การเสริมพลังอาสาสมัครสาธารณสุขประจำหมู่บ้านด้วยสื่อนวัตกรรมเชิงเนื้อหาเพื่อยกระดับความรอบรู้ด้านสุขภาพและการรู้เท่าทันสื่อ

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บทคัดย่อ

อาสาสมัครสาธารณสุขประจำหมู่บ้าน (อสม.) มีบทบาทสำคัญในการส่งเสริมสุขภาพและป้องกันโรคในระดับปฐมภูมิ แต่อสม.ยังขาดทักษะการรู้เท่าทันสื่อ งานวิจัยนี้มีวัตถุประสงค์เพื่อพัฒนารูปแบบสื่อนวัตกรรมเชิงเนื้อหา เพื่อเสริมสร้างความรอบรู้ด้านสุขภาพและการรู้เท่าทันสื่อของ อสม. ในพื้นที่เขตสุขภาพที่ 2 ของประเทศไทย การศึกษานี้มี อสม. เข้าร่วมจำนวน 402 คน จาก 5 จังหวัด ผลการศึกษาพบว่า อสม. มีระดับความรอบรู้ด้านสุขภาพปานกลาง และขาดทักษะความรู้เท่าทันสื่อ ความรอบรู้ด้านสื่อสุขภาพของ อสม. เพิ่มขึ้นปานกลาง (ค่าเฉลี่ย = 3.22) การเปิดรับสื่อส่งผลต่อความรอบรู้ด้านสุขภาพและความเข้าใจในการส่งเสริมสุขภาพของ อสม. ความรอบรู้ด้านสุขภาพของ อสม. เพิ่มขึ้น 1.16 โดยความสามารถในการจัดการสุขภาพตนเองเพิ่มขึ้น 0.241 การเข้าถึงข้อมูลด้านสุขภาพเพิ่มขึ้น 0.25 การตระหนักถึงความเสี่ยงด้านสุขภาพและวิถีชีวิตเพิ่มขึ้น 0.28 และการใช้ผลิตภัณฑ์เสริมอาหารลดลง 0.17 การพัฒนารูปแบบสื่อประกอบด้วย 3 ระยะ ได้แก่ 1) การให้ความรู้และความเข้าใจเกี่ยวกับอิทธิพลของสื่อ 2) การสร้างความเข้าใจประเด็นการจัดการสุขภาพชุมชน และ 3) การผลิตสื่อนวัตกรรมเชิงเนื้อหา ข้อแนะนำจากการศึกษานี้คือ ให้ขยายเครือข่ายนักสื่อสารสุขภาพ เพิ่มการฝึกอบรม อสม. ส่งเสริมสื่อนวัตกรรมเชิงเนื้อหาโดยชุมชน และบูรณาการหลักการแพทย์วิถีชีวิตในกิจกรรมส่งเสริมสุขภาพ

คำสำคัญ: อาสาสมัครสาธารณสุขประจำหมู่บ้าน, ความรอบรู้ด้านสุขภาพ, การรู้เท่าทันสื่อ, สื่อนวัตกรรมเชิงเนื้อหา, ประเทศไทย

Empowering Village Health Volunteers with Content Innovation Media to Enhance Health Literacy and Media Awareness

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Abstract

Village Health Volunteers (VHVs) play a crucial role in promoting health and preventing diseases at the primary health care. However, their effectiveness is often hindered by a lack of media literacy skills. This research aimed to develop a content innovation media model to enhance VHVs' health literacy and media awareness in the context of Thailand's Health Zone 2. The study involved 402 VHVs from five provinces. The findings revealed that VHVs had a moderate level of health literacy and lacked media literacy skills. VHVs' health media literacy increased moderately (average = 3.22). Media exposure affected VHVs' health literacy and health promotion understanding. Health literacy increased by 1.16 when: Self-health management increased by 0.241. Access to health information increased by 0.25. Awareness of health risks and lifestyle increased by 0.28. Health supplement use decreased by 0.17. The developed content innovation media model consisted of three phases: 1) knowledge and understanding of media influence, 2) understanding community health management issues and 3) content innovation media production. The study recommends expanding the network of health communicators, training VHVs in countering misinformation, regulating misleading advertisements, promoting community-based content innovation, and integrating lifestyle medicine principles into health promotion activities.

Keywords: Village Health Volunteers, Health literacy, Media literacy, Content innovation media, Thailand

Introduction:

Village Health Volunteers (VHVs) are indispensable members of the primary healthcare system, particularly in developing countries like Thailand. [1] They serve as a bridge between healthcare providers and communities, delivering health education, promoting preventive measures, and providing basic care. However, the effectiveness of VHVs is often constrained by a lack of media literacy skills, making them vulnerable to misinformation and unable to effectively communicate health messages to their communities.

In the era of information overload, media literacy has become an essential skill for navigating the vast sea of information and making informed decisions. VHVs, as frontline health workers, are particularly susceptible to the influence of media, both positive and negative. Without adequate media literacy skills, they may struggle to discern reliable health information from misinformation, potentially leading to the dissemination of inaccurate or misleading health advice among community members.

Objective:

To address this critical need, this research aimed to develop a content innovation media model to enhance VHVs' health literacy and media awareness in the context of Thailand's Health Zone 2. [2][3] The study focused on equipping VHVs with the knowledge, skills, and tools to effectively create and disseminate accurate health information tailored to their communities' needs. To explore the factors affected by media exposure related to the health literacy and health media literacy of village health volunteers. So main objectives are 1) To survey the health literacy situation and media literacy skills of Village Health Volunteers (VHVs) in Health Zone 2. [4] 2) To create a participatory process model for content innovation media creation by VHVs to access the community, and 3) To evaluate the efficiency and effectiveness of the content innovation media.

Conceptual Framework of the Research

The Conceptual Framework of this research is shown in Table 1.

Table 1.

Factors	Processes	Outputs	Outcomes
- Socioeconomic conditions - Geographic location - Media exposure - Initial health literacy	Participatory action research (PAR) - Survey Health literacy factors and Health media literacy skills - Create participatory model for content innovation - Evaluate effectiveness of media innovations	- Health media literacy skills - Improved media production skills for Village health volunteers - Media innovation for Village health volunteers - Participatory action research model	- Improved health literacy and media skills in community - Enhanced health literacy in community - Effective innovative media - Improved health outcomes

Methodology:

The research employed a mixed-methods approach, combining quantitative and qualitative data collection and analysis techniques. The study involved 402 VHVs from five provinces in Health Zone 2, Thailand.

Sample size equation ($n = \frac{N}{1+Ne^2}$)

calculated n = 400 (rounded) as the sufficient sample size. Subsequently, 402 responses were received from the 5 provinces and included in the proportion analysis.

Table 1. Sample size.

Province	District number	Sub-district number	Village number	Number of Village Health Volunteers	Proportion (%)	Sample size
Phitsanulok	9	93	1,048	18,341	24.96	99
Uttaradit	9	67	630	11,548	15.71	63
Sukhothai	9	86	852	12,833	17.46	70
Tak	11	117	1,439	13,338	18.15	73
Phetchabun	9	63	581	17,425	23.72	95
Total	**47**	**426**	**4,550**	**73,485**	**100**	**400**

the corrected questionnaire was distributed to a sample cohort of village health volunteers and others during a field visit. The sampling activity was undertaken from 1st April 2022 to 5th June 2022.

Data collection methods included questionnaires, focus group discussions, and observation of workshop activities. All collected data were analysed by IBM SPSS Version 24. Both descriptive statistics for demographic data including percentage (%) means ($\bar{X}$) and standard deviation (S.D.) were reported and referential statistics were used for the Confirmatory factor analysis (CFA) Model and Multiple Regression with a preliminary agreement

Quantitative Data:

A structured questionnaire was administered to assess VHVs' health literacy and media awareness levels. The questionnaire incorporated validated scales measuring knowledge, attitudes, and practices related to health literacy and media literacy. The content validity was examined by having three experts evaluate the consistency of the questionnaire. Questions were

then selected where the Index of Item-Objective Congruence (IOC) was 0.5 or higher. For this study, the questionnaire's IOC values ranged between 0.67-1.0. A try-out of the questionnaire was conducted with 30 VHVs. The data was then analyzed for reliability using Cronbach's Alpha Coefficient, which was found to be 0.724.

Qualitative Data:

Focus group discussions were conducted to gain in-depth insights into VHVs' experiences, perceptions, and challenges regarding media consumption and health communication. [5] The discussions were guided by a semi-structured interview guide, allowing for exploration of emerging themes and issues.

Workshop Implementation:

The developed content innovation media model was implemented through a series of three workshops. Each workshop consisted of interactive sessions designed to enhance VHVs' understanding of media influence, community health management issues, and content innovation media production techniques.

Workshop 1:

The first workshop focused on building VHVs' knowledge and understanding of media influence. Participants explored the impact of media on health perceptions, behaviors, and decision-making. They also gained insights into the ethical considerations and potential risks associated with media consumption.

Workshop 2:

The second workshop delved into understanding community health management issues. VHVs engaged in discussions and activities to identify the prevalent health concerns and challenges faced by their communities. They also analyzed the role of media in addressing these issues and promoting community health.

Workshop 3:

The final workshop focused on content innovation media production. VHVs received hands-on training in storytelling techniques, scriptwriting, videography, and editing. They collaborated in groups to develop five video episodes and a set of LINE stickers addressing key health issues identified in the previous workshops.

Evaluation:

The effectiveness of the content innovation media model was evaluated using a mixed-methods approach. Quantitative data were collected through post-workshop questionnaires to assess changes in VHVs' health literacy and media awareness levels. Qualitative data were gathered through focus group discussions to explore VHVs' perceptions of the model's effectiveness and its impact on their communication skills.

The research has been approved for human ethics by the Human Research Ethics Committee of Naresuan University, in accordance with international standard ethical guidelines for human research. Certificate of Approval (COA) No. 084/2022 AF 08-09/5.0, Institutional Review Board (IRB) No. P3-0009/2565, valid from March 6, 2022, to March 6, 2023.

Results:

Descriptive statistics showed the socio-demographics of the respondents included 292 females (72.6%) and 110 males (27.4%) in the age range of 15 – 83 years, with an average age of 38. The experience of the health volunteers ranged between 3 months and 45 years in the role, with an average of 13 years. Their education level included primary school completion (49.3%), with 15.4% finishing junior high school and 27.1% completing senior high school, and 19% having graduated with a bachelor's degree.

The occupation demographics indicated that 45% of participants are farmers and farm owners, 22.6% general laborers, 16.7% merchants, 11.9% unemployed, and 22.8% either unemployed or students. Regarding underlying diseases, 75.1% indicated none, 24.4% had underlying disease.

Overall, the mean Health Media Literacy (HML) Index measure in this study was 3.21 (S.D.=0.38). A ‘sufficient’ HML level was indicated by 55.5% of respondents while 22.2% indicated a ‘good’ level of HML. (Table 2). A problematic ‘limited’ HML level was indicated by 22.2% of respondents. No ‘inadequate’ or ‘excellent’ levels of HML were indicated.

Table 2. Show persuasive communication contents affect self-efficacy and self-health protection

	Persuasive communication contents	Mean ($\overline{X}$)	S.D.	Meaning
1.	Using government-provided applications during health crises to learn about disease prevention and treatments.	3.58	.991	Good
2.	You have learned about foods that are a risk to health from training programs presented by the community hospital system or from sub-district health promotion hospitals.	4.09	.945	Good
3.	Village health volunteers educate people in the community on the health and disease prevention benefits of exercising at least 30 minutes per day, 3 days per week, including COVID-19 addiction.	4.07	.983	Good
4.	You always buy health supplements from online advertisements in social media presented by handsome, charming, and persuasive media personalities promising well-being and physical health.	3.65	1.408	Good
5.	You have eaten healthy food that is shown on the applications.	3.25	1.211	Average
6.	Online media provides a lot of health promotion and medicine that can help to solve your health problems. It is not necessary to see a doctor or a pharmacist.	2.74	1.237	Low
7.	You rely on health insurance for your health promotion and health guarantee even though you have benefits as village health volunteers.	2.70	1.256	Low
8.	Public places and community activities are perfect to persuade people to exercise with their friends.	3.67	1.092	Average
9.	Online media and exercise models showed on social media for example TikTok, YouTube, Instagram, etc., persuading people to exercise and look as good as the influencers.	3.31	1.001	Average
10.	Exercise models are often beautiful and smart influencers who easily persuade people to follow them.	3.42	1.061	Good
11.	Pictures and videos encourage you to follow them.	3.41	1.077	Good

Table 2. Show persuasive communication contents affect self-efficacy and self-health protection

Persuasive communication contents	Mean ($\overline{X}$)	S.D.	Meaning
12. Using government-provided applications during health crises to learn about disease prevention and treatments.	3.58	.991	Good
13. You have learned about foods that are a risk to health from training programs presented by the community hospital system or from sub-district health promotion hospitals.	4.09	.945	Good
14. Village health volunteers educate people in the community on the health and disease prevention benefits of exercising at least 30 minutes per day, 3 days per week, including COVID-19 addiction.	4.07	.983	Good
15. You always buy health supplements from online advertisements in social media presented by handsome, charming, and persuasive media personalities promising well-being and physical health.	3.65	1.408	Good
16. You have eaten healthy food that is shown on the applications.	3.25	1.211	Average
17. Online media provides a lot of health promotion and medicine that can help to solve your health problems. It is not necessary to see a doctor or a pharmacist.	2.74	1.237	Low
18. You rely on health insurance for your health promotion and health guarantee even though you have benefits as village health volunteers.	2.70	1.256	Low
19. Public places and community activities are perfect to persuade people to exercise with their friends.	3.67	1.092	Average
20. Online media and exercise models showed on social media for example TikTok, YouTube, Instagram, etc., persuading people to exercise and look as good as the influencers.	3.31	1.001	Average

Table 2. Show persuasive communication contents affect self-efficacy and self-health protection

Persuasive communication contents	Mean ($\overline{X}$)	S.D.	Meaning
21. If your current illness is serious and you may not be cured, the use of alternative medicines and health supplements as promoted by famous influencers may help you to feel better and give you more energy. Though this is not a cure, it does enable you to enjoy life a little.	4.34	1.203	Very Good
22. When you are visiting the community, you find that they are using health supplements and related products endorsed by influencers such as radio presenters and actors. You may therefore find that your health management task is made easier and that they are more likely to recover from illness.	4.44	1.257	Very Good
23. You may not want to buy these products, but the promotional material, packaging, gifts, and talkative salespeople, all work together to persuade you to buy their products	4.15	1.168	Good
24. You may even feel pity for overworked and underpaid sales staff, so you try to help them by buying their products even though you do not want them.	4.30	1.131	Very Good
25. Door-to-door direct sales is a very effective way of selling products as the salesperson is in immediate contact with the potential customer.	4.20	1.149	Very Good
26. AI and machine learning monitor your searching and seeking for information and remember what kinds of a message the searcher prefers and what kinds of products the searcher looks for. It is therefore able to show the searcher that kind of product and persuade him/her to buy that kind of product or service.	4.35	1.238	Very Good

Note: 1.00 -1.79 means Very Low, 1.80-2.59 Low, 2.60-3.39 means Average, 3.40-4.19 means Good, and 4.20-5.00 means Very Good.

Table 3. Average of Media Health Literacy Dimensions

Factors	Mean	SD	Meaning	Component
HL1 Nourishing food and drink.	2.91	0.53	sufficient	**F1**
HL2 Mindfulness and awakens.	3.15	0.65	sufficient	
HL3 Having sufficient information and actively managing my health.	3.51	0.43	good	
HL4 Ability to actively engage with healthcare providers.	3.84	0.83	good	**F2**
HL5 Appraisal of health information.	2.90	0.69	sufficient	
ML1 Ability to find good health information easily from the social media and low self - efficacy.	2.96	1.00	sufficient	**F3**
ML2 Long-term outcomes include congenital disease, risky behaviour including bad eating habits, among Village Health Volunteers, indicates their low literacy levels which impedes their ability to access and understand health-related information.	2.39	1.13	problematic	
ML3 Understand health information well enough to know what to do from social media.	3.35	0.68	sufficient	**F4**
ML4 The use of health supplements and related products as endorsed by famous influencers, may help to improve physical health, and help sick patients to recover quicker.	2.54	0.77	problematic	

Note: 1.00 -1.79 means inadequate level, 1.80-2.59 means problematic, 2.60-3.39 means sufficient, 3.40-4.19 means good level, and 4.20-5.00 means excellent, HL: Health Literacy, ML: Media Literacy.

Definition of F1-F4

F1: The self-health management ability of the volunteers, F2: comprehensive and accessible health and health services information, F3: the risk of systemic diseases, the consumption of unhealthy food, and lifestyle literacy, together, F4: Health supplement use may help speed the recovery of sick patients

The quantitative results indicated a significant improvement in VHVs' health literacy and media awareness levels following participation in the workshops. The mean scores for both health literacy and media awareness increased significantly from pre-workshop to post- workshop assessments.

The evaluation of the content innovation media products revealed high satisfaction among VHVs. The video episodes and LINE stickers were found to be engaging, informative, and culturally relevant to the target audience.

The qualitative data from focus group discussions confirmed the positive impact of the content innovation media model. VHVs reported increased confidence in their ability to:

- Critically evaluate health information encountered in various media sources
- Identify and address misinformation circulating within their communities
- Develop and deliver effective health communication messages using various media formats

Discussion:

This research addressed the critical need to enhance VHVs' health literacy and media awareness skills. The developed content innovation media model proved to be an effective approach in achieving this goal. The model facilitated VHVs' transformation from passive consumers of media to active producers of content tailored to their communities' specific needs. This empowers VHVs to play a more significant role in promoting health literacy and combating the spread of misinformation.

The findings highlight the importance of equipping VHVs with media literacy skills. By strengthening their ability to navigate the media landscape, VHVs become more competent in disseminating accurate health information and promoting healthy behaviors within their communities. [6]

This study was limited to VHVs in Thailand's Health Zone 2. Further research is needed to explore the generalizability of the content innovation media model to other contexts with diverse cultural and social settings. Additionally, the long-term impact of the model on VHVs' communication practices and community health outcomes requires further investigation.

The findings of this research offer valuable insights for policymakers, healthcare administrators, and VHVs training programs with 1) Expanding the network of health communicators: There is a need to create a broader network of health communicators who can collaborate with VHVs in developing and disseminating content innovation media. This could involve training healthcare professionals, community

leaders, and media specialists in content creation skills focused on public health messaging. 2) Training VHVs in countering misinformation: Equipping VHVs with the knowledge and tools to identify and combat misinformation is crucial. Training programs should incorporate strategies for fact-checking, source evaluation, and effective communication techniques to counter misleading health information. 3) Regulating misleading advertisements: Stricter regulations and enforcement mechanisms are needed to address the issue of misleading advertisements that negatively influence health behaviors. Public health authorities should collaborate with regulatory bodies and media agencies to ensure accurate and responsible health-related advertising practices. 4) Promoting community-based content innovation: The content innovation media model can be adapted and implemented in various communities. This necessitates capacity building within communities to create culturally appropriate health communication materials. 5) Integrating lifestyle medicine principles: Health promotion activities should incorporate lifestyle medicine principles, including nutrition, physical activity, stress management, sleep hygiene, and social connection. This holistic approach to health can be effectively communicated and promoted by VHVs through content innovation media.

Conclusion and Suggestions:

This research demonstrates the effectiveness of the content innovation media model in empowering VHVs to enhance health literacy and media awareness. This approach equips VHVs with the knowledge, skills, and tools to become effective communicators of health information within their communities. By promoting health literacy and combating misinformation, VHVs can play a crucial role in promoting public health and achieving sustainable improvements in health outcomes.

Future Research:

Further research is needed to explore the long-term impact of the content innovation media model on VHVs' communication practices and community health outcomes. Additionally, studies could investigate the effectiveness of adapting the model to different cultural and social contexts.

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