

Wellness Practices and Self Rated Health among Employees of a Cooperative Company in Kannur, Kerala

Mariamamma V George

Associate Professor, College of Nursing, AIIMS, Bhubaneswar, India

Abstract: ***Background:** Wellness practices may relate to how people perceive their health. This study assessed wellness practices and their association with self-rated health among employees of a cooperative company in Kannur, Kerala. **Methods:** A descriptive cross-sectional survey was conducted among 71 employees aged ≥ 20 years selected by purposive sampling. Data were collected using a demographic proforma, a modified Oklahoma wellness questionnaire, and a 10-point self-rated health scale. Descriptive statistics, tests of association, and Pearson correlation were used. **Results:** Moderate wellness was reported by 37 participants (52.1%), high wellness by 29 (40.8%) and low wellness by 5 (7.0%). The most common self-rated health scores were 7 (19 participants, 26.8%) and 5 (16 participants, 22.5%). The wellness score was positively correlated with self-rated health ($r = 0.314$, $p = 0.008$). There were no statistically significant association between wellness category and age, gender, educational status or monthly income. **Conclusion:** Wellness practices were positively correlated with perceived health.*

Keywords: wellness; self-rated health; employees; occupational health; cross sectional study

1. Introduction

Wellness is a multidimensional concept that extends beyond the absence of illness and reflects an individual's pursuit of optimal functioning and well-being. It encompasses interconnected physical, emotional, intellectual, social, occupational, and spiritual dimensions, with each dimension contributing to overall health and quality of life. The interrelationship among these dimensions supports a holistic understanding of health and provides a useful framework for examining health-promoting behaviours across different populations. ^[1,2]

Wellness is particularly relevant among working adults, whose health behaviours and well-being are influenced by the interaction of occupational responsibilities with physical, psychological, social, and personal demands. The workplace therefore represents an important setting for health promotion. Assessment of employees' wellness practices can identify strengths and potentially modifiable areas of health behaviour and may provide evidence for developing context-specific workplace health-promotion strategies. ^[3,4]

Self-rated health (SRH) complements such assessment by providing a simple global measure of an individual's perception of overall health. SRH has demonstrated meaningful associations with subsequent health outcomes; systematic reviews and meta-analyses have shown that poorer SRH is associated with increased mortality risk at the population level. ^[5,6] Examining wellness practices together with SRH may therefore provide a broader understanding of employees' health behaviours and perceived health status. Accordingly, the present study assessed wellness practices among employees of a selected cooperative company in Kannur district, Kerala, and examined their association with selected demographic characteristics and self-rated health.

2. Materials and Methods

Study design and participants

A descriptive cross-sectional survey was conducted among employees of a selected cooperative company in Kannur district, Kerala. The study included 71 employees aged 20 years and above who were selected using purposive sampling. Informed consent was obtained from the participants.

Data collection instruments

Data were collected using a demographic proforma developed by the investigator and a modified version of the Oklahoma wellness questionnaire. The adapted questionnaire assessed six dimensions of wellness: physical, emotional, intellectual, occupational, social, and spiritual wellness. It consisted of 22 items rated on a 5-point scale from 1 (almost never; $<10\%$ of the time) to 5 (almost always; $\geq 90\%$ of the time), giving a possible total score of 22–110, with higher scores indicating better wellness practices. Scores of 22–52 were classified as low wellness, 53–73 as moderate wellness, and 74–110 as high wellness. Self-rated health was scored from 1 (poorest) to 10 (optimal). Informed consent was obtained from the participants.

Statistical analysis

Descriptive statistics were used to summarize participant characteristics, wellness practices, and self-rated health. Associations between wellness category and selected demographic variables were examined using appropriate tests of association. Pearson correlation was used to examine the relationship between total wellness score and self-rated health. Statistical significance was set at $p < 0.05$.

3. Results

Sociodemographic characteristics.

A total of 71 employees participated in the study. More than half were aged 31–40 years ($n = 37$, 52.1%), followed by

those aged 41–50 years ($n = 17$, 23.9%) and 20–30 years ($n = 16$, 22.5%); only one participant (1.4%) was aged >50 years. The majority of participants were male ($n = 54$, 76.1%), while 17 (23.9%) were female.

Most participants were Hindu ($n = 66$, 93.0%), while 3 (4.2%) were Muslim and 2 (2.8%) were Christian. Regarding educational attainment, 50 participants (70.4%) had completed the Secondary School Leaving Certificate (SSLC), 9 (12.7%) were graduates, 8 (11.3%) had technical education, and 4 (5.6%) had completed pre-university education (PUC).

Description of self-rating of level of health.

Among the 71 participants, self-rated health scores ranged from 4 to 10 on the 10-point scale. The most frequently reported score was 7, selected by 19 participants (26.8%), followed by 5 in 16 (22.5%) and 8 in 15 (21.1%). A score of 10 was reported by 10 participants (14.1%), while 5 (7.0%) selected 6. Scores of 4 and 9 were each reported by 3 participants (4.2%). No participant selected scores of 1, 2 or 3. Overall, 47 participants (66.2%) reported scores of 7 or higher, indicating that responses were concentrated toward the higher end of the scale.

Description on wellness practices

The maximum score in the wellness practice questionnaire was 110 and the minimum score was 22. Scores between 22–52 were categorized as low level of wellness and 53 to 73 were categorized as moderate level of wellness and scores

between 74 to 110 was categorized as high level of wellness. More than half of the participants (37, 52.1%) had a moderate level of wellness, while 29 (40.8%) had a high level and 5 (7.0%) had a low level of wellness. (Fig:1)

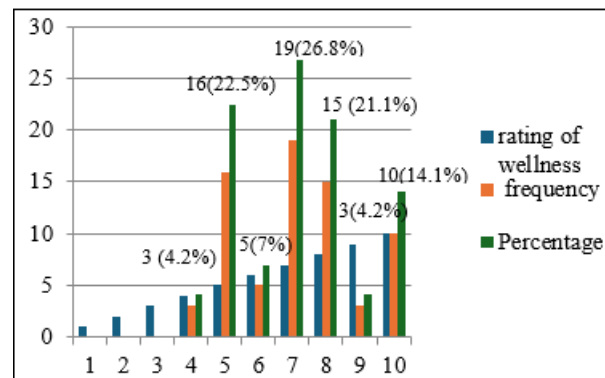


Figure 1: Distribution of participants based on self-rating of level of health

Distribution of samples based on Intellectual wellness

The highest proportion of participants, 31 (43.7%), reported very often engaging in reading or other hobbies daily. For learning something new or developing a new skill, 21 (29.6%) participants reported engaging in this activity very often, followed by 18 (25.4%) who reported doing so often and 18 (25.4%) who reported doing so almost always. (Table 1)

Table 1: Distribution of samples based on Intellectual wellness, $n=71$

Variables	Almost never		Occasionally		Often		Very often		Almost always	
	f	%	f	%	f	%	f	%	f	%
Intellectual wellness										
Reading, or engaging in hobbies daily	5	7	15	21.1	14	19.7	31	43.7	6	8.5
Learning something new or new skill	3	4.2	11	15.5	18	25.4	21	29.6	18	25.4

Distribution of samples based on Occupational wellness

Occupational wellness was generally favourable, with 32.4% of participants almost always enjoying their work and 40.8%

almost always able to balance work and leisure time. (Table 2)

Table 2: Distribution of samples based on Occupational wellness, $n=71$

Variables	Almost never		Occasionally		Often		Very often		Almost always	
	f	%	f	%	f	%	f	%	f	%
Occupational wellness										
Enjoys work	5	7	6	8.5	19	26.8	18	25.4	23	32.4
Able to balance between work and leisure time	4	5.6	7	9.9	17	23.9	29	40.8	14	19.7

Distribution of samples based on Spiritual wellness

Regarding spiritual wellness, 56.3% of participants reported that they almost always lived a life consistent with their values, while 23.9% reported doing so very often. In

contrast, prayer, meditation, or self-reflection was reported as almost never practiced by 60.6% of participants, followed by 19.7% who practiced these activities occasionally. (Table 3).

Table 3: Distribution of samples based on Spiritual wellness, $n=71$

Variables	Almost never		Occasionally		Often		Very often		Almost always	
	f	%	f	%	f	%	f	%	f	%
Spiritual wellness										
Lives a life consistent with the values	3	4.2	3	4.2	8	11.1	17	23.9	40	56.3
P-rayer/ meditation/self-reflection	43	60.6	14	19.7	4	5.6	4	5.6	6	8.5

Distribution of samples based on Social wellness

Regarding social wellness, participation in social, religious, or voluntary activities was reported as occasionally by 40.8% of participants, while 25.4% reported almost never participating in such activities. In contrast, 32.4% of

participants reported that they almost always found time to be with family and friends, followed by 25.4% who reported doing so often. The findings suggest relatively greater engagement with family and friends than with social, religious, or voluntary activities. (Table 4)

Table 4: Distribution of samples based on Social wellness, n=71

Variables	Almost never		Occasionally		Often		Very often		Almost always	
Social wellness	f	%	f	%	f	%	f	%	f	%
Participation in social religious or voluntary activities	18	25.4	29	40.8	7	9.9	13	18.3	4	5.6
Finds time to be with family and friends	1	1.4	12	16.9	18	25.4	17	23.9	23	32.4

Distribution of samples based on Emotional wellness

Regarding emotional wellness, 36.6% of participants reported that they almost always felt happy with themselves and their lives, while 38.0% reported very often. Similarly, 33.8% reported very often expressing their emotions in an acceptable way, and 19.7% reported doing so almost always.

Regarding stress, 36.6% reported often experiencing little stress in their lives, while only 7.0% reported almost always experiencing little stress. Overall, the findings indicate generally favourable emotional wellness, although lower levels of freedom from stress were observed. (Table 5).

Table 5: Distribution of samples based on Emotional wellness, n=71

Variables	Almost never		Occasionally		Often		Very often		Almost always	
Emotional wellness	f	%	f	%	f	%	f	%	f	%
Happy with oneself and the life	4	5.6	3	4.2	11	15.5	27	38	26	36.6
Expresses emotions in acceptable way	8	11.3	10	14.1	15	21.1	24	33.8	40	19.7
little stress in life	6	8.5	14	19.7	26	36.6	20	28.2	5	7

Distribution of samples based on Physical wellness

Participants reported relatively favourable practices for hydration, physical activity, sleep, and maintenance of a healthy weight. Nearly half (45.1%) reported almost always consuming 2–3 L of water daily, while 39.4% almost always engaged in at least 30 minutes of moderate physical activity per day. Adequate sleep was reported very often by 39.4%

and almost always by 32.4% of participants. Approximately one-third (32.4%) reported almost always maintaining a healthy weight for their height. Dietary practices were comparatively less consistent. Only 25.4% reported almost always consuming fruits and vegetables daily, and 5.6% almost always consumed high-fibre foods. (Table 6)

Table 6: Distribution of samples based on Physical wellness, n=71

Variables	Almost never		Occasionally		Often		Very often		Almost always	
Physical wellness	f	%	f	%	f	%	f	%	f	%
Vegetables/ fruits daily	5	7	13	18.3	21	29.6	14	19.7	18	25.4
High fiber foods daily	7	9.9	28	39.4	23	32.4	9	12.7	4	5.6
Avoids high fat/ restaurant/ fast foods	15	21.1	39	54.9	6	8.5	5	7	6	8.5
Healthy weight for height	6	8.5	9	12.7	15	21.1	18	25.4	23	32.4
blood pressure/ blood sugar/ cholesterol within recommended range	13	18.3	5	7	16	22.5	21	29.6	16	22.5
30 minutes of moderate physical activity in a day	4	5.6	11	15.5	12	16.9	16	22.5	28	39.4
Drink 2-3 liters of water	4	5.6	5	7	10	14.1	20	28.2	32	45.1
Takes expert advises for health	10	14.1	19	26.8	13	18.3	19	26.8	10	14.1
Avoids use of tobacco	49	69	6	8.5	3	4.2	3	4.2	10	14.1
Avoids alcohol consumption	53	74.6	5	7	3	4.2	3	4.2	7	9.9
Adequate sleep	3	4.2	6	8.5	11	15.5	28	39.4	22	32.4

Association between wellness practices and demographic variables.

There were no significant association between wellness practices with age ($p = 0.819$), gender ($p = 0.530$), education ($p = 0.769$) and income ($p = 0.361$).

Relationship between wellness practices and self-rated health status

Wellness score had a weak positive correlation with self-rated health ($r = 0.314$; $p = 0.008$). (Table 7)

Table 7: Relationship between wellness practices and self-rated health status, n=71

Variable	r value	p value
Wellness practice	0.314	0.008
Self-rated health status		

“r = Pearson's correlation coefficient; $p < 0.05$.

4. Discussion**Self-rated health**

Most participants perceived their health within the moderate-to-good range, with 26.8% rating their health as 7 and 22.5% as 5 on the 10-point scale. SRH is a subjective measure, but prospective evidence indicates that poorer SRH is associated with higher mortality risk even after consideration of other health measures. [5–8] The findings of the present study are therefore relevant because participants' perceptions of their own health provide information beyond the objective presence or absence of disease. However, the present study assessed perceived health at a single point in time; therefore, the findings should be interpreted as describing participants' health perceptions rather than predicting future health outcomes.

Level of wellness

Most participants were classified as having moderate-to-high wellness. WHO conceptualizes well-being as a positive state

influenced by social, economic, and environmental conditions and linked with quality of life, meaning, and purpose.^[9] The predominance of moderate wellness suggests that favourable practices coexisted with areas in which improvement may be possible

Wellness practices and self-rated health

The study identified a statistically significant low positive correlation between wellness practices and self-rated health ($r = 0.314$, $p = 0.008$), indicating that participants with more favourable wellness practices tended to report better perceived health. This finding is compatible with broader evidence linking lifestyle-related behaviours with perceived health and health-related quality of life. A systematic review and meta-analysis of randomized controlled trials reported improvements in health-related quality of life following lifestyle interventions.^[10] A systematic review among older adults also reported associations between healthier dietary patterns and better quality of life, although the evidence was heterogeneous.^[11] These studies concern different populations and outcomes, so they provide contextual rather than directly comparable evidence.

Variation across wellness dimensions

The findings showed variation across wellness dimensions. Intellectual and occupational practices were relatively favourable, and more than half of participants reported living in accordance with personal values. In contrast, daily prayer, meditation, or personal reflection was infrequent for many participants.

Participation in social, religious, or voluntary activities was less frequent than time spent with family and friends. Social connection is relevant to health: a 2023 systematic review and meta-analysis of 90 prospective cohort studies found that social isolation and loneliness were associated with increased mortality risk.^[12] Overall, the variation observed across wellness dimensions suggests that wellness promotion should consider the different areas measured in the present study rather than focusing on a single behaviour or dimension. The WHO health-promotion framework similarly emphasizes improving health and well-being through approaches that enable individuals and communities to have greater control over their health.^[9]

Association between wellness practices and demographic variables.

In the present study, wellness practices were not significantly associated with age, gender, educational status or monthly income. These findings are partly consistent with a study among Turkish workers that reported no significant differences in overall health-promoting lifestyle scores by age, gender or educational level.^[13] Similarly, no significant differences in overall lifestyle scores across these demographic characteristics were observed among hospital clinical staff in Iran.^[14] A study among Saudi medical students also reported no significant differences in overall lifestyle scores across monthly family-income groups.^[5] However, differences in populations, income measures and assessment instruments limit direct comparability.

In contrast, a Turkish study reported significantly higher overall lifestyle scores among workers whose income

exceeded their expenses, alongside age-related differences in exercise and nutrition.^[13] Significant differences in health-promoting lifestyle subscales according to age, gender and education were also identified among industrial workers.^[16] Furthermore, education-related differences in physical activity and stress management were reported among hospital clinical staff despite the absence of significant differences in overall scores.^[14] These findings suggest that demographic associations may vary across behavioural domains and may not be apparent in an aggregate wellness score. Between-study differences may reflect variations in sample composition, occupational context, measurement approaches and statistical power.

5. Limitations

The study used a cross-sectional design and purposive sampling from a single cooperative company, limiting causal inference and generalizability. Wellness and health were self-reported and may be affected by response bias. The sample size was modest, and subgroup analyses may have had limited statistical power.

6. Conclusion

Most participants demonstrated moderate-to-high levels of wellness and generally favourable self-rated health. Wellness practices showed a statistically significant low positive correlation with self-rated health ($r = 0.314$, $p = 0.008$), whereas no statistically significant associations were reported with the demographic variables examined. The findings support assessment of wellness practices alongside perceived health in workplace populations, while the cross-sectional design precludes causal conclusions. Larger longitudinal and interventional studies are needed to clarify the direction and strength of this relationship.

References

- [1] Strout KA, Howard EP. The six dimensions of wellness and cognition in aging adults. *J Holist Nurs.* 2012;30(3):195-204. doi:10.1177/0898010112440883.
- [2] Bruce GM. Implementing a university campus wellness model. *AAOHN J.* 1993;41(3):120-3. doi:10.1177/216507999304100302.
- [3] World Health Organization Regional Office for South-East Asia. Promoting a healthy lifestyle at the workplace: Be the Change. New Delhi: World Health Organization Regional Office for South-East Asia; 2017.
- [4] Virtanen M, Lallukka T, Elovainio M, Steptoe A, Kivimäki M. Effectiveness of workplace interventions for health promotion. *Lancet Public Health.* 2025;10(6):e512-e530. doi:10.1016/S2468-2667(25)00095-7.
- [5] DeSalvo KB, Bloser N, Reynolds K, He J, Muntner P. Mortality prediction with a single general self-rated health question: a meta-analysis. *J Gen Intern Med.* 2006;21(3):267-75. doi:10.1111/j.1525-1497.2005.00291.x.
- [6] Dramé M, Cantegrit E, Godaert L. Self-rated health as a predictor of mortality in older adults: a systematic

- review. *Int J Environ Res Public Health*. 2023;20(5):3813. doi:10.3390/ijerph20053813.
- [7] Lorem G, Cook S, Leon DA, Emaus N, Schirmer H. Self-reported health as a predictor of mortality: a cohort study of its relation to other health measurements and observation time. *Sci Rep*. 2020; 10: 4886. doi:10.1038/s41598-020-61603-0.
- [8] Wuorela M, Lavonius S, Salminen M, Vahlberg T, Viitanen M, Viikari L. Self-rated health and objective health status as predictors of all-cause mortality among older people: a prospective study with a 5-, 10-, and 27-year follow-up. *BMC Geriatr*. 2020; 20: 120. doi:10.1186/s12877-020-01516-9.
- [9] World Health Organization. Health promotion glossary of terms 2021. Geneva: World Health Organization; 2021.
- [10] Amiri S, Mahmood N, Junaidi S, Khan MAB. Lifestyle interventions improving health-related quality of life: a systematic review and meta-analysis of randomized controlled trials. *J Educ Health Promot*. 2024;13:193. doi:10.4103/jehp.jehp_1156_23.
- [11] Govindaraju T, Sahle BW, McCaffrey TA, McNeil JJ, Owen AJ. Dietary patterns and quality of life in older adults: a systematic review. *Nutrients*. 2018;10(8):971. doi:10.3390/nu10080971.
- [12] Wang F, Gao Y, Han Z, Yu Y, Long Z, Jiang X, et al. A systematic review and meta-analysis of 90 cohort studies of social isolation, loneliness and mortality. *Nat Hum Behav*. 2023;7(8):1307-19. doi:10.1038/s41562-023-01617-6.
- [13] Beşer A, Bahar Z, Büyükkaya D. Health promoting behaviors and factors related to lifestyle among Turkish workers and occupational health nurses' responsibilities in their health promoting activities. *Ind Health*. 2007;45(1):151-9. doi:10.2486/indhealth.45.151. PubMed.
- [14] Moghimi A, Saberi Isfeedvajani M, Javanbakht M, Khedmat L. Health-promoting lifestyle behaviors and its association with sociodemographic characteristics in hospital clinical staff. *Front Public Health*. 2024;12:1391094. doi:10.3389/fpubh.2024.1391094. PubMed.
- [15] Alzahrani SH, Malik AA, Bashawri J, Shaheen SA, Shaheen MM, Alsaib AA, et al. Health-promoting lifestyle profile and associated factors among medical students in a Saudi university. *SAGE Open Med*. 2019; 7:2050312119838426. doi:10.1177/2050312119838426. PubMed.
- [16] Lusk SL, Kerr MJ, Ronis DL. Health-promoting lifestyles of blue-collar, skilled trade, and white-collar workers. *Nurs Res*. 1995;44(1):20-4. PubMed.