ( $SD = 22.9$ ) out of 208 maximum score, while the mean total PMH score was 4.99 ( $SD = 0.75$ ) out of maximum score of 6. Spiritual growth was the highest score ( $M = 27.22$ ,  $SD = 5.1$ ); while physical activity was the lowest score ( $M = 19.58$ ,  $SD = 6.9$ ) in the HPLP II subscales; whereas emotional support was the highest score ( $M = 5.19$ ,  $SD = 0.86$ ) in the PMH subscale.

**Conclusion:** Findings are significant to consider when developing strategies to increase engagement in health promotion and positive mental health activities among Filipino nurses.

**Keywords:** health-promoting behavior, positive mental health, Filipino nurses, self-care

## Background

For the past seventeen years, nursing has been voted as the number one trusted profession (Brenan, 2018). Nurses are known to provide compassionate care to their patients and their families, which includes providing patient education on how to improve their health. While nurses dedicate their lives to promoting the health and wellness of their patients, evidence showed that they seem to lack integrating this practice into their own selves (Ross et al., 2017). Even though being a nurse can be rewarding (Robinson, 2016), nursing is one of the most stressful jobs (Golshiri et al., 2012). Heavy workload, understaffing, and pressures nurses experience from patients, families, and supervisors are some of the major sources of stressors for nurses (Turner, 2013; Yen. et al., 2020). This constant exposure to stress that many nurses experience oftentimes takes a toll on their personal, physical, and mental health, which frequently leads to burnout, job dissatisfaction, increased turnover, obesity, and sleep disturbances (Ross et al., 2017). The lack of self-care and health-promoting behavior by nurses can lead to a decline in all domains of health. This health condition becomes worse among immigrant nurses because of the extra need to adapt to a new culture (Ea et al., 2008). This overall unhealthy working condition is true among Filipino nurses who have been filling in the nursing shortage gap around the world (Lorenzo et al., 2007).

Since the first wave of Filipino nurses who migrated to the United States (U.S.) in 1903, the latest data show that there were roughly 28% of Filipino nurses working in the U. S. in 2018 (Batalova, 2020). Hence, Filipinos represent one of the largest segments of the U.S. nursing workforce. A large proportion of Filipino nurses are concentrated in big states such as California, New York, and Illinois. In Michigan, an estimated 3% of nurses are Asians, including Filipinos, albeit much smaller in numbers compared to the bigger states, these nurses should not be ignored or overlooked (Michigan Center for Nursing, 2019). Filipino nurses are often described as hardworking, rarely complains, selfless, and have a strong sense of loyalty (Nadal, 2011). However, studies also showed that Filipinos, in general, have unhealthy habits, thus increasing their health risks and possibly reducing life expectancy (Bayog & Walters, 2018; Bhimia et al., 2017; Dela Cruz & Galang, 2008; Vargas & Jurado, 2015). To date, there are very limited studies regarding health-promoting behavior, self-care practices, and mental health among Filipino nurses, thus the need for this research study. Therefore, the purposes of this study were to 1) examine health-promoting behavior among Filipino nurses and 2) assess the level of positive mental health among Filipino nurses working in Michigan guided by the midrange theory of health promotion.

## Theoretical Framework

The Health Promotion Model (HPM) by Pender (2005) was used to guide this study. According to Pender et al. (2005),

health promotion is defined as a behavior motivated by the person's desire to enhance well-being and actualize health potential. This actualization is possible through competent self-care, goal-directed behavior, and harmony with the environment, including interpersonal relationships (McElliott et al., 2009). The HPM was based on the Theory of Reasoned Action, Social Cognitive Theory, and Theory of Planned Behavior. Positive mental health is described as the presence of positive emotions and good functioning in both individual and social environments (Sanchez-Carrion, 2016). In the present study, it is conceptualized that having a positive mental health will motivate Filipino nurse to participate in health-promoting behaviors, thus enhancing their own well-being and health potentials.

## Method

The aims of this quantitative, descriptive, and cross-sectional study were to examine the health-promoting behavior and to assess the level of positive mental health of Filipino nurses working in Michigan. The study used Research Electronic Data Capture (REDCap) for informed consent and data collection, and survey responses from December 2019 to April 2020 were included in the analysis.

## Sample/Setting

Upon Institutional Review Board approval, a convenient sample of Filipino nurses working in Michigan was recruited to participate in this survey. Potential participants were recruited via flyers, through social media (Facebook), via email to the President of the Philippine Nurses Association of Michigan and through personal contacts. A survey link with access code were included in the recruitment flyers, social media, and emails.

## Data Collection

Data were collected and managed using REDCap tool (Harris et al., 2009). REDCap is a secured web-application developed by Vanderbilt University. The site is HIPAA compliant and secured. RedCap is available through the researchers' university.

## Health-Promoting Behavior

The Health-Promoting Lifestyle Profile II (HPLP-II) developed by Walker et al. (1987) was used to measure the frequency of self-reported health-promoting behaviors of Filipino nurses. The tool is a 52-item on a 4-point Likert scale that assesses six domains. These domains include health responsibility, physical activity, nutrition, spiritual growth, interpersonal relations, and stress management. This tool has established construct and criterion-related validity and reported internal consistency of alpha coefficient .940 for total scale and range of .793 to .872 for the subscales (Walker & Hill-Polerecky, 1996). The three-week test-retest stability coefficient of the total scale was .892 (Walker & Hill-Polerecky, 1996).

### Level of Positive Mental Health

The Positive Mental Health (PMH) survey by Vaingankar et al. (2014) was used to measure the level of positive mental health among Filipino nurses. This tool is a 24-item questionnaire that measures and evaluates positive mental health specific to Asian communities. The tool has six subscales - general coping, emotional support, spirituality, interpersonal skills, general affect, and personal growth and autonomy. Scores range from 1 (lower PMH) to 6 (higher PMH). This instrument has established criterion validity. The internal consistency and test-re-test reliability of this instrument were high, Cronbach's  $\alpha$  coefficient of .87 and intra-class correlation of .93 (Vaingankar et al., 2014).

### Data Analysis

Data collected from RedCap were transported into the investigator's SPSS Version 25 software for analysis. Descriptive statistics, including mean, percent, and standard deviations were used. Pearson  $r$  or Spearman  $\rho$  correlations was used to determine correlations between HPLP and PMH, and the following variables - age, years living in the U.S., and work-shift in a clinical setting.

## Results

### Demographic Characteristics

Forty-three nurses started the survey, but only 27 completed the surveys (63% completion rate). Data from the 27 Filipino nurses who completed the surveys were included in the final analysis. The mean age of the participants was 49.11 ( $SD = 15.8$ ) years old, 93% were females, 63% married; median number of children was two; 96% were practicing religion; 85% were born outside the U.S., and 63% have been living in the U.S. for more than 20 years. Sixty-seven percent have a bachelor's degree in nursing, 78% are currently working in a clinical setting, 67% are work-

ing full-time, 44% are working in the day shift (8 hour morning and 12-hour morning shifts), and the average years working as nurses was 23.54 ( $SD = 15.5$ ) years. See Table 1.

### Health-Promoting Behavior

The mean total HPLP score was 144.30 ( $SD = 22.9$ ) out of 208 maximum scores. Spiritual growth subscale had the

**Table 1**

*Frequency Distribution of Selected Demographic Characteristics (N = 27)*

Characteristics	n (%)
Gender	
Male	2 (7%)
Female	25 (93%)
Marital Status	
Single	6 (22%)
Married	17 (64%)
Divorced	2 (7%)
In a relationship	2 (7%)
Born in the U. S.	
Yes	23 (84%)
No	4 (15%)
Highest education attained	
Associated degree	6 (22%)
Bachelor's degree	18 (67%)
Master	1 (4%)
Doctorate	2 (7%)
Practicing Religion	
Yes	26 (96%)
No	1 (4%)
Years working as a nurse	
<1 year	1 (4%)
1-5 years	5 (18%)
6-10 years	0
11-20 years	3 (11%)
21-30 years	8 (30%)
>31 years	7 (26%)
Missing	3 (11%)
Years living in the U. S.	
<1 year	0
1-5 years	2 (7%)
6-10 years	0
11-20 years	3 (11%)
>20 years	17 (63%)
Not applicable	5 (19%)
Currently working in clinical setting	
Yes	21 (78%)
No	6 (22%)

**Table 1***Demographic Characteristics*

Characteristics	Frequencies
Working status	
Working full time	18 (67%)
Part time	3 (11%)
Per Diem/Consultant	2 (7)
Missing	4 (15%)
Work-shift	
Morning	9 (33%)
Afternoon	2 (8%)
Night	4 (15%)
12-hour morning	3 (11%)
12-hour night	3 (11%)
Others	3 (11%)
Missing	3 (11%)
Work area	
Med-surg.	3 (11%)
Dialysis	10 (37%)
ICU	1 (4%)
LTC	1 (4%)
OB	1 (4%)
Rehab	1 (4%)
Office	3 (11%)
University	2 (7%)
Missing	5 (18%)
Job title	
LPN	1 (4%)
Staff Nurse	19 (70%)
Charge Nurse	1 (4%)
APRN	1 (4%)
Faculty	2 (7%)
Retired	2 (7%)
Missing	1 (4%)

**Table 2***Total and All Subscales Domains Score on HPLP*

HPLP Scoring	Score (SD)
Health-Promoting Lifestyle (items 1-52)	144.30 (22.92)
Health Responsibility (items 3,9,15,21,27,33,39,45,51)	24.27 (5.11)
Physical Activity (items 4,10, 16,22,28,34,40,46)	19.58 (6.93)
Nutrition (items 2,8,14,20,26,32,38,44,50)	23.62 (4.55)
Spiritual Growth (items 6, 12, 18, 24, 30, 36, 42, 48, 52)	27.22 (5.09)
Interpersonal Relations (items 1,7,13,19,25,31,37,43,49)	27.15 (4.23)
Stress Management (items 5,11,17,23,29,35,41,47)	21.48 (3.91)

highest mean score ( $M = 27.22$ ,  $SD = 5.1$ ). Physical activity had the lowest mean score ( $M = 19.58$ ,  $SD = 6.9$ ) followed by stress management ( $M = 21.48$ ,  $SD = 3.9$ ). See Table 2. There was no correlation noted between total HPLP score and the following variables - age, years living in the U.S. and shift working in the clinical setting ( $r = .271$ ,  $p = .17$ ;  $r = .010$ ,  $p = .96$ ; and  $r = .222$ ,  $p = .30$ , respectively).

### Level of Positive Mental Health

The mean score on the overall PMH was 4.99 ( $SD = .75$ ). The emotional support subscale had the highest mean score ( $M = 5.19$ ,  $SD = .86$ ); whereas general coping had the lowest mean score ( $M = 3.93$ ,  $SD = .70$ ). Table 3 presents all

**Table 3**

#### Total and Subscales Scores on PMH

Positive Mental Health (n)	<i>M</i>	<i>SD</i>
Total Positive Mental Health (12)	4.99	.75
Emotional Support (27)	5.19	.86
Interpersonal Skills (27)	5.09	.89
Spirituality (25)	4.86	1.21
Personal Growth Autonomy (27)	4.67	1.22
Global Affect (27)	4.67	1.03
General Coping (14)	3.93	.70

the PMH scores on the total and all subscales. There was no correlation noted between total PMH score and age ( $r = .553$ ,  $p = 0.62$ ), shift working in the clinical setting ( $r = .308$ ,  $p = 0.33$ ), and years living in the U.S. ( $r = -.521$ ,  $p = 0.83$ ).

### Discussion

The study showed that Filipino nurses working in Michigan rely on spiritual growth for health promotion and emotional support for maintaining a positive mental health. This finding is not surprising because about 8 in 10 Filipinos practice Catholicism; hence, religion and faith play significant roles in the Filipino culture (Lipka, 2015). Religion and spirituality provide meaning to the way many Filipinos interpret diseases and self-manage health conditions (Domingo et al., 2018; Lagman et al., 2014). Ramos and Mahmood's (2020) phenomenological study that identified faith as one of the factors that facilitated health-seeking behaviors of elderly Filipinos supported the findings. It is a common practice among Filipino to leave their health problems in God's hand and seek only medical attention as a last resort (Lagman et al., 2014; Ramos & Mahmood, 2020). Another finding in this study was that physical activity, stress management, and nutrition were the bottom three in health-promoting

behavior among Filipino nurses. This observation is worrisome given the high preponderance of cardiovascular disease (CVD) and diabetes among Filipinos not only in their homeland (Gloria, 2019) but also in the U. S. (Abesamis et al., 2016; Iyer, et al., 2019; Nguyen et al., 2015). Physical inactivity, foods high in fat and sodium, and stress are some of the identified risk factors for developing CVD (Centers for Disease Control and Prevention, 2019). It is worth mentioning that even though all the respondents were nurses who have basic knowledge of CVD risks, this knowledge does not always translate into their own personal health practice. The finding also reflects data about Asian Americans being the least physically active compared to other racial/ethnic groups (Kao et al. 2016; Yi et al., 2015).

Results also showed that emotional support, interpersonal skills, and spirituality were the most heavily relied on when it comes to maintaining positive mental health. Family is very important to Filipinos (Scroope, 2017). A Filipino family is classified as a nuclear unit but functionally extended. In other words, some households include other members of their immediate family besides parents and children (Scroope, 2017). Filipinos are more inclined to rely on family support in dealing with issues and concerns first rather than going to a formal health care provider (Grossman & Webb, 2016; Ramos & Mahmood, 2020). Similar to health-promoting behavior, Filipinos not only rely on spirituality for health-promoting behaviors but also for their mental health. Spirituality is the third highest score in the PMH subscale. Spirituality is also an important aspect to mental health (Verghese, 2008). There is promising evidence on the role of religion and spirituality on a person's mental health enhancing positive clinical outcomes.

### Limitations

The study limitations include a small sample size; the use of convenience sampling, and only Filipino nurses from MI were surveyed. Data collection began in late December 2019 and continued up until April 2020, when the coronavirus (COVID) 19 pandemic was at its peak. The pandemic could have affected the recruitment of Filipino nurses.

### Implications

This study has implications to research and practice. More research is needed with a larger sample size in evaluating health-promoting strategies in this population. The present study may be used as a guide to develop self-care strategies specific to Filipino culture. There should be special considerations for health-promoting programs that will incorporate religion or spirituality, and family support, while simultaneously targeting areas of physical activity, nutrition, and stress. Further examination of the relationships between the health-promoting behavior and positive mental health sub-



scales, and other socio-demographic variables is needed, which may provide additional evidence to these topics and population. Additionally, information regarding generational differences in self-care practices as well as in relation to acculturation or assimilation is needed. Recognizing and understanding cultural behaviors will enable health professionals to develop culturally tailored health promotion strategies for this population to improve health outcomes.

### Conclusion

This study aimed at determining health-promoting behavior and positive mental health of Filipino nurses in Michigan. Results showed that Filipino nurses tend to rely on spirituality when it comes to health-promoting and health-seeking behaviors, and emotional support for maintaining positive mental health. This study adds to the limited knowledge about self-care practices among Filipino nurses in the U.S. Results however should be interpreted with caution because of its limitations.

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