Factors Affecting Competencies in Consumer Protection among Officers in the District Health Networks of Maha Sarakham Province, Thailand

นิพนธ์ต้นฉบับ

Original Article

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กลุ่มงานคุ้มครองผู้บริโภคและเภสัชสาธารณสุข สำนักงานสาธารณสุขจังหวัดมหาสารคาม

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บทคัดย่อ

วัตถุประสงค์: เพื่อศึกษาระดับสมรรถนะของผู้ปฏิบัติหน้าที่ตามกฎหมายการคุ้มครองผู้บริโภคด้านผลิตภัณฑ์สุขภาพ ปัจจัยที่มีอิทธิพลต่อสมรรถนะ และร่างแนวทางการพัฒนาสมรรถนะของเครือข่ายสุขภาพระดับอำเภอ จ.มหาสารคาม **วิธีการศึกษา:** เป็นการวิจัยแบบผสานวิธี โดยระยะที่ 1 ใช้การสัมภาษณ์เชิงลึกในกลุ่มผู้บริหารและผู้เกี่ยวข้องกับการปฏิบัติหน้าที่ตามกฎหมายการคุ้มครองผู้บริโภคด้านผลิตภัณฑ์สุขภาพของเครือข่ายสุขภาพระดับอำเภอจำนวนที่เลือกแบบเจาะจง 20 คน วิเคราะห์เนื้อหาแล้วสร้างสมมติฐานเชิงปฏิบัติการ ระยะที่ 2 สำรวจข้อมูลกลุ่มในตัวอย่างผู้ปฏิบัติหน้าที่ตามกฎหมายการคุ้มครองผู้บริโภคด้านผลิตภัณฑ์สุขภาพ 268 คน โดยใช้แบบวัดความรู้ และแบบสอบถามความคิดเห็นแบบมาตราส่วนประมาณค่า 5 ระดับ และระยะที่ 3 ร่างแนวทางการพัฒนาสมรรถนะฯ โดยให้ผู้เชี่ยวชาญ 15 คนวิจารณ์และประเมินผลยืนยันความเหมาะสมของร่าง แล้วปรับปรุงตามผลประเมินและคำแนะนำ **ผลการศึกษา:** ระดับสมรรถนะของผู้ปฏิบัติหน้าที่โดยรวมอยู่ในระดับสูง (ค่าเฉลี่ย 3.62 จากคะแนนเต็ม 5 คะแนน) พบว่ามีปัจจัย 5 ชนิดที่มีอิทธิพลทางบวกต่อสมรรถนะผู้ปฏิบัติหน้าที่ ได้แก่ ทัศนคติด้านเทคโนโลยีสารสนเทศ ด้านภาวะผู้นำของผู้บริหาร ด้านคุณภาพชีวิตการทำงาน และด้านทัศนคติในการทำงาน และความรู้เรื่องผลิตภัณฑ์สุขภาพ โดยทั้งหมดสามารถอธิบายความแปรปรวนของคะแนนสมรรถนะโดยรวมได้ร้อยละ 60.70 (R^2 = 0.607, P < 0.05) และแนวทางการพัฒนาสมรรถนะฯ ได้รับการประเมินและปรับปรุงสำเร็จ **สรุป:** สมรรถนะของผู้ปฏิบัติหน้าที่ตามกฎหมายการคุ้มครองผู้บริโภคด้านผลิตภัณฑ์สุขภาพของเครือข่ายสุขภาพระดับอำเภอ จ.มหาสารคาม อยู่ในระดับสูง และมีปัจจัยที่สัมพันธ์ทางบวกอย่างมากกับสมรรถนะดังกล่าวอยู่ 5 ปัจจัย

คำสำคัญ: ปัจจัยที่มีอิทธิพล, สมรรถนะผู้ปฏิบัติหน้าที่ตามกฎหมายการคุ้มครองผู้บริโภคด้านผลิตภัณฑ์สุขภาพ

Abstract

Objective: To determine level of competency in consumer protection on health products and factors influencing such competency, and to build a guideline for developing competency in consumer protection on health products among district health networks of Maha Sarakham province. **Method:** This study used an integrated research method. In phase 1, we performed in-depth interviews on 20 administrators and officers relating to consumer protection selected by a purposive sampling. In phase 2, a survey was done among 268 officers in consumer protection to assess knowledge and attitudes toward the consumer protection using questionnaire with 5-point rating scale. In phase 3, a draft of guideline for development of competency of consumer protection on health products was made. Then it was assessed and criticized by 15 experts and the revision was done accordingly. **Results:** The score of overall competency was 3.62 out of 5 points. There were five significant factors positively affecting competency namely attitudes toward information technology, leadership of the leader, quality of working life, and the officer job, and knowledge about health products. These factors together explained 60.70% of competency variance (R^2 = 0.607, P < 0.05). The guideline for development of competency of consumer protection on health products was assessed and revised successfully. **Conclusion:** Competency of consumer protection officers on health products in the district health networks of Maha Sarakham province was in a high level and was positively associated with five factors.

Keywords: affecting factors, competency of law enforcers related to consumer protection on health products

Introduction

In this fast economic growth with a highly competitive free market, a resulting high consumption volume of various kinds of inappropriate health products is inevitable worldwide. The consumer protection action, both by private and public sectors, thus has never been higher in need. In Thailand, the consumers have been facing a higher risk of inappropriate health products or even dangerous so-called health products. Various factors have contributed to this drawback. On the market side, there has been a massive and continuous pouring of the products to the market and an ever-growing widespread of the products through an expanding number of distribution channels. The ineffective measures of the government agencies have made the situation worse. It has long been known that the mechanisms of consumer protection tasks have not been fully in place. Policy on consumer protection has not been given a fair amount of attention politically. Legal measures on the wrongdoing have not been enforced adequately. In addition, some laws and regulations pertaining to consumer protection are too obsolete to effectively handle legal issues in the present societal and economic context. On the business side, incomplete, misleading or even false information has been fed to the consumers continuously. The advertisement has also aimed at creating false values and attitudes towards these health

products. The consumers have not sufficiently armed with knowledge and potential to protect themselves from the harms. Agents responsible for consumer protection tasks, both academic and government, have not been able to keep up with the situation and hence a lack of knowledge management ability to plan sound strategies.[1]

With more than 30 years of the implementation of consumer protection measures in Thailand, the problems have been continuously diverse and ever-changing in nature. The most concerned problems among these health products were that their quality was poor and their safety was questionable or even unacceptable.[2] With all concerns mentioned above, consumer protection has been increasingly crucial in improving quality of life and reducing health risk of the people. Consumer protection assures that consumers have the right to safety and fairness from goods and services. In 2012, more than 400,000 items of new health products were launched into the market with a total of more than 900,000 items subject to annual monitoring. The burden in 2012 was about 4 folds of that in 2007.[3] In the near future, an even higher risk of consuming unsafe health products in Thailand could be expected in part because of a larger import volume facilitated by the international free trade and the diverse and complex product properties made possible by technological development. On the contrary, consumer protection agencies still have a limited taskforce competency in executing their tasks. In addition, a widespread of the advanced media has made it more difficult to control the information dissemination to the consumers. To make things worse, consumers have not realized about the harms associated with these unsafe health products. With all these circumstances, the improvement of consumer protection measures is in urgent need. The failure to do so could result in further detrimental effects on people's health, healthcare system, and the economics of the country in the near future.

Various agencies associating with consumer protection tasks and policy include the government offices, non-profit organizations or people sectors, and professional councils. These agencies have been either directly appointed or indirectly supportive for this responsibility. The co-operations among these stakeholders could help handle more, if not all, aspects of the problems. The Ministry of Public Health (MoPH) is the major responsible agency for consumer protection on health products. Under the MoPH, the Food and Drug Administration (FDA), the Department of Health Service Support, the Department of Medical Sciences, and the provincial public health offices are agents responsible for executing various tasks of consumer protection on health products.

As suggested by the title, the provincial public health offices are responsible for regional tasks. Their responsibilities of consumer protection on health products have been under the provision of the Consumer Protection Act (B.E. 2522 or A.D. 1979), the Drug Act (B.E. 2510 or A.D. 1967), and the Cosmetic Act (B.E. 2558 or A.D. 2015). The national consumer protection policy has been firstly included in the public health development plan portion of the 5th National Comprehensive Development Plan (B.E. 2525 – 2529 or A.D. 1982 - 1986) and continuously to the 8th plan (B.E. 2540 – 2544 or A.D. 1997 - 2001).

In the national plans, strategies for consumer protection have been laid out to cover food, health, and community products, and health services. The plans also mandated the development of knowledge and skill in the officers responsible for consumer protection tasks and the development of connections and co-operations among public and private organizations. However, consumer complaints have been filed continuously about the quality and effect of the goods especially food products.

In the 8th plan (B.E. 2540 – 2544), the reform of the national health system has been started. In B.E. 2543 (or A.D. 2000), the National Health Commission was formed to enforce the reform based on the concept of "health for all." This concept replaced the old idea of "repairing over creating health" with the new idea of "creating over repairing health" and recognized alternative medicine as a significant element in the national health system. After the conception during the 8th plan period, "health for all" was fully implemented in the 9th plan period (B.E. 2545 – 2549 or A.D. 2002 – 2006). Under the 11st plan (B.E. 2555 – 2559 or A.D. 2012 – 2016), consumer protection on health was mandated as the strategy for health development, specifically with strategy 3 emphasizing health promotion, disease prevention and control, and consumer protection in order to achieve a better health physically, mentally, socially and cognitively.

In the 12nd national plan (B.E. 2560 – 2564 or A.D. 2017 – 2021), measures and strategies for consumer protection tasks have been laid out under the first set of health development strategies. This set of strategies aimed at progressively developing health for all age groups and disease

prevention and control system, reducing health risk, and strengthening consumer protection system on health products. Regarding the consumer protection aspect, vigilance system to monitor and investigate entrepreneurs at all levels, i.e., manufacturers, distributors/dealers, stores, and street vendors, to ensure the safety of food and health products. Social and behavioral measures towards consumer protection have also been developed and promoted with the approach integrating both public and private organizations, centrally and locally, to encourage enforcement, reduce redundant works, and promote resource sharing among agencies.[4]

Provincial public health offices are the regional agencies responsible for consumer protection tasks as the local FDA. At the provincial level, potential and competency of consumer protection officers at all levels, i.e., provincial, district and sub-district levels, have been annually strengthened. However, the limited taskforce of these officers is the major shortcoming especially those at district and sub-district levels. The most troublesome aspect of consumer protection task is law enforcement on health products. In addition, the daily practice of these officers has been with certain obstacles including understaffing, lack of the diversity of the officers' profession, limited budget, poor government rule, and lack of job prioritization. The obstacles have led to the failure to enforce the law to solve the local problems caused by unsafe health products.[5]

With the local problems realized, it is highly critical to strengthen the progressive consumer protection tasks on health products by strengthening the officers' competency at the district level known as the network of district health system. In a given province, these networks allow for integration and participation of all relevant parties and the local people in each of all districts. This network system has been an alternative to strengthen the consumer protection on health products by improving the competency of the officers to effectively carry out the legal tasks.

Consumer protection officers in the consumer protection department of the provincial public health office are mandated to enforce the relevant laws. They are also expected to promote the distribution and use of safe health products and their related information. They grant the license for health products, examine and monitor product quality before and after market launching. They inspect the quality of venues for manufacturing, distribution, and sale of the products. They are responsible for forming the network of consumer protection at district and sub-district level. They are also required to provide knowledge and training to other new officers. At present, the competency of these consumer protection officers in the tasks mentioned above has not been clearly understood; hence the competency improvement could not be planned effectively. We therefore aimed to study the existing level of competency of the consumer protection officers in the district health networks of Maha Sarakham province. We also examined the factors that had potential to affect the competency. Finally, we aimed to create a guideline for development of competency of consumer protection on health products for the district health networks, Maha Sarakham province.

Methods

The study was conducted in Maha Sarakham province. The study used a mixed method design with three phases of investigation. On the first phase, qualitative approach was used to explore the components of competency of the consumer protection officers using literature and in-depth interview of 20 delegates of the target study population which were all officers of consumer protection at provincial, district, and sub-district levels. These 20 interviewees were individuals involving in the network of consumer protection as mandated by consumer protection laws. They were three directors of community hospitals in Maha Sarakham province, three heads of pharmacy department of the community hospitals, three heads of the district public health offices, five pharmacists from the community hospitals, four technical officers from the district public health offices, and four technical officers or directors of sub-district health promoting hospitals. These interviewees were selected by means of purposive sampling method. The information was obtained by using the structured in-depth interview form. The interviewed data were determined for reliability by the methodological triangulation.[6] When reliability of information from different sources were verified along with the proposed theories and the researchers, operational assumptions of the research were formed. Questions regarding competencies in the network of consumer protection and factors affecting such competencies were summarized and incorporated in the questionnaire in the second phase.

In the second phase, a quantitative approach was used. A survey was conducted among a sample of consumer protection officers from all 13 districts of Maha Sarakham

province. Participants were selected by multi-stage sampling method. Based on the study population of 201 networks of district health systems in the province[5], a sample of 134 networks was needed based on Yamane's estimation method.[7] For each network selected, two officers were sampled to result in a total sample of 268 participating officers.

In this survey, the questionnaire was created based on the previous document review and in-depth interview from phase 1. The questionnaire consisted of four parts. The first section collected demographic data of the officer including gender, education level, age and number of years since appointed a consumer protection officer. The second part assessed the participant's knowledge about health products with a total of 20 questions. The answer was in the yes/no format with a score of 1 for the right and 0 for the wrong answer.

The third part of the questionnaire asked the participants about their competency as the consumer protection officer found from phase 1. The response format was in the Likert-type rating scale ranging from 1-lowest to 5-highest competency. Furthermore, a summary score of 1 – 5 points from all four questions was calculated.

In this third part of the questionnaire, the participants were also asked to rate how much they agreed with each of all factors affecting the competencies in the consumer protection network. The response and scoring format of this set of questions was similar to that of the competency questions mentioned above.

In terms of instrument quality assurance, the survey questions on knowledge about health products, competencies in consumer protection, and factors affecting the competencies were tested for content validity by three experts and revision was made accordingly. The questions were further tested for reliability in 30 officers with characteristics comparable to the target study sample. Reliability of the knowledge questions was acceptable with a K-R reliability coefficient of 0.75. The questions on competency and its factors had a relatively high internal consistency reliability with a Cronbach's alpha coefficient of 0.86.[8]

In the third phase, based on the findings from phase 2, guideline for the development of competencies in consumer protection was drafted. This draft was reviewed by 15 experts. The draft was subject to verification that the content was in accordance with the findings from earlier phases and suitable for developing the officer competencies in consumer protection. Revisions were made corresponding to the experts' comments to achieve a practical final guideline.[9]

Data analysis

Data were presented as descriptive statistics including mean with standard deviation (SD) and frequency with percentage. Data from phase 1 interview were analyzed using content analysis by grouping and summarizing the frequency of the issues found. Stepwise multiple linear regression was done to test relationship between the competency total score and independent variables including factors, knowledge score, and officer's characteristics simultaneously.[10] Statistical significance was set a *P*-value of < 0.05.

For the analysis of expert verification opinion in the third phase, consensus was used to account for opinions most mentioned by the experts.[8, 9] Of the total score of 5, opinions with the score of 3.5 to 5.0 points were included in the guideline by means of analytic induction approach.

Results

In phase 1, based on the literature review and in-depth interview, four competencies in consumer protection were found. These included competencies in strengthening the consumer protection potential of the network, in planning and managing the network, in investigating and monitoring the product safety, and in enforcing the relevant laws and regulations. For factors associating with the competencies, these included attitudes toward the officer job, leadership of the leader, information technology, and quality of working life, in addition to the officer's characteristics.

In phase 2, among 268 participating officers, about two-thirds were female (66.00%). The majority graduated with Bachelor's degree (76.10%), followed by master degree (14.90%). Their average age was 37.39 years (SD = 10.25) with a range of 23 to 56 years. They had been doing the consumer protection job for an average of 7.53 years (SD = 6.49) with a range of 1 to 29 years.

In terms of competencies in consumer protection in the district health network, the overall total score was 3.62 (SD = 0.61) by average. Competencies with high level were strengthening the consumer protection potential of the network (3.82 ± 0.65 points), planning and managing the network (3.75 ± 0.59 points), and investigating and monitoring the product safety (3.56 ± 0.73 points); while enforcing the relevant laws

and regulations was in the moderate level (3.37 ± 0.75 points). In terms of independent variables, mean scores of attitudes toward information technology (5 items), attitudes toward leadership of the leader (5 items), knowledge about health products (20 items), attitudes toward quality of working life (10 items), and attitudes toward the officer job (8 items) were 3.93 ± 0.64, 3.82 ± 0.55, 3.86 ± 0.65, 3.66 ± 0.53, and 3.39 ± 0.83 points, respectively).

In testing the association between competency total score and associating factors, all independent variables were not significantly related as shown by low correlation coefficients of less than 0.75. These variables were then put in the stepwise multiple linear regression analysis. The results showed that five variables significantly positively associated with competency score (*P*-value < 0.05). These included (1) attitudes toward information technology, (2) attitudes toward leadership of the leader, (3) knowledge about health products, (4) attitudes toward quality of working life, and (5) attitudes toward the officer job (*P*-value < 0.000, < 0.001, 0.003, 0.015, and 0.019 respectively). Together these five independent variables could moderately to highly explain 60.7% of variance of the competency score (R^2 = 0.607).

Table 1 Relationship between the total competency score and predicting factors by the stepwise multiple regression analysis (N = 268).

Predicting factors	b	B	SE_b	t	*P*-value
attitudes toward information technology-5	0.214	0.293	0.235	4.695	< 0.001
attitudes toward leadership of the leader-5	0.282	0.255	0.046	4.334	< 0.001
knowledge about health products-20	0.116	0.124	0.065	2.963	0.003
attitudes toward quality of working life-10	0.166	0.146	0.068	2.447	0.015
attitudes toward the officer job-8	0.141	0.147	0.060	2.362	0.019
R = 0.787	R^2 = 0.607		SE_{est} = 0.409		
	Constant = 0.210		F = 194.640; *P*-value < 0.05		

Based on the beta coefficients in Table 1 and a constant coefficient of 0.210, the predictive equation could be constructed as follows:

Competency score = 0.210 + 0.214 (score of attitudes toward information technology) + 0.282 (score of attitudes toward leadership of the leader) + 0.116 (score of knowledge about health products) + 0.166 (score of attitudes toward quality of working life) + 0.141 (score of attitudes toward the officer job).

The development of competency for consumer protection on health products for the district health networks, Maha Sarakham province

Suitability and practicality of the guideline for development of competency for consumer protection on health products for the district health networks as verified by the experts' consensus were as follows. The guideline consisted of four main components of competency development and five affecting factors. Four competencies included (1) strengthening the consumer protection potential of the network, (2) planning and managing the network, (3) investigating and monitoring the product safety, and (4) enforcing the relevant laws and regulations was in the moderate level. All components in developing competency of consumer protection, related factors, strategies and mechanisms are presented in Figure 1.

Discussions and Conclusion

In was found that the overall total score of competency in consumer protection on health products of the officers in the district health network was high. Once individual competencies were considered, strengthening the consumer protection potential of the network, planning and managing the network, and investigating and monitoring the product safety were in high level while enforcing the relevant laws and regulations was in moderate level. This high level of competency could be attributable to the ongoing active approach of the Maha Sarakham Provincial Public Health Office in implementing the strategies to reduce health risks by means of consumer protection tasks, especially through strengthening the competency of the officers responsible for consumer protection laws especially through the district health networks. This execution is in accordance with the Ministry of Public Health policy on national health system.[5] The office also emphasized the integration of all responsible parties from the provincial to district and sub-district levels.

The moderate level of competency in enforcing relevant laws was not surprising since these officers were not those with formal legal education and training. As the employee of the Ministry of Public Health, their main responsibility was healthcare service and/or health promotion, not law enforcement. Special training has been provided but more intensive trainings are needed to boost the confidence of the officers to enforce the laws. Not only the defect in law

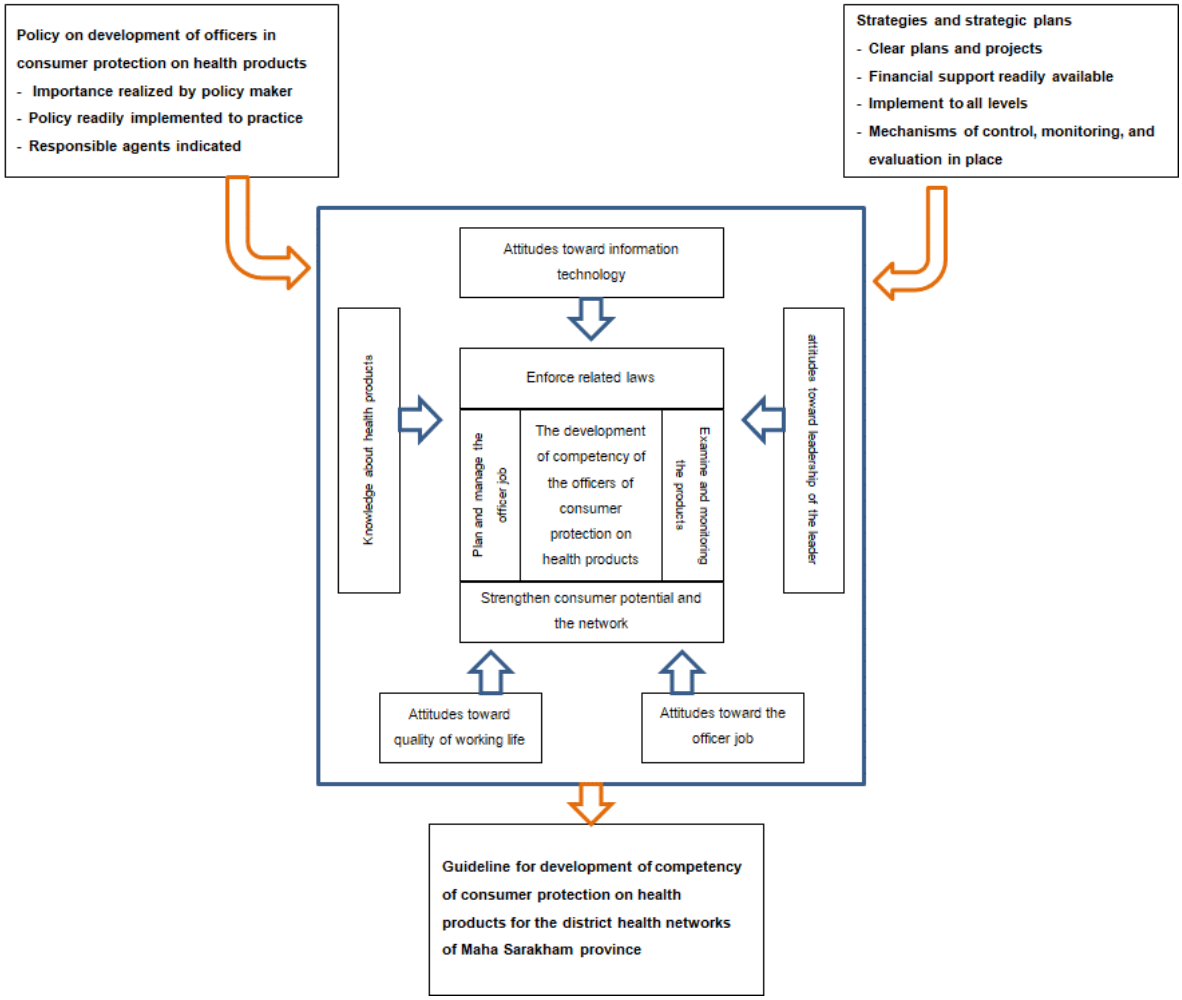

Figure 1 Framework of the guideline for development of competency of consumer protection on health products for the district health networks, Maha Sarakham province.

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knowledge but a lack of knowledge about health products also made the officers less confident or less clear to enforce the law on certain product issues.

Our findings were consistent with the concept of David C. McClelland stating that competency is essential for achieving the goal and the individual possessing the competency is behaviorally outstanding from others.[11,12] Competency is a trait that helps the person to perform tasks effectively. However, the strengthened competency of the officer alone did not ensure the success of consumer protection tasks at the community level.

In addition to the shortcomings on the officer side, the difficulties in enforcing the laws were also related with consumers and entrepreneurs. With misunderstandings, some entrepreneurs were not willing to co-operate with the officers. Furthermore, the dangers of some health products were not realized or concerned by a certain number of entrepreneurs, therefore they were unwilling or even resistant to co-operate with the officers. In addition, since the officers and certain entrepreneurs live and/or work in the same community with some level of informal relationships, enforcing the law on these entrepreneurs could be difficult and frustrating. This cause of the law enforcing problem was considered seemingly more difficult to handle and improve than other aspects of the competencies.

The findings indicated the need to improve competency regarding law enforcing in the consumer protection tasks. Even though some parts are difficult to improve, most officers could benefit from learning about related laws and regulations including the Consumer Protection Act (B.E. 2522 or A.D. 1979), the Food Act (B.E. 2522 or A.D. 1979), the Drug Act (B.E. 2510 or A.D. 1967), and the Cosmetic Act (B.E. 2558 or A.D. 2015). More knowledge about the safety issues of

various health products could also be beneficial for law enforcing tasks.

In terms of factors affecting the competency of consumer protection on health products, all promising factors, i.e., attitudes toward information technology, attitudes toward leadership of the leader, attitudes toward quality of working life, attitudes toward the officer job, and knowledge about health products, but not demographic characteristics, were significantly and positively associated with the competency score. In addition to the importance of providing more knowledge about health products previously mentioned, policy makers should also improve working environment and support so that the officers could have more positive attitudes toward information technology, quality of working life, and their officer job. Leaders at all level should demonstrate a better leadership to the officers. The improvement of the competency by indirectly strengthening all of these attitudes and product knowledge are promising since all these factors accounted for a large portion of variance of competency score (60.70%) with a statistical significance (*P*-value < 0.05). Therefore all factors affecting the competency of consumer protection on health products could be incorporated into the development of competency of consumer protection on health products for the district health networks, Maha Sarakham province.

In terms of recommendations, the administrators and policy makers should plan for more training sessions on knowledge about safety issues of health products, law enforcement, and information technology. More budgets for instruments and devices for information technology should be readily available for the officers. These would allow for more convenient and standardized collection and retrieval of the data pooled in the district health network.

We also recommended that the assignment of tasks on consumer protection to the officers should be clear and comprehensive to the sub-district level. In a more tangible measure, identification cards for consumer protection officers should be given to show at the actual inspection sites. Rewards, recognitions and career promotion should be given to officers with outstanding performance. Opportunity to present their work and achievement should be regularly given. In addition, the district health networks should provide adequate technical and instrumental supports such as testing kits for steroid, substance contamination, bacteria contamination in food products, and prohibited substances in cosmetic products. The distribution of these kits should correspond to product issues specific to areas and communities. The network of consumer protection should be extended to more sub-district health promoting hospitals, village public health volunteer networks, and local authoritative organizations.

In terms of the future research, we recommended that studies on specific groups of consumer protection officers should be conducted. For example, officers under the provision of Drug Act, Food Act, and Cosmetic Act, and officers from different professions. Differences in competency among various groups of officers could be identified and specific improvements could be planned accordingly. Methodologically, findings could better represent specific populations of the officers. Future studies should implement the guideline to improve the competency of the officers either via trials or observational studies. In addition, competency levels among various professionals and education levels of the officers or among various social/community contexts and expectations should be compared.

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