

ADULT LITERACY AND HEALTH PROMOTION BEHAVIOR (HPB): A STUDY OF RURAL ADULT POPULATIONS IN RIVER STATE, NIGERIA

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Abstract

Preventing illness and maintaining a healthy lifestyle both require actions that are beneficial to one's health. Literacy has various potential benefits for one's health and well-being, and these benefits are manifest in health promotion behavior. The present study examines the association between adult literacy and health promotion behavior in rural adults. A convenience sample of two hundred and eleven adults residing in the rural communities of River State, Nigeria, participated in the study. The respondents comprising males and females aged 40 to 65, completed a self-report measure of the adult literacy questionnaire and the health promotion lifestyle profile II. The result demonstrated a statistically significant, positive correlation between adult literacy and health promotion behavior, $r(209) = .36, p < .001$, with adult literacy contributing 21.2% of the variation in health promotion behavior. The finding has implications for developing adult literacy in rural communities in River State, Nigeria.

Keywords: *health promotion behaviors, adult literacy, adults, rural communities*

INTRODUCTION

Education describes studying to obtain a more profound knowledge and understanding of various issues to be applied to daily life. The point is that learning is not confined to the pages of a book but can also occur through real-world encounters. Indications abound, suggesting that proper education improves people's understanding of the world around them, thus, making them less susceptible to the influence of others. At the same time, proper interpretation of information requires education, as it improves knowledge. Moreover, Adewale et al. (2019) have described knowledge as an essential aspect of human existence. In every society, education is a crucial component of knowledge development. It is commonly regarded as a human right essential to achieving other human rights (Stewart-Withers & Hapeta, 2020). It also allows people to be more analytical and aware of their surroundings (Monteiro et al., 2020). As a result, Akala (2019) maintains that education is a fundamental component of human development that everyone should have access to regardless of their creed, gender, color, or social background. Similarly, Oladele et al. (2019) stated that education is necessary for human, societal, economic, and technical growth. Indeed, the value of education in numerous fields is well demonstrated. (Barrichello et al., 2020; Bhardwaj, 2016a, 2016b; Išoraitė, 2019; Quinn & Rubb, 2005; Torani et al., 2019; Wu, 2020; Zimmer, 2016; Zuhdi et al., 2021). Nevertheless, education remains the primary pathway to literacy development.

Literacy refers to skills that include reading, writing, and speaking fluently enough to make sense of the world around you in various situations. The ability to read and write is a cornerstone of literacy because it opens doors to further education, employment, and civic engagement (Nwafor & Agi, 2013). Adult literacy refers to a person's proficiency in reading, writing, basic arithmetic, and the target language. Literacy among adults is defined as the percentage of the population over 15 who can read, write, and speak a short, simple statement about themselves (World Bank, 2016). Nevertheless, being able to do simple math is also a part of being literate. Therefore, adult literacy is a crucial resource that significantly explains why people act the way they do in various settings.

The prevalence of poverty in many of Nigeria's rural villages can be traced back to a lack of proper education and illiteracy in such regions (Ihejirika, 2012). Unfortunately, the levels of ignorance and illiteracy found in rural regions are rather typical, affecting those who live in rural areas regarding the quality of their health. Similarly, there is a growing intimation that unhealthy lifestyles, poor health attitudes, and behaviors that compromise health are more prevalent in the rural population. This is implicated in increased susceptibility to disease as well as poor well-being. Illiteracy is the primary factor that can be ascribed to the trend. As a result, this study aims to investigate adult literacy as a potential route to improving health-enhancing habits.

Adopting a mentality and engaging in activities that promote health and well-being while rejecting those that do the opposite describes health promotion behavior (HPB). Thus, disease prevention, quality of life, and optimal health are attainable goals through health promotion strategies (Hwang & Oh, 2020; Polat et al., 2016; Tariman et al., 2016). Health-enhancing actions involve an optimistic view of life and working toward greater happiness and fulfillment. Generally, socioeconomic status has been widely acknowledged essential determining factor in health outcome" (Bastani et al., 2018). More so, nutrition, social lifestyle, responsibility, exercise, stress management, and literacy are all parts of the multi-faceted health promotion construct (Pender et al., 2019). Thus, HPB entails taking charge of one's health in terms of eating well, getting plenty of exercises, cutting down on drugs and alcohol, maintaining a clean environment, maintaining positive connections with others, and handling stress effectively. Health promotion through lifestyle, which is crucial to the quality of life, is, thus, the critical adaptive method in this field (Lee & Oh, 2020). The present study argues that literacy is an element of health and a cause of health. Older adults with low literacy may be less aware of the importance of health behaviors. Additionally, having an adequate level of literacy is often needed in order to make appropriate decisions concerning health behaviors. For example, people with low literacy have poorer comprehension of food labels.

HPB has attracted wide research attention. For instance, several disparate studies have underscored potential determinants of HPB. As such, health literacy is an antecedent of HPB that has been widely documented (Adewole et al., 2021; Bae & Yoon, 2021; Barca et al., 2019; Chahardah-Cherik et al., 2018; Ho et al., 2018; Ju-Young & Lee, 2019; Kim & Kim, 2020; Kim & Oh, 2021; Mirsamizyazdi et al., 2021; Tsai et al., 2014). Whereas social norms (Dempsey et al., 2018; Rice & Klein, 2019), culture (Baker, 2011; Bhandari & Kim, 2016), media (Li & Liu, 2020), health policies (Moon et al., 2020), and the social environment (Sriram et al., 2018), have also been correlated with HPB. In addition, evidence has linked gender with HPB (Chae & Kim, 2019; Noh et al., 2020; Rew et al., 2015; Soffer, 2010). However, research attempting to examine the association between adult literacy and HPB remains scarce in the literature, hence justifying the current study. One pathway between adult literacy and health promotion behavior could be via health behaviors like understanding health warnings, comprehension of prescriptions, poor knowledge of dietary demands, and cultural and religious beliefs, all linked to health status and health outcomes. Therefore, the study's primary objective is to investigate the correlation between adult literacy and HPB among a sample of adults in the rural communities of River State, Nigeria.

Hypothesis: *Adult literacy positively correlates with health promotion behavior in rural adults in River state, Nigeria.*

Materials and Methods

A cross-sectional survey was conducted at five rural communities in Omoku, Ahoada, Ikwere, Omuma, and Tai local government areas of River State, Nigeria, from December 2022 to February 2023. Adults attending rural community health centers and religious places were conveniently selected as the research participants. The inclusion criteria were (1)

age between 30 to 65 years; (2) rural residents with no urban experience (3) ability to communicate and complete a self-administered questionnaire. Questionnaires were distributed only to adults who had provided written consent after being informed about the study's objective. The survey was distributed to 223 adults, of which 211 questionnaires were returned (response rate: 95.4%). In principle, the participants answered the questionnaire by themselves on the spot. However, support was provided for those who requested it.

Measures

Health promotion behavior (HPB) was assessed using the Health Promotion Lifestyle Profile II, initially developed by Walker et al. (1995) and modified to suit the current context. The instrument was designed to measure the health-promoting behavior of individuals and consists of 13 items comprising three dimensions of health-promoting behavior, including physical, social, and emotional dimensions. The Likert-type scale was scored in a 5-point response ranging from 1 (strongly disagree) to 5 (strongly agree). The total score ranges from 13 to 65, with higher scores indicating a higher level of health-promoting behavior. The Cronbach's α for this scale in the present study was 0.87.

Adult literacy was measured with a developed questionnaire to ascertain the respondents' literacy skills. This scale consists of 10 items using a 4-point Likert scale, ranging from 1 (no, I cannot) to 4 (yes, I can). The total score ranges from 10 to 40, with a higher score indicating higher adult literacy. The Cronbach's α 0.78 was recorded for the current study, thus, suggesting acceptable internal consistency.

Result

A Pearson's product-moment correlation was run to assess the relationship between adult literacy and health promotion behavior. Two hundred and eleven respondents participated in the study. Preliminary analyses showed the relationship to be linear, with both variables normally distributed, as assessed by Shapiro-Wilk's test ($p > .05$), and there were no outliers. There was a statistically significant, moderate positive correlation between adult literacy and health promotion behavior, $r(209) = .36, p < .001$, with adult literacy contributing 21.2% of the variation in health promotion behavior.

Table 1: showing the means, standard deviations, and correlations for adult literacy and health promotion behavior.

Variables	<i>M</i>	<i>SD</i>	<i>1</i>	<i>2</i>
1. Adult literacy	2.89	0.31	.11**	
2. Health promotion behavior	4.76	0.44	-.34	.34**
<i>R</i> ²	.212			

Note. $N = 211, ** = p < .01$ (two-tailed).

Discussion

The primary aim of the current study was to examine the association between adult literacy and health promotion behavior in adults residing in rural communities. The primary assumption of the study predicted a significant positive relationship between adult literacy and health promotion behavior. The analysis revealed that adult literacy was a significant positive predictor of HPB. Thus, adult literacy accounted for 21.2% of the variation in HPB among the respondents. The result indicates that literate rural adults are more likely to engage in behavior that promotes a healthy lifestyle than illiterates. This is because acquiring a certain amount of formal education by adults affects lifelong health through multiple pathways (Egertter et al., 2009). Thus, the result suggests that adults with lower educational literacy suffer from poor health behavior compared to others. This pattern is attributed to the enormous health gap brought about by basic literacy. Literate people are more likely to understand health information and risks, refining their literacy and conception of complex issues critical to their well-being.

More so, more educated individuals are more open to health campaigns. Literacy can also lead to more comprehension of health beliefs and knowledge, thus enhancing lifestyle choices. Basic literacy is a pathway to effective habits and may improve perceptive ability. The literacy skills acquired through formal or informal education can indirectly affect health promotion behavior by understanding health implications, attending check-ups, and adhering to professional advice. Thus, more highly literate adults may be more able to recognize health issues and follow treatment procedures (Goldman & Smith, 2002). The quality of doctor-patient interaction is also lower with patients with poor literacy status. Similarly, a review of the effects of health literacy on health behavior suggests that individuals with inadequate health literacy are more likely to be admitted into an emergency and are less likely to use preventive measures such as checking blood pressure and other vitals. Among the elderly, poor health literacy has been linked to inferior health status and higher death rates (Berkman et al., 2011). A clear understanding of the health benefits of educational literacy can therefore serve as the key to improving the well-being of future rural populations.

The implication of the study

These findings indicated that adult literacy is a significant factor in improving the HPB in rural adults. The present study suggests that literacy skills may be crucial when advocating for a healthy lifestyle and managing health-related issues. Considering these results, health officers should take on a significant role in accommodating adults with lower literacy skills to enhance health promotion behavior in the rural population. Healthcare providers, including educators and other

illiterate individuals, should provide considerable effort to offer illiterate adults with health education and health information to improve their quality of living.

Practice implications

The study gives insight into the role of literacy in health responsiveness, especially in rural adults. Thus, The determination of adult literacy in rural adults will provide a guide for the promotion of enhanced adult health.

Conclusions

The current study examined the association between adult literacy and health-promoting behaviors in a rural adult population. The findings demonstrate that adult literacy is an essential factor in health-promoting behavior in rural adults. Thus, the study contributes to health promotion literature by revealing adult literacy skills as a critical determinant of HPB. Although, there is still a notable proportion of unexplained variance in the adult literacy-HPB relationship. Future research should examine other predictors of this relationship in rural adults.

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