



**Article title:** Factors Affecting the Men's Health Literacy in Malaysia

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# Factors Affecting the Men's Health Literacy in Malaysia

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## **Abstract**

Men's average life expectancy in Malaysia is about 5 years less than women's. There are certain health hurdles that men encounter more than women. Men often have health issues that go undiagnosed or are ignored. Men in general feel that exhibiting emotion and grief makes them look vulnerable. This socially ingrained worldview has misled males and unconsciously educated them to believe that seeking medical attention demonstrates weakness. This may be an indication of the lack of health knowledge and inadequate use of health care services among male Malaysians. This research is an effort to investigate the factors affecting health literacy among men in Malaysia. Using HLS-M-Q18 and primary data of 251 men, this research applied a multiple regression model to examine the influence of various social and health-related factors. The findings show that education level, income, poor health condition, and regular medical consultancy increase the men's health literacy in Malaysia. The findings of this study also indicate that BMI and religion, on the other hand, have no impact on health literacy levels in Malaysia. While men are given equal healthcare opportunities, addressing the perceptions, attitudes, and beliefs associated with men's health typically needs more careful consideration. The findings of this study hope to assist the policy formulation regarding men's health awareness in Malaysia.

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**Keywords:** Health literacy, Malaysia, Men's health awareness, Men's health checks

## 1. Introduction

The media presents males as being powerful, as superheroes, and not showing symptoms of vulnerability. There is a cultural and media expectation for males to be tough and, like warriors, to exhibit no evidence of weakness. This socially engrained perspective unconsciously teaches males that visiting the doctor demonstrates weakness. According to a poll performed by The Cleveland Clinic, 40% of men go to the physician only when they have a major health problem and never for periodic checks (Cleveland Clinic, 2018). This figure is much lower than the number of doctor visits made by women. Needless to say, this is a troubling statistic.

Certain medical disorders are more common among males. Men die five years sooner than women on average, owing to the "medical gender gap" and its implications (Kirby, 2019). Men's health continues to be significantly different from women's health, according to research and studies (Evans et al., 2011). While these distinctions are often related to specific behaviors, they also aid in identifying larger concerns that must be addressed (Galdas et al., 2005). Many men avoid going to the doctor since they are afraid of finding out what is wrong. The urge to conceal flaws is so intense that it may drive males to denial.

It is generally the case that men are reluctant to discuss their emotions. Discussing their feelings is a type of vulnerability for guys, which causes discomfort (Banks, 2001). It might be frightening for many guys to begin communicating their emotions, but doing so can assist them in the foreseeable future. It is less probable that sentiments will be shown violently if they are conveyed verbally (Robertson, 2003).

According to statistics, males consume more alcohol and smoke more cigarettes than women (Waldron & Johnston, 1976) (Rimm et al., 1995). Drinking and smoking regularly may have significant health consequences. Drugs and alcohol may cause a variety of problems, including lung and heart illness, liver disorders, and avoidable accidents (Degenhardt et al., 2014).

In the diet, men also typically make fewer healthful decisions. Women consume far more vegetables and fruit than males, who favor meat and milk product items (Kiefer et al., 2005). The subtle influence of cultural norms on men's eating choices may have long-term implications (Deshmukh-Taskar et al., 2007).

Men have a lower life expectancy than women, in part because of their health habits. This disparity has only widened throughout time, and males are today anticipated to live an average of five years less than women (Miller & Gerstein, 1983). Consequently, if anybody questions why we need a month dedicated to men's health, this gap in life expectancy should speak for itself: men are just not as healthy as they might be, and it's time to rectify that. Although men cannot alter their genetic makeup or external variables like as job stress that influence them on a regular basis, they may modify their attitudes toward developing healthier behaviors. For instance, healthcare problems become more difficult to resolve when they are not actively sought out or examined. Men are often hesitant to include periodic medical examinations in their life.

Men are far more prone to have heart problems, hypertension, and high blood cholesterol than women (Kannel, 1987) (Sundquist & Winkleby, 2001). And, as is the case with health concerns, the later a man waits to get a diagnosis, the more difficult it is to seek and obtain effective therapy. Early identification may assist in reducing fatality rates. Men do not consider it simple to take time away from their various work, familial, and social duties to see a doctor, which is the primary reason why they tend to ignore their health. This is the explanation why the health of the typical man in most nations is worse than that of the average female.

A man's average lifespan is lower than a woman's. They will often die early or become crippled as a result of avoidable illnesses. This disparity has typically been ascribed to a fixed genetic predisposition. However, the difference is gradually closing, and the veracity of this premise is increasingly being called into doubt.

Women in Malaysia have regular interaction with healthcare services. Women's health is seen as a priority, and support for it is regarded as an inalienable value for all women. Following completion of childhood health monitoring procedures, they will visit a family physician on a regular basis for contraception, cervical cytology screening, menopause and hormone therapy guidance, and mammographic screening. They will also bring their children and grandkids for consultation, which will provide additional possibilities for medical checks and counseling.

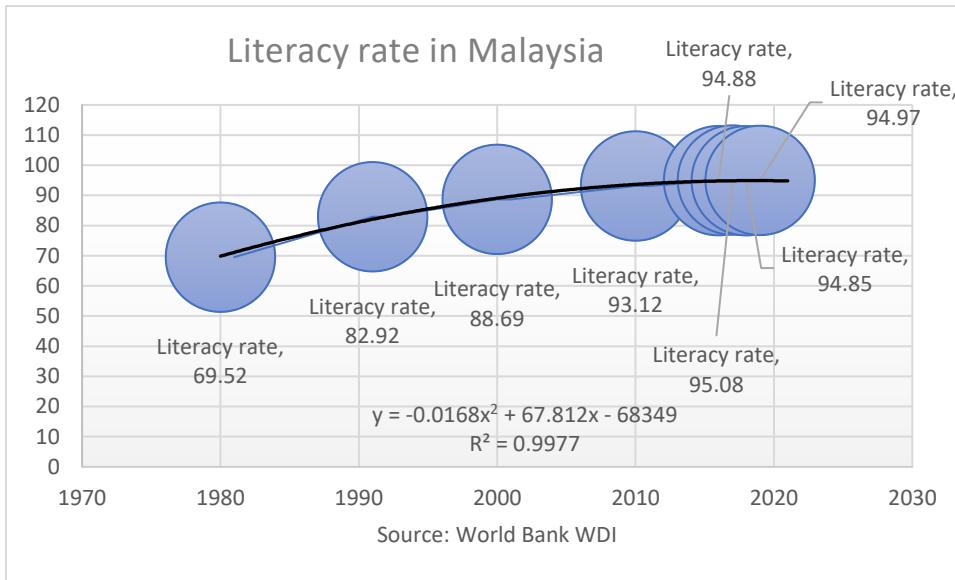
In certain nations, while men's health is still a neglected problem, it is gaining attention as an essential health priority (Baker, 2018). Australia, Brazil, and Ireland have national policies on men's health; Many countries have released regional and national reports on men's health (Richardson et al., 2019). The inclusion of males in the global health equality agenda was asked for in an article published in the Bulletin of the World Health Organization.

## **2. Men's Health and health-literacy in Malaysia**

Since independence, there have already been substantial advances in sanitation, distribution of safe water, vaccination coverage, and efficient prevention and management of infectious illnesses that led to a rise in life expectancy. Therefore, over the last few decades, the general health conditions of Malaysians, particularly women and children, have significantly improved.

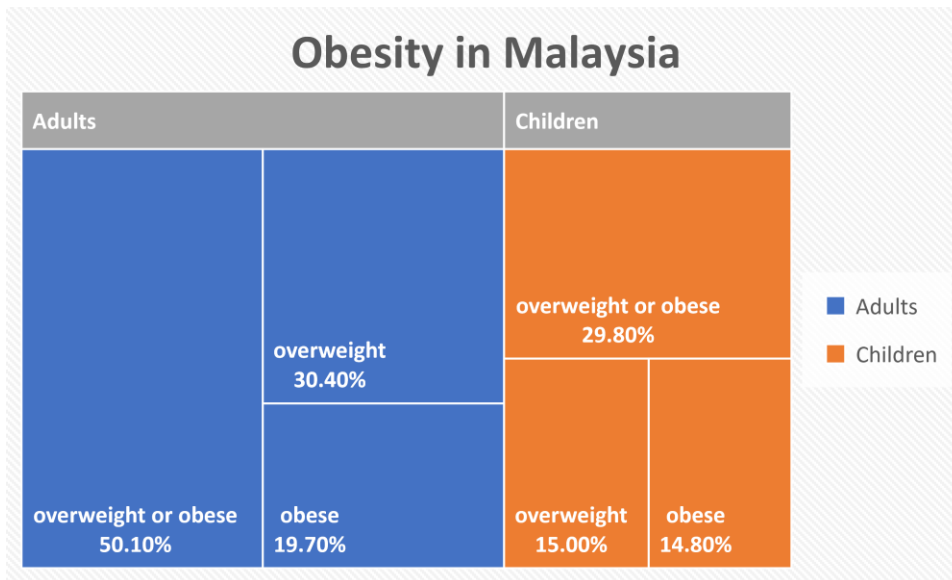
Despite this increase, males are still suffering reduced life expectancy relative to women (Said, 2020). In 1960, the male life expectancy in Malaysia was 58.7 years compared to 60.3 years for females, a difference of 1.6 years. 57 years later, in 2017, despite the fact that men's life expectancy has climbed to 72.7 years in comparison to 77.3 years for women, the disparity has grown to 4.6 years DOSM(2016, 2017). The discrepancy between male and female life expectancy persists. Men have a naturally lower life expectancy than women. Consequently, men's health is an important problem in Malaysia, and efficient steps to enhance their health condition are required. Men's health improvement research and measurements are insufficient and not gender-specific. (Tong, Low, & Ng, 2011)

Life expectancy at birth for males in Malaysia is 71.7 years as opposed to 76 and half years for women. In terms of life expectancy, which would be regarded as the time of life without major handicaps, males have a 62-year advantage over women. (Tong, Low, & Ng, 2011)



Comparatively, Malaysia is in the 95th percentile for access and in the 61st percentile for learning among the nations. The youth literacy rate in Malaysia is 98 percent, which is lower than the median youth literacy rate in comparable upper-middle-income nations.

Despite the high literacy rate, according to National Health and Morbidity Survey 2019, 35.1% of people have inadequate health literacy. 28.0 percent had poor health literacy in handling medical difficulties, 32.3% in disease preventive activities, and 27.0 percent in promoting health and good living behaviors.



Source: National Health and Morbidity Survey 2019

The unsatisfactory health conditions of men in comparison to women are extensively established. Noncommunicable illnesses and injuries are the leading causes of mortality for males in Malaysia. Risk factors include risky behavior, smoking, and hypertension are widespread and susceptible to early management. A substantial proportion of men in Malaysia partake in smoking which may negatively impact their health over time.

Erectile dysfunction, urinary incontinence, and prostate diseases are also frequent. Nevertheless, many of these illnesses go undetected and are not recognized in a timely manner; hence, chances for early diagnosis are lost. This is perhaps evidence of Malaysian men's lack of health awareness and insufficient usage of health care services. The impact of family and friends on their health-seeking attitude has been shown. However, further activities are required to identify men's unmet health care requirements and devise appropriate solutions to meet them. Because the population of Malaysia is aging and sedentary habits are on the rise, maximizing men's health will continue to be difficult unless proper strategies are done. The current male-hostile health care system and the harmful effect of masculinity on men's health attitudes must be addressed. A national men's health strategy based on a men-friendly approach to health care delivery is required immediately to offer a framework for tackling these issues.

The majority of causes of mortality in males include cardiovascular disease, traumas, motor vehicle accidents, malignancies, violence, war, and infectious illnesses (including HIV/AIDS) (Tong, Low, Ismail, et al., 2011) (White & Holmes, 2006). The disparity in average lifespan between males and females in Malaysia is comparable to the worldwide norm. Cardiovascular disease and transportation accidents are the leading causes of mortality among Malaysian males, according to the patterns discussed before. Malaysian men also have a high incidence of chronic conditions and health risk issues. The high prevalence of health morbidities in the 2006 national health morbidity survey includes hypertension (33.2%), hypercholesterolemia (18.6%), diabetes (12%), and smoking (46.4 percent) (Tong, Low, Ismail, et al., 2011).

Similarly prevalent were male-specific diseases. Around majority Two-thirds of men over 40 and older have mild to acute erectile dysfunction, while 19 to 29 percent have medium to severe symptoms of the lower urinary tract (Tan et al., 2009; Tong, Low, Ismail, et al., 2011).

In Malaysia, promoting and strengthening men's health will face several obstacles. (Tong, Low, & Ng, 2011) mentioned some of the obstacles. Malaysia is a fast-expanding nation with a rising living level. The birth life expectancy is rising, as well as the population is rising. Consequently, men's health issues are increasing at an alarming pace. The lack of focus on male-sensitive health care delivery exacerbates the difficulties. There is insufficient empirical evidence on the core causes of men's health concerns. Since Malaysia is a multiethnic nation with varied cultures, the theoretical notions and knowledge of men's health developed from Western research may not be applicable or appropriate to treating men's health issues in the local context.

### 3. Hypothesis

This research aims to investigate the following hypotheses:

**H1:** Body-Mass-Index (BMI) affects the Men's health literacy in Malaysia

**H2:** Consultancy with physicians affects the Men's health literacy in Malaysia

**H3:** Education level affects the Men's health literacy in Malaysia

**H4:** Health Condition (HC) affects the Men's health literacy in Malaysia

**H5:** Income level affects the Men's health literacy in Malaysia

**H6:** Religious affiliation affects the Men's health literacy in Malaysia



## 4. Methodology

Using the self-administered HLS-M-Q18 questionnaire, data were gathered. This questionnaire was developed and condensed from European Questionnaire 47 of the Health Literacy Survey (HLS-EU-Q47) (Jaafar et al., 2021; Mohamad et al., 2020). The European Health Literacy Survey Questionnaire (HLS-EU-Q47) is gaining popularity as a health literacy (HL) measurement instrument, notably in Malaysia. (Jaafar et al., 2021) used confirmatory component analysis to compress the 47-item scale to a short scale with appropriate psychometric qualities for HL screening.

### a) Correlation analysis

Pearson Correlation measures the linear relationship between two variables.

$$\text{Correlation}(X, Y) = r_{XY} = \frac{\text{Cov}_{XY}}{S_X S_Y} = \frac{\frac{\sum(X - \bar{X})(Y - \bar{Y})}{(N - 1)}}{S_X S_Y} = \frac{\sum(X - \bar{X})(Y - \bar{Y})}{S_X S_Y} \times \frac{1}{N - 1}$$

Where X and Y are two continuous variables. N represents the number of observations.

### b) Regression analysis

$$Y_i = \beta_0 + \beta_1 X_i + \varepsilon_i \quad i = 1, \dots, n$$

where:

- $Y_i$  is the dependent variable
- $\beta_0, \beta_1$  are intercept and slope parameters, respectively.
- $X_i$  is the predictor variable
- $\varepsilon_i$  is a random error term, with condition that:

$$E\{\varepsilon_i\} = 0 \quad \sigma^2\{\varepsilon_i\} = \sigma^2 \quad \sigma\{\varepsilon_i, \varepsilon_j\} = 0 \quad \forall i, j \ni i \neq j$$

We make assumptions while doing regression analysis. We utilize a number of diagnostic tests to validate the assumptions.

## ii) Estimation models

The following econometric models will be estimated. To check the impacts of different indicators on health literacy among Malaysian men.

$$\begin{aligned} \text{Health literacy} &= \beta_1 + \beta_2(\text{BMI}) + \beta_3(\text{Consultancy}) \\ &+ \beta_4(\text{Education}) + \beta_5(\text{Health condition}) \\ &+ \beta_6(\text{Income}) + \beta_7(\text{Religion}) + \varepsilon \end{aligned}$$

Where,

$\beta_1$  is the intercept.  $\beta_2 \dots \beta_6$  are the slope coefficients which measure the impacts,  $\varepsilon$  is the error term; BMI (Kg/m<sup>2</sup>): Underweight (< 18,5), Normal Weight ( $\geq 18,5$  a < 25), Overweight ( $\geq 25$  a < 30), and Obese ( $\geq 30$ ); health condition: Likert-sclae from very unhealthy=1, to very healthy=5; income: yearly income in thousands; Consultancy: Medical consultation last year, yes=1, no=0; religion: Islam=1, others=0.

## 5. Results

Table 1 provides the findings of our model where the BMI, consultancy, education, Health condition (HC), income, and religion are the independent variables. Table nn reveals that consultancy, education level, and income have a statistically significant impact on men's health literacy in Malaysia. The health condition has a negative and significant impact on men's health literacy. The BMI, and religion, on the other hand, have no impact on health literacy in Malaysia.

Figure 1. Correlation among the variables.

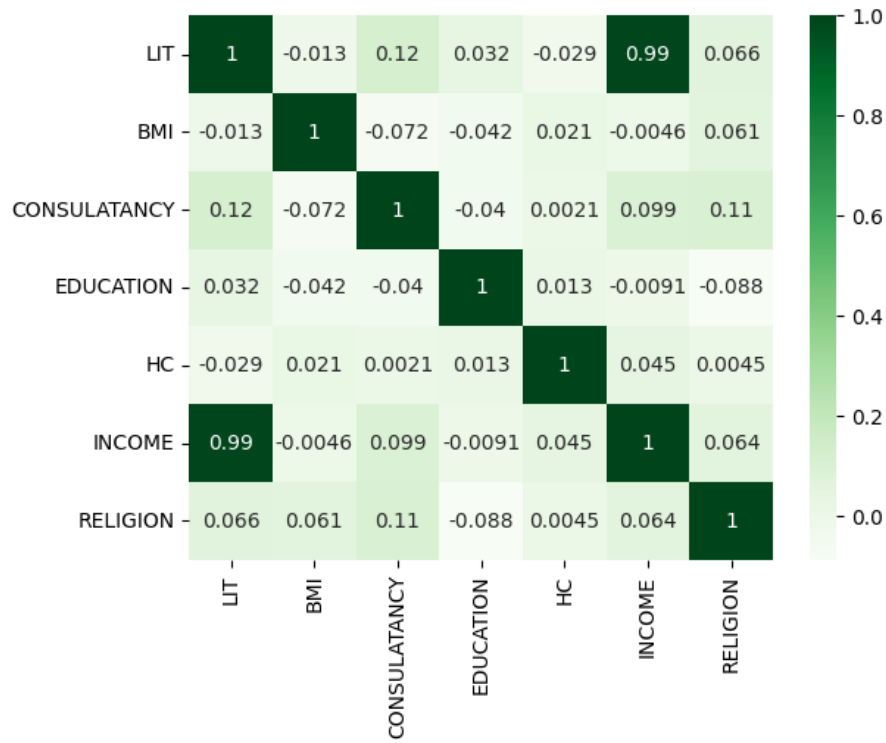


Figure 2. Plot showing that wealthy and educated men have greater literacy score

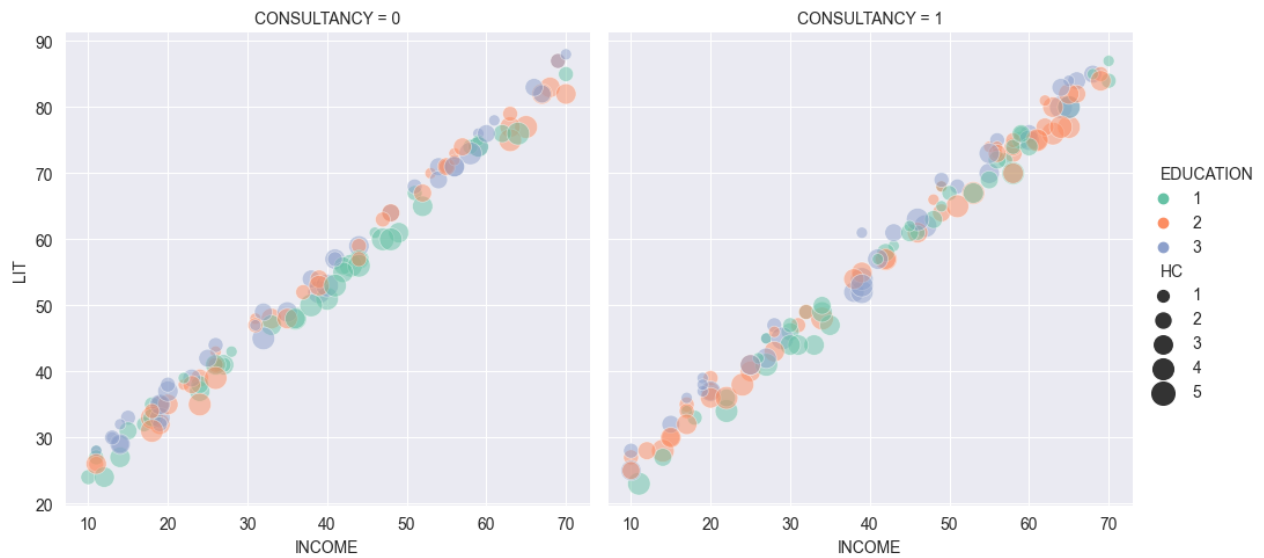


Table 1. Estimated regression model

Dependent Variable: **Men's health literacy**

Method: Least Squares

Sample: 1 251

Included observations: 251

Variable	Coefficient	Std. Error	t-Statistic	Prob.
BMI	-0.068000	0.082226	-0.826983	0.4091
CONSULTANCY	0.997376	0.138381	7.207456	0.0000
EDUCATION	0.971572	0.086501	11.23196	0.0000
HC	-0.995931	0.051028	-19.51752	0.0000
INCOME	1.001507	0.003836	261.0477	0.0000
RELIGION	0.101924	0.138941	0.733576	0.4639
C	16.07789	0.341905	47.02444	0.0000
R-squared	0.996507	Mean dependent var	55.19124	
Adjusted R-squared	0.996421	S.D. dependent var	18.07150	
S.E. of regression	1.081161	Akaike info criterion	3.021440	
Sum squared resid	285.2137	Schwarz criterion	3.119759	
Log likelihood	-372.1907	Hannan-Quinn criter.	3.061006	
F-statistic	11600.51	Durbin-Watson stat	2.220678	
Prob(F-statistic)	0.000000			

Hypotheses	Support	Decision
H1	Not Supported	Body-Mass-Index (BMI) does not affect the Men's health awareness in Malaysia
H2	Supported	Consultancy with physicians increases the Men's health literacy in Malaysia
H3	Supported	Education level increases the Men's health literacy in Malaysia
H4	Supported	Health Condition (HC) negatively affect the Men's health literacy in Malaysia
H5	Supported	Income level increases the Men's health literacy in Malaysia
H6	Not Supported	Religious affiliation does not influence the Men's health literacy in Malaysia

## 6. Conclusion

Men in Malaysia confront unique healthcare difficulties compared to women. This may be linked to a variety of cultural, socioeconomic, and personal factors. Paying attention to the lifespan disparity between males and females – a discrepancy that has continued to increase despite medical advancements – might be effective in dispelling these myths and overcoming these obstacles, therefore improving the status of men's health.

Despite the publication of the National Education Act in 1961, most of the population did not get the national curriculum before the institutionalization of the National School Curriculum in the nineties, resulting in varying levels of education. As the age increases, additional attention must be paid to care. As a result, continual health literacy evaluation is required to guarantee that the requirements of all groups are satisfied.

Frequently, we learn the most from our social support networks and connections, thus the greatest thing guys can do is to create better relationships and better supportive networks. Even more so, forming consultancy relationships with men's health experts be beneficial, since it will offer a safer environment for healthy dialogues about physical and mental health. Affecting men's perceptions of their own health and well-being is the value placed on healthy practices and frequent checkups.

Detection of any bad health problem at an early stage may be incredibly beneficial. This may be accomplished by making frequent visits to the family doctor and undergoing screenings for common health problems affecting the aged, including diabetes, hypertension, cholesterol, prostate problems, etc. Health care providers should use every chance to encourage men to engage in health assessment and maintenance issues.

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