



The significant associations between performance of VHVs and the independent variables (age group, knowledge, social support, all categories of social support, source support from local leaders, neighbors, health center staff and VHVs' club) are shown in Table 5. The result showed that the highest proportion of high performance on TB prevention (62.50%) was in the age ranging from 45 to 54 years group, while the lowest was in the age less than 35 years. There was found age group significantly associated with performance of VHVs (p -value=0.025). The knowledge on TB prevention of VHVs revealed that 59.22 percent of those who had good level of knowledge on TB prevention, had high performance, while 84.62 percent of those who had poor knowledge, had high performance. There was found knowledge significantly associated with performance of VHVs (p -value=0.029). The result of social support identified that VHVs who had high social support, had high level of performance with 62.66 percent, compared to those who had moderate and low level of social support (40.32% and 16.67% respectively). The result also revealed significantly associated between social support and performance of VHVs (p -value < 0.001). With regard to all categories of social support, it showed that VHVs who had higher level of social support, more likely had high performance, and significant association were found with performance of VHVs including emotional support (p -value=0.012), informational support (p -value=0.030), and instrumental support (p -value<0.001). In addition, the support from local leaders and health center staff were found a significant association with performance of VHVs (p -value<0.001), followed by neighbors (p -value=0.006), and VHVs' club (p -value =0.009).

Table 5 Factors significantly associated with performance of VHVs

Variables	High performance (n= 178)	Low performance (n= 137)	χ^2	<i>p-value</i>
Age group (years)			9.319	0.025*
< 35	39.22	60.78		
35 - 44	60.94	39.06		
45 - 54	62.50	37.50		
> 54	50.00	50.00		
Knowledge on TB prevention			7.107	0.029*
Good	59.22	40.78		
Moderate	49.59	50.41		
Poor	84.62	15.38		
Perception			0.029	0.866
High	56.82	48.18		
Moderate	55.79	44.21		
Social support			18.065	<0.001***
High	62.66	37.34		
Moderate	40.32	59.68		
Low	16.67	83.33		
Emotional support			8.810	0.012*
High	59.92	40.08		
Moderate	35.00	65.00		
Low	53.83	46.15		
Informational support			7.014	0.030*
High	60.58	39.42		
Moderate	42.37	57.63		
Low	46.67	53.33		
Instrumental support			25.511	<0.001***
High	71.94	28.06		
Moderate	35.29	64.71		
Low	46.48	53.52		

Table 5 Factors significantly associated with performance of VHVs (cont.)

Variables	High performance	Low performance	χ^2	<i>p-value</i>
Local leaders			15.192	<0.001***
Received	60.36	39.64		
Not received	25.71	74.29		
Neighbors			7.693	0.006**
Received	59.42	40.58		
Not received	35.90	64.10		
Health center staff			16.082	<0.001***
Received	69.70	30.30		
Not received	46.99	53.01		
VHVs' club			6.872	0.009**
Received	61.72	38.28		
Not received	46.23	53.77		

* Significant at *p-value* < 0.05
 ** Significant at *p-value* < 0.01
 *** Significant at *p-value* < 0.001

DISCUSSION

In this study revealed that slightly over one-half percentage of VHVs had high performance. Some performances have been done sometimes due to VHVs works not only in TB prevention activities, but also in several other fields of public health program. However, the proportion of high performance of VHVs in this study was lower than the results from previous studies.⁵⁻⁷ The difference results might be that the previous studies did in the difference problem as well as the studying area.

Considering the roles of VHVs, each roles for TB prevention had been performed by VHVs more than 85 percent, and the role which VHVs had the most performing (97.46%) was to advise the group of TB suspected cases for TB examination and sending sputum collection to health center, while the least was to coordinate with health center (86.67%). It might be that they were quite understand about TB prevention process and concerned to public consciousness of their communities. This is supported by the result of knowledge that found VHVs had good knowledge level (56.83%).

Of the seven socio-demographic variables, only age group was identified as significantly associated with performance of VHVs. It might be explained that mature in age of VHVs was an important factors in determining their performance due to the old ones tend to have more experience and more influential as well as responsibility. Many previous studies¹⁰⁻¹¹ identified significant association between age group and performance of VHVs.

Regarding knowledge on TB prevention revealed slightly over one-half (56.83%) of VHVs had good knowledge level on TB prevention, while 4.13 percent had poor level of knowledge. In addition, the result found that there was significantly associated between knowledge and performance of VHVs. This result was similar to the result of Kongsap S⁵, that showed a significant association between knowledge on dengue haemorrhagic fever and prevention and performance of VHVs. Considering in details of VHVs' knowledge, most of VHVs had good knowledge about TB prevention, in terms of people are able to prevent from TB by advising TB patients to cover their mouths while coughing (97.14%). However, the least knowledge about TB prevention (36.19%), was to advise children under 5 years take some TB drugs when one of family members is diagnosed with TB. This reason might be that VHVs were not familiar with this process which mostly tended to operate by health personnel, and the VHVs might be likely think about the Expand Program Immunization (EPI) when mentioned to children under 5 years had illness.

With regard to perception, it showed that 69.84 percent of VHVs had high level of perception towards TB prevention, while 30.16 percent of them had moderate perception. The result no found significantly associated between perception of TB prevention and performance of VHVs. It was similar to the result of Piedad V.¹¹ that showed no significantly associated between the sense of volunteerism and perfor-

mance of VHVs. VHVs had strongly agreed on improving the understanding of people (46.98%) at more percentage than changing attitude (24.44%) and changing behavior (23.81%). This might be that improving the understanding about TB was easiest activity on TB program whereas, changing behavior and changing attitude were accounted to be difficult and may take long time to success.

With respect to social support, the result found that majority of VHVs (76.51%) had high level of social support, while a few of them (3.81%) had low level of social support. Of the three categories of social support, emotional support was relatively high support for respondents (83.17%), followed by informational support (76.51%), while instrumental support (44.13%). A significant association was identified between social support and performance of VHVs. The result was similar to the study of Ketsophaong B.⁷, that there was significantly associated between overall social support and performance of VHVs, and the study of Kaori S.¹² showed significantly associated between performance of peer educators and each category of social support. These reasons might be that emotional support was accounted to be importance feeling, and it was supported by family members, local leaders, neighbors, VHVs' club and health center staff. In addition, emotional support was relatively less expensive quite easier to get it, especially in Thailand culture. In terms of categories by source of social support, the

support from local leaders, neighbors, health center staff and VHVs' club were also found significantly associated with performance of VHVs. These reasons might be that VHVs were the member of community and were very closely relationship with local leaders, neighbors, health center staff and VHVs' club, as well as most people in the village always appreciated on their dedication working in the community.

RECOMMENDATIONS

Based on the findings of this research, the recommendations were that VHVs should be encouraged to improve their knowledge about TB prevention by providing regular refresher training. The contents of training course should focus more on eliminating TB germs by opening doors/windows in houses during the daytime, especially in houses with a TB patient, providing more knowledge regarding parents who had children under 5 years to take some TB drugs due to likely a chance to get TB if one family member is diagnosed with TB. Giving feedback comments concerning VHVs working, as well as sharing experience among VHVs were also recommended. Social support should be more encouragement, especially the support from family members. Although VHVs were able to conduct perfectly on their activities, however instrumental support should be paid more attention namely: TB material support and some incentive.

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