

# Health literacy among communities in protected areas

<b>Submission date</b> 22/06/2023	<b>Recruitment status</b> No longer recruiting	<input type="checkbox"/> Prospectively registered <input checked="" type="checkbox"/> Protocol
<b>Registration date</b> 24/06/2023	<b>Overall study status</b> Ongoing	<input type="checkbox"/> Statistical analysis plan <input type="checkbox"/> Results
<b>Last Edited</b> 10/01/2025	<b>Condition category</b> Other	<input type="checkbox"/> Individual participant data <input checked="" type="checkbox"/> Record updated in last year

## Plain English summary of protocol

### Background and study aims

Health literacy plays a crucial role in empowering individuals to make healthy decisions in their life. However, protected areas communities face unique challenges that hinder their health literacy levels. This study explores the impact of the ecosystem of a protected area on health literacy among the communities. There are some limitations to accessing education, infrastructure, and socioeconomic activities due to the implemented policy of protected area. Thus, this study will identify the relationship of the socioeconomic factors with health literacy and try to propose efficient intervention programs to improve their level of health literacy.

### Who can participate?

Adults aged 18 years and above in the population of interest.

### What does the study involve?

All participants will receive an explanation of the study. Their informed consent is required before the interview can start. The study will conduct a face-to-face interview between the interviewer and the participant using administered questionnaires. In addition, the body weight, height, waist and hip circumferences, and blood pressure of the respondents will be measured by trained interviewers.

### What are the possible benefits and risks of participating?

The data collected from this study will give an overview of the health literacy status of the local community in Pahang National Park. The results of the data analysis can be used to determine the intervention program needed by the people in this area. Participants identified as having health problems during the medical screening will be referred for further examination at a nearby health facility. There are no risks of physical injury or harm by taking part in this study. The information gathered from this survey will be sensitively dealt with regarding the individuals and organizations.

### Where is the study run from?

Universiti Sains Islam Malaysia (USIM), Malaysia

When is the study starting and how long is it expected to run for?  
October 2021 to December 2026

Who is funding the study?  
Universiti Sains Islam Malaysia (USIM), Malaysia

Who is the main contact?  
Dr Amirah Azzeri, amirah.azzeri@usim.edu.my

## Contact information

### Type(s)

Principal Investigator

### Contact name

Ms Nor Aziah Abd Kadir

### ORCID ID

<http://orcid.org/0000-0001-7123-1146>

### Contact details

Faculty of Medicine and Health Sciences  
Universiti Sains Islam Malaysia (USIM)  
Persiaran Ilmu  
Putra Nilai  
Nilai  
Malaysia  
71800  
+60 199852074  
noraziah@raudah.usim.edu.my

## Additional identifiers

### EudraCT/CTIS number

Nil known

### IRAS number

### ClinicalTrials.gov number

Nil known

### Secondary identifying numbers

USIM/JKEP/2022-216

## Study information

### Scientific Title

Understanding the impact of health literacy among rural communities in protected areas

### Study objectives

This study aims to identify the impact of the ecosystem on health literacy status among the rural communities in Pahang National Park. The information gathered here will be used to design an effective intervention program to improve health literacy status and the community's quality of life.

### **Ethics approval required**

Ethics approval required

### **Ethics approval(s)**

Approved 31/05/2022, Research Ethics Committee, Universiti Sains Islam Malaysia (Faculty of Medicine and Health Sciences Persiaran Ilmu Putra Nilai, Bandar Baru Nilai, 71800, Malaysia; +60 3-42892458; info.pppi@usim.edu.my), ref: USIM/JKEP/2022-216

### **Study design**

Observational cross-sectional study

### **Primary study design**

Observational

### **Secondary study design**

Cross sectional study

### **Study setting(s)**

Community

### **Study type(s)**

Quality of life

### **Participant information sheet**

See study outputs table

### **Health condition(s) or problem(s) studied**

Health literacy status, health status, healthcare utilization, and quality of life

### **Interventions**

This is a cross-sectional study to determine health literacy status, health status, healthcare utilization, and quality of life among the rural communities surrounding Pahang National Park. It will be conducted for a duration of 3 years. Subsequent intervention studies will be conducted based on the findings of this study. The population of interest is the rural communities that reside within the Pahang National Park, Malaysia. The tools and instruments of data collection are:

1. Questionnaires which also include a form for physical examination and observation. The questionnaire will cover topics from socio-demographics, healthcare utilization expenditure and history, lifestyle, and quality of life, housing, and environment, and health literacy status. The physical examinations of the study participants include anthropometric measurements (height, weight, waist circumference, and hip circumference) and blood pressure.
2. Focus Group Discussion (FGD) among the stakeholders who are involved directly with the local communities. The FGD will discuss the issues, opportunities and challenges of health literacy among the communities.

### **Intervention Type**

Other

### **Primary outcome measure**

Current primary outcome measures as of 10/01/2025:

Measured at a single time point:

1. Health status assessed using a questionnaire
2. Healthcare utilization was assessed using a questionnaire
3. Quality of life assessed using a questionnaire
4. Health literacy status using a questionnaire
5. The efficiency of Training of Trainers (ToT) as an intervention program from the Focus Group Discussion and evaluation of the cost-effectiveness.

Previous primary outcome measures:

Measured at a single time point:

1. Health status assessed using a questionnaire
2. Healthcare utilization was assessed using a questionnaire
3. Quality of life assessed using a questionnaire
4. Health literacy status using a questionnaire
5. The efficient intervention programs from the Focus Group Discussion and costing analysis

### **Secondary outcome measures**

Measured at a single time point:

1. Blood pressure measured using a calibrated OMRON M2 HEM-7120 Automatic BP Monitor
2. BMI calculated from weight and height measurements using a calibrated SECA 813 digital electronic weighing scale and a calibrated vertical SECA Portable 217 Stadiometer respectively
3. Waist: hip ratio calculated from waist and hip circumference measured using a SECA 201 Ergonomic measuring tape
4. Lifestyle assessed using a questionnaire

### **Overall study start date**

01/10/2021

### **Completion date**

30/12/2026

## **Eligibility**

### **Key inclusion criteria**

1. Adult 18 years old and above
2. Member of household surveyed
3. Mental conscious

### **Participant type(s)**

Resident, Population

### **Age group**

Adult

### **Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

First cluster = 300, second cluster = 100 . Total = 400 participants

**Key exclusion criteria**

1. Not part of the household surveyed

**Date of first enrolment**

01/05/2023

**Date of final enrolment**

31/08/2023

**Locations****Countries of recruitment**

Malaysia

**Study participating centre****Faculty of Medicine and Health Sciences**

Universiti Sains Islam Malaysia (USIM)

Persiaran Ilmu

Putra Nilai

Nilai

Malaysia

71800

**Sponsor information****Organisation**

Universiti Sains Islam Malaysia

**Sponsor details**

Persiaran Ilmu

Bandar Baru Nilai

Nilai

Malaysia

71800

+60 6-758 0401

nc@usim.edu.my

**Sponsor type**

University/education

**Website**

<https://fpsk.usim.edu.my/>

**ROR**

<https://ror.org/020ast312>

## Funder(s)

**Funder type**

University/education

**Funder Name**

Universiti Sains Islam Malaysia

**Alternative Name(s)**

Islamic Science University Of Malaysia, USIM

**Funding Body Type**

Private sector organisation

**Funding Body Subtype**

Universities (academic only)

**Location**

Malaysia

## Results and Publications

**Publication and dissemination plan**

Planned publication in a high-impact peer-reviewed journal

**Intention to publish date**

31/12/2026

**Individual participant data (IPD) sharing plan**

The datasets generated and/or analyzed during this study will be included in the subsequent results publication

**IPD sharing plan summary**

Published as a supplement to the results publication

**Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Participant information sheet</a>	In Malay		23/06/2023	No	Yes

[Protocol article](#)

29/01/2024

09/02/2024

Yes

No