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Research Article

AI Health Literacy, Trust in AI-Generated Health Videos, and Perceived Health Teaching Competency Among Barangay Health Workers

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Abstract. Artificial intelligence (AI) has become an important source of health information among Barangay Health Workers (BHWs), creating opportunities for health education while highlighting the need for adequate AI health literacy and appropriate trust in AI-generated health information in teaching DOH-approved herbal medicines. However, it remains unclear whether BHWs' AI health literacy and trust in AI-generated health videos relate to their perceived health teaching competency. This study examined relationships between AI health literacy, trust in AI-generated health videos, and perceived health teaching competency on DOH-approved herbal medicines among 111 middle-aged (40-59 years old) BHWs in Rizal, Philippines. A quantitative, descriptive-correlational design with purposive sampling was employed. Data were collected using adapted AI Literacy Scale (AILS) and Trust in AI-Generated Health Advice (TAIGHA) questionnaires and a researcher-developed Perceived Health Teaching Competency Questionnaire, all self-reported. Data were analyzed using descriptive and inferential statistics, including Pearson's r, Chi-square, Cramer's V, and the contingency coefficient. Results showed that BHWs had moderately high AI health literacy (M = 3.27, SD = 0.99) and trust in AI-generated health videos (M = 3.06, SD = 1.01), and moderately good perceived health teaching competency, with self-perceived knowledge rated highest (M = 3.36, SD = 1.03), followed by self-perceived attitude (M = 3.13, SD = 1.15) and self-perceived skills (M = 2.98, SD = 1.09). AI health literacy was positively correlated with self-perceived knowledge (r = .56), self-perceived skills (r = .65), and self-perceived attitude (r = .61). Similarly, trust was positively correlated with self-perceived knowledge (r = .77), self-perceived skills (r = .74), and self-perceived attitude (r = .78) (all $p < .001$). These findings highlight the need to strengthen AI health literacy and foster appropriate trust. Accordingly, the proposed AI Health Teaching Competency Enhancement Program (AI-HTCEP) aims to promote critical evaluation of AI-generated information and enhance evidence-based health teaching.

Keywords: *AI health literacy; Artificial intelligence; Barangay Health Workers; Health teaching competency; Trust in AI-generated health information.*

The rapid advancement of artificial intelligence (AI) has transformed the way health information is created, shared, and accessed by the public. Social media platforms, particularly Facebook, have become a common source of health information, where AI-generated content such as text, images, and videos can rapidly

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disseminate health advice to the public (Muhtar et al., 2024). While these provide easy access to information, they also increase the risk of exposing users to inaccurate or misleading health content that may influence beliefs and practices if not carefully evaluated (Liu et al., 2025). In the Philippines, Barangay Health Workers (BHWs) serve as frontline health educators who assist in delivering health information and guidance within their communities (Gallegos et al., 2023; Querri et al., 2020). This role is particularly relevant to the dissemination of information concerning the ten (10) Department of Health (DOH)-approved herbal medicines, which are promoted and scientifically validated through the Philippine Institute of Traditional and Alternative Health Care (PITAHC), an agency attached to the DOH (PITAHC, 2026). PITAHC also conducts community-based training that includes BHWs and provides education on the proper use of the ten DOH-approved herbal medicines (PITAHC, 2025). Accordingly, BHWs may encounter AI-generated health content on Facebook while seeking health information (Abeo et al., 2025). As middle-aged BHWs, familiarity with emerging AI technologies may vary; this highlights the importance of AI health literacy and informed trust in AI-generated health information in relation to evidence-based health education and the prevention of misinformation to the public.

This study was anchored primarily on a conceptual framework linking AI health literacy, trust, and health teaching competency, with the Health Belief Model, McAllister's Cognitive-Affective Trust Theory, and Bloom's Taxonomy providing complementary theoretical support for the relationships among the three constructs and their proposed associations. Collectively, these theories provide a broader theoretical foundation by addressing the behavioral, cognitive-affective, and educational dimensions relevant to how BHWs engage with, evaluate, trust, and apply health information. The Health Belief Model, developed by Rosenstock, Hochbaum, and Kegels, provides contextual support for understanding how perceived benefits and barriers may influence individuals' engagement with health information, including AI-generated health information. In this study, the model provides a contextual perspective for understanding how BHWs' perceptions of the benefits and barriers associated with AI-generated health information may shape their engagement with such content. McAllister's Cognitive-Affective Trust Theory further explains trust through cognitive judgments of the accuracy and reliability of information and affective feelings of confidence and comfort in using it. In relation to this study, these cognitive and affective dimensions of trust may help explain how BHWs assess and engage with AI-generated health information. Finally, Bloom's Taxonomy of Educational Objectives is primarily an educational classification framework that organizes learning outcomes according to levels of cognitive complexity. In this study, it provides contextual support for understanding the cognitive dimensions involved in health teaching competency, particularly the application and evaluation of knowledge. It does not inherently establish a causal or associative relationship among AI health literacy, trust in AI-generated health information, and perceived health teaching competency. Together, these theoretical perspectives provide complementary contextual support for examining AI health literacy, trust in AI-generated health information, and health teaching competency as conceptually distinct constructs that may be examined for possible associations. AI health literacy concerns the ability to understand and evaluate AI-generated health information, trust concerns the cognitive and affective confidence placed in such information, and health teaching competency concerns the perceived ability to apply knowledge and perform health-teaching responsibilities. While the three constructs may be conceptually related through BHWs' engagement with health information, the frameworks do not establish a direct causal relationship among them. Their relationships are therefore treated as empirical questions to be examined through the study's correlational analysis.

Previous literature has demonstrated that AI health literacy and trust play important roles in how individuals evaluate and utilize AI-generated health information. Existing studies have examined these constructs among physicians, nurses, healthcare professionals, medical students, older adults, and the general population across various healthcare settings (Iyamu et al., 2026; Liu et al., 2025; Zeeb & Dratva, 2025). Similarly, previous studies have explored the utilization of AI technologies, digital media, and social media platforms among community health workers in different countries, emphasizing their potential to support communication, education, and health promotion activities (Chen et al., 2025; Ocasio et al., 2026). However, despite the growing body of literature, significant knowledge gaps remain. Existing studies mainly focus on AI-generated text or general digital health literacy rather than AI-generated health videos disseminated through Facebook. Moreover, existing evidence suggests genuine tensions rather than a uniformly reinforcing relationship among these constructs. Familiarity with AI-generated information may increase reliance on it even when the information is inconsistent or contradictory, suggesting that increased exposure does not necessarily translate into appropriate trust (Klingbeil et al., 2024). Similarly, awareness of AI content origin may promote critical evaluation while reducing perceived

trust and content quality, indicating that literacy and trust may operate in opposing rather than parallel directions. These contradictions highlight the need to examine AI health literacy, trust, and health teaching competency as related yet distinct constructs, rather than assuming that improvements in one necessarily produce gains in the others.

More importantly, limited evidence examines how AI health literacy and trust in AI-generated health videos on Facebook relate to the perceived health teaching competency of middle-aged BHWs, particularly regarding the delivery of health education on DOH-approved herbal medicines. This gap is significant because BHWs serve as community-level sources of health information and may contribute to community health education and health promotion activities. In the Philippine context, PITAHC's community-based training initiatives specifically include BHWs and address the proper use of medicinal plants, demonstrating the relevance of herbal medicine education within community-based health activities (PITAHC, 2025).

Therefore, this study determined whether AI health literacy and trust in AI-generated health videos on Facebook regarding DOH-approved herbal medicines significantly relate to the perceived health teaching competency of middle-aged BHWs in the province of Rizal, Philippines. This study focused on middle-aged BHWs because their varying familiarity with emerging AI technologies, combined with their frontline role in delivering health information and guidance to their communities, places them in a position where differences in AI health literacy or trust may be associated with how they perceive their health teaching competency. The study therefore examines these constructs as related factors within the context of community health education, rather than assuming that AI health literacy or trust directly causes changes in health teaching competency.

Methodology

Research Design

This study used a quantitative, descriptive-correlational research design that explored the relationship between AI health literacy, trust in AI-generated health videos, and perceived health teaching competency on Department of Health (DOH)-approved herbal medicines among middle-aged Barangay Health Workers (BHWs). It employed a cross-sectional design, as the variables of interest were measured at a single point in time. This allowed the researchers to examine the existing relationships among the variables without following the respondents over an extended period. The study did not involve the manipulation or control of variables. Instead, it described the existing conditions and determined whether significant relationships existed among the variables. A descriptive approach was appropriate for identifying the levels of AI health literacy, trust, and health teaching competency, while the correlational component enabled the assessment of the strength and direction of the relationships among the variables (Salmons, 2023).

Participants and Sampling Technique

The study involved Barangay Health Workers (BHWs) from selected municipalities in the province of Rizal, Philippines. BHWs were considered an appropriate population because they are community-based health workers involved in health promotion, health education, and the delivery of basic health information within their respective communities. The study specifically focused on middle-aged BHWs to examine their AI health literacy, trust in AI-generated health videos, and perceived health teaching competency regarding DOH-approved herbal medicines. Purposive sampling was employed to select participants who met the established inclusion criteria. Participants were required to be (1) active BHWs in the selected barangays in Rizal Province, (2) 40 to 59 years old, (3) with access to the internet and Facebook, and (4) with prior exposure to online health videos related to DOH-approved herbal medicines. Participants were also required to voluntarily provide informed consent. These criteria ensured that the participants had relevant experience with digital health content necessary to address the objectives of the study. The age range of 40 to 59 years was selected because the study specifically aimed to examine middle-aged BHWs and their engagement with emerging digital and AI-related health information.

The study was conducted in five municipalities of Rizal Province: Cainta, Angono, Rodriguez, Taytay, and Morong. The selection of these municipalities was based on the researchers' access and coordination with the respective Municipal Health Offices (MHOs), Rural Health Units (RHUs), and concerned barangay officials during the data-gathering period. The researchers coordinated with the local health offices and proceeded to the barangays within the selected municipalities to identify BHWs who were available during the data-gathering period and who met the established inclusion criteria. The final sample consisted of 111 BHWs distributed across

Cainta (n = 35), Angono (n = 20), Rodriguez (n = 20), Taytay (n = 19), and Morong (n = 17).
In determining the required sample size, the researchers used an a priori power analysis through G*Power version 3.1.9.7. The analysis used the Correlation: Bivariate Normal Model under the Exact test family, consistent with the study's correlational objectives. The parameters were set at a two-tailed test, an anticipated correlation effect size of r = 0.30, a significance level of α = 0.05, and a statistical power of 0.85. The analysis indicated a minimum required sample size of 96 participants, with an achieved power of 0.85. To provide an allowance for potential incomplete responses or participant dropout, the researchers increased the target sample by 15%, resulting in a target of 111 participants. The final sample reached 111 eligible BHWs, and all completed questionnaires were retained for the final analysis.

Research Instrument
The study used two adapted standardized instruments and one researcher-developed questionnaire. The AI Literacy Scale (AILS) by Nong et al. (2024) was substantively reconstructed to assess AI health literacy in the context of AI-generated health information and DOH-approved herbal medicines among BHWs, while retaining its five domains: application, cognitive ability, morality, criticality, and self-efficacy. The Trust in AI-Generated Health Advice (TAIGHA) Scale by Kopka et al. was contextually adapted to assess trust in AI-generated health videos concerning herbal medicines; its trust dimension was retained, while the distrust dimension was excluded. The Perceived Health Teaching Competency Questionnaire was researcher-developed based on the Barangay Health Workers Reference Manual (2022) and consisted of self-perceived knowledge, skills, and attitude domains. All items used a five-point Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). Permission to use and adapt the AILS and TAIGHA was sought from the respective authors. The Filipino version underwent back-translation upon the recommendation of the Head of the Research Committee to verify that the translated items retained the intended meaning of the original version.

Content and face validity were assessed through expert review by six validators with expertise in public health/herbal medicine, psychology, computer science, nursing, and philosophy. The questionnaire was evaluated using a five-point scale (1 = Very Poor to 5 = Very Good) based on six criteria addressing measurement of the variable, sufficiency, relevance, clarity, simplicity, and ambiguity. The overall mean rating was 4.50/5.00 (Very Good). Expert recommendations, including refinement of terminology and translation, specification of Facebook as the AI-video platform, and inclusion of commonly accessible DOH-approved herbal medicines, were incorporated before pilot testing. Pilot testing was conducted among 30 BHWs who were not included in the actual study. Cronbach's alpha coefficients were 0.895 for AILS, 0.878 for trust, 0.846 for knowledge, 0.844 for skills, and 0.837 for attitude. In the actual sample of 111 BHWs, the corresponding coefficients were 0.939, 0.928, 0.895, 0.917, and 0.950, respectively, indicating good internal consistency across the questionnaire components.

Data Gathering Procedure
Prior to data collection, the researchers obtained approval and coordinated with the Municipal Health Offices (MHOs), Rural Health Units (RHUs), and concerned barangay officials in the selected municipalities of Rizal Province. Since there was no consolidated record of middle-aged BHWs who met all of the study criteria, the researchers coordinated with the local health offices and conducted barangay-to-barangay visits to identify BHWs who were available during the data-gathering period and met the established inclusion criteria. Data collection was conducted from June 24, 2026 to July 06, 2026. The researchers personally approached eligible BHWs in the identified barangays and explained the study's purpose, procedures, voluntary nature of participation, and ethical considerations. BHWs who met the inclusion criteria and agreed to participate were asked to sign the informed consent form before answering the questionnaire.

The questionnaire was administered personally by the researchers using a pen-and-paper approach in Barangay Health Centers. Whenever possible, participants were asked to complete the questionnaire in a designated private area to minimize distractions and to allow them to answer without unnecessary influence from other BHWs or local health personnel. The researchers provided standardized instructions before administration and remained available to clarify procedural questions without influencing the participants' responses. Each participant was given approximately 10-15 minutes to complete the questionnaire. Participants were instructed to answer the items based on their own experiences and perceptions. The researchers avoided explaining or suggesting answers to individual questionnaire items and limited their assistance to clarifying instructions or the meaning of the response procedure. These measures were taken to minimize potential social desirability bias and reduce the

possibility that participants would feel pressured to provide favorable responses. After completion, the questionnaires were checked by the researchers for completeness. Questionnaires that were not completed or did not meet the established eligibility criteria were not included in the final analysis. The completed questionnaires were collected personally by the researchers and were subsequently organized, encoded, and prepared for statistical analysis.

Data Analysis Procedure

Data were encoded, cleaned, and analyzed using JAMOVI software. Frequencies and percentages summarized participants' demographic characteristics, particularly sex and years of BHW experience. Means and standard deviations described the levels of AI health literacy, trust in AI-generated health videos, and health teaching competency. Assumptions for Pearson's product-moment correlation were assessed using the Shapiro-Wilk test, Normal Q-Q plots, and scatterplots. Although some variables showed deviations from normality, Q-Q plots indicated only minor departures, while scatterplots showed approximately linear relationships without substantial outliers. Given the sample size (n = 111) and the robustness of Pearson's correlation to mild normality deviations when linearity and substantial outliers are not concerns, Pearson's correlation was considered appropriate.

Pearson's correlation coefficient (r) assessed the presence, strength, and direction of relationships among the continuous study variables. The chi-square test of independence examined the association between years of BHW experience and self-perceived knowledge, skills, and attitude. Cramer's V and the contingency coefficient were used to determine the strength of these associations. Expected cell frequencies were examined to assess chi-square assumptions, including the requirement that at least 80% of expected counts be ≥5 and none be <1. Where assumptions were not met, results were interpreted with consideration of the violation and category consolidation or an appropriate exact/alternative test was considered. A significance level of a = .05 was used for Pearson correlation and chi-square analyses. Because multiple correlations were conducted, the potential increase in Type I error was considered; however, no additional adjustment was applied, and p-values were interpreted using the established a = .05 criterion.

Ethical Considerations

The study was conducted in accordance with established ethical guidelines and received approval from Trinity University of Asia – Institutional Ethics Review Committee, with Protocol Code 2026-2nd-SLCN-Ramovs-v1. Participation was voluntary, and respondents were informed of the study objectives, procedures, potential risks and benefits, and their right to withdraw at any time without consequences. Written informed consent was obtained prior to participation. The principles of autonomy, beneficence, non-maleficence, and justice were observed throughout the research process by ensuring respectful treatment, minimizing potential risks, and providing equal opportunities for participation. Confidentiality and anonymity were maintained during data collection, analysis, and reporting, with collected information used solely for research purposes. All data were securely stored and managed by the research team in compliance with Data Privacy of the Philippines, to prevent unauthorized access and protect participants privacy.

Results and Discussion

Demographic Profile of Barangay Health Workers

Table 1. *Frequency and Percentage Distribution of Respondents in Terms of Sex*

Sex	Frequency	Percentage (%)
Female	111	100%

Table 1 presents the demographic characteristics of the Barangay Health Worker (BHW) participants (n = 111). As evident in the table, all respondents were female (f = 111, 100%), indicating that the study sample consisted entirely of women. This is consistent with the statistics of the total number of the Philippine BHW workforce. Hartigan-Go et al. (2025) stated that there are 232,243 registered BHWs throughout the country, where only 3,024 are male. The female majority in the statistics has been associated with the nature of the BHW position, which is community-based, where the female role is associated with maternal activities and child health care services (Baliola et al., 2024). Therefore, the demographic characteristics of the respondents reflect the actual figures of the Philippine BHW workforce, meaning the data of the sample is fit for the target population in terms of gender.

Table 2 presents the distribution of respondents according to their years of experience as Barangay Health Workers (BHWs). Most respondents had served for more than six years (*f* = 42, 37.8%), followed by those with three to four years of experience (*f* = 35, 31.5%). Meanwhile, some respondents had one to two years of service (*f* = 21, 18.9%), and few had less than one year (*f* = 7, 6.3%), and the smallest group had five to six years of experience (*f* = 6, 5.4%).

Table 2. *Frequency and Percentage Distribution of Respondents in Terms of Years of Experience*

Years of Experience	Frequency	Percentage (%)
<1 year	7	6.3%
1-2 years	21	18.9%
3-4 years	35	31.5%
5-6 years	6	5.4%
>6 years	42	37.8%

The predominance of BHWs with longer years of experience of service indicates that a substantial proportion of participants had extensive exposure to community-based health activities, including health education and public health service delivery. This level of experience may contribute to the development of practical knowledge and decision-making abilities through continuous engagement with community health responsibilities. Consistent with Benner's Novice to Expert framework, expertise develops progressively through accumulated experience and repeated exposure to practice situations (Nero, 2026). Similarly, previous studies reported that longer service experience among BHWs was associated with greater perceived knowledge and competence in performing community health roles (Niňal & Apas, 2021). However, the extent to which years of service are associated with AI health literacy, trust in AI-generated health videos, and perceived health teaching competency was determined through subsequent inferential analyses.

Levels of AI Health Literacy

Table 3 presents the level of AI health literacy among middle-aged Barangay Health Workers (BHWs) using the AI Literacy Scale (AILS). The respondents demonstrated a moderately high level of AI health literacy, with an overall mean score of 3.27 (*SD* = 0.99). Among the five dimensions, Criticality obtained the highest mean score (*M* = 3.50, *SD* = 1.16), followed by Application (*M* = 3.33, *SD* = 1.05), Cognitive Ability (*M* = 3.19, *SD* = 1.17), Self-Efficacy (*M* = 3.17, *SD* = 1.16), and Morality (*M* = 3.15, *SD* = 1.70).

Table 3. *Level of AI Health Literacy of BHWs in Rizal according to AI Health Literacy Dimension*

Statements	*M*	*SD*	Interpretation
Application	**3.33**	**1.05**	**Moderately high**
1. I often see AI-generated information about DOH-approved herbal medicines.	3.28	1.17	Less agree
2. I frequently encounter AI-generated content (such as videos) about herbal medicine.	3.34	1.18	Less agree
3. I have seen AI being used to explain or share information about herbal medicines.	3.40	1.20	Less agree
Cognitive Ability	**3.19**	**1.17**	**Moderately high**
4. Due to AI, I have become more interested in learning how to utilize it for health teaching.	3.15	1.28	Less agree
5. I can identify whether health information is AI-generated or from a human.	3.23	1.24	Less agree
Morality	**3.15**	**1.70**	**Moderately high**
6. I have seen AI-generated health information that is clear and truthful.	3.08	1.30	Less agree
7. I have also seen AI-generated content that may be incorrect or unsafe for patients.	3.22	1.19	Less agree
Criticality	**3.5**	**1.16**	**High**
8. I verify first if AI-generated information is correct before I teach herbal medicine to patients	3.52	1.31	Less agree
9. I know how to verify the trustworthiness of AI-generated information regarding herbal medicines	3.49	1.21	Less agree
Self-Efficacy	**3.17**	**1.16**	**Moderately high**
10. My exposure to AI has helped me feel more confident in understanding health information about herbal medicines.	3.13	1.16	Less agree
11. Because of AI, I am becoming more interested in learning how to use it when teaching health.	3.21	1.25	Less agree
AI Health Literacy	**3.27**	**0.99**	**Moderately high**

Note. N = 111. Interpretation of mean scores: 1.00-1.80 = Very Low, 1.81-2.60 = Low, 2.61-3.40 = Moderately High, 3.41-4.20 = High, and 4.21-5.00 = Very High.

The higher score in Criticality suggests that respondents demonstrated greater ability to evaluate the reliability and credibility of AI-generated health information. This finding is supported by Zeng et al. (2026), who reported that greater confidence in AI-related abilities contributes to increased willingness to engage with AI technologies. Meanwhile, the lower score in Morality suggests that ethical considerations in AI use, including concerns related to misinformation, bias, and data privacy, may require further attention. This finding is consistent with Zavaleta-

Monestel et al. (2025), who highlighted that healthcare professionals continue to encounter ethical concerns regarding AI adoption despite recognizing its potential benefits.

The overall moderately high AI health literacy observed among BHWs indicates that respondents possess the ability to understand and evaluate AI-generated health information; however, their confidence in consistently applying AI tools in health education may still be developing. This finding is consistent with Abedin et al. (2026), who reported that healthcare professionals may demonstrate positive attitudes toward AI despite limitations in understanding AI systems. This suggests that familiarity with AI-generated content does not necessarily translate into sufficient confidence and competence in its application. The findings further align with the AI Literacy Framework of Long and Magerko, which emphasizes that AI literacy involves not only awareness of AI technologies but also the ability to understand AI systems, critically evaluate outputs, apply AI appropriately, and consider ethical implications. For BHWs, strengthening these competencies may support the responsible evaluation and communication of AI-generated health information in community health education.

Levels of Trust in AI-Generated Health Videos

Table 4 presents the descriptive statistics for the trust of middle-aged Barangay Health Workers (BHWs) in AI-generated health videos as a source of information on DOH-approved herbal medicines. The overall mean trust score was 3.06 (*SD* = 1.01), interpreted as moderately high. Among the indicators, respondents most strongly agreed that AI videos could help them make good decisions in health teaching (*M* = 3.16), while confidently relying on AI videos when teaching about herbal medicine received the lowest rating (*M* = 2.87). These results indicate that although BHWs generally regard AI-generated health videos as a moderately trustworthy resource, they remain cautious rather than fully confident, evaluating the information such videos provide rather than accepting it without reservation.

Table 4. *Level of Trust in AI-Generated Health Videos among Middle-Aged BHWs*

Statements	*M*	*SD*	Interpretation
1. I feel comfortable using AI videos as a source of information about DOH-approved herbal medicines.	3.11	1.15	Less agree
2. AI videos can support better health teaching about herbal medicine.	3.10	1.19	Less agree
3. I have confidence in AI videos regarding DOH-approved herbal medicines.	3.04	1.16	Less agree
4. I confidently rely on AI videos when teaching about herbal medicine.	2.87	1.14	Less agree
5. I believe information from AI videos can help me make good decisions in health teaching about herbal medicine.	3.16	1.08	Less agree
Overall Trust	**3.06**	**1.01**	**Moderately high**

Note. N = 111. Interpretation of mean scores: 1.00–1.80 = Very Low, 1.81–2.60 = Low, 2.61–3.40 = Moderately High, 3.41–4.20 = High, 4.21–5.00 = Very High

This pattern is consistent with McAllister's Cognitive-Affective Trust Theory, which explains trust as arising from both rational evaluation and emotional confidence in a source; before extending full trust, individuals weigh a source's perceived accuracy, usefulness, and risk. The moderate trust observed among BHWs therefore reflects a balanced, evaluative stance rather than uncritical acceptance. This finding aligns with Chen et al. (2025), who reported that healthcare workers extend greater trust to AI-generated health content when they perceive it as accurate, transparent, and evidence-based, and with Nong and Platt (2025), who found trust to be a key determinant of healthcare workers' willingness to adopt AI in professional practice. At the same time, the comparatively lower confidence in relying on AI videos during actual teaching suggests that concerns around misinformation, transparency, and accountability continue to temper full reliance on AI-generated health content.

Perceived Health Teaching Competency on DOH-Approved Herbal Medicines

Table 5 presents the descriptive statistics for perceived health teaching competency in terms of self-perceived knowledge, self-perceived skills, and attitude. Self-perceived knowledge obtained the highest overall mean (*M* = 3.36, *SD* = 1.03), moderately good, with respondents most confident in aligning AI-generated information with DOH-approved herbal medicine guidelines such as the proper use of *lagundi, sambong, and tsaang gubat* (*M* = 3.44). Attitude followed, with an overall mean of 3.13 (*SD* = 1.15), reflecting general openness to integrating AI-generated health information into BHW activities. Self-perceived skills obtained the lowest overall mean (*M* = 2.98, *SD* = 1.09), with the weakest rating given to using AI-generated health videos to guide community members' health-related decisions (*M* = 2.91).

Table 5. *Perceived Health Teaching Competency on DOH-Approved Herbal Medicines*

Statements	*M*	*SD*	Interpretation
Self-Perceived Knowledge	**3.36**	**1.03**	**Moderately good**
K1. I understand how AI-generated information can be used in my work as a BHW.	3.25	1.13	Less agree
K2. I know when it is appropriate to use AI-generated information in my community activities	3.38	1.10	Less agree
K3. I know how to align AI-generated information with DOH-approved herbal medicine guidelines.	3.44	1.17	Less agree
Self-Perceived Skills	**2.98**	**1.09**	**Moderately good**
S1. I use AI-generated information when advising community members about their health concerns.	3.05	1.11	Less agree
S2. I apply what I learned from AI-generated information when assisting families during home visits.	2.96	1.20	Less agree
S3. I use information from AI-generated health videos to guide community members in making health-related decisions.	2.91	1.23	Less agree
Attitude	**3.13**	**1.15**	**Moderately good**
A1. I am willing to use AI-generated health information as part of my work as a BHW.	3.04	1.22	Less agree
A2. I find AI-generated health information helpful in delivering health services in my community.	3.16	1.19	Less agree
A3. I am open to integrating AI-generated health information into my regular BHW activities.	3.18	1.20	Moderately high

Note. N = 111. K = Knowledge; S = Skills; A = Attitude. Interpretation of Mean Scores: 1.00–1.80 = Very Poor, 1.81–2.60 = Poor, 2.61–3.40 = Moderately Good, 3.41–4.20 = Good, 4.21–5.00 = Very Good.

Taken together, these results suggest that middle-aged BHWs possess an adequate theoretical foundation and a generally favorable disposition toward AI-assisted health education but are comparatively less confident in translating that knowledge into practice. This knowledge-skill gap is consistent with Sultan et al. (2025), who identified competency-based education, built on practical, contextualized learning rather than knowledge acquisition alone, as an effective strategy for helping community health workers transfer learning into practice. Similarly, Holcomb et al. (2022) found that structured training in communication skills substantially improved community health workers' ability to educate and support patients, while Rogers et al. (2023) reported that continuous training and hands-on experience were stronger predictors of performance than formal education alone. These findings imply that BHWs may benefit less from additional content-based instruction and more from applied, supervised opportunities to practice AI-assisted health teaching. It should be noted that the Perceived Health Teaching Competency Questionnaire captured respondents' self-perceived knowledge, self-perceived skills, and attitude rather than an observed or objectively assessed measure of teaching performance; accordingly, the results reflect self-reported competency and should not be interpreted as evidence of demonstrated clinical or teaching competence.

Relationship Between AI Health Literacy and Trust in AI-Generated Health Videos

Table 6. *Correlation Between Overall AI Health Literacy and Trust in AI-Generated Health Videos*

Variable	*r*	*df*	*p*	Interpretation
Overall AI Health Literacy & Trust	0.66	109	<.001	Strong positive

Table 6 presents the overall relationship between AI health literacy and trust in AI-generated health videos. A statistically significant, strong positive correlation was found (r = .66, df = 109, p < .001), indicating that BHWs with higher AI health literacy tend to report greater trust in AI-generated health videos, leading to the rejection of the null hypothesis. As shown in Table 7, all five dimensions of AI health literacy were likewise significantly and positively associated with trust: self-efficacy showed the strongest relationship (r = .72), followed by application (r = .61) and cognitive ability (r = .60), while morality (r = .54) and criticality (r = .54) showed comparatively weaker, though still significant, associations.

Table 7. *Correlation between AI Health Literacy Dimensions and Trust in AI-Generated Health Videos*

Dimension	*r*	*p*	Interpretation
Application	.61	<.001	Strong positive
Cognitive Ability	.60	<.001	Strong positive
Morality	.54	<.001	Moderate positive
Criticality	.54	<.001	Moderate positive
Self-Efficacy	.72	<.001	Strong Positive

Note. N = 111. All correlations significant at p < .05.

These findings support the Cognitive-Affective Trust Theory: BHWs with stronger AI health literacy were better equipped to evaluate the accuracy, relevance, and utility of AI-generated content and, in turn, more inclined to trust it. This is consistent with Chu-Ke and Dong (2024), who found that individuals with greater AI literacy

exhibit higher trust in evaluating AI-generated health information, and with Rahman et al. (2024), who noted that sufficient understanding of AI's capabilities and limitations enables people to critically assess AI-generated content while maintaining appropriate confidence in reliable sources. The results also affirm Long and Magerko's AI Literacy Framework, which identifies self-efficacy, application, cognitive ability, morality, and criticality as the core competencies through which individuals make sense of AI-generated content, and echo Yadav et al. (2023) on AI literacy's role in ethical, evidence-based use of AI. As Gonçalves-Fernández and Pino-Juste (2025) argued, self-efficacy in particular underlies the sound use of AI technologies, underscoring the value of building BHWs' confidence with AI as a foundation for responsible, informed trust. Framed within Locsin's Theory of Technological Competency as Caring in Nursing, stronger AI health literacy positions BHWs to use AI-generated health videos responsibly, critically evaluating content before sharing it with the community, consistent with recommendations by Zeeb and Dratva (2025) to strengthen AI health literacy among healthcare workers.

Relationship Between Demographic Profile and Perceived Health Teaching Competency

Tables 8 through 10 present the distribution of self-perceived knowledge, self-perceived skills, and attitude across BHWs' years of experience. Across all three competency components, respondents were predominantly classified within the moderately good to good categories regardless of tenure, and BHWs with more than six years of experience were still represented across the full range of competency levels, including poor and very poor, while some respondents with fewer years of experience were already classified as good or very good.

Table 8. *Distribution of Self-Perceived Knowledge by Years of Experience as BHWs*

Knowledge Level	<1 year	1-2 years	3-4 years	5-6 years	>6 years	Total
Very Poor	2	2	5	0	1	10
Poor	1	4	3	1	9	18
Moderately Good	2	9	13	4	12	40
Good	2	6	13	0	16	37
Very Good	0	0	1	1	4	6
Total	**7**	**21**	**35**	**6**	**42**	**111**

Table 9. *Distribution of Self-Perceived Skill by Years of Experience as BHWs*

Skills Level	<1 year	1-2 years	3-4 years	5-6 years	>6 years	Total
Very Poor	2	5	5	1	4	17
Poor	2	6	4	1	12	25
Moderately Good	1	8	14	3	13	39
Good	2	2	11	0	10	25
Very Good	0	0	1	1	3	5
Total	**7**	**21**	**35**	**6**	**42**	**111**

Table 10. *Distribution of Attitude by Years of Experience as BHWs*

Attitude Level	<1 year	1-2 years	3-4 years	5-6 years	>6 years	Total
Very Poor	1	6	4	0	1	15
Poor	2	3	3	1	10	19
Moderately Good	3	4	17	2	12	38
Good	1	7	9	2	11	30
Very Good	0	1	2	1	5	9
Total	**7**	**21**	**35**	**6**	**42**	**111**

As summarized in Table 11, chi-square tests confirmed that years of experience was not significantly associated with any of the three competency components, and the corresponding Cramer's V values indicated only weak associations in each case; the null hypothesis was therefore accepted for all three components. These results suggest that competency development among BHWs is not a linear function of tenure; longer service does not automatically translate into higher perceived knowledge, skill, or attitude toward AI-assisted health teaching. This is consistent with Sultan et al. (2025), who emphasized that competency is strengthened primarily through competency-based education, practical learning, and continuous assessment rather than tenure alone. The comparatively wider variability observed in self-perceived skills further suggests that translating AI-related knowledge into effective health teaching practice depends less on time in service than on sustained opportunities for mentoring, communication training, and applied practice.

Table 11. *Summary of Chi-Square Test Results and Measures of Association*

Competency Component	X^2	*df*	*p*	Decision	Contingency Coeff.	Cramer's V
Self-Perceived Knowledge	18.60	16	.288	Not significant	0.38	0.21
Self-Perceived Skills	16.00	16	.452	Not significant	0.36	0.19
Attitude	15.50	16	.490	Not significant	0.35	0.19

Note. N = 111. Significance level set at p < .05. Phi coefficient not computed (applies only to 2 × 2 tables).

Relationship Between AI Health Literacy and Health Teaching Competency

Table 12 presents the correlations between the five AI health literacy dimensions, overall AI health literacy, and the three components of perceived health teaching competency. All eighteen correlations were positive and statistically significant ($p < .001$). Self-efficacy consistently produced the strongest association across all three competency components – self-perceived knowledge ($r = .72$), self-perceived skills ($r = .68$), and attitude ($r = .68$) – while morality consistently showed the weakest, though still significant, relationships ($r = .54$, .542, and .48, respectively). Self-perceived skills was most strongly associated with overall AI health literacy ($r = .653$) rather than with any single dimension.

Table 12. *Correlation Between AI Health Literacy Dimensions and Perceived Health Teaching Competency*

Competency Component	Application	Cognitive Ability	Morality	Criticality	Self-Efficacy	Overall
Self-Perceived Knowledge (r)	0.61	0.60	0.54	0.54	0.72	0.56
p-value	<.001	<.001	<.001	<.001	<.001	<.001
Self-Perceived Skills (r)	0.58	0.57	0.54	0.55	0.65	0.65
p-value	<.001	<.001	<.001	<.001	<.001	<.001
Attitude (r)	0.54	0.62	0.48	0.50	0.68	0.61
p-value	<.001	<.001	<.001	<.001	<.001	<.001

Note. N = 111. All correlations significant at p < .05.

The consistent primacy of self-efficacy indicates that confidence in one's own ability to use AI technologies was closely associated with the other dimensions of AI health literacy and, in turn, with perceived competency in health teaching. Given the cross-sectional, correlational design of the study, this association cannot establish that self-efficacy precedes or causes the other dimensions; it may, however, warrant further investigation as a potential contributor to AI health literacy development, a possibility consistent with Acosta (2025), who identified confidence in engaging with AI as foundational to its responsible use in health communication. That morality showed the weakest associations suggests that ethical judgment develops through professional experience, organizational values, and formal training rather than through routine exposure to AI technologies, a distinction also drawn by Paakkari et al. (2024), who described ethical competence as a professional domain shaped by personal values and responsibility rather than technical literacy. That self-perceived skills correlated most strongly with overall AI health literacy rather than a single dimension further suggests that practical teaching competence draws on a broad, integrated understanding of AI, echoing El-Banna et al. (2025). Given that digital literacy among Filipino BHWs remains inconsistent, with only 32.2% meeting basic computer literacy standards, even as digitally competent BHWs report stronger program performance (Yumen, 2025), these findings point to the value of training that develops AI awareness, critical evaluation, and ethical decision-making in tandem rather than in isolation.

Relationship Between Trust in AI-generated Health Videos and Perceived Health Teaching Competency

Table 13. *Correlation Between Trust in AI-Generated Health Videos and Perceived Health Teaching Competency*

Competency Component	*r*	*p*	Interpretation
Self-Perceived Knowledge	0.77	<.001	Strong positive
Self-Perceived Skills	0.74	<.001	Strong positive
Attitude	0.78	<.001	Strong Positive

Note. N = 111. All correlations significant at p < .05.

Table 13 presents the correlation between trust in AI-generated health videos and the three components of perceived health teaching competency. All three correlations were strong, positive, and statistically significant: attitude ($r = .78$), self-perceived knowledge ($r = .77$), and self-perceived skills ($r = .74$), all $p < .001$. These results indicate that BHWs who trust AI-generated health videos more are also more likely to report stronger knowledge,

greater confidence in their teaching skills, and a more positive attitude toward health education on DOH-approved herbal medicines.

That attitude showed the strongest relationship, indicating trust was more closely associated with how BHWs perceive and accept AI as a teaching tool than with knowledge or skill directly; this pattern is consistent with, though it does not by itself confirm, the direction proposed by Landrum et al. (2026), who found that trust in generative AI health advice significantly influenced users' confidence, willingness to follow recommendations, and perceived competence. The association with knowledge aligns with Jongjiamdee et al. (2025), who noted the growing role of AI in preserving and disseminating traditional and herbal medicine knowledge through accessible digital platforms, while the association with skills is consistent with Sun et al. (2025), who found that trust in AI-generated health information was linked to better learning outcomes and greater willingness to engage with AI-supported educational resources. Together, these findings position trust as a construct that co-varied closely with self-reported knowledge, skills, and attitudes, and that may warrant further investigation as a potential contributor to effective community health teaching. It should also be noted that AI health literacy, trust, and perceived health teaching competency were all measured through the same self-administered questionnaire at a single point in time; consequently, some of the comparatively strong correlations observed, such as that between trust and attitude (r = .782), may partly reflect shared method variance rather than the strength of the underlying relationship alone, a limitation common to single-source, cross-sectional survey designs.

Recommendations

Building on these findings, the researchers propose an instructional framework grounded in the study's findings and in the literature, the AI-Assisted Health Teaching Competency Enhancement Program (AI-HTCEP), structured using the ADDIE model (Analysis, Design, Development, Implementation, and Evaluation) to strengthen AI health literacy, appropriate trust in AI-generated health videos, and health teaching competency among middle-aged BHWs (Figure 1). The AI-HTCEP was not implemented or empirically tested as part of this study; it is presented as a proposed program whose anticipated benefits are derived from the present findings and the cited literature, and its actual effectiveness would need to be established through future implementation and evaluation. The framework responds to the growing presence of AI-generated health information on platforms such as Facebook and is grounded in Locsin's Technological Competency as Caring in Nursing, which holds that technology should enhance rather than replace human caring and professional judgment. It is guided by four principles: evidence-based practice, anchored in verification against Department of Health (DOH) and Philippine Institute of Traditional and Alternative Health Care (PITAHC) guidelines using tools such as the SIFT method, the CCOW framework, and the FACTS checklist; community-centered learning, responsive to the health needs and contexts BHWs serve; responsible AI use, promoting ethical decision-making and appropriate trust by recognizing both the capabilities and limitations of AI; and empowerment, building BHWs' confidence and self-efficacy in AI-assisted health teaching. These principles echo recent calls for AI literacy that extends beyond tool use to include critical evaluation of AI outputs and verification against credible sources (Okolo et al., 2024; Solano-Kamaiko et al., 2024).

The Analysis phase identifies middle-aged BHWs with varying digital literacy as the target learners and, guided by the present findings, prioritizes strengthening critical evaluation, evidence verification, ethical decision-making, and confidence in AI-assisted teaching – consistent with Bloom's Taxonomy, which frames competency as developing progressively from knowledge toward application, evaluation, and creation (Ray et al., 2025; Sultan et al., 2025). The Design phase translates these priorities into a graduated instructional sequence – lectures and guided discussion, demonstrations of AI health platforms, verification exercises using official references, case-based learning, and supervised teaching simulations – moving participants from foundational concepts to applied practice. The Development phase produces the supporting materials (presentation content, verification workshop guides, case scenarios, simulation guides, and competency checklists), which are reviewed by nursing educators, community health nurses, AI and digital health experts, and DOH/PITAHC representatives, then pilot-tested prior to full rollout. Implementation proceeds in three sequential phases – AI literacy and capacity building; skills application and supervised practice; and competency assessment with continuous professional development – preceded by a baseline pre-assessment. The Evaluation phase is designed to apply a three-level model assessing the participants' perceptions of the training, gains in AI health literacy and knowledge, and demonstrated competency through checklists and simulations, supplemented by a six-month AI literacy refresher to keep pace with evolving technologies and DOH/PITAHC guidance; these evaluation activities remain proposed and would be carried out only once the program is implemented.

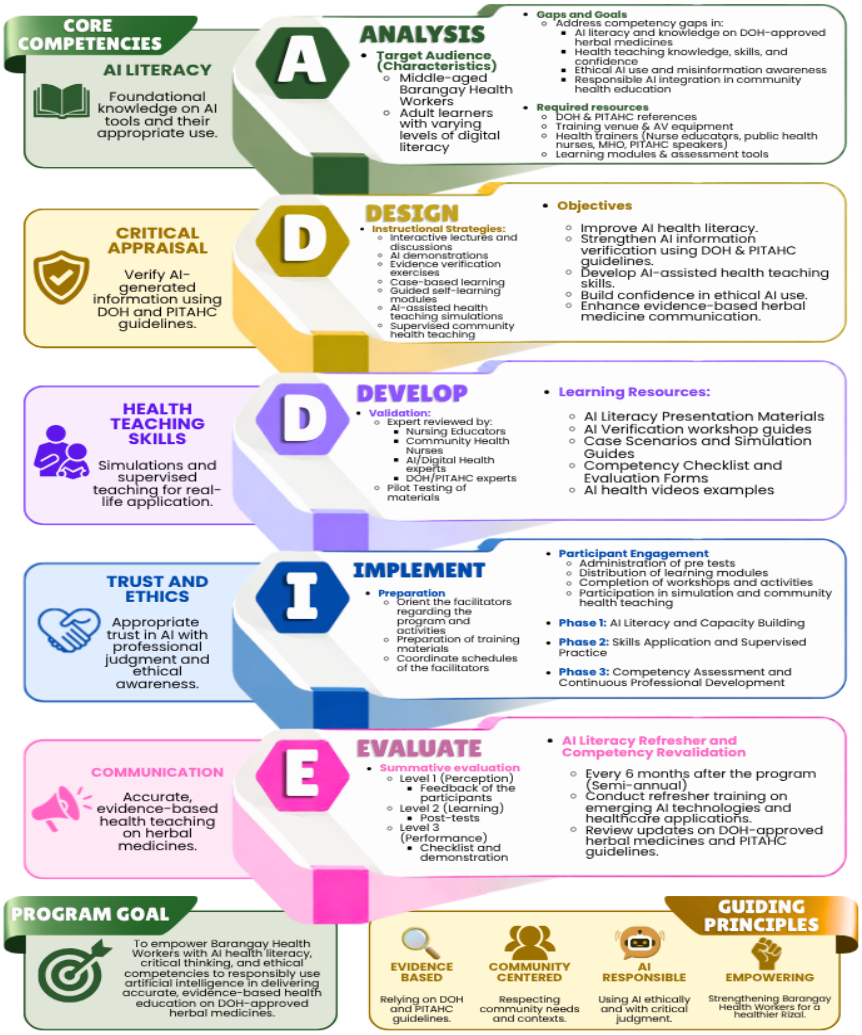


Figure 1. *AI-Assisted Health Teaching Competency Enhancement Program (AI-HTCEP)*

Overall, the AI-HTCEP is presented as a possible, evidence-informed teaching model and not as an empirically tested intervention. It is based on results of the present study, the ADDIE model for instructional design, Technological Competency as Caring in Nursing from Locsin, Bloom's Taxonomy, structured information-verification techniques like SIFT, and authoritative DOH and PITAHC health references. It aims to offer a potential outline for future AI health literacy and information verification, responsible AI use, and health education on DOH-approved herbal medicine competency development programs. The framework can only be proven effective or applicable by future researchers and relevant health authorities who can further develop, validate, implement, and evaluate.

Conclusion

This study demonstrated significant positive associations among AI health literacy, trust in AI-generated health videos, and perceived health teaching competency on DOH-approved herbal medicines among middle-aged BHWs in selected municipalities of Rizal Province. Overall, AI health literacy was significantly associated with self-perceived knowledge, self-perceived skills, and attitude, while trust in AI-generated health videos also demonstrated significant positive associations with these components of health teaching competency. Among the AI health literacy dimensions, Criticality obtained the highest descriptive mean, while Morality obtained the lowest; self-efficacy, meanwhile, showed the strongest correlations with trust and with perceived health teaching competency in the inferential analyses. These findings highlight the relevance of strengthening AI health literacy and appropriate evaluation of AI-generated health information in community health education.

The findings provide an empirical basis for capacity-building initiatives that may enhance BHWs' ability to critically evaluate AI-generated health information, verify information using credible sources, and apply responsible judgment in health teaching. The proposed AI Health Teaching Competency Enhancement Program (AI-HTCEP) may serve as a structured approach for strengthening AI literacy, critical evaluation, and evidence-based health teaching related to DOH-approved herbal medicines. Such initiatives may support the responsible integration of AI as a supplementary resource in community health education rather than as a substitute for established health information sources.

The findings should, however, be interpreted within the limitations of the study. The cross-sectional design does not permit causal inference, while purposive nonprobability sampling and the restricted geographic setting limit the generalizability of the findings. The inclusion of only middle-aged and female BHWs further limits applicability to other age groups and sex groups. Additionally, the use of self-reported measures and self-perceived competency may be subject to social desirability and common-method bias and does not establish objectively demonstrated health teaching competency. Possible sparse cells in the chi-square analyses also warrant cautious interpretation. Future research should consider more diverse and representative samples, objective measures of competency, and longitudinal or experimental designs to further examine these relationships.

Contributions of Authors

The authors contributed equally to all sections and collectively approved the final version for publication.

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References

Abedin, N., Hahn, P., Zeuzem, S., & Dultz, G. (2026). Healthcare professionals show high AI enthusiasm but limited knowledge: A cross-sectional study. PLOS Digital Health, 5(6), e0001433. https://doi.org/10.1371/journal.pdig.0001433

Abeo, A.N.A., Armstrong, S., Scriney, M., & Goss, H. (2025). Artificial intelligence techniques and health literacy: A systematic review. Mayo Clinic Proceedings: Digital Health, 3(4), Article 100269. https://doi.org/10.1016/j.mcpdig.2025.100269

Acosta, J. (2025). Perspective: Advancing public health education by embedding AI literacy. Frontiers in Digital Health, 7, 1584883. https://doi.org/10.3389/fdgth.2025.1584883

Baliola, M., Golpe, M., & Advincula-Lopez, L. (2024). Gains and challenges of the Barangay Health Worker (BHW) Program during COVID-19 in selected cities in the Philippines. Journal of Health Research, 38(1). https://doi.org/10.56808/2586-940X.1060

Chen, Z., Wu, T., Wu, X., Wang, J., Ke, S., Li, H., & Lin, R. (2025). The mediating effects of technology trust and perceived value in the relationship between eHealth literacy and attitude toward the usage of artificial intelligence in nursing: A cross-sectional study. BMC Nursing, 24(1), 989. https://doi.org/10.1186/s12912-025-03577-w

Chu-Ke, C., & Dong, Y. (2024). Misinformation and literacies in the era of generative artificial intelligence: A brief overview and a call for future research. Emerging Media, 2(1), 70–85. https://doi.org/10.1177/27523543241240285

El-Banna, M., Sajid, M.R., Rizvi, M.R., Sami, W., & McNelis, A. (2025). AI literacy and competency in nursing education: Preparing students and faculty members for an AI-enabled future—A systematic review and meta-analysis. Frontiers in Medicine, 12, Article 1681784. https://doi.org/10.3389/fmed.2025.1681784

Gallegos, I.N., Comidoy, M.D., Cabal, M.S., Acol, P.M., & Polistico, A. (2023). Communication needs of Barangay Health Workers situated at the city landfill of Davao, Philippines, in delivering health care services. The Journal of Development Communication, 34(1), 1–5. Retrieved from https://jdc.journals.unisel.edu.my/index.php/jdc/article/view/243

Gonçalves-Fernández, M.L., & Pino-Juste, M. (2025). Health literacy in healthy adults: A systematic review of recent evidence. Atención Primaria, 57(11), 103300. https://doi.org/10.1016/j.aprim.2025.103300

Hartigan-Go, K., Prieto, M.L.M., & Valenzuela, S. (2025). Important but neglected: A qualitative study on the lived experiences of Barangay Health Workers in the Philippines. Acta Medica Philippina, 59(9), 19–31. https://doi.org/10.47895/amp.vi0.9589

Holcomb, J., Ferguson, G., Thornton, L., & Highfield, L. (2022). Development of training curriculum to improve patient communication skills and social support among community health workers. HLRP: Health Literacy Research and Practice, 6(2). https://doi.org/10.3928/24748307-20220518-02

Iyamu, I., Wheelans, C., Haag, D., Roe, I., Chang, H.-J., Donelle, L., Ellis, U., McKee, G., Bartlett, S., & Gilbert, M. (2026). AI and algorithmic literacy among health workers: A scoping review through a digital health literacy lens. Frontiers in Public Health, 14, Article 1802392. https://doi.org/10.3389/fpubh.2026.1802392

Jongjiamdee, K., Pornwonglert, P., Na Bangchang, N., & Akarasereenont, P. (2025). Artificial intelligence in traditional medicine: Evidence, barriers, and a research roadmap for personalized care. Frontiers in Artificial Intelligence, 8, 1659338. https://doi.org/10.3389/frai.2025.1659338

Klingbeil, A., Grützner, C., & Schreck, P. (2024). Trust and reliance on AI—An experimental study on the extent and costs of overreliance on AI. Computers in Human Behavior, 160(108352), 108352–108352. https://doi.org/10.1016/j.chb.2024.108352

Kopka, M., Majeed, A., Spinelli, G., El-Osta, A., & Feufel, M. (2025). The Trust in AI-Generated Health Advice (TAIGHA) scale and short version (TAIGHA-S): A development and validation study. ArXiv.org. https://doi.org/10.48550/arxiv.2512.14278

Landrum, A.R., Verma, N., & Kehrberg, A. (2026). Trusting generative AI for health advice: Preregistered survey experiment. Journal of Medical Internet Research, 28, e97882. https://doi.org/10.2196/97882

Muhtar, S.M., Amir, A.S., & Arya, N. (2024). Utilizing social media for public health advocacy and awareness in digital health communication. Majority Science Journal, 2(1), 270–278. https://doi.org/10.61942/msj.v2i1.96

Nero, F.D. (2026). A cross-sectional study on the competency in delivering health services among Barangay Health Workers in Metro Vigan: Basis for the conduct of a competency-based

training program. The Open Public Health Journal, 19, e18749445431349. https://doi.org/10.2174/0118749445431349251219053855
Niñal, R.R., & Apas, R., Jr. (2021). Assessment of health service delivery trainings of Barangay Health Workers in selected barangays of Kiblawan, Davao del Sur. International Journal of Research and Innovation in Social Science, 5(10), 178–188. https://rsisinternational.org/journals/ijriss/Digital-Library/volume-5-issue-10/178-188.pdf
Nong, Y., Cui, J., He, Y., Zhang, P., & Zhang, T. (2024). Development and validation of an AI literacy scale. Journal of Artificial Intelligence Research, 1(1), 17–26. https://doi.org/10.70891/jair.2024.100029
Nong, P., & Platt, J. (2025). Patients' trust in health systems to use artificial intelligence. JAMA Network Open, 8(2), e2460628. https://doi.org/10.1001/jamanetworkopen.2024.60628
Ocasio, M., Fashjian, J., Haywood, C., Davenport, T., Wennerstrom, A., Johnson, M., Saberi, P., & Fernández, M.I. (2026). Community health workers and social media: Benefits, drawbacks, and training needs. mHealth, 12, 1. https://doi.org/10.21037/mhealth-20251-68
Okolo, C., Agarwal, D., Dell, N., & Vashistha, A. (2024). "If it is easy to understand, then it will have value": Examining perceptions of explainable AI with community health workers in rural India. Proceedings of the ACM on Human-Computer Interaction, 8(CSCW1), Article 71, 1–28. https://doi.org/10.1145/3637348
Paakkari, O., Kulmala, M., Lyyra, N., Saaranen, T., Lindfors, P., & Tyrväinen, H. (2024). The core competencies of a health education teacher. Health Promotion International, 39(4), daae078. https://doi.org/10.1093/heapro/daae078
Querri, A., Ohkado, A., Kawatsu, L., Bermejo, J., Vianzon, A., Recidoro, M.J., & Medina, A. (2020). Assessment of the role of community health volunteers in delivering primary health care in Manila, the Philippines. Journal of International Health, 35(1), 15–25. https://doi.org/10.11197/jaih.35.15
Rahman, A.U., Saqia, B., Alsenani, Y., & Ullah, I. (2024). Data quality, bias, and strategic challenges in reinforcement learning for healthcare: A survey. International Journal of Data Informatics and Intelligent Computing, 3(3), 24–42. https://doi.org/10.59461/ijdiic.v3i3.128
Rahman, M.M., Babiker, A., & Ali, R. (2024). Motivation, concerns, and attitudes towards AI: Differences by gender, age, and culture. Lecture Notes in Computer Science, 15439, 375–391. https://doi.org/10.1007/978-981-96-0573-6_28
Ray, M.E., Rudolph, M., & Daugherty, K. (2025). Bloom's taxonomy in health professions education: Associations with exam scores, clinical reasoning, and instructional effectiveness. Currents in Pharmacy Teaching & Learning, 17(11), 102444. https://doi.org/10.1016/j.cptl.2025.102444
Rogers, A., Goore, L.L., Wamae, J., Starnes, J.R., Okong'o, S.O., Okoth, V., & Mudhune, S. (2023). Training and experience outperform literacy and formal education as predictors of community health worker knowledge and performance, results from Rongo sub-county, Kenya. Frontiers in Public Health, 11. https://doi.org/10.3389/fpubh.2023.1120922
Salmons, J. (2023, February 3). Quantitative research with non-experimental designs. Sage Research Methods Community. https://tinyurl.com/683pxjbs
Solano-Kamaiko, I.R., Mishra, D., Dell, N., & Vashistha, A. (2024). Explorable explainable AI: Improving AI understanding for community health workers in India. Proceedings of the 2024 CHI Conference on Human Factors in Computing Systems. https://doi.org/10.1145/3613904.3642733
Sultan, M., Miller, E., Tikkanen, R. S., Singh, S., Kullu, A., Cometto, G., Fitzpatrick, S., Ajuebor, O., Gillon, N., Edward, A., Moleman, Y., Pandya, S., Park, I., Shen, J.Y., Yu, Y., Perry, H., Scott, K., & Closser, S. (2025). Competency-based education and training for Community Health Workers: A scoping review. BMC Health Services Research, 25(1), 263. https://doi.org/10.1186/s12913-025-12217-7
Sun, X., Ma, R., Wei, S., Cesar, P., Bosch, J., & Ali, A.E. (2025). Understanding trust toward human versus AI-generated health information through behavioral and physiological sensing. International Journal of Human-Computer Studies, 103714. https://doi.org/10.1016/j.ijhcs.2025.103714
Yadav, N., Pandey, S., Gupta, A., Dudani, P., Gupta, S., & Rangarajan, K. (2023). Data privacy in healthcare: In the era of artificial intelligence. Indian Dermatology Online Journal, 14(6), 788–792. https://doi.org/10.4103/idoj.idoj_543_23
Yumen, N.M. (2025). Computer literacy for Barangay Health Workers: Supporting the Philippines' digital health transformation. Aloysian Interdisciplinary Journal of Social Sciences, Education, and Allied Fields, 1(5), 195–214. https://doi.org/10.5281/zenodo.15508037
Zavaleta-Monestel, E., Anchía-Alfaro, A., Rojas-Chinchilla, C., Quesada-Loria, D.F., & Arguedas-Chacón, S. (2025). Ethical and practical dimensions of artificial intelligence (AI) in healthcare: A comprehensive study of professional perceptions. Cureus. https://doi.org/10.7759/cureus.78416
Zeeb, H., & Dratva, J. (2025). Digital health literacy. In H. Zeeb, L. Maaß, T. Schultz, U. Haug, I. Pigeot, & B. Schüz (Eds.), Digital public health (pp. 249–266). Springer. https://doi.org/10.1007/978-3-031-90154-6_13
Zeng, Q., Zhu, J., Wang, Y., Su, S., & Huang, Y. (2026). Artificial intelligence self-efficacy and attitudes among nursing students: A multicenter network analysis of educational stratification. BMC Medical Education, 26, 299. https://doi.org/10.1186/s12909-026-08685-y