

RESEARCH NOTE

A STUDY ON ATTITUDE TOWARDS BLOOD DONATION AMONG PEOPLE IN A RURAL DISTRICT, THAILAND

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Abstract. Blood and blood components are important in many situations. At present, there is only a donation system for blood banks to get blood in Thailand. Although the blood bank process has been founded in Thailand for many years, there is still an insufficient amount of blood for use. There are misguided attitudes on blood donation among the people in the rural areas. This study has been designed as a cross-sectional descriptive study to study attitude towards blood donation among the people in Bang Sapan District, Prachuab Kiri Khan Province, Thailand. Data from self-administered questionnaires were collected and statistical analysis was performed. We found that people in that area had a rather good attitude but this was still found in less than 50%. We found the attitude of the subjects only significantly correlated with the level of education. We concluded that improving the people's attitude on blood donation is important. We suggest that every blood bank should design a program for providing knowledge in order to improve the attitude of the people in that area. We also suggest that knowledge on blood donation should be repeatedly taught at any education level including the school system. This study can provide preliminary results for other studies.

Blood transfusion is an important procedure in many medical emergency situations. Blood is an *in vivo* product, hence finding sufficient blood for use is not easy (Hollan *et al*, 1990). We can obtain blood for use by different methods - business system, donation system and insurance system (Rossi *et al*, 1996). But in Thailand, there is only the donation system. This system will not be successful without a process encompassing donors, blood collection team and blood bank. Nowadays there are many blood banks in many provinces serving the people in the community based on the concept that there must be sufficient blood for safe usage. To set up a blood collection team and a blood bank is as important as to find a donor (Swisher and Pety, 1996). In Thailand though this process has been performed for many years but there are still many misguided attitudes about blood donation among the people, especially people in rural areas. Thus, the supply of blood bank is not sufficient for the demand of hospitals.

In Bang Sapan Hospital, Prachuab Kiri Khan Province, the blood bank was founded many years ago. At present, although the total amount of blood in the blood bank of this hospital is sufficient some specific blood groups are still under-represented. Hence, this study has been designed to determine the attitude of those people who get health services

from this hospital regarding the blood donation system.

This study has been designed as a cross-sectional descriptive study to be a pilot study. The people who got health service from the Bang Sapan Hospital were selected as the subjects. In the hospital, the health service provided for people is identical day by day so we selected people who came to this hospital to get health services between 09.30 and 15.00 hours, October, 1997.

A self-administered questionnaire was used for data collection. An exclusion criterion was if a subject could not fill the questionnaire by him/herself. The questionnaire was produced after review of the literature on the blood donation process and it also made use of a practical textbook for blood bank processes, which was issued by the Thai Red Cross Society (National Blood Center, 1994). The produced questionnaire was tested by Kuder-Richardson method and gave reliability equal to 0.73. This questionnaire is composed of 10 true or false questions (Table 1). Upon collecting data, we give one point for each correct answer and zero for each incorrect answer. The total score per subject was calculated into the percentage and graded by the modification evaluation criteria for attitude: Good 80% and above, Fair 50-79%, Poor 0 - 49%. Descriptive statistics were applied where

appropriate. Chi-square test at a significance level = 0.05 was used in test for independence.

We had 400 subjects participating in this study. The demographic data are shown in Table 2. We found that only 14% of the subjects had an overall good attitude, 76% had an overall fair attitude

and 10% had an overall poor attitude. Details of attitude per group of subjects are shown in Table 3.

Table 1
Questionnaire used in this study.

In your opinion, you agree or disagree with these sentences:	
1. Blood donation can cause weight gain.	
2. Blood donation can cause weight loss.	
3. Blood donation can cause infertility.	
4. Blood donation can cause HIV infection.	
5. Blood donation can cause hepatitis infection.	
6. Blood donation can cause blood dyscrasia.	
7. Blood donation can cause severe fatigue.	
8. Blood donation can cause cosmetic change.	
9. Blood donation can cause neurosis.	
10. Blood bank will sell blood to the patient.	

Table 2
Demographic data of the subjects.

Topic	Total	%
Sex		
Male	120	30
Female	280	70
Age (years)		
11-20	64	16
21-30	112	28
31-40	104	26
41-50	72	18
51-60	48	12
Level of education		
No education	16	4
Primary school	126	34
Secondary school	224	56
University	24	6

Table 3
Attitude of the subjects in this study.

Topics	Number of subjects per level of attitude			Chi-square
	Good (N=56,14%)	Fair (N=304,76%)	poor (N=40,10%)	
Sex				
Male	8	104	8	$X^2_{\text{calculate}} < X^2_{0.05}$
Female	48	200	32	
Age (years)				
11 - 15	8	0	0	$X^2_{\text{calculate}} < X^2_{0.05}$
16 - 20	0	40	16	
21 - 25	16	48	0	
26 - 30	16	24	8	
31 - 35	0	40	8	
36 - 40	8	48	0	
41 - 45	0	40	0	
46 - 50	0	24	8	
51 - 65	8	16	0	
56 - 60	0	24	0	
Level of education				
No education	0	16	0	$X^2_{\text{calculate}} > X^2_{0.05}$
Primary school	0	120	16	
Secondary school	48	152	24	
University	8	16	0	

The result of the test has shown that there is no significant correlation between attitude and sex. Also, there is no significant correlation between attitude and age. But there is a significant correlation between attitude and education level of the subjects.

The present study has shown that less than 50% of the subjects have a good attitude though Bang Sapan District is a big district with many facilities. Thus, it can hardly be established how poor people's attitude on blood donation actually is in other rural districts. We found the education level to be the one factor exclusively determining people's attitude whereas their respective sex and age play only a minor role. Therefore, to improve health education in rural areas is most essential.

Several of the subjects have a misguided attitude in that they still believe blood donation to be harmful, for example implying the risk of HIV transmission to the donors. Some believed that blood bank will sell the blood to the patients. Therefore, promotion of safety of blood donation and blood bank activity to the people in the community is necessary.

Although this has only been a pilot study, we believe that it might serve as a basic study on this topic. We have devised a program to improve the attitude on blood donation among people starting with those people who come to get health service from the hospital. And we have further promoted

this attitude among the blood donor group. We intend to conduct another test after a period of knowledge promotion.

Though blood donation is a very important method for getting blood for clinical use and though a number of blood banks have been established in the community for years, the poor attitude of the people can be detected. From this study, education plays important role in determining of people's attitude. Therefore, the strategy should be for all health workers to realize this importance and promote basic health knowledge among the people.

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