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Health Promoting Lifestyle among Health Professionals

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ABSTRACT

Introduction

Health promotion is important for health-promoting behaviour and disease prevention, which is associated with improved physical and mental health outcomes. So, this study aimed to find out the health-promoting lifestyle profile of health professionals working in Karnali Province.

Methods

A descriptive cross-sectional study was done among 217 randomly selected doctors, nurses, and paramedics in Karnali Province. Participants who had at least six months of experience and had no conditions that limited their physical activity. Data were collected by using the structured questionnaire. Mean scores of overall and subscale health-promoting lifestyle were calculated, and a t-test was used to compare differences between demographic variables and health-promoting lifestyle of health professionals.

Results

The majority of participants (67.74%) were younger than 30 years, with a mean age of 28.92±6.516, and 62.67% were female. A majority (69.12%) of participants perceived their current health as good. In terms of health-promoting behaviours, 62.67% showed a moderate level of engagement. The overall mean health-promoting lifestyle score was 123.99±16.66 out of 208, indicating a moderate practice level among health professionals. Furthermore, a statistically significant difference in health-promoting lifestyle scores with age groups (p = .035) was found, which suggests that age may influence the adoption of health-promoting behaviours.

Conclusion

Findings indicate that health professionals practiced a moderate level of health-promoting behaviours, underscoring the need for targeted advocacy and awareness to improve the health-promoting practices.

Keywords

Health care, health-promoting behaviour, health professionals, health promotion, lifestyle.

INTRODUCTION

A health-promoting lifestyle is a key determinant of an individual's overall health status, which includes behaviours such as regular physical activity, balanced nutrition, assuming responsibility for one's health, effective stress management, nurturing interpersonal relationships, and fostering spiritual growth.[1, 2] It reflects the actions and beliefs that motivate individuals to maintain their well-being and protect themselves from illness.[3] As a central strategy to encourage healthy living, it plays a vital role in the prevention of non-communicable diseases.[4] Health professionals are the backbone of the healthcare system, serving as important role models whose health-promoting behaviours can directly or indirectly influence patients' and clients' attitudes toward healthy living.[5] Their contribution to health promotion and health education further emphasizes their significance in guiding the public toward healthier lifestyle practices.[6] Additionally, health professionals spend a substantial portion of their time within healthcare settings, and attention to their own health-promoting behaviours becomes essential.[7] The concept of a health-promoting lifestyle encompasses six major components: physical activity, nutrition, health responsibility, spiritual growth, interpersonal relationships, and stress management, each contributing to enhanced well-being, personal satisfaction, motivation, and self-improvement. Despite its importance, research in this area remains limited.[8] Therefore, the researchers examined the health-promoting lifestyle among health professionals in Karnali Province, Nepal.

METHODS

A descriptive cross-sectional study was conducted to assess the health-promoting lifestyle profile of health professionals working in Karnali Province. The Karnali province has ten districts with eleven hospitals, which were study sites. Ethical approval for the study was obtained from the Institutional Review Committee of the Karnali Academy of Health Sciences, Jumla (Ref: 076/077/20), and the study was carried out from April 2021 to February 2022. Further approval was obtained from the concerned authority of the study sites.

The study population included doctors, nurses, and paramedics (fifth level and above) working in these hospitals. Participants were identified through records maintained by the Health Directorate Office of Karnali Province and by the hospital administration of the Karnali Academy of Health Sciences, Teaching Hospital, Jumla. Participants were recruited from Surkhet province hospital-37, Mehalkuna hospital-7, Kalikot-8, Jajarkot-8, Dolpa-3, Dailekh-7, Mugu-3, Humla-3, Rukum paschim-8, Salayan-5, and Jumla (KAHS)-128. Health professionals were eligible for inclusion if they had at least six months of work experience, did not have any physical condition that limited exercise, had no psychological illness, and were not taking medication associated with physical or mental disorders. Individuals experiencing acute stressful events, such as the recent death of a loved one or physical injury, were excluded from the study.

A total of 338 eligible health professionals were working during the study period. The sample size was determined using the mean and standard deviation of the Health-Promoting Lifestyle Profile (HPLP) reported in an Iranian study[9] Using a mean ($\bar{X}$) of 2.53, a standard deviation (σ) of 0.42, an allowable error (d) of 0.06, and a Z-value of 1.96 at the 95% confidence interval, the formula $n = Z^2\sigma^2/d^2$ yielded a sample size of 188. After accounting for a 10% non-response rate, the final sample size was 217. Participants were selected through simple random sampling using a lottery method based on hospital-wise lists.

Data collection instruments included a researcher-developed socio-demographic questionnaire and the standardized Health-Promoting Lifestyle Profile II (HPLP-II) developed by Walker, which comprises six subscales.[10-13] Socio-demographic variables included age, marital status, living arrangements, educational level, work experience, current health conditions, and perceived health status. The HPLP-II contains 52 items distributed across six domains: spiritual growth (9 items), interpersonal relations (9 items), nutrition (9 items), physical activity (8 items), health responsibility (9 items), and stress management (8 items). Responses were scored on a 4-point Likert scale ranging from 1 (never) to 4 (routinely). The questionnaire was pretested among 22 health professionals at the Karnali Academy of Health Sciences, Jumla, who were later excluded from the main study.

Data entry and analysis were conducted using SPSS version 16. Means were calculated for the overall HPLP-II score and its six subscales. The health-promoting lifestyle scores met the

assumption of normality (P = 0.2). Independent t-tests were applied to compare mean scores across selected variables.

RESULTS

In this study, a total of 217 health professionals, including doctors, nurses, and paramedics with education at the fifth level and above working within the eleven hospitals in the ten districts of Karnali Province, were included in the study to find out their health-promoting lifestyle behaviours.

Table 1. Socio-demographic characteristics of health professionals (n=217)

Variables	n(%)
Age in years	
Less than 30	147(67.74%)
30 or more	70(32.25%)
Mean age ±SD in year (28.92 ± 6.516)	
Gender	
Male	81(37.32%)
Female	136(62.67%)
Marital status	
Unmarried	88(40.55%)
Married and others	129(59.44%)
Work experiences	
Less than 3 years	119(54.83%)
3 or more years	98(45.16%)
Education attainment	
Undergraduate	105(48.38%)
Graduate and above	112(51.61%)
Living arrangement	
With family	142(65.43%)
Without family	75(34.56%)

Among 217 health professionals working in hospitals of Karnali Province; 67.74% were younger than 30 years, with a mean age of 28.92 ± 6.516. In terms of gender, 62.67% were female. More than half (59.44%) were married, and 54.83% had less than three years of work experience. Similarly, 51.61% had a graduate level or above education, and the majority (65.43%) were living with their families (Table 1).

Table 2. Health-related characteristics among health professionals (n=217)

Variables	n (%)
Perceived current health problem	
Yes	12(5.52%)
No	205(94.47%)
Rating of current health	
Excellent	47(21.65%)
Good	150(69.12%)
Fair	19(8.75%)
Poor	1(0.46%)

About perceived health status, most (94.47%) of health professionals reported having no current health problems. Regarding the rating of their overall health, most participants (69.12%) described it as good, while 8.75% rated it as fair, and only 0.46% rated their health as poor (Table 2).

Table 3. Level of health-promoting lifestyle among health professionals (n=217)

Health-promoting lifestyle level	n(%)
Excellent	0(0%)
Good	80(36.86%)
Moderate	136(62.67%)
Poor	1(0.46%)

In terms of perceived health-promoting lifestyle levels, 62.67% of health professionals reported a moderate level, 36.86% indicated a good level, and only one participant (0.46%) perceived their lifestyle as poor (Table 3).

Table 4. Mean and standard deviation of each subscale of HPLP II among health professionals (n=217)

Subscale of HPLP II	Minimum	Maximum	Mean	Std. Deviation
Health responsibility	15.00	36.00	24.0415	4.34860
Spiritual Growth	9.00	30.00	20.0323	4.16487
Physical Activity	12.00	34.00	24.3180	4.46336
Interpersonal Relations	17.00	36.00	27.4793	4.22961
Nutrition	17.00	36.00	26.8710	4.10645
Stress management	11.0	32.0	21.281	3.8765
Total score	78.00	165.00	123.9908	16.65527

The overall mean score for health-promoting lifestyle was 123.99 ± 16.66. Among the subscales, the highest mean was observed for interpersonal relations (27.48 ± 4.23), followed closely by nutrition (26.87 ± 4.11). The mean scores for health responsibility and physical activity were 24.04 ± 4.35 and 24.32 ± 4.46, respectively. The scores for stress management and spiritual growth were lower relative to the other dimensions, with mean values of 21.28 ± 3.88 and 20.03 ± 4.16, respectively (Table 4).

Table 5. Difference in socio-demographic and job-related variables with total HPLP II scores variables

Variables	Number	Mean score	SE Mean	t-value	p-value
Age in years					
Less than 30	147	122.3469	1.31837	-2.124	.035
30 or more	70	127.4429	2.10409		
Gender					
Male	81	125.8889	1.72133	1.298	.184
Female	136	122.8603	1.48067		
Marital status					
Unmarried	88	123.9205	1.65502	-.051	.959
Married and others	129	124.0388	1.53581		
Work experiences					
Less than 3 years	119	123.4034	1.43458	-.572	.568
3 or more years	98	124.7041	1.80376		
Education attainment					
Undergraduate	105	121.8762	1.62014	-1.678	.095
Graduate and above	112	125.9732	1.56233		
Living arrangement					
With family	142	124.7887	1.42942	.971	.333
Without family	75	122.4800	1.83788		

SE: Standard Error, p-value significant at <0.05

A statistically significant association was observed between age and the overall health-promoting lifestyle scores of health professionals (p = .035). No significant differences were found with other socio-demographic variables, including gender, marital status, work experience, educational attainment, and living arrangements (Table 5).

DISCUSSION

In this study, the majority of the health professionals (67.74%) were below 30 years of age, with a mean age of 28.92 ± 6.516, and 62.67% were females. More than half (59.44%) were married, and more than half (54.83%) had less than 3 years work experience. Likewise, more than half (51.61%) had graduate-level and above education, and the majority (65.43%) were living with their family. Regarding the perceived current health-related status, most of them (94.47%) had no health problems. About the rating of their current health, the majority (69.12%) rated their health as good, 8.75% rated their health as fair, and only 0.46% rated their health as poor. One cross-sectional study conducted in Myanmar showed that 16% rated their health as very good, 53.6% rated it as good, 29.4% rated it as moderate, and 1.0% rated their health as poor.[14]

Regarding the health-promoting lifestyle profile (HPLP), 62.67% of health professionals reported a moderate level, 36.86% reported a good level, and only 0.46% reported a poor level. A cross-sectional study conducted in Maharashtra, India, found that the majority of participants (71.77%) had good HPLP scores, 23.39% had excellent scores, and none fell into the poor category[15] which is broadly consistent with the current study. The mean total score for health-promoting lifestyle among health professionals in this study was 123.99 ± 16.66. Similarly, a cross-sectional study in Turkey reported a mean total score of 125.7 ± 18.99,[16] closely align with the present results. However, findings from Guilan, Iran, indicated an undesirable overall HPLP score.[17]

In terms of subscales, the highest mean in the current study was observed for interpersonal relations (27.48 ± 4.23). This is consistent with a study from Iran, which reported the highest mean for interpersonal relations as 26.46.[18] Equally, another study in Iran reported the highest scores in the spiritual growth subscale (26.75 ± 4.7).[19] In contrast, the present study found the spiritual growth dimension to have the lowest mean among all subscales (20.03 ± 4.16), differing from a cross-sectional descriptive study in Iran, which reported the highest score in spiritual growth (27.07 ± 5.94).[7]

The mean score for health responsibility in this study was 24.04 ± 4.35, which is similar

to findings from a descriptive cross-sectional study among hospital medical staff in Iran, where the mean was 24.91 ± 4.4.[19] The physical activity subscale had a mean score of 24.32 ± 4.46, whereas a study conducted in Isfahan, Iran, reported a lower mean for physical activity (17.58 ± 2.9).[8]

The current study had a mean score of 21.28 ± 3.88 for stress management, which was lower than that of other subscales. A similar finding was reported in a descriptive cross-sectional study at Manipal Teaching Hospital, Nepal, where the mean stress management score was 20.50 ± 3.96.[20] The mean score for the nutrition subscale in this study was 26.87 ± 4.11, which is higher than a study conducted in China, which reported a mean of 10.43 ± 2.97.[5] Similarly, the spiritual growth dimension had the lowest mean in the current study (20.03 ± 4.16), in contrast to findings from Manipal Teaching Hospital, Nepal, where spiritual growth had the highest mean score (27.43 ± 4.63).[20] Another contrasting finding was observed in a study conducted in Faisalabad, which reported a mean spiritual growth score of 25.06 ± 4.23.[21] The contrast finding may be due to differences in sociodemographic backgrounds.

This study was conducted in the hospital setting, and the data were collected with a self-administered questionnaire. So, it is recommended to conduct a study by doing face-to-face interviews among health professionals in the hospital as well as in a community setting to find out more comprehensive findings.

CONCLUSION

The findings of this study showed that most health professionals were young, and a majority were female. Overall, participants perceived their health positively, and the majority reported being involved in a moderate level of health-promoting lifestyle. A statistically significant association was found between age and health-promoting lifestyle scores. These results emphasize the need for targeted advocacy and awareness programs to encourage and enhance health-promoting lifestyles among health professionals.

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CONFLICT OF INTEREST

Regarding the research, writing, and/or publication of this work, the authors affirm that they have no conflicts of interest.

AUTHOR CONTRIBUTIONS

- Saraswoti Kumari Gautam Bhattarai: Research concept, design, literature review, data collection, data analysis, manuscript preparation
- Mangal Rawal: Research concept, design
- Rabin Khadka: Research concept, design, data collection
- Asha Panth: literature review, manuscript Preparation
- Monika Lama: Data collection
- Sujata Ojha: Data collection
- Sheela Thapa: Data collection
- Dibika Khadka: Data collection
- Kanchan Gautam: Literature review, manuscript preparation

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