

Factors Associated With Health Literacy Among Monks In Nong Khai Province

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Abstract

This Cross-Sectional Analytical Study Aimed To Describe Factors Associated With Health Literacy Among Monks In Nong Khai Province. Three Hundred Thirty-Seven Samples Of 4,183 Monks Were Selected By Systematic Random Sampling. This Study Was Used Questionnaires As A Tool For Data Collection Which Conducted In November 2019. The Data Were Analyzed By Using Computer Programs To Acquire Percentage, Mean, Standard Deviation, Median, Minimum, Maximum, And Multiple Logistic Regression Models (With 95% Ci) Were Administered To Decide The Possible Associated Factors With The Health Literacy Of Monks. The Results Have Shown That The Average Age Is 41.89 ± 17.92 Years Old (Min: Max;12:83). Most Of The Educational Level Was At A Primary Level Of 34.41%. Most Of Them Can Write Smoothly At 65.29%. For Convenience, Most Of Them Use Electricity At 86.47%. Regarding Health Information Receiving Channels, There Is 33.53 Percent Of Television Channels. In Searching For Health Information, It Was Found That Most Of Them Searching For Information From The Internet Which Is 48.23%. Most Of Them Have Health Literacy At A Low Level Of 55.88%. The Multiple Regression Analysis Was Administered To Determine The Possible Associated Factors And Health Literacy Among Monks Indicated That Educational Level (Aor.=1.70; 95 % Ci: 1.07 To 2.71; P-Value <0.024) And Health Information Receiving Channel Which Is An Internet Channel(Aor.=3.75; 95 % Ci: 2.16 To 6.50; P-Value <0.001) Is Associated With Health Literacy Among Monks In Nong Khai Province.

Conclusion: The Stakeholder Needs To Increase Communication Channels To Increase Health Literacy Among Monks Who Have Not Been Educated Or Have A Hearing Problem. Implementing The Health Literacy Development Plan For The Monks Clearly And Continuously.

Keywords: Health Literacy, Chanel Of Health Information Receiving, Monks Efficiendi Eum; Apeirian; Omnium; Doctus Quaestio Congue (Times New Roman, 9)

Introduction

From The Statistic, Monks Who Underwent Treatment At Monk Hospital In 2015 Found Hyperlipidaemia, Diabetes, Hypertension, And Other Elderly Diseases Which Are Cataracts, Osteoarthritis, And Benign Prostatic Hyperplasia Which Are Non-Communicable Disease And Preventive (Department Of Medical Services, 2015). The Majority Of Chronic Diseases Cause Is Consuming Behavior. Many Studies Found That The Consuming Behavior Of A Monk Mostly Consumed High Carbohydrates And Low Protein Diet. Besides That, The Monk Could Not Choose Their Own Food. They Only Have Food Provided By People. Nowadays, People Tend To Give A Delicatessen To A Monk Which Can Cause Chronic Diseases In Monk Such As Diabetes, Hypertension, Heart Diseases, Etc. The Study Of 4 Dimensions Of The Good Health-Promoting Guideline Is Physical, Mental, Social And Wit Of A Monk Found That In The Physical Health

Dimension, Monks Have Main Risk Behavior In Many Aspects Both Consume Unhygienic Food That Causes Obesity By 45.1 %. Also Found A Monk That Has Hypertension, Diabetes, And Osteoarthritis. In The Part Of Physical Activities Of The Monks Which Cannot Perform Like A Usual People, So They Use Their Own Routine As A Workout Such As Alms, Walking Meditation And Cleaning The Temple Area. Forty-Three-Point Nine Percent Said Has A Regular Exercise, 28.9% Has Infrequently Exercise And 14.6% Has No Exercise At All (Thammanoon Krongboonruang, 2010).

Monk Patient Quality Of Life Development To Decrease The Illness From Food Or Exercise Behavior Which Needs To Perform Coordination Between Monk, People, Community, And People. One Of The Important Factors That Have A Direct Impact On Health And Quality Of Life Level Of The Monk, To Decrease The Risk From Chronic Disease Illness Is Health Literacy Which Means The Ability To Search Or Access, Create The Understanding And Use The Benefit From Health Information (Mancuso, J.M. ,2009). In Thailand Has Translated This Word Differently Such As Health Proficient Or Health Literacy Or Health Intelligence Includes Knowledge, Understanding, And Skill. The Difference Of Individual Health Literacy Level Consists Of Many Factors And Conditions Whether Education, Individual Ability, Gender, Age, Childhood Development, Language, And Culture As Well As The Living Condition And Occupation. Also, It Is Similar To The Health Determinant Factor That Is An Indicator Of Individual Health Status. The Literature Review Found That If Any Individual Has A Low Level Of Health Literacy It Surely Affects The Health Outcome To Be At A Low Level As Well (Wagner, Knight, Steptoe, Wardle, 2007). This Means That That Individual Could Not Manage Themselves In A Health Aspect Appropriately, Unable To Access Information, And Health Services Appropriately Also Could Not Understand And Make An Efficient Decision. Thus, Promoting Health Literacy Will Make The Monk Healthy. Moreover, Monk's Self-Care Is A Process From Learning And Memorize From The Social Environment, Repeated Communication Education, And Culture Which Individual Decided To Perform Appropriately To Be According With Their Context, For The Body System To Be Able To Perform In A Normal Balance Condition. It Is One Of The Factors That Affect The Level Of Health And Health Literacy Of Monks. If Monks Have Good And Appropriate Self-Management, It Will Help Monks To Be Able To Stay Healthy And Have A Good Quality Of Life.

From Literature Review Related To Health Literacy Among Monks Found That It Is Still Limited. Therefore, The Researcher Was Interested To Study Factors Associated With Health Literacy Among A Monk In Nong Khai Province. To Use A Study Result As A Guide To Prevent And Solving Problems To Decrease The Risk Of Having Chronic Diseases Among Monks And Improve The Quality Of Life Of Monks.

Methodology

1. Objective

To Study The Level Of Health Literacy Among Monks In Nong Khai Province And Identify Factors Associated With The Health Literacy Of Monks In Nong Khai Province.

2. Studied Population

The Monk Under The Affiliate Of A Temple According To The Record Of Nong Khai Provincial Office Of Buddhism In All 9 Districts Which Is 4,183 Individuals. The Sample Was Chosen By Systematic Random Sampling Method And Calculate The Sample Size By Using A Sample Size Calculation Equation For Multivariable Association Analysis For Multiple Logistic Regression Statistics (Hsieh, Et Al, 1998) And Obtained A Sample Size Of 340 Individuals.

3. Research Instrument

1) Quantitative Research Tool Is A Questionnaire That Has Detail As Follows.

Part 1 Personal Characteristics Consist Of Age, Education Level, Writing Literacy, Temple Facilities, Health Information Receiving Channel, And Health Information Searching.

Part 2 Health-Related Information Questionnaire Consists Of The Use Of Eyeglasses Or Contact Lens For Vision, Hearing Problems And Has Been Diagnosed With Chronic Diseases.

Part 3 Health Literacy Questionnaire Consists Of Information Access Skill, Understanding Skill, Questioning Skill, Decision-Making Skill, And Behavioral Changing Skill.

4. Data Analysis

This Study Was Performed Data Analysis By Using Computer Software As Follows.

1) Descriptive Statistic, For Describing Personal Characteristic Which Consists Of Age, Education Level, Writing Literacy, Temple Facilities, Health Information Receiving Channel, Health Information Searching, Health Information, Use Of Eyeglasses Or Contact Lens For Vision, Hearing Problem, Has Been Diagnosed With Chronic Diseases And Health Literacy. Frequency And Percentage Were Used To Describe The Categorical Data. Mean, Standard Deviation, Median, Maximum, And Minimum Were Used To Describe Continuous Data.

2) Inferential Statistic Was Performed By Using Simple Logistic Regression To Analyze Crude Relationship (Crude Analysis) By Analyzing The Variable Pair By Pair (Bivariate). It Is A Relationship Analysis Between A Dependent Variable And One Independent Variable Without Considering An Effect From Other Variables And The Obtained Value From This Analysis Are Crude Odd Ratio And P-Value. Considering The P-Value < 0.25 To Recruit The Independent Variable Into The Multivariable Model Which Analyses By Using Multiple Logistic Regression To Analyze The Association Between Health Literacy And Independent Variables (Final Model). The Obtained Value From This Analysis Is Adjusted Odd Ratio And P-Value.

5. Research Ethics

This Study Has Been Approved For Ethical Research In Human By The Ethics Committee On Human Research Of Sirindhorn College Of Public Health Khon Kaen. Approval Number He 6320012.

Results

1. Personal Characteristic Data

The Study Found That The Mean Age Of The Sample Is Between 41.89 \pm 17.92 Years Old. The Youngest Is 12 Years Old And The Oldest Is 83 Years Old. The Majority Of The Monk Was Graduated In Primary Education Level By 34.41 Percent And Junior High School By 30.88 Percent. Most Of Them Are Fluently In Writing By 65.29 Percent And 31.47 Percent Have A Writing Skill At A Good Level. For Temple, Facilities Aspect Found That Mostly Has An Electricity 86.47 Percent And Have Cell Phone 57.94 Percent. Thirty-Three Point Five-Three Percent Receive Health Information Via Television While 28.53 Percent Receive Health Information Via Health Personnel. Internet Is The Most Common Way For Searching Health Information Which Is 48.23 Percent And 37.94 Percent Asking The Health Information From Other Health Personnel Such As Dentist, Pharmacist, And Physical Therapist Respectively: Table 1

Table 1: Personal Characteristic Of Monks In Nong Khai Province (N=340)

General Information	Number	Percentage
Age (Year)		
< 20	53	15.59

General Information	Number	Percentage
20-30	45	13.24
31-40	57	16.76
41-50	81	23.82
51 And Older	104	30.59
Mean \pm S.D.: 41.89 \pm 17.92, Median (Min: Max) 43 (12: 83)		
Education Level		
Non-Educated	10	2.94
Primary Education	117	34.41
Junior High School	105	30.88
Senior High School/ Vocational Certificate	39	17.35
Diploma/ High Vocational Certificate	10	2.94
Bachelor Degree And Higher	39	11.47
Literacy - Writing Aspect		
Could Not Write	11	3.24
Unskillful Writing	107	31.47
Skillful Writing	222	65.29
Temple Facilities		
Electricity	294	86.47
Television	116	34.12
Radio Am/Fm	55	16.18
Satellite Dish /Cable	63	18.53
Computer	65	19.12
Cell Phone	197	57.94
Health Information Receiving Channels		
Never Receive Health Information From Anybody	56	16.47
Television	114	33.53
Radio	47	13.82
Newspaper/Magazine	57	16.76
Line Application	67	19.71
Facebook	81	23.82
Internet	96	28.24
Medical Doctor	65	19.12
Nurse	55	16.18
Pharmacist	23	6.76
Dentist	28	8.24
Public Health Personnel	97	28.53
Village Health Volunteer	59	17.25
Family Members	18	5.29
Friends/ Neighbors	21	6.18
Broadcast Tower	32	9.41
Searching Health Information		
Medical Doctor	129	37.65

General Information	Number	Percentage
Nurse	103	30.29
Other Health Personnel Such As Dentist, Pharmacist, Physical Therapist	128	37.94
Village Health Volunteer	80	23.53
Family Members	42	12.35
Friends	39	11.47
Internet	164	48.23
Line Application	65	19.12
Facebook	87	25.59
Book/Newspaper/Magazine	70	20.59

2. Health Information Of Monks In Nong Khai Province

The Study Result Revealed That The Use Of Eyeglasses Or Contact Lens For Vision Aspect, 63.53 Percent Of The Sample Did Not Use Eyeglasses Or Contact Lens For Vision. For The Hearing Problem Found That 91.76 Percent Of The Sample Have No Hearing Problem. Forty-Three Point Two-Four Percent Of The Sample Has Undergone The Health Check-Up In The Past 1 Year And Has Not Been Diagnosed With Any Disease. Table 2

Table 2: Health Information Of Monks In Nong Khai Province (N=340)

Health Information	Number	Percentage
Use Of Eyeglasses Or Contact Lens For Vision		
No	216	63.53
Yes	124	36.47
Hearing Problem		
No	312	91.76
Yes	28	8.24
Has Been Diagnosed With Chronic Diseases		
Never Done A Health Checkup	143	42.06
Has Been Done For Health Checkup In The Past 1 Year, But No Disease Was Found	147	43.24
Has Been Done For A Health Checkup, And Found A Disease	50	14.71

3. Health Literacy

3.1 Health Literacy On Information Access Skill, Understanding Skill, Questioning Skill, Decision Making Skill And Behavior Modification Skill

The Analysis Of Health Literacy On Information Access Skill, Understanding Skill, Questioning Skill, Decision Making Skill And Behavior Modification Skill Of Monks In Nong Khai Province Found That Sample Has A Health Literacy In Low Level By 55.88 Percent While 26.76 Percent Has Health Literacy In A High-Level Respectively. Table 3

Table 3: Level Of Health Literacy On Information Access Skill, Understanding Skill, Questioning Skill, Decision Making Skill, And Behavior Modification Skill Of Monks In Nong Khai Province (N=340).

Health Literacy	Number	Percent
High	91	26.76
Moderate	59	17.35
Low	190	55.88

3.4 Factor Associated With Health Literacy Of Monk In Nong Khai Province.

From Multivariable Analysis By Using Multiple Logistic Regression With Backward Elimination Technique Found That Factors Associated With Health Literacy Among Monks In Nong Khai Province Are Education Level And Health Information Receiving Channels. Monks Who Have Educational Attainment At Secondary Education And Higher Have Higher Health Literacy Level Than Monks Who Has Educational Attainment At Primary Education And Lower By 1.65 Times (Aor. = 1.70; 95 % Ci: 1.07 To 2.71; P-Value <0.035). And Monks Who Receive Health Information Via The Internet Have Higher Health Literacy 3.44 Times When Compare With Monks Who Have Not To Receive Health Information Via The Internet (Aor. = 3.44; 95 % Ci: 1.97 To 6.01; P-Value <0.012). Table 4.

Table 4. Factor Associated With Health Literacy Of Monk In Nong Khai Province (N=340).

Factor	Number	%HI Moderate To High Level	Crude Or	Aor	95% Ci	P-Value
Education Level						0.024
Primary And Lower	213	38.03	1	1		
Secondary And Higher	127	54.33	1.93	1.70	1.07 To 2.71	
Channels Of Health Information Receiving						<0.001
Not Received	96	21.88	1	1		
Received	244	52.87	4.01	3.75	2.16 To 6.50	

Discussion

Health Literacy Level Among Monks In Nong Khai Province

The Study Found That Level Of Literacy On Information Access Skill Aspect, Understanding Skills Aspect, Questioning Skills Aspect, Decision-Making Skills Aspect, And Behavioral Modification Skills Aspect, 55.88 Percent Is In Low Level And 26.76 Percent Is In High Level. The Majority Of Monks Are In Middle Age Until The Elderly Which Is An Obstacle For Access To The Information For Information Access Skill Aspect, Understanding Skills Aspect, Questioning Skills Aspect, Decision-Making Skills Aspect, And Behavioral Modification Skills Aspect. Also, The Study Found That 3.24 Percent Of Monks Could Not Write And 2.94 Percent Of Monks Do Not Have An Education. For Health Information Receiving Channels, The Aspect Found That 16.47 Percent Of Monks Never Receive Information From Anybody Also Found 8.24 Percent Of Monks Has A Hearing Problem Which Is An Obstacle For Creating Health Literacy Which Makes Health Literacy Level Among Monks In Nong Khai Province Is In Low Level. Consistent With The Study Of Wimol Roma Et Al (2017) That Conducted National Health Literacy Survey 2017, Thailand (Phase 1) Found That 50 Percent Of Thai Citizen Has Inadequate Health Literacy. As Well As A Study By Khanitchat Wuttisaksakul (2018) Found That Age Is

Associated With The Health Behavior Of Monks With Statistically Significant At The Level Of 0.05 (P-Value <0.001). The Older Monk Will Have A Lower Health Behavior Score Average Since The Younger Monks Can Access Information On Health Care, Workout, Stress Management, And Other Information Via Social Networks More Than Older Monks According To The Changes Of Lifestyle. And The Study Of Aree Raetong (2019), The Analysis Result Of The Association Between A Personal Factor And Health Literacy, 3aor 2sor Found That Age Has An Association With Statistically Significant With Health Literacy, 3aor 2sor At The Significant Level Of 0.05 (P = .026).

For Factors Associated With Health Literacy Among Monks In Nong Khai Province Found That Education Level Factor Associated With Health Literacy Among Monks In Nong Khai Province. Monks Who Have Educational Attainment At Secondary Education And Higher Have Health Literacy 1.70 Times Higher Than Monks Who Have Educational Attainment At Primary Education Or Lower. The Higher Of Education, The Better Of Health Behavior Due To In Each Level Of Education Will Receive More Knowledge About Appropriate Health Behavior More. As Well As The Access To Media Easier Which Makes A High Education Person Tend To Have More Health Literacy. And The Factor Of Health Information Receiving Channel Via Internet Channel, Monks Who Receiving Health Information Via The Internet Has Health Literacy 3.75 Times Higher Than Monks Who Have Not Received Health Information Via The Internet. This Might Be Because 28.24 Percent Of The Monk Has Used The Internet As A Channel To Access Health Information And News And At The Present Communication Via The Internet Is Very Popular As We Can See From The Increasing Number Of The Member Of The Use And Has A New Website Has Been Created All The Time. Consistent With A Study Of Yupaporn Puipiom (2016) Found That The Use Of The Internet For The Health Objective Of The Sample, They Want To Bring Health Promotion Guidelines To Maintain Their Healthy Body Such As Make Healthy Food Choices. Besides, They Want To Be Able To Pursue New Health Information Such As Protecting An Outbreak Of Some Diseases. Most Of The Respondents Thought That Searching For Information On Physical And Mental Rehabilitation Is Correct And Trustworthy. Also Consistent With The Study Of Nalinee Sriwilas And Parinya Roonpho (2017) Found That The Elderly Has Access To Internet Usage For Communication And Health Aspect.

Conclusion

The Study Of Factors Associated With Health Literacy Among Monks In Nong Khai Province Found That The Health Literacy Of Monks Is Mostly At A Low Level. The Factor That Associated With Health Literacy Among Monks In Nong Khai Province Is Education Level And Health Information Receiving Channel Via The Internet.

Recommendation

From The Study, The Result Found That Health Literacy Among Monks In Nong Khai Province Is Mostly At A Low Level. Therefore, The Relevant Organization Should Be Operating To Increase Health Literacy In A Monk To Be At A Higher Level As Follows.

1 Increase Communication Channel To Increase Health Literacy Among Monks Who Have Not Educated Or Having Hearing Problems To Be Able To Speak, Read, Write And Convince People To Understand And Accept Information. As Well As, Be Able To Verify The Correctness And Trustworthiness Of Information Which Can Determine Goals, Plan, Follow A Healthy Self-Care Plan And Be Able To Review And Revise Health Self-Care Plan.

2 Conducting A Health Literacy Development Plan For Monks Clearly And Continuously. By Emphasizing Providing Knowledge On Communication And Exchange To Increase Expertise, Information Technology Accessing For More Correct Decision Making. And Training For Health Behavior Modification And Promoting Health Risk Factor Management In The Temple.

Declaration Of Conflicting Interests

The Author(S) Declared No Potential Conflicts Of Interest Concerning The Research, Authorship, And/Or Publication Of This Article.

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