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# Health Education Awareness: A Silent Catalyst for Restful Sleep, Mental Resilience, and Holistic Well-Being

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**Abstract**

Health education awareness plays a critical role in shaping individual health behaviors, including sleep patterns, mental resilience, and overall well-being. However, the extent of its influence on these aspects remains underexplored. This study examines the impact of health education awareness on sleep quality, stress management, mental health, and preventive healthcare behaviors. A comparative analysis was conducted among individuals with and without health education awareness. Data were collected through structured questionnaires assessing key areas, including sleep hygiene, mental well-being, stress management techniques, preventive healthcare engagement, and lifestyle behaviors. Mean scores and standard deviations were analyzed to evaluate differences between the two groups. The findings reveal a strong correlation between health education awareness and improved health outcomes. Participants with health education awareness reported significantly better sleep hygiene, with more consistent sleep schedules and fewer disturbances. They also exhibited higher mental resilience, actively engaging in stress management techniques such as mindfulness, exercise, and social support. Additionally, they demonstrated greater engagement in preventive healthcare measures, such as regular medical check-ups and health monitoring. In contrast, those lacking health education awareness displayed poorer sleep quality, higher stress levels, and lower adherence to preventive health practices. Health education awareness serves as a silent but powerful catalyst for improved sleep, enhanced mental resilience, and overall well-being. By fostering knowledge about health-promoting behaviors, it empowers individuals to adopt proactive healthcare measures, leading to long-term health benefits. These findings highlight the urgent need for widespread health education initiatives to bridge knowledge gaps and promote healthier lifestyles across populations.

**Keywords:** Health education awareness, sleep quality, mental resilience, stress management, preventive healthcare, well-being.

## Introduction

Health education has become one of the imperative approaches that play a central role in increasing the health literacy of the population, as well as in combating diseases among adults [1,2]. To ensure a better quality of life, such programs are used to enhance the capability of people to make the right decision on their health, nutrition, and other health-related aspects [3].

The current global trends of non-communicable diseases, including diabetes, hypertension, and cardiovascular diseases, necessitate the need for well-structured health promotion interventions [4,5]. The World Health Organization defines health education as the process carried out through communicating for the purpose of promoting health literacy involving the acquisition of knowledge and other constructive learning experiences that support effective health practices within individuals and communities [3].

Such factors like wrong attitude towards diet, reduced physical activity, and high stress have become alarming determinants of deteriorating adult health in the society of today [6,7]. The Healthy People 2030, which was launched by the US Department of Health and Human Services, underlines the necessity of giving the health education solution to such issues as it outlines measurable health objectives and goals for the country conditioned on data to promote the health and wellness of the population in the upcoming decade [8]. Addressing health education issues is vital to the improvement of the general health of the population, reducing the rate of occurrence of chronic diseases [9,10]. Moreover, evidence indicates that illiterate individuals can be provided with an understanding of what being healthy entails by offering them formal/structured health literacy that can help them understand the need to seek medical care and make proper decisions concerning their health [11,12].

However, health education programs are focused not only on the physical but also the mental and emotional health of the people [13,14]. For instance, Whole Health Action Management (WHAM) is one of the peer leader interventions developed with the purpose of improving the management and, in general, constructing the resilience of individuals with mental illness and chronic health disorders. The works of Fuller et al. [15] and Luft et al. [16] argue that adequate health education can build one's mental strength, thus reducing stress and improving the quality of life. Stress management is critical, explaining the role of health education given that stress triggers many diseases [17,18]. Interventions, such as mindfulness and behavioral programs, have been revealed to enhance the utilization of coping skills and self-mental health [13,19]. As health is a complex concept that comprises physical, mental, and social health, it is pertinent to determine what role health education plays in enhancing the health of adults.

Health education programs are planned and systematic activities that are tailored to act as a source through which people are enabled to make the right choice regarding their health [5,20]. These may, for instance, cover areas like healthy dieting, exercise, non-communicable diseases, illness/well-being of the mind, and handling stress [21]. They may be presented using different media such as community-based stands, worksite, school-based interventions, magazines, newspapers, websites, media advertisements, and healthcare centers [22,23]. According to the WHO, health education is described as any form of learning intervention, which is grounded in theory that assists individuals, groups, and communities to acquire essential knowledge and skills required in enhancing quality health choices [24]. According to the policies and programs developed by McGinnis et al. [25] and Marmot [26], people's habits and whether they modify or improve some of these factors that one can change can lead to a general improvement in their quality of life.

Well-being of the adult is a complex construct that includes physiological, psychological well-being, and social adjustment as well as the capacity to cope with life stresses [27,28]. Still, it is an essential phase that requires appropriate health management since it involves more individual responsibilities, workplace stress, and a higher probability of getting chronic diseases compared with children and adolescents [29,30]. An educated adult population is likely to make better decisions, thereby reducing the incidence of lifestyle-related diseases and promoting better health among the community [31,32]. The overall framework of Healthy People 2030 also underlines the fact that adult well-being is a crucial priority for the nation and that strides should be made towards setting goals on the promotion of healthy behaviors to reduce the gap that has for long separated people with adequate, healthy, and wealthy lifestyles and those who lack them [33,34].

This research aims to fill the knowledge gap on the effects of health education programs for adults by providing answers to the following research questions:

1. How do health education programs impact physical health outcomes in adults?
2. What is the effect of these programs on mental and emotional well-being?
3. Do health education interventions contribute to behavioral and lifestyle changes?

Effects of the health education interventions on behavioral and lifestyle change

Hereby, based on the identified objectives, the primary aim of this research will involve the assessment of health education programs in improving adult health status. Therefore, it is crucial for this research to explore the impact of educational interventions on students' overall health, as well as the influence of physical and mental health on their educational journey. This can be useful for policymakers, clinicians, and educators in particular to design improved and convenient health education programs for adults, considering the established conditions. The study will also seek to identify the problems that people come across when implementing health education programs, some of which include access, economic status, and culture. As a result, identifying these challenges will facilitate the development of effective strategies that would warrant the eventual success of delivering health education interventions.

## II. Literature Review

### A. Overview of Health Education Programs

Health education is a very vital tool for raising health consciousness among people, avoiding ailments, and enhancing healthy status in individuals and societies. These programs aim to inform individuals about healthy living, healthy eating, exercise, attitudes toward health, and disease prevention [1]. Thus, health education programs enable people to be informed and equipped with knowledge to make appropriate choices in given health situations, change behavioral patterns, and minimize the possibility of developing diseases.

Health education also involves more than just the modification of individual practices; rather, it involves changes within the community and considers all health-related factors. Koelen and Van den Ban [2] note that it is possible to implement health promotion in education systems, workplaces, and healthcare facilities to prevent adverse health conditions and promote lasting health improvements. Promising efforts by programs tailored to reach out to vulnerable workers, including migrant and underserved groups, continue to demonstrate improvements in health disparities [9].

### B. Theoretical Frameworks Supporting Health Education

Numerous theories form the basis for developing and managing health education programs, offering a framework for analyzing the determinants of health behaviors and implementing interventions. The Social Ecological Model (SEM), as described by Golden & Earp [7], considers multiple levels that influence an individual’s health behavior. This model emphasizes the importance of educating people on preventive measures while also addressing external factors that influence behavior.

Intervention mapping, a widely used framework, aims to develop theory- and evidence-based health education programs [5]. This process includes identifying target health issues, setting goals, and applying strategies based on behavioral theories. Likewise, the Health Equity Framework developed by Peterson et al. [14] embraces principles of social justice and public health by addressing underlying factors contributing to health disparities.

Some examples of health education models include the Transtheoretical Model of Behavior Change (TTM), which categorizes behavioral change into five stages: pre-contemplation, contemplation, preparation, action, and maintenance [10]. This model is particularly useful for assessing and administering interventions tailored to individual needs, increasing the likelihood of success. Furthermore, Galante et al. [13] discuss the Mindfulness-Based Health Promotion Model, which highlights the role of mindfulness in enhancing mental health and emotional self-sufficiency.

### C. Existing Research on Adult Well-being and Health Education

Health promotion requires educational systems to teach adults about physical, mental, and overall quality of life. Previous studies indicate that health education interventions in the EU have improved health literacy, knowledge, and skills related to chronic disease prevention [1]. These programs have shown success in areas such as oral health, mental health, sleep disorders, and chronic disease prevention.

Health education programs focusing on preventive measures have demonstrated effectiveness in promoting healthy lifestyles, particularly in oral health interventions. Nakre and Harikiran [21] conducted a systematic review on the efficacy of oral health education programs and found that well-structured interventions positively impact oral hygiene knowledge, attitudes, and practices. Similarly, a qualitative cross-sectional study in Washington State showed that interactive, community-based oral health education significantly improved oral hygiene practices and awareness among migrant and underrepresented groups [9].

Beyond physical health, health education plays a critical role in mental and emotional well-being. Anxiety, depression, and sleep disorders are global concerns, particularly in developing nations. Liang et al. [29] investigated the mental health and anxiety levels of hepatitis C patients in the COVID-19 era and emphasized the need for health education programs to enhance psychological well-being. Similarly, a meta-analysis by Galante et al. [13] demonstrated that mindfulness-based programs effectively reduce stress, anxiety, and depression.

Sleep disorders are another major contributor to adverse adult well-being. Health education has been shown to improve sleep hygiene and awareness of the consequences of poor sleep. A study in Pakistan found that lifestyle factors, stress, and health conditions significantly impact sleep quality, emphasizing the need to integrate sleep health education into broader health initiatives [30].

Health education also plays a vital role in preventing and managing chronic diseases. Adler et al. [27] explored how health education mitigates social determinants of health and reduces disparities in chronic disease outcomes. Their study highlighted the importance of educating individuals on diet and exercise to lower the prevalence of conditions such as diabetes, cardiovascular diseases, and obesity.

The effectiveness of adult education programs has been evident in pandemic situations, including COVID-19. Umar et al. [30] examined the clinical presentation of COVID-19 pneumonia and stressed the need for public awareness to prevent disease spread. Additionally, Umar et al. [29] analyzed vaccine efficacy and emphasized the importance of health education in addressing public skepticism about vaccines.

Collaboration also enhances the success of health education programs. A systematic review by Alderwick et al. [8] found that partnerships between healthcare and non-healthcare organizations improved the reach and effectiveness of health education interventions. This aligns with the argument made by Artiga and Hinton [8] that community involvement in health education leads to better health outcomes.

### D. Factors Affecting the Effectiveness of Health Education Programs

Several factors determine the success of health education programs, including accessibility, relevance, and acceptability. Limited availability due to financial constraints, geographical location, and language barriers remains a significant challenge [8]. Research shows that interventions targeting migrant workers and low-income communities have yielded better health outcomes [9].

Cultural sensitivity is another critical factor in health education program success. Programs that align with community values and actively involve participants tend to achieve higher engagement and better outcomes [15]. Fuller et al. [16] emphasize that only culturally relevant health education initiatives will be widely accepted and effectively implemented.

Program funding is also crucial for successful implementation and sustainability. Aldana [18] reviewed financial outcomes of health promotion and found that well-funded programs reduce healthcare costs and improve workplace productivity. However, financial constraints often limit program scalability.

Community engagement is another vital aspect of successful health education programs. Kamimura et al. [20] found that self-efficacy and perceived benefits significantly influence participation in health education initiatives. Effective engagement strategies such as peer tutoring, interactive learning, and digital tools enhance program success [19].

### E. Gaps in Current Literature

Despite extensive research, gaps remain in the study of health education programs. One key limitation is the lack of long-term evaluations of program effectiveness. Many studies focus on short-term impacts, leaving uncertainty regarding sustained behavioral changes and health improvements [4].

Cross-disciplinary research is also limited. While collaborations between healthcare and non-healthcare sectors are increasing, more research is needed to explore how interdisciplinary approaches enhance program efficiency.

Additionally, health education programs have not fully leveraged technological advancements. While telehealth education has grown in recent years, studies on its long-term impact and learner retention remain scarce [16]. Future research should explore how digital platforms enhance health education accessibility and engagement.

Cultural inclusivity in health education programs also requires further investigation. Many interventions use standardized approaches that may not adequately address the unique needs of ethnic minority and low-income groups. Research suggests that culturally tailored health education strategies yield better results, highlighting the need for further exploration in this area [14].

## III. Methodology

### A. Research Design

To achieve the above objective, this study employed a quantitative cross-sectional research design to compare and analyze the effect of health education knowledge on the well-being of the respondents. In contrast with the contingency introduction of an intervention program, this study does not include the implementation of new health education; rather, it involves intervening between students who already possess health education knowledge and those who do not or have a low level of such knowledge. It is for this purpose that the current study aims to compare these two groups in a bid to establish the level of health education awareness in the physical health, mental health, and lifestyle dimensions among respondents. The cross-sectional approach allows for conducting research regarding the distribution of various forms of knowledge regarding health education and their relation to the health status at a particular point. This design is particularly advantageous in terms of analyzing the trends and associations between health literacy and several well-being factors in the sample of mostly diverse adults.

### B. Sample Population and Sampling Techniques

The sampling comprises 250 adults aged 25 to 55 years, selected from different parts of the country with a diverse socioeconomic status. The participants' samples are chosen using the quota sampling method in an attempt to include participants from different educational levels and occupational statuses, and they come from both urban and rural areas. It is critical to stratify to obtain a sample that will provide information that describes how health education is provided and why or why not to various groups of people. The sample is divided into two separate groups: HEfilled, the Health Educated group, which includes people who have had a formal or informal way of being educated on health, including nutrition, physical activity, disease

prevention, and mental/emotional health; and NHEfilled, a group of people who have been educated little or not at all on health issues.

Only certain patients can be included in a study, and others should be excluded to improve results validity. The inclusion criterion comprises adults within the age bracket of 18 to 60 who can understand and have agreed to participate in the study but have different levels of health education exposure. If the person has a disability or other condition, such as a cognitive impairment that will prevent them from completing the survey or impair their understanding, or a medical condition that would strongly impact any of our health measurements, they may be excluded. This process of sample selection helps in ensuring that while selecting the sample of respondents, only those with different levels of health literacy are chosen so that a few biases that are likely to have influenced the results are eliminated.

### C. Data Collection Methods

This study related to health education assessment depended on a structured questionnaire, which functioned as the main tool to determine adult-related well-being effects. The questionnaire included sections for collecting both demographic information and evaluations about health education knowledge alongside behavioral and attitudinal aspects. This research tool contained closed-ended and Likert scale inquiries that enabled quantitative evaluation of health education awareness as well as its impact on well-being areas such as knowledge acquisition, lifestyle practices, sleep quality, mental health, and preventive health practices.

We distributed a questionnaire to 400 subjects, and 250 responded without any missing or invalid data, yielding a response rate of 62.5%. The questionnaire presented straightforward questions to measure clarity on health information, search practices, healthy lifestyle participation rates, and preventive healthcare engagement. The study survey used a five-point Likert-type scale with 1 indicating Strongly Disagree and 5 indicating Strongly Agree to measure health education's impact on individual health decisions. The researchers evaluated the gathered data through an analysis process to uncover patterns and relationships that existed between health education knowledge and measures of well-being.

### D. Data Analysis Techniques

To evaluate the relationship between health education knowledge and adult well-being, the study employs several **statistical analysis methods**. **Descriptive statistics** summarize participant demographics, health status, and lifestyle behaviors, providing a foundational understanding of the sample characteristics.

### E. Ethical Considerations

Ethical integrity is a critical component of this study, and several measures are taken to ensure compliance with research ethics standards. Before participation, all individuals provide informed consent, which includes a clear explanation of the study’s purpose, procedures, potential risks, and confidentiality policies. Participants are assured that their responses will remain anonymous and that they have the right to withdraw from the study at any point without any consequences. To protect participant privacy, all data is anonymized and stored securely, with access restricted to authorized researchers only.

## 3. Results

### 3.1. Demography

Table 1 presents the demographic characteristics of the study participants, highlighting key factors relevant to the role of health education programs on adult well-being. The sample consists of 250 individuals, with a nearly equal gender distribution (52% male, 48% female). The majority of participants fall within the 25-34 (36%) and 35-44 (34%) age groups, with fewer individuals in the 45-55 age range (30%). Educational attainment varies, with a significant proportion having completed secondary school (32%) or holding an undergraduate

degree (32%), while a smaller percentage have a postgraduate degree (16%) or lower levels of education. Notably, health education awareness is evenly split, with 50% of participants having received health education and 50% lacking exposure. These demographic insights underscore the importance of health education initiatives in reaching diverse adult populations and enhancing well-being through informed decision-making.

Table 1: Demographic characters

| Demographic Character | Frequency | Percentage |
|---|---|---|
| **Gender** | | |
| Male | 130 | 52.00% |
| Female | 120 | 48.00% |
| **Age Group (Years)** | | |
| 25-34 | 90 | 36.00% |
| 35-44 | 85 | 34.00% |
| 45-55 | 75 | 30.00% |
| **Education Level** | | |
| No formal education | 10 | 4.00% |
| Primary school | 40 | 16.00% |
| Secondary school | 80 | 32.00% |
| Undergraduate degree | 80 | 32.00% |
| Postgraduate degree | 40 | 16.00% |
| **Health Education Awareness** | | |
| Yes | 125 | 50.00% |
| No | 125 | 50.00% |

### 3.2. Health Education Knowledge

The data comparison between individuals who have knowledge about health education programs shows marked differences in their understanding of and approach to health information. Participants with health education awareness exhibit significantly higher confidence and understanding of general health topics, with mean scores consistently above 4.0. People with health education knowledge proactively consult trustworthy healthcare providers and internet platforms and read materials for their personal health information. Methods for preventing health issues, along with disease prevention, play a major role in maintaining overall health, according to these participants. The score average for people without knowledge of health education remains at 2.0, while the other group maintains scores above 4.0. They continue to seek health information and have doubts about making informed health choices due to a knowledge-disapplication gap.

Information about health education actively affects how people conduct their daily habits through their lifestyle choices. People who receive health education have higher probabilities of applying learned information to build dietary balance and physical activity routines because their scores indicate supportive perspectives. The respondents demonstrate practical utilization of their acquired health knowledge to enhance their complete lifestyle pattern. The participants without access to health education demonstrate a lower ability to apply health knowledge in their daily routines because their mean scores stay at lower levels. The participants showed limited knowledge about the direct relationship between health education programs and personal well-being. Health education programs hold a vital function because they enable people to develop health-conscious behaviors and gain the ability to make informed health choices (Table 2).

Table 2: Comparative Analysis of Health Education Awareness on Knowledge, Information-Seeking Behavior, and Lifestyle Application

| Question | Health Education Awareness | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Mean Score | STD. |
|---|---|---|---|---|---|---|---|---|
| I have a good understanding of general health education topics. | Aware | 0 (0.0%) | 7 (5.6%) | 16 (12.8%) | 60 (48.0%) | 42 (33.6%) | 4.1 | 0.83 |
| | Not aware | 41 (32.8%) | 45 (36.0%) | 21 (16.8%) | 18 (14.4%) | 0 (0.0%) | 2.13 | 1.03 |
| I have received formal or informal health education from school, workplace, or health programs. | Aware | 0 (0.0%) | 4 (3.2%) | 18 (14.4%) | 49 (39.2%) | 54 (43.2%) | 4.22 | 0.81 |
| | Not aware | 36 (28.8%) | 49 (39.2%) | 27 (21.6%) | 13 (10.4%) | 0 (0.0%) | 2.14 | 0.95 |
| I actively seek health-related information from reliable sources (e.g., doctors, online platforms, books). | Aware | 0 (0.0%) | 10 (8.0%) | 16 (12.8%) | 47 (37.6%) | 52 (41.6%) | 4.13 | 0.92 |
| | Not aware | 32 (25.6%) | 56 (44.8%) | 28 (22.4%) | 9 (7.2%) | 0 (0.0%) | 2.11 | 0.87 |
| I am confident in my ability to make informed health-related decisions. | Aware | 0 (0.0%) | 7 (5.6%) | 19 (15.2%) | 55 (44.0%) | 44 (35.2%) | 4.09 | 0.85 |
| | Not aware | 36 (28.8%) | 49 (39.2%) | 25 (20.0%) | 15 (12.0%) | 0 (0.0%) | 2.15 | 0.98 |
| I believe that health education is essential in preventing diseases and maintaining well-being. | Aware | 0 (0.0%) | 6 (4.8%) | 21 (16.8%) | 53 (42.4%) | 45 (36.0%) | 4.1 | 0.85 |
| | Not aware | 35 (28.0%) | 53 (42.4%) | 24 (19.2%) | 13 (10.4%) | 0 (0.0%) | 2.12 | 0.94 |
| My awareness of health | Aware | 0 (0.0%) | 8 (6.4%) | 22 (17.6%) | 51 (40.8%) | 44 (35.2%) | 4.05 | 0.89 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| education influences my daily habits, such as diet and physical activity. | Not aware | 29 (23.2%) | 56 (44.8%) | 33 (26.4%) | 7 (5.6%) | 0 (0.0%) | 2.14 | 0.84 |
| I regularly apply my health knowledge to improve my lifestyle choices. | Aware | 0 (0.0%) | 6 (4.8%) | 16 (12.8%) | 64 (51.2%) | 39 (31.2%) | 4.09 | 0.79 |
| | Not aware | 36 (28.8%) | 48 (38.4%) | 26 (20.8%) | 15 (12.0%) | 0 (0.0%) | 2.16 | 0.98 |

**3.3: Physical Health and Lifestyle Behaviors**

When comparing people with and without health education awareness, it is found that there are differences in the perceived self-health status and in using various lifestyle behaviors. The subject, aware of health education, showed positive health behaviors as depicted by the high mean values of the various statements. They pay profound attention to the state of their health, have overall low incidences of diseases, and commonly have a proper diet that is free of fatal deficiencies and rare cases of obesity. Moreover, they exercise for at least three days a week, drink the right proportion of water, and reduce unhealthy foods. Even in the aspect of health, they are not left behind: they participate in routine physical examinations and tests, indicating that they are ready to take any measures to remain healthy and fit.

In contrast, individuals without health education awareness report significantly lower engagement in health-promoting behaviors. These scores indicate a lack of self-confidence in their physical well-being, poor eating habits, and a tendency to neglect regular health check-ups. It further implies that they are much more inclined to lack regular exercise and fail to take enough water daily. Especially, their unhealthy food behaviors and exercising healthy check-up practices are noticeably low, indicating low health literacy on their part due to these unhealthy practices. These results further strengthen the importance of conducting health education in targeting a positive approach to changing health risk behaviors to prevent diseases and improve the health status of people (Table 3).

Table 3: Influence of Health Education Awareness on Physical Health and Lifestyle Behaviors

| Question | Health Education Awareness | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Mean Score | STD. |
|---|---|---|---|---|---|---|---|---|
| I consider my physical health to be in good condition. | Aware | 0 (0.0%) | 0 (0.0%) | 11 (8.8%) | 52 (41.6%) | 62 (49.6%) | 4.41 | 0.65 |
| | Not aware | 46 (36.8%) | 57 (45.6%) | 22 (17.6%) | 0 (0.0%) | 0 (0.0%) | 1.81 | 0.72 |
| I maintain a balanced diet that includes adequate fruits, | Aware | 0 (0.0%) | 0 (0.0%) | 11 (8.8%) | 49 (39.2%) | 65 (52.0%) | 4.43 | 0.65 |
| | Not aware | 49 (39.2%) | 58 (46.4%) | 18 (14.4%) | 0 (0.0%) | 0 (0.0%) | 1.75 | 0.69 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| vegetables, and proteins. | | | | | | | | |
| I monitor my weight and overall physical health regularly. | Aware | 0 (0.0%) | 0 (0.0%) | 11 (8.8%) | 48 (38.4%) | 66 (52.8%) | 4.44 | 0.65 |
| | Not aware | 43 (34.4%) | 63 (50.4%) | 19 (15.2%) | 0 (0.0%) | 0 (0.0%) | 1.81 | 0.68 |
| I engage in physical activity at least three times per week. | Aware | 0 (0.0%) | 0 (0.0%) | 18 (14.4%) | 52 (41.6%) | 55 (44.0%) | 4.3 | 0.71 |
| | Not aware | 55 (44.0%) | 54 (43.2%) | 16 (12.8%) | 0 (0.0%) | 0 (0.0%) | 1.69 | 0.69 |
| I drink at least 8 glasses of water daily to maintain hydration. | Aware | 0 (0.0%) | 0 (0.0%) | 13 (10.4%) | 42 (33.6%) | 70 (56.0%) | 4.46 | 0.68 |
| | Not aware | 62 (49.6%) | 47 (37.6%) | 16 (12.8%) | 0 (0.0%) | 0 (0.0%) | 1.63 | 0.7 |
| I avoid consuming unhealthy foods such as processed snacks and sugary drinks. | Aware | 0 (0.0%) | 0 (0.0%) | 14 (11.2%) | 48 (38.4%) | 63 (50.4%) | 4.39 | 0.68 |
| | Not aware | 53 (42.4%) | 63 (50.4%) | 9 (7.2%) | 0 (0.0%) | 0 (0.0%) | 1.65 | 0.61 |
| I engage in preventive healthcare practices such as regular check-ups and screenings. | Aware | 0 (0.0%) | 0 (0.0%) | 11 (8.8%) | 45 (36.0%) | 69 (55.2%) | 4.46 | 0.65 |
| | Not aware | 56 (44.8%) | 54 (43.2%) | 15 (12.0%) | 0 (0.0%) | 0 (0.0%) | 1.67 | 0.68 |

### 3.4. Sleep Patterns and Well-being

The discrepancy between people with health education awareness and those without it becomes more noticeable when comparing hours of sleep and subjective well-being. Self-reported health knowledge in the group of those who are familiar with the principle of health education means they have better sleep habits in terms of mean scores. They are capable of getting at least 7 to

8 hours of sleep per day; they are disciplined when it comes to setting a bedtime and wake-up time, and they avoid undesirable sleep-related factors such as the use of computers and bright lights at night. Further, they experience fewer night-time wake-ups, and they feel better rested and have more vigor during morning hours. This must be a significant factor in their desire for quality sleep, as they are aware of the negative effects of sleep deprivation.

On their part, individuals without health education awareness possess unhealthy sleeping habits, with the mean scores summing up below the overall mean in all the measured aspects. In particular, they have difficulties in routines of the day, including unstable sleeping schedules. Few people are able to have a proper sleep at night, which is why many people become exhausted and have limited activities throughout the day. One of the main concerns that has been identified in this group is the use of electronic devices before going to sleep, which has a negative impact on sleep quality. These people also claim to wake up often at night, which indicates that they are not aware of some practices that can make them sleep better at night. This fact implies that the lack of proper health knowledge might be a factor that leads to poor sleeping habits and, therefore, poor health.

The study results yield information on the need to have health education to encourage people to practice proper sleep habits. The development of this health consciousness leads to the adoption of certain practices that will need to improve sleep quality, which is an aspect that enhances the health of a person's body and mind. Conversely, people with no H.E. will not acquire the knowledge necessary to identify erratic practices in sleep and health. According to these findings, it would be advisable to recommend specific counseling regarding what concerns sleep hygiene, reduction of screen time, and routine establishment to enhance the quality of sleep and the functional status of individuals. Thus, awareness of the relationship between sleep and health is an example of a significant area in which health education programs can positively impact people of different age groups and statuses (Table 4).

Table 4: Impact of Health Education Awareness on Sleep Patterns and Overall Well-Being

| Question | Health Education Awareness | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Mean Score | STD. |
|---|---|---|---|---|---|---|---|---|
| I get at least 7-8 hours of sleep on most nights. | Aware | 0 (0.0%) | 0 (0.0%) | 14 (11.2%) | 49 (39.2%) | 62 (49.6%) | 4.38 | 0.68 |
| | Not aware | 11 (8.8%) | 45 (36.0%) | 49 (39.2%) | 20 (16.0%) | 0 (0.0%) | 2.62 | 0.86 |
| I have a consistent sleep schedule and maintain proper sleep hygiene. | Aware | 0 (0.0%) | 0 (0.0%) | 6 (4.8%) | 55 (44.0%) | 64 (51.2%) | 4.46 | 0.59 |
| | Not aware | 10 (8.0%) | 39 (31.2%) | 50 (40.0%) | 26 (20.8%) | 0 (0.0%) | 2.74 | 0.88 |
| waking up frequently at night. | Aware | 0 (0.0%) | 0 (0.0%) | 14 (11.2%) | 46 (36.8%) | 65 (52.0%) | 4.41 | 0.69 |
| | Not aware | 9 (7.2%) | 50 (40.0%) | 53 (42.4%) | 13 (10.4%) | 0 (0.0%) | 2.56 | 0.78 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| I feel well-rested and energized throughout the day. | Aware | 0 (0.0%) | 0 (0.0%) | 15 (12.0%) | 52 (41.6%) | 58 (46.4%) | 4.34 | 0.69 |
| | Not aware | 15 (12.0%) | 45 (36.0%) | 44 (35.2%) | 21 (16.8%) | 0 (0.0%) | 2.57 | 0.91 |
| I avoid using electronic devices before bedtime to improve sleep quality. | Aware | 0 (0.0%) | 0 (0.0%) | 10 (8.0%) | 52 (41.6%) | 63 (50.4%) | 4.42 | 0.64 |
| | Not aware | 21 (16.8%) | 41 (32.8%) | 43 (34.4%) | 20 (16.0%) | 0 (0.0%) | 2.5 | 0.96 |
| I rarely experience sleep disturbances such as waking up frequently at night. | Aware | 0 (0.0%) | 0 (0.0%) | 16 (12.8%) | 47 (37.6%) | 62 (49.6%) | 4.37 | 0.7 |
| | Not aware | 7 (5.6%) | 49 (39.2%) | 44 (35.2%) | 25 (20.0%) | 0 (0.0%) | 2.7 | 0.85 |
| I feel well-rested and energized throughout the day. | Aware | 0 (0.0%) | 0 (0.0%) | 14 (11.2%) | 49 (39.2%) | 62 (49.6%) | 4.38 | 0.68 |
| | Not aware | 11 (8.8%) | 45 (36.0%) | 49 (39.2%) | 20 (16.0%) | 0 (0.0%) | 2.62 | 0.86 |

### 3.5. Mental Health and Stress Management

People who obtain health education information report superior mental health conditions and improved stress management abilities versus those lacking this type of information. The higher mean scores across the participants reveal improved emotional stability, whereby many cope well mentally throughout their day-to-day existence. Their understanding of stress management enables them to practice techniques such as meditation together with deep breathing or yoga, thus improving their ability to deal with stress. The more aware group shows their comprehension that mental health stands equal to physical health as a vital aspect of complete well-being. The combination of hobbies and social activities available to this resilient group strengthens their resistance toward emotional distress and stress-related problems.

People who lack awareness about health education demonstrate inferior emotional well-being along with reduced mental stability. These individuals demonstrate inconsistent behaviors toward stress management, which leaves them exposed to increased chances of anxiety and distress. Emotionally distressed users avoid both searching for professional help and turning to friends and family for support, thus decreasing their mental health coping effectiveness. Their diminished view of mental health importance compared to physical health creates understanding difficulties, which could prevent them from properly caring for themselves. Their unwillingness to participate in mental health activities reflects their lack of understanding regarding methods that could enhance their emotional state.

Health education programs demonstrate essential functions for developing mental wellness and stress management proficiency among individuals. People who received health education find ways to maintain their emotional stability through personal application and by asking for

assistance when needed, along with practicing stress relief techniques. People without health education awareness face difficulties when trying to handle stress while failing to understand the importance of their mental well-beingand thus demanding specific educational efforts. The provision of health education programs that raise awareness alongside mental health coping strategies helps improve both individuals' mental resilience and their general life quality (Table 5).

Table 5: Impact of Health Education Awareness on Mental Health and Stress Management Practices

| Question | Health Education Awareness | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Mean Score | STD. |
|---|---|---|---|---|---|---|---|---|
| I feel emotionally well and mentally stable in my daily life. | Aware | 1 (0.80%) | 14 (11.20 %) | 22 (17.60 %) | 49 (39.20 %) | 39 (31.20 %) | 3.888 | 1 |
| | Not aware | 12 (9.60%) | 39 (31.20 %) | 41 (32.80 %) | 9 (7.20%) | 24 (19.20 %) | 2.952 | 1.42 |
| I practice stress management techniques such as meditation, deep breathing, or yoga. | Aware | 1 (0.80%) | 7 (5.60%) | 10 (8.00%) | 47 (37.60 %) | 60 (48.00 %) | 4.264 | 0.89 |
| | Not aware | 18 (14.40 %) | 32 (25.60 %) | 29 (23.20 %) | 14 (11.20 %) | 32 (25.60 %) | 3.08 | 1.4 |
| I believe that my mental health is equally important as my physical health. | Aware | 2 (1.60%) | 10 (8.00%) | 24 (19.20 %) | 42 (33.60 %) | 47 (37.60 %) | 3.976 | 1.02 |
| | Not aware | 23 (18.40 %) | 30 (24.00 %) | 26 (20.80 %) | 6 (4.80%) | 40 (32.00 %) | 3.08 | 1.52 |
| I seek help from professionals, friends, or family when I feel emotionally distressed. | Aware | 2 (1.60%) | 14 (11.20 %) | 15 (12.00 %) | 42 (33.60 %) | 52 (41.60 %) | 4.024 | 1.06 |
| | Not aware | 24 (19.20 %) | 31 (24.80 %) | 26 (20.80 %) | 11 (8.80%) | 33 (26.40 %) | 2.736 | 1.47 |
| My knowledge of mental health education helps me manage | Aware | 0 (0.00%) | 7 (5.60%) | 15 (12.00 %) | 42 (33.60 %) | 61 (48.80 %) | 4.256 | 0.88 |
| | Not aware | 17 (13.60 %) | 34 (27.20 %) | 31 (24.80 %) | 12 (9.60%) | 31 (24.80 %) | 3.048 | 1.38 |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| stress effectively. | | | | | | | | |
| I engage in activities (e.g., hobbies, social interactions ) that contribute to my mental well-being. | Aware | 3 (2.40%) | 12 (9.60%) | 17 (13.60 %) | 43 (34.40 %) | 50 (40.00 %) | 4 | 1.07 |
| | Not aware | 17 (13.60 %) | 39 (31.20 %) | 22 (17.60 %) | 6 (4.80%) | 41 (32.80 %) | 3.12 | 1.48 |
| I seek help from professionals, friends, or family when I feel emotionally distressed. | Aware | 1 (0.80%) | 6 (4.80%) | 20 (16.00 %) | 42 (33.60 %) | 56 (44.80 %) | 4.168 | 0.92 |
| | Not aware | 20 (16.00 %) | 28 (22.40 %) | 34 (27.20 %) | 6 (4.80%) | 37 (29.60 %) | 3.096 | 1.44 |

### 3.6. Preventive Healthcare and Health Literacy

A review of the analysis indicates that there is low health literacy and resulting preventive health behaviors among those who are aware of minority health education. Those who have awareness of health education have a high practice in preventive health care, as shown in their mean scores. They are prone to seek the services of a physician for checkups more often, to screen their health status via health parameters including blood pressure and cholesterol, and are more likely to take vaccines for the prevention of diseases. Furthermore, this group goes out in search of information on new diseases and any development in the medical field, which has a way of consolidating their capacity to make health-wise decisions. They believe in the doctors and the information given to them by the medical practitioners; hence, their active participation and being conscious of their health status.

In contrast, individuals without health education awareness exhibit lower participation in preventive healthcare measures. Their lower mean scores suggest that the affected people do not frequently visit healthcare facilities and receive little checkups for their core health standards. Such patients are not likely to go for vaccinations or take protective measures due to a lack of knowledge about diseases. Furthermore, they seem to have a poor knowledge of how, when they are ill, they can get access to health facilities that they need to seek to get treated. Failure to make efforts in a bid to learn new developments in health and also in medical science denies them a chance to make proper choices regarding their health. Such factors as low trust in physicians and other healthcare givers and disbelief in given words of advice and recommendations regarding their personal health may also limit their proportions on preventive measures.

Therefore, these findings underscore the importance of health education programs in increasing an individual's health literacy and encouraging preventive measures against diseases. Cultural awareness in health is a way of life that incorporates prevention into people's lifestyles, while a lack of it makes it difficult for people to organize check-ups, immunizations, and general health screening. Through sanctioning the access to the health-related information and building up trust in the doctors and, above all, the health educators, the health education programs can help citizens and make them ensure better health and a better way of living to avoid diseases and other health complexities. The lack of health knowledge that prevails among people can

be filled with educational programs to improve preventive measures in health maintenance (Table 6).

Table 6: Influence of Health Education Awareness on Preventive Healthcare Practices and Health Literacy

| Question | Health Education Awareness | Strongly Disagree (1) | Disagree (2) | Neutral (3) | Agree (4) | Strongly Agree (5) | Mean Score | STD. |
|---|---|---|---|---|---|---|---|---|
| I visit a healthcare provider at least once a year for a routine check-up. | Aware | 1 (0.80%) | 6 (4.80%) | 20 (16.00%) | 42 (33.60%) | 56 (44.80%) | 4.168 | 0.92 |
| | Not aware | 27 (20.77%) | 30 (23.08%) | 40 (30.77%) | 6 (4.62%) | 20 (15.38%) | 2.69 | 1.31 |
| I regularly monitor my blood pressure, cholesterol, and other key health indicators. | Aware | 1 (0.80%) | 7 (5.60%) | 10 (8.00%) | 47 (37.60%) | 60 (48.00%) | 4.264 | 0.89 |
| | Not aware | 11 (8.8%) | 45 (36.0%) | 49 (39.2%) | 20 (16.0%) | 0 (0.0%) | 2.62 | 0.86 |
| I take vaccinations and preventive measures to protect against diseases. | Aware | 2 (1.60%) | 10 (8.00%) | 24 (19.20%) | 42 (33.60%) | 47 (37.60%) | 3.976 | 1.02 |
| | Not aware | 23 (18.40%) | 30 (24.00%) | 26 (20.80%) | 6 (4.80%) | 40 (32.00%) | 3.08 | 1.52 |
| I understand how to access healthcare services when needed. | Aware | 2 (1.60%) | 14 (11.20%) | 15 (12.00%) | 42 (33.60%) | 52 (41.60%) | 4.024 | 1.06 |
| | Not aware | 24 (19.20%) | 31 (24.80%) | 26 (20.80%) | 11 (8.80%) | 33 (26.40%) | 2.736 | 1.47 |
| I actively educate myself on emerging health issues and medical advancements. | Aware | 0 (0.00%) | 7 (5.60%) | 15 (12.00%) | 42 (33.60%) | 61 (48.80%) | 4.256 | 0.88 |
| | Not aware | 21 (16.8%) | 41 (32.8%) | 43 (34.4%) | 20 (16.0%) | 0 (0.0%) | 2.5 | 0.96 |
| I trust health professionals and medical advice for my healthcare decisions. | Aware | 3 (2.40%) | 12 (9.60%) | 17 (13.60%) | 43 (34.40%) | 50 (40.00%) | 4 | 1.07 |
| | Not aware | 17 (13.60%) | 39 (31.20%) | 22 (17.60%) | 6 (4.80%) | 41 (32.80%) | 3.12 | 1.48 |
| My knowledge of health education has encouraged me to adopt | Aware | 1 (0.80%) | 6 (4.80%) | 20 (16.00%) | 42 (33.60%) | 56 (44.80%) | 4.168 | 0.92 |
| | Not aware | 36 (28.8%) | 48 (38.4%) | 26 (20.8%) | 15 (12.0%) | 0 (0.0%) | 2.16 | 0.98 |

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| preventive healthcare practices. |

**Discussion**

From this study, it is clear that there is a strong correlation between health education awareness and all aspects of well-being, including health prevention, physical health, mental health, sleep, and stress management. Participants with awareness of health education exhibited enhanced health literacy and demonstrated positive health-promoting behaviors, aligning with the health promotional theory explained by Sharma [1] and Koelen & Van den Ban [2]. These findings are consistent with the general correlation between education and population health, as described by Zajacova & Lawrence [6], who emphasize that health education informs the population of best health practices. Similarly, Nutbeam & Muscat [3] define health literacy as a key determinant of health, highlighting an individual's ability to find, understand, and use health information. The disparity in health education awareness underscores that structured health education effectively alters behaviors, promoting healthier lifestyles and reducing health inequalities.

Vaccination, screening, regular check-ups, self-reported health assessments, and adherence to prescriptions were more frequent among participants with some level of health education awareness. This aligns with previous research suggesting that simple knowledge translation is insufficient for effective health promotion—intervention mapping and capacity building are required for sustainable, long-term change [5,19]. Individuals with strong health literacy are more likely to attend routine check-ups, reducing their risk of chronic conditions [4,10]. Ponce-Gonzalez et al. [9] further advocate for interactive health education programs to address knowledge deficits and motivate underserved groups to adopt preventative health practices through community-based health interventions. Participants with low levels of health education awareness showed lower adherence to these preventive measures, supporting the argument made by Golden & Earp [7] regarding structural and informational barriers to preventive healthcare. This study therefore recommends expanding health education to enhance preventive measures and overall health status.

Another crucial domain highlighting the need for increased health education awareness is mental health and stress management. Participants with higher health education awareness were more likely to recognize the importance of mental health, engage in physical exercise, practice mindfulness techniques such as meditation or deep breathing, and seek professional or social support when experiencing emotional distress. These findings support research by Galante et al. [13], which demonstrates that mindfulness-based programs improve mental health and reduce stress. Similarly, Peterson et al. [14] stress the necessity of incorporating mental health literacy into public health curricula to reduce stigma surrounding mental illness and encourage mental healthcare utilization. Adler et al. [27] also note that social determinants of health significantly impact mental well-being, as individuals with higher education and health literacy are more likely to recognize stressors and access mental health services. The findings in this study suggest that health education plays a key role in equipping individuals with the necessary skills to manage stress effectively and prevent negative psychological outcomes.

This study also found a significant correlation between health education awareness and sleep patterns, overall health, and well-being. Participants with higher health education awareness were more likely to maintain consistent sleep schedules, avoid screen time before bed, and report higher energy levels during the day. These findings align with research by Umar et al. [30], which established a connection between health education and sleep-related behaviors. The importance of sleep quality in overall well-being and cognitive performance has been well-documented [15,18]. Therefore, integrating sleep health education into broader health

promotion strategies is essential, particularly for populations unaware of the health implications of poor sleep hygiene.

Scientific evidence strongly supports the assertion that health education is vital for overall health and well-being. Ensuring broad access to health education across diverse populations is essential for public health improvement. The Health Equity Framework proposed by Peterson et al. [14] and the Social Ecological Model by Golden & Earp [7] emphasize the necessity of long-term, multi-level interventions targeting individuals, communities, and policy frameworks. In this regard, the findings of this study are consistent with Bar-Tur [17] on positive aging and well-being, highlighting that individuals with higher health literacy or formal education are more likely to adopt healthy behaviors, effectively manage stress, and engage in preventive health measures.

Other studies by Luft et al. [16] and Kamimura et al. [20] also identify key challenges in achieving health education goals, particularly regarding socioeconomic factors and resource availability. Addressing these barriers is crucial to ensuring equitable health education access. Strategies such as informative sessions involving policymakers and healthcare professionals can effectively disseminate health information, encouraging behavior change and ultimately improving health outcomes while reducing health disparities.

## Conclusion

This study concluded that health education plays an important function in promoting the well-being of people through advancing preventive healthcare practices, mental health promotion, sleep, hygiene, and life behaviors. Holders of health education awareness have been proved to have a deeper understanding of their health status and better behavioral practices in health than those who do not have health awareness. These findings corroborate the principles of established health promotion theories, the propositions that knowledgeable people will take precautions, seek treatment, control stress, and practice healthy lifestyle behaviors. On the other hand, low levels of health education awareness were evident in lower health-promoting behavior, poor perceived mental health, and destructive health behaviors; therefore, programs need to be intensified in the promotion of health education. Therefore, since health education plays a significant role in health outcomes, the policymakers and other healthcare workers should ensure that structured health education is included in the strategies that are being implemented by various authorities to help the citizens become empowered, minimize health disparities, and improve overall quality of life.

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