Republika ng Pilipinas

Department of Education

OFFICE OF THE UNDERSECRETARY FOR OPERATIONS

APPROVED & RELEASED BY OUOPS

DEPARTMENT OF EDUCATION
OFFICE OF THE UNDERSECRETARY FOR OPERATIONS
RECEIVED
DATE: 3/21/25
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TIME: 4:20PM
DOC #: [illegible]

MEMORANDUM
DM-OUOPS-2025-12-00973

TO : **REGIONAL DIRECTORS**
SCHOOLS DIVISION SUPERINTENDENTS
ALL OTHERS CONCERNED

MALCOLM S. GARMA
Assistant Secretary, Officer-In-Charge,
Office of the Undersecretary for Operations

FROM : **MALCOLM S. GARMA**
Assistant Secretary for Operations,
Officer-in-Charge, Office of the Undersecretary for Operations

SUBJECT : **REQUEST FOR PARTICIPATION IN THE RESEARCH STUDY PROJECT ON THE PREVALENCE OF HEALTH CONDITIONS AND LIMITED HEALTH LITERACY AMONG SCHOOL CHILDREN IN GRADES 7-12**

DATE : March 12, 2025

This is in reference to the research project of the Institute of Child Health and Human Development, National Institutes of Health, University of the Philippines - Manila, titled "Prevalence Survey of Health Conditions and Health Literacy Among School Children in Selected Provinces in the Philippines: Instrument Development."

The study aims to assess the prevalence of health conditions and limited health literacy among Grades 7 to 12 students in both public and private schools across nine (9) major local language groups in the Philippines. The research plans to recruit 15 junior and senior high school students from one public and one private school per study site (approximately seven to eight students per school). The data gathered will be instrumental in informing policy development, designing targeted interventions, and improving programs aimed at enhancing health literacy, ultimately promoting better health and welfare for school children.

For reference, the study's timeline and the list of identified public and private schools per study site are attached in the appendices.

For any questions or concerns, Ms. Sandra S. Hernandez, MD, MPH, Principal Investigator, Institute of Child Health and Human Development, National Institutes of Health, University of the Philippines Manila, will reach out to you for coordination. Likewise, she may be contacted via phone at 0917-538-3874 or email at sshernandez1@up.edu.ph.

For dissemination and appropriate action.

Republika ng Pilipinas

Department of Education

OFFICE OF THE UNDERSECRETARY FOR OPERATIONS

MEMORANDUM
OM-OUOPS-2025-12-00973

FOR **ATTY. FATIMA LIPP D. PANONTONGAN**
Undersecretary and Chief of Staff

FROM : **MALCOLM S. GARMA**
Assistant Secretary for Operations, Officer-in-Charge,
Office of the Undersecretary for Operations

DEXTER A. GALBAN
Assistant Secretary for Operations

SUBJECT : **COMPLETE STAFF WORK ON THE REQUEST FOR ENDORSEMENT ON RESEARCH STUDY PROJECT REGARDING PREVALENCE OF HEALTH CONDITIONS AND LIMITED HEALTH LITERACY AMONG SCHOOL CHILDREN IN GRADES 7-12**

DATE : March 12, 2025

I. BACKGROUND INFORMATION

In a letter dated January 27, 2025, the Institute of Child Health and Human Development, National Institutes of Health, University of the Philippines Manila, requested the endorsement of their research project entitled "Prevalence Survey of Health Conditions and Health Literacy Among School Children in Selected Provinces in the Philippines: Instrument Development." This request was officially received by the Office of the Secretary (OSEC) on February 10, 2025, and was endorsed to the Office of the Undersecretary for Operations (OUOPS) the following day. By February 12, 2025, the OUOPS had further endorsed it to the Office of the Assistant Secretary for Operations (OASOPS) for appropriate action.

To facilitate the review process, OASOPS reached out to Ms. Sandra S. Hernandez via email on February 13, 2025, requesting a detailed research proposal, including the study's timeline and the specific schools involved. In response, Ms. Hernandez submitted the proposal on March 4, 2025, providing the requested details, including the study's timeline and a list of identified public and private schools per study site.

This study aims to assess the prevalence of health conditions and limited health literacy among Grades 7 to 12 students in both public and private schools across nine (9) major local language groups in the Philippines. It plans to recruit 15 junior and senior high school students from one public and one private school per study site (approximately seven to eight students per school). The list of target schools are

attached to this Memorandum, for reference.

The research will be conducted in two phases: (1) Development and pretesting of the data collection instrument among school children, and (2) Administration of the finalized instrument through in-person interviews.

II. OBJECTIVE

The general objective of the research project is to develop an instrument to measure the level of health literacy among junior high school and senior high school students in the Philippines.

III. EXPECTED OUTPUT

For Phase 1, the final output will be a pretested instrument for measuring health literacy among junior and senior high school students, which will be used in the nationwide survey in Phase 2.

IV. CLEAR STATEMENT OF REQUEST/RECOMMENDED ACTION

After thorough review and consideration of this proposal, this Office recommends the conduct of the study, which will be instrumental in informing policy development, designing targeted interventions, and improving programs aimed at enhancing health literacy. Furthermore, this aligns with the Department's ongoing efforts to promote better health and welfare for school children.

In this regard, we respectfully **request the Honorable Undersecretary's approval of the attached endorsement to the Regional Offices and Schools Division Offices**, for the good Undersecretary's consideration.

Should you have any questions or concerns, please do not hesitate to contact us via phone 8633-7213 or email at oasops.deped.gov.ph

- ☐ *Approved*
- ☐ *Disapproved*
- ☐ *Further Comments/Remarks*

Institute of Child Health & Human Development
National Institutes of Health
University of the Philippines Manila

27 January 2025

SECRETARY JUAN EDGARDO M. ANGARA
Office of the Secretary
Department of Education
DepEd Complex, Meralco Avenue
Pasig City, Metro Manila
Philippines 1600

Dear Secretary Angara,

We respectfully request the endorsement of the Department of Education for our research project entitled, **"Prevalence Survey of Health Conditions and Health Literacy Among School Children in Selected Provinces in the Philippines: Instrument Development."** This study aims to assess the prevalence of health conditions and limited health literacy among school children in grades 7-12 in both public and private schools. The research will be conducted in two phases:

Phase 1: Development and pretesting of the data collection instrument among school children.

Phase 2: Administration of the finalized instrument through in-person interviews.

The research is being commissioned by the Department of Health and it seeks to provide valuable insights into the health literacy levels and associated behaviors of school children, which align with the Department's commitment to enhancing the health and welfare of Filipino students. Health literacy—the ability to access, understand, evaluate, and apply health information—is closely linked to health outcomes. The data gathered from this study will be instrumental in informing policy development, designing targeted interventions, and improving programs aimed at enhancing health literacy, thereby promoting better health and welfare for school children.

To facilitate the successful implementation of this project, we kindly request your endorsement to support coordination with school administrators. We assure you that the study will strictly adhere to ethical standards and the Department's guidelines, including securing informed consent from parents or guardians and obtaining assent from participating students. For your reference, we have enclosed the research concept paper.

With your endorsement, we are confident that this project can make a significant contribution to our shared goal of improving the health and education outcomes of Filipino school children.

Should you require further information or clarification, please do not hesitate to contact me at **email address** sshernandez1@up.edu.ph **or mobile no. +63917 5383874. We would be happy to provide additional details or arrange a meeting at your convenience.**

Institute of Child Health & Human Development
National Institutes of Health
University of the Philippines Manila

Thank you for considering our request. We look forward to your support in this research project.

Sincerely,

SANDRA S. HERNANDEZ, MD, MPH
Principal Investigator
Institute of Child Health and Human Development
National Institutes of Health
University of the Philippines Manila

Noted by:

FERNANDO B. GARCIA, Jr., PhD
Dean, College of Public Health, University of the Philippines Manila
Centre Director, SEAMEO Tropmed Philippines

Primary Investigator: Sandra S. Hernandez, MD, MPH

Organization: University of the Philippines Manila National Institutes of Health, in collaboration with the College of Public Health

Funder: Department of Health

Title: Prevalence Survey of Health Conditions and Health Literacy Among School Children in Selected Provinces in the Philippines: Instrument Development

I. Introduction

A. Background of the Study

Health literacy is defined as the knowledge, motivation, and competencies that enable people to access, understand, appraise, and apply health information when making decisions concerning health care, disease prevention, and health promotion (Sorensen et al., 2012). It is an independent and direct determinant of health (Pelikan et al., 2018) and may be considered a risk factor for socioeconomic disparities in health (Stormacq et al., 2018). Although there are no specific targets for health literacy within the Sustainable Development Goals (SDGs), increased health literacy is expected to support the achievement of targets related to SDG 3 on good health and well-being, as well as a range of other SDGs (World Health Organization & United Nations Development Programme, 2008).

Increasing health literacy is a key strategy in the Philippine government's efforts to improve health outcomes, reduce health inequities, and achieve universal health care. The Philippine Development Plan 2023-2028 includes health literacy as a strategy to promote good health by enabling individuals to make healthy choices and live healthy lifestyles (National Economic and Development Authority, 2023). The Department of Health's Health Promotion Framework Strategy 2030 (HPFS 2030), implemented through Administrative Order 2021-0063, aims to increase health literacy with focus on reducing non-communicable diseases through the conduct of health literacy assessments that will inform the design and implementation of health literacy interventions. The HPFS 2030 further aims for health-enabling settings supported by health-promoting policies and designates learning institutions as healthy settings in accordance with the Universal Health Care Act. The Department of Social Welfare and Development (DSWD), Department of Education (DepEd), Commission on Higher Education (CHED), Legal Education Board (LEB), Technical Education and Skills Development Authority (TESDA), and Department of Interior and Local Government (DILG) Joint Administrative Order 2022-0001 "Guidelines on Healthy Settings Framework in Learning Institutions" operationalizes the designation of schools as healthy settings, pursuant to Section 30 of Republic Act 11223 or the Universal Health Care Act. The guidelines mandate the integration of health literacy and knowledge of health rights in the curriculum, programs, and activities of learning institutions.

B. Statement of the Research Problem

Health literacy (HL) is recognized globally as a critical determinant of health outcomes and equity. The Department of Health (DOH) Administrative Order (Admin. Ord. No. 2021-0063, 2021) and the National Economic and Development Authority (NEDA) Philippine Development Plan (National Economic and Development Authority, 2023) underscore the importance of increasing health literacy to boost and achieve universal health care and sustainable development goals. Enhancing HL empowers individuals to make informed health decisions,

leading to improved health outcomes and reduced health disparities. While there is growing emphasis on the need to promote HL across all population groups, the current state of health literacy in the Philippines, especially among school children, remains underexplored. Existing studies (e.g., Tolabing, 2022) have documented the nationwide prevalence of limited HL among adults, yet there is a notable research gap concerning the HL status of children (reference/search strategy that yielded no result). The dimensions and domains where school children may be deficient remain unidentified, hindering the development of targeted interventions. This gap is further compounded by the absence of a locally validated HL instrument designed for school-aged children. A synthesis of available HL instruments reveals that most tools are developed for adult populations or international contexts, limiting their applicability to the local educational and cultural setting (Bröder et al., 2017; Okan et al., 2018; Navarro Rubio & Blay, 2023).

Addressing this gap is essential for transitioning from the current situation of limited HL to the desired state where health literacy is widely promoted and sustained. This research aims to develop and validate a local HL instrument tailored for Filipino school children. Such a tool will enable baseline measurements of HL levels, facilitating the identification of specific domains or dimensions where deficiencies exist. The generated knowledge will inform the design and implementation of targeted interventions to improve HL among school-aged children. Furthermore, understanding the distribution of limited HL across sociodemographic and geographic factors will guide policymakers in prioritizing interventions in underserved areas. By addressing the foundational gaps in HL assessment and intervention, this research has the potential to contribute significantly to the broader goal of enhancing population health literacy, aligning with national health objectives and promoting equity in health outcomes.

C. Objectives

General objective: To determine the level of health literacy among Filipino school children

Specific Objectives:

1. To identify the specific domains and dimensions of health literacy in which Filipino school children have deficiencies
2. To determine the prevalence of limited health literacy
3. To describe health literacy of school children across socio and demographic characteristics

Secondary objective: To describe risky behavior and health conditions affecting school children

Prevalence Survey of Health Conditions and Health Literacy Among Junior High School and Senior High School Students in Selected Provinces in the Philippines: Instrument Development

Research Proposal

IMPLEMENTING AGENCY

Institute of Child Health and Human Development, National Institutes of Health

University of the Philippines Manila

FUNDING AGENCY

Department of Health

PRINCIPAL INVESTIGATOR

Sandra Concepcion Layla S. Hernandez, MD, MPH

CO-INVESTIGATORS

Ma. Carmen C. Tolabing, MPH, DrPH; Fernando B. Garcia, Jr., PhD;
Arianna Maever L. Amit, MS, MAS

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Review of Related Literature and local policies/plans

1. Adolescent health conditions and risk behaviors in the Philippines

Adolescence is the crucial stage in human development between 10 and 19 years old (World Health Organization, 2019a). It is a developmental transition period during which a person experiences multiple physical, cognitive, and psycho-social changes and challenges which may affect overall health (Yang, 2024). Adolescents aged 10 to 14 years have the lowest risk of death, predominantly from infectious illnesses; however, mortality risk is increased with older adolescents, primarily from preventable causes such as accidents, injuries, self-harm, and interpersonal violence (Ward, 2021; World Health Organization, 2024a). Globally, the leading causes of death among adolescents are injuries, including road injuries, drowning, interpersonal violence, and self-harm; communicable diseases, including diarrheal diseases, lower respiratory tract infections, and tuberculosis; and maternal conditions. The leading causes of morbidity are mental disorders, including childhood behavioral disorders,

depressive disorders, and anxiety disorders, and iron-deficiency anemia (Guthold et al., 2021; Ward, 2021).

In the Philippines, the probability of dying among adolescents is at 2%, however adolescents develop behavioral patterns related to illness and death, such as smoking, alcohol use, physical inactivity, and risky sexual activity (UNICEF et al., 2024; World Health Organization, 2024a). The average starting age for smoking is 17.5 years, though the majority of adolescents (81%) perceive it as harmful (Esteban-Ipac & Torres-Ticzon, 2022). The 2019 Global Youth Tobacco Survey (GYTS) found that 12.5% of students aged 13 to 15 years were current tobacco product users, significantly higher among boys (18.3%) than girls (6.9%) (World Health Organization, 2021). The 2019 Global School-based Student Health Survey (GSHS) of grade 7 to fourth year high school students aged 13 to 17 years found that 25.2% currently drank alcohol and 7.0% ever used marijuana one or more times during their life (World Health Organization, 2019b). Physical inactivity among Filipino adolescents is high with 70% of 10 to 19-year-olds having insufficient physical activity, particularly among girls and urban, wealthy individuals (UNICEF et al., 2024). Among students included in the 2019 GSHS, only 6.7% were physically active at least 60 minutes per day on all 7 days before the survey. Aside from the decline in unhealthy behaviors, adolescent pregnancy (5.4%) and birth rates (25%) were also lower in 2022 than in previous years (UNICEF et al., 2024). However, a rapid increase in the number of new cases of HIV has been seen in the past decade, and it is estimated that almost half (47%) of new infections in 2023 will be among the youth (15 to 24 years old).

Violence is also prevalent among children in the Philippines. The 2015 National Baseline Study on Violence Against Children in the Philippines found that 8 out of 10 children experience any one form of violence in the home, school, workplace, and community (Ramiro et al., 2022). More than 3 in 5 Filipino children suffer from physical, psychological, and peer violence, while 1 in 5 are victims of sexual abuse. Furthermore, 20% of internet-using children aged 12 to 17 have been found to be victims of grave instances of online sexual exploitation and abuse (ECPAT et al., 2022). The 2019 GSHS also showed that 31.0% of students aged 13 to 17 years were in a physical fight in the past 12 months and 43.7% were seriously injured in the past 12 months before the survey.

Adolescents are particularly vulnerable to mental health problems due to physical, cognitive, and psychosocial changes and exposures to poverty and violence (World Health Organization, 2024b). It is estimated that one in seven 10 to 19-year-olds have a mental disorder. Suicide is the third leading cause of death in older adolescents and young adults (15 to 29 years), while anxiety disorders are the most prevalent and are experienced by both sexes and all age groups. Other mental health conditions that commonly develop during adolescence include eating disorders, psychosis, and risk-taking behaviors. The growing mental health crisis is evident in the Philippines, with suicide ideation and attempt rates doubling from 2013 to 2021 (UNICEF et al., 2024; University of the Philippines Population Institute, 2022). Among youth aged 15 to 24 years, only 11% are aware of any suicide prevention program or service, 62% did not reach out to anyone regarding their thoughts and

In the 2019 GSHS, 23.1% of 13 to 17-year-olds seriously considered attempting suicide in the past 12 months and 24.3% attempted suicide in the past 12 months before the survey (World Health Organization, 2019b).

The double burden of malnutrition, where undernutrition coexists with overweight and obesity, is also seen among school children and adolescents (United Nations Educational, Scientific and Cultural Organization & World Health Organization, 2021). The national average of stunting for adolescents is high (22.3%) while the prevalence of overweight (15%) and obesity (5%) among Filipino adolescents aged 10 to 19 years are also high (UNICEF et al., 2024). Among 13 to 17-year old students in the 2019 GSHS, 12.6% were overweight and 3.7% were obese (World Health Organization, 2019b).

2. Literacy, health literacy, and health literacy tools

Literacy is defined as one's ability to read and write, while functional literacy refers to a higher level of literacy, which includes reading, writing, and numeracy skills, that should be sufficiently advanced as to enable an individual to participate in activities in daily life that require abilities in communicating using written language (Philippine Statistics Authority, 2005). Functional literacy improved between 2013 and 2019 for 10 to 14-year-olds (from 83.2% to 86.0%) and for 15 to 19-years-olds (from 93.7% to 95.0% (UNICEF et al., 2024). However, learning poverty, a new quality indicator jointly constructed by the World Bank and the UNESCO Institute for Statistics, is at 91%. Learning poverty indicates the share of children who are unable to read and understand a short, age-appropriate text by age 10 (World Bank & UNESCO, 2022).

Health literacy is linked to literacy. In the Philippines, the first National Health Literacy Survey in the Philippines found the prevalence of limited health literacy was at 51.54% nationwide and 45.59% among youth. The health literacy access dimension had the highest prevalence of limited health literacy (45.94%) while the health care domain had the highest prevalence of limited health literacy (50.93%) (Tolabing et al., 2022).

The instrument used to measure health literacy was an adapted version of the HL-EU Q47 Asia. This 47-item tool assesses four dimensions (finding and understanding health information, appraising and applying) of health literacy across three domains (health care, disease prevention, and health promotion).

Another aspect of health literacy measured in the Tolabing et al. survey was functional health literacy (FHL). FHL comprises three domains: prose literacy, document literacy, and numeracy. Prose literacy refers to the ability to understand and use information from sentences or paragraphs, while document literacy involves locating and interpreting information from noncontinuous texts in various formats. Numeracy pertains to identifying and performing computations using numerical data from printed materials (Kutner et al., 2006; Berkman et al., 2010). To assess FHL, the FHL-5 Test, developed by Tolabing et al., was used. This instrument consists of five questions measuring prose literacy, document literacy (Tolabing et al., 2022).

3. Health literacy and health literacy assessment tools for children and adolescents

Health literacy knowledge and skills develop over the life course (Sorensen et al., 2012). Childhood and adolescence are unique and important periods for health literacy research and intervention due to the cognitive, physical and emotional changes that take place and the health-related behaviors and skills that develop during these stages (Broder et al., 2017). Health literacy among children and adolescents is influenced by factors unique to child health care, known as the "4Ds": developmental change, dependency on parents or adults, differential epidemiology of child health and illness, and the demographics of children and their families (Rothman et al., 2009). Among adolescents, health literacy is also influenced by individual traits, peer and parent influences, media, education, and health care systems (Manganello, 2008).

The research literature on health literacy on childhood and adolescence is still minimal and there is limited consensus on the knowledge and ability that a child or adolescent should have for health-related decision making (Navarro Rubio & Blay, 2023). There are many studies of health literacy among children and youth that vary according to target age group, definitions of health literacy and models and dimensions of health literacy used (Bröder et al., 2017). A systematic review of child and adolescent health literacy assessment tools found that existing health tools were widely used among the 11 to 18 year age group while there was inadequate information on health literacy instruments for primary school children (Okan et al., 2018). The authors suggest that health literacy assessment in this younger age group should focus on basic concepts and that health literacy of parents of young children is more likely to have a greater impact than that of the young children themselves. In addition, age-appropriate and developmental stage-adjusted concepts and participation of children and adolescents should be considered in developing questionnaires.

In their review of health literacy instruments used in children and adolescents, Guo et al. (2018) identified 18 instruments that were used to measure health literacy in the school setting. Majority of the instruments were newly developed, measured functional, interactive, and critical domains of health literacy, and considered developmental change, dependency, and demographic patterns. The instruments covered a range of health topics (i.e., nutrition, sexual health) and most instruments measured health literacy in healthcare settings or health promotion context (i.e., oral health, mental health). Most of the instruments were self-administered rather than interviewer-administered. Performance-based instruments were more common than instruments that had self-report items.

Project Objectives

1. Health Project Goal

To enhance health literacy among Filipino junior and senior high school students

2. Research Project Objectives

The study has two phases: Phase 1 is instrument development and Phase 2 is the survey on health literacy and health conditions affecting junior and senior high school students. The research objectives for Phase-1 are as follows:

General Objective: To develop an instrument to measure the level of health literacy among junior high school and senior high school students in the Philippines.

Specific Objectives:

1. To determine the applicable domains and dimensions of health literacy.
2. To determine the face and content validity of the adapted instrument.
3. To determine clarity of the instrument through cognitive pretesting among experts and a subset of the target population.

Methodology

1. Definition of terms

Adolescent

- Adolescence is defined by the World Health Organization as the phase of life between childhood and adulthood, from ages 10 to 19 (World Health Organization, 2019a).
- The Philippine Statistics Authority defines adolescents as individuals belonging to the age group 10 to 19 years (Philippine Statistics Authority, 2020).

Junior high school

- Grades 7 to 10 under the K to 12 Basic Education Program

Senior high school

- Grades 11 to 12 under the K to 12 Basic Education Program

Health literacy

- Ability to to access, understand, appraise, and apply health information when making decisions concerning health care, disease prevention, and health promotion, as a response to a set of questions to measure these dimensions and domains of health literacy

2. Study population

The target population is composed of junior and senior high school students enrolled in public and private schools in the Philippines. The eligibility criteria are listed below:

Inclusion Criteria:

- High school students representing the six different grade levels of the target population
- Both sexes (male and female)
- Students from public and private schools
- At least 12 years old

Exclusion Criterion:

- A child enrolled in special education sections or classes

3. Research Methodology

The instrument development process consists of the following steps: (1) identification of health literacy domains and dimensions; (2) evaluation of the quality and appropriateness of existing instruments for measuring health literacy among high school students; (3) instrument adaptation; and (4) pretesting. Details about each step are described below and summarized in Figure 1.

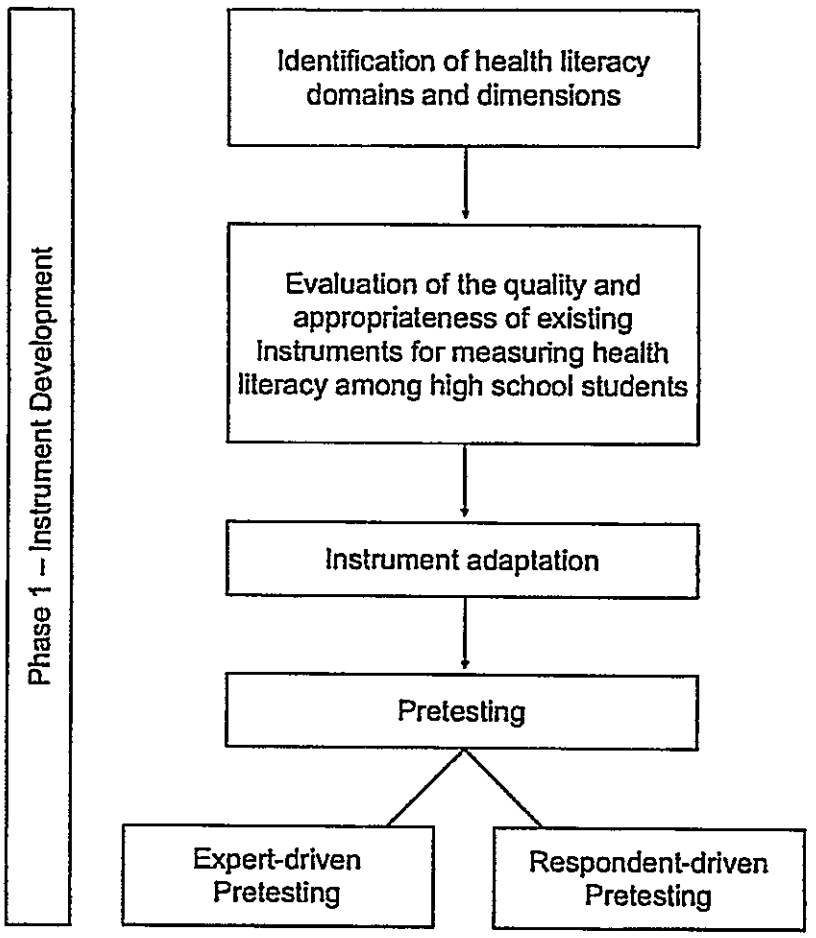

Figure 1. Process of developing the HL instrument for junior and senior high school students

1. Identification of health literacy domains and dimensions

A literature search was conducted using PubMed, ScienceDirect, and Google Scholar to determine how health literacy is defined among children and adolescents. The search terms used were "health literacy" AND ("child* OR adolescent* OR tee* OR youth*) AND (defin* OR concept* OR model*). A separate search was conducted to identify health literacy assessment tools designed for children and adolescents, using the above search terms and (question* OR tool* OR instrument*). The articles were evaluated if they 1) contained relevant information on definitions, conceptualizations, and measurement of health literacy among children and adolescents, 2) addressed a target population that included individuals aged 18 years or younger, 3) published in English, and 4) published as full-text articles. Articles were excluded if they 1) included participants aged 18 years or older only and 2) not peer-reviewed or articles published as editorials, comments, reviews, book chapter, conference abstracts, proceedings or presentations.

The study will employ a modified Delphi method to achieve consensus among a group of subject matter and methods experts, together with junior and high school students representing the target population to develop an age-appropriate health literacy instrument in the Philippines.

2. Evaluation of the quality and appropriateness of existing instruments for measuring health literacy among junior and senior high school students

The instruments mentioned in the retrieved studies were evaluated according to their psychometric properties and appropriateness for the local context.

The first national survey on the prevalence of limited health literacy in the Philippines used the adapted Asia version of the 47-item European Health Literacy Survey Questionnaire (HLS-EU-Q47) developed by the Asia Health Literacy Association. The original HLS-EU-Q47 questionnaire was developed for the European health literacy survey and implemented among participants aged 15 years and above (Sorensen et al., 2015). It consists of 47 items that are answered using a 4-point Likert-type scale. It measures the dimensions of health literacy (ability to access, understand, appraise, and apply health information) and domains (health care, disease prevention, health promotion). The Philippine version was developed by Tolabing et al. (2022) through a process involving localization, translation, and cultural adaptation. It was translated into nine of the major languages of the Philippines, including Ilocano, Filipino, Hiligaynon, Waray, Kapampangan, Bicolano, Cebuano, Maranao, and Tausug.

3. Instrument adaptation

3.1 Objective

To develop or adapt an existing health literacy (HL) instrument for junior and senior high school students, typically at least 12 years of age, in measuring the level of comprehensive and functional health literacy levels.

3.2 Design

This study will employ the Delphi method to achieve consensus on health literacy domains, dimensions, and competencies for Filipino junior and senior high school students. A panel will be formed composed of experts (research methodologists, health literacy experts, public health practitioners, health promotion specialists, adolescent medicine specialists, junior and high school teachers) and representatives of the target population (junior and senior high school students) for a consensus-building workshop (or "consensus meeting").. The resulting instrument will be translated into the 9 major local languages.

3.3 Participant selection

A total of at least 6 to 12 experts from multiple disciplines including health literacy, child behavioral medicine, health promotion, adolescent medicine, and education, will be purposively selected and invited to participate in the development of a health literacy instrument tailored for junior and senior high school students. Selection of experts will be based on their broad knowledge and experience with health literacy.

Six junior and senior high school students representing each grade level from public and private high schools will also be invited to the panel discussion. Convenience sampling will be used to select the students.

3.4 Data collection tool and procedures

Permission to use and adapt the data collection instrument developed and utilized by Tolabing et al. (2022) in the previous study, entitled "Prevalence of Limited Health Literacy in the Philippines: First Nationwide Survey" was obtained. The instrument adaptation process will follow the process used by Tolabing et al. (2022) to develop the Phil-Asia Version of HLS-EU-Q47 and FHL5-TEST, consisting of instrument modification, translation, cultural adaptation, and pretesting.

The expert panel will review selected parts of the Phil-Asia Version of HLS-EU-Q47 (Tolabing, M.C. et. al., 2018) and modify the questions, if needed, to develop a version appropriate for Filipino junior and senior high school students, typically 12 to 17 years old. The parts of the instrument that will be adapted include:

Part 1 - Demographics

Part 2 - Comprehensive Health Literacy

Part 3 - Personal Health Information (Q3.1 to Q3.2.1)

Part 4 - Social and Economic

Part 5 - Functional Health Literacy

For Part 3, the question "Has a doctor or health professional ever told you that you have _____"? will be added to Q3.2, followed by the health conditions listed below:

- Anxiety, Depression, Suicidal ideation and attempt, Self-injurious behavior
- Eating disorders
- Attention-Deficit/Hyperactivity Disorder, Specific Learning Disorder (i.e., reading, writing, mathematics), Dyslexia, Autism Spectrum Disorder
- Malnutrition, Overweight and Obesity, Vitamin Deficiencies, Micronutrient Mineral Deficiencies (i.e., iron, iodine)
- Menstrual problems
- Sexually transmitted infections (i.e., Hepatitis B, HIV/AIDS, Syphilis, Gonorrhea
- Allergic rhinitis, Childhood Asthma, Atopic Dermatitis (Atopic Eczema), Ocular Allergies, Urticaria and Angioedema, Food Allergy and Adverse Reactions to Foods, Adverse Reactions to Drugs
- Tuberculosis, Pneumonia, Acute Gastroenteritis
- Acute Appendicitis, Gastroesophageal Reflux Disease, Peptic Ulcer Disease
- Common Cold, Sinusitis, Acute Pharyngitis
- Bronchitis
- Congenital Heart Disease, Cardiac Arrhythmias, Rheumatic Heart Disease
- Anemia
- Urinary tract infection
- Vulvovaginitis
- Diabetes Mellitus, Hypo/Hyperthyroidism, Goiter
- Seizure Disorder, Headaches
- Hearing Loss, Otitis Externa, Otitis Media
- Irritant Contact Dermatitis, Allergic Contact Dermatitis, Scabie, Head Lice
- Acne
- Injuries
- Violence
- Other: (Specify)

Following standard cultural adaptation procedures, the expert committee will assess if the concepts and items in the questionnaire are relevant, acceptable, and appropriate for adolescents 12 years old and above. The expert committee will consider the characteristics and developmental stages of adolescents, appropriate question characteristics, survey layout, question sequence, and mode of survey administration to ensure optimum quality of response from the survey respondents.

3.5 Translation

The Phil-Asia Version of HLS-EU-Q47 was translated into nine major Philippine languages, including Ilocano, Filipino, Hiligaynon, Waray, Kapampangan, Bicolano, Cebuano, Maranao, and Tausug. Any additions or modifications to the instrument will undergo translation and back-translation. The translation process that will be employed in this study will follow the iterative process implemented by Tolabing et. al. (2022) to ensure that the original concepts are not lost in translation. The translation process involves three steps: forward translation, back translation, and translation analysis. The invitation letters addressed to parents, informed consent forms, and assent forms will also be translated.

4. Pretesting

Trained interviewers will conduct face-to-face interviews using the Computer Assisted Personal Interviewing (CAPI) method. The interviewer will use a tablet computer to record responses using QuickTap survey application or a similar suitable platform with both an online and offline feature. The interviewers will be locals who speak the local language. Both expert-driven pretesting and respondent-driven pretesting will be done in this study. The expert-driven pretesting will be conducted among the same group of experts involved in instrument adaptation, together with an additional 10 or more experts with similar characteristics. For the respondent-driven pretesting, fifteen (15) children will be recruited from one public and one private school (i.e., 7 to 8 students for each) for the 9 study sites representing the 9 major local languages in the Philippines. The schools that will be included in the study will be purposively selected in close coordination with the Department of Education and BARMM Ministry of Basic, Higher, and Technical Education. From each selected school, 1 to 2 students will be invited from each grade level (Table 1).

Table 1. Selection of junior high school and senior high school students from public and private high schools.

Grade level	Public school		Private school		Total
	F	M	F	M	
7	1	1		1	3
8		1	1		2
9	1		1	1	3
10		1	1		2
11	1	1		1	3
12		1	1		2

Grade level	Public school		Private school		Total
Total	3	5	4	3	15

4.2.3. Data collection tool and procedures

Junior and senior high school students will be recruited from a school in each study site. Parental informed consent and child assent will be obtained. An invitation to participate in the study, along with the informed consent form, will be distributed to the parents/guardians through their children.

4.2.4. Phase 1 Output

The final output will be a pretested instrument for measuring health literacy for junior and senior high school students, which will be used in the nationwide survey in Phase 2.

Gantt Chart

ACTIVITIES	2024		2025								
	Nov	Dec	Jan	Feb	Mar	Apr	Jun	Jul	Aug	Sep	Oct
1. IDENTIFICATION OF RESEARCH PROBLEM											
Submission of Inception Report											
2. PLANNING											
Collaboration with the Asian Health Literacy Association (AHLA)/UP Manila College of Public Health											
Coordination with Department of Education (DepEd) Central Office											
Coordination with Ministry of Basic, Higher and Technical Education (MBHTE)											
Coordination with local DepEd offices, MBHTE, schools and site coordinators											
Ethical approval											
3. IMPLEMENTATION											
Data collection											

ACTIVITIES	2024				2025						
	Nov	Dec	Jan	Feb	Mar	Apr	Jun	Jul	Aug	Sep	Oct
1. Identification of domains and dimensions of school children health literacy											
2. Evaluation of existing instrument/s for quality and appropriateness											
3. Instrument adaptation											
Translation											
4.1 Expert-driven pretesting											
4.2 Respondent-driven Pretesting											
Data processing, analysis, interpretation											
Manuscript preparation											
4. RESEARCH DISSEMINATION											

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Annex A. Data Collection Tools

GENERAL INSTRUCTIONS

The Phil-Asia Version of HLS-EU-Q47 is a Philippine version of the adapted Asia version of the 47-item European Health Literacy Survey Questionnaire was an instrument developed to measure the health literacy (HL) level of Filipinos in the study "Prevalence of Limited Health Literacy in the Philippines: First National Survey" by Tolabing et al. (2022). The questionnaire measures the components of HL, including its dimensions (ability to access, understand, appraise, and apply health information) and domains (health care, disease prevention, health promotion). The current study aims to develop and pretest a HL instrument tailored for junior and senior high school students.

Please score each item's appropriateness from 1 to 4, with "1" indicating that the item is not at all appropriate and "4" that the item is appropriate for measuring health literacy for junior and senior high school students. You may submit your accomplished form (printed or soft copy version) tomorrow before the panel discussion starts. Alternatively, you may answer during our live poll session tomorrow. We will allot enough time for you to score the items.

At the end of this scoring sheet, please indicate any items that were not identified in the original questionnaire, but that may be important in the local setting. Please also identify any additional recommendations to improve the questionnaire and any challenges that need to be overcome to adequately measure health literacy of junior and senior high school students.

Thank you very much for your time and participation.

A. INFORMATION ABOUT THE EXPERT PANEL MEMBER

Please provide the following information:

1. Name
2. Contact information
3. Primary institutional affiliation
4. Address of primary institutional affiliation
5. Field of expertise
6. Brief description of your role in health literacy/child health

B. INSTRUMENT ADAPTATION AND SCALE DEVELOPMENT

No. / Construct	Item	Level of appropriateness (Put a 'X' in the box that corresponds to your answer)				Remarks
		1	2	3	4	
2.1A	*Nanonood ba kayo ng TV? /* Do you watch TV?					
...						
5.13	*Para saan ang immunization card? /* What do you need the immunization card for?					

C. RECOMMENDATIONS

(1) Are there any items that are missing from the original instrument? What are these and to which domain can these be added to?;

(2) How can this instrument be further improved? What are your recommendations?;

(3) What are the challenges that one may face in measuring the health literacy of junior and senior high school students using this instrument? What can be done to overcome these challenges? All feedback and outputs of the consensus-building workshop will be incorporated in the revised instrument.

GENERAL INSTRUCTIONS

The Phil-Asia Version of HLS-EU-Q47 is a Philippine version of the adapted Asia version of the 47-item European Health Literacy Survey Questionnaire was an instrument developed to measure the health literacy (HL) level of Filipinos in the study "Prevalence of Limited Health Literacy in the Philippines: First National Survey" by Tolabing et al. (2022). The questionnaire measures the components of HL, including its dimensions (ability to access, understand, appraise, and apply health information) and domains (health care, disease prevention, health promotion). The current study aims to develop and pretest a HL instrument tailored for junior and senior high school students.

Please score each item's appropriateness from 1 to 4, with '1' for a weak representation of the construct being measured and '4' indicating a very strong representation of the construct.

At the end of this scoring sheet, please indicate any items that were not identified in the original questionnaire, but that may be important in the local setting. Please also identify any additional recommendations to improve the questionnaire and any challenges that need to be overcome to adequately measure health literacy of junior and senior high school students.

Thank you very much for your time and participation.

A. INFORMATION ABOUT THE EXPERT PANEL MEMBER

Please provide the following information:

1. Name
2. Contact information
3. Primary institutional affiliation
4. Address of primary institutional affiliation
5. Field of expertise
6. Brief description of your role in health literacy/child health

B. PRETESTING

No. / Construct	Item	How well does the item represent the construct being measured? (Put a 'X' in the box that corresponds to your answer)				Remarks
		1	2	3	4	
2.1A	*Nanonood ba kayo ng TV? /* Do you watch TV?					
...						
5.13	*Para saan ang immunization card? /* What do you need the immunization card for?					

C. RECOMMENDATIONS

1. Is the language clear, easy to understand, and appropriate for junior and senior high school students?
2. What are your recommendations to improve on the logical flow of the instrument and the layout?
3. How did you find the length and duration of answering the questionnaire?
4. Are there any items that need to be removed or added?
5. What are your other suggestions to improve the instrument?

Annex B. Technical Review Certification

SCIENTIFIC REVIEW COUNCIL
National Institutes of Health
University of the Philippines Manila

CERTIFICATION OF APPROVAL

This is to certify that the protocol version 2 dated 26 February 2025 of the research project titled ***"Prevalence Survey of Health Conditions and Health Literacy Among Junior High School and Senior High School Students in Selected Provinces in the Philippines: Instrument Development"*** by principal investigator **Dr. Sandra Concepcion Layla S. Hernandez** has been reviewed and approved by the NIH Scientific Review Council (SRC) as of 28 February 2025.

The protocol is hereby endorsed for submission to the appropriate research ethics board for ethical review.

CATHERINE LYNN T. SILAO, MD, PhD, FPPS
Chair, NIH-SRC

SHNU

Republic of the Philippines
Department of Education
NATIONAL CAPITAL REGION

DEPARTMENT OF EDUCATION
RELEASED
RECORDS SECTION REGIONAL OFFICE-NCR
MAY 14 2025
BY: TIME:

REGIONAL MEMORANDUM
ORD-2025- 427

TO : **SCHOOLS DIVISION SUPERINTENDENT**
HEAD, SCHOOL HEALTH SECTION
SDO Quezon City

FROM : **JOCELYN DR ANDAYA**
Regional Director, NCR
Concurrent Officer-in-Charge, Office of the
Assistant Secretary for Operations

SUBJECT : **REQUEST FOR PARTICIPATION IN THE RESEARCH STUDY PROJECT ON THE PREVALENCE OF HEALTH CONDITIONS AND LIMITED HEALTH LITERACY AMONG SCHOOL CHILDREN IN GRADES 7 TO 12**

DATE : **May 13, 2025**

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1. Enclosed in this Regional Memorandum is OUOPS Memorandum No. 2025-12-00973, dated March 12, 2025, from Usec. Malcolm S. Garma, Officer-in-Charge, Office of the Undersecretary for Operations, titled "Request for Participation in the Research Study Project on the Prevalence of Health Conditions and Limited Health Literacy Among School Children in Grades 7 to 12."

2. This Office, through the Education Support Services Division – School Health and Nutrition Unit, hereby endorses **Commonwealth High School of Schools Division Office of Quezon City**, to participate in the abovementioned research project.

3. For questions and concerns, kindly address to Dr. Sandra S. Hernandez, Principal Investigator, Institute of Child Health and Human Development, National Institutes of Health, University of the Philippines Manila, via phone at 0917 538 3874 or email at sshernandez1@up.edu.ph.

4. For information and guidance of all concerned.

ESSD/SHNU