



RESEARCH ARTICLE

CORRELATION BETWEEN ADULT LITERACY AND HEALTH PROMOTION BEHAVIOR AMONG ADULTS IN RURAL COMMUNITIES IN ENUGU STATE, NIGERIA

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Abstract

Health-promoting behaviors are an essential component of illness prevention and healthy living. The concept of health promotion behavior and educational literacy skills describes the multidimensional potentialities of literacy for healthy well-being. The present work 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 Enugu State, Nigeria, participated in the study. The respondents comprising males and females aged 30 to 65, completed a self-report measure of the adult literacy questionnaire and the Health Promotion Lifestyle Profile II scale. The finding revealed a significant positive association between the variables.

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Introduction:-

Knowledge is an essential aspect of human existence (Adewale et al., 2019). Education has proved to be a necessary component of knowledge development in every society. It is widely considered a human right and fundamental to reaching other human rights (Stewart-Withers & Hapeta, 2020). Education means studying to obtain a more profound knowledge and understanding of various subjects to be applied to daily life. It also allows people to be more critical and better knows the reality that surrounds them (Monteiro et al., 2020). Accordingly, Akala (2019) contends that education is an essential element of human growth that all should enjoy irrespective of their belief, gender, race, or social class. Similarly, Oladele et al. (2019) described education as an essential tool for human, societal, economic, and technological development. Perhaps, the importance of education in various domains are well documented (Barrichello et al., 2020; Bhardwaj, 2016a, 2016b; Işoraitè, 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.

The concept of literacy reflects the ability to recognize, understand, interpret written materials, and communicate using written and verbal means to make sense of the world in varying contexts. Literacy involves a continuum of learning which enables individuals to achieve their goals, develop knowledge and the potential to fully participate in their community and broader society (Nwafor & Agi, 2013). Adult literacy describes the ability of an adult to read, write, compute basic figures, and effectively communicate in a given language. Adult literacy entails the share of literate persons aged 15 years and older with the potential to comprehend, recite and write a simple statement on their everyday life (World Bank, 2016). Nonetheless, literacy also includes the ability to make basic mathematical calculations. Thus, adult literacy is an indispensable tool that accounts significantly). Adult in various domains.

The incidence of poverty in many rural communities in Nigeria is attributed to a lack of adequate education and illiteracy (Ihejirika, 2012). Perhaps, the level of rural illiteracy and ignorance in the rural areas is typical. Hence,

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affecting rural dwellers relative to health quality of life. Similarly, there is a growing intimation that unhealthy lifestyles, poor health attitudes, and health-compromising behaviors are more prevalent in the rural population, which is implicated in increased susceptibility to disease and poor well-being. The trend is primarily attributed to illiteracy. Thus, this study aims to examine adult literacy as a pathway to enhancing health-promoting behaviors.

Health promotion behavior (HPB) reflects the process of adopting attitudes and behaviors capable of improving an individual's overall health and well-being and avoiding acts that compromise health standards. Health promotion practices are essential to prevent illness, promote well-being, and maximize health (Hwang & Oh, 2020; Polat et al., 2016; Tariman et al., 2016). Health promotion behaviors entail a positive approach to living and increasing well-being and self-actualization. It has been described as an essential determinant of an individual's health outcome (Bastani et al., 2018). Health-promoting behaviors entail a multidimensional construct encompassing nutrition, social lifestyle, responsibility, physical activity, stress management, and literacy (Pender et al., 2019). Thus, HPB consists of taking the responsibility regarding healthy behaviors, healthy food intake, adequate and regular physical activity, decreased substance consumption, cleanliness, healthy social relationships, and stress management. Thus, health-promoting lifestyles are the primary adaptable approach relative to health promotion through lifestyle, which is vital to the quality of life (Lee & Oh, 2020).

Numerous literatures abound that correlates health literacy with HPBs (Adewole et al., 2021; Bae & Yoon, 2021; Barca et al., 2019; Chahardah-Cherik et al., 2018; Ho et al., 2018; Ju-Young & Lee, 2019; H. J. Kim & Kim, 2020; Kim & Oh, 2021; Mirsamizyazdi et al., 2021; Tsai et al., 2014). Others found 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), as significant correlates of 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. 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 Enugu State, Nigeria.

Hypothesis:

Adult literacy would positively correlate with health promotion behavior in rural adults in Enugu state, Nigeria.

Materials and Methods:-

A cross-sectional survey was conducted at five rural communities in Enugu east and Isi-uzo local government areas of Enugu State, Nigeria, from August 2021 to November 2021. Participants were recruited through convenience sampling when they visited community centers and religious places. 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 directly 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

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 on the format of 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

Adult literacy was measured with a developed questionnaire aimed to ascertain the literacy skills of the respondents. This scale consists of 10 items using a 4-point Likert scale, ranging from 1 (no, I can't) 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:- Table showing the means, standard deviations, and correlations for adult literacy and health promotion behavior.

Variables	M	SD	1	2
1. Adult literacy	2.89	0.31	.11**	
2. Health promotion behavior	4.76	0.44	-.34	.34**
R^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 healthy lifestyle than illiterates. This is because acquiring a certain amount of formal education by adults affects lifelong health through multiple pathways (Egarter et al., 2009). Thus, the result suggests that adults with lower educational literacy suffer from poor health behavior compared to other populations. This pattern is attributed to the enormous health gap brought about by basic literacy. Literate people are more likely to understand health information and health 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. Attaining 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 or directly 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 pressures and other vitals. Among the elderly, poor health literacy has been linked to more 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 literate individuals, should provide considerable effort to offer illiterate adults with health education and health information to improve their quality of living.

Limitations of the study

It is appropriate to report the several limitations in this study. For example, convenience sampling of the participants from community-dwelling adults in two local governments of the study parameter may limit the generalizability of the results. Adult literacy and HPB were based on self-reports, and the present study is a cross-sectional study. Therefore, cause-and-effect interpretations on variables could not be established.

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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