CHAPTER IV

RESEARCH RESULT

A cross-sectional descriptive study of women in 35-64 age group at Naikuan Sub-district, Yan Ta Khao District, Trang Province, in the rate of cervical cancer screening, and the related factors that influence over their coming or not coming. The population were 1,350 persons in nine villages. The systematic sampling was applied regarding the list of target group as the sampling frame. The starting random was number 4 and then picking out one from every next five, until 250 samples were obtained. The self-administered questionnaires were used to collect data. The period of data collection was from April to May 2003. The returning of questionnaires were 100%. (See Appendix D)

The results will be presented in 6 sections as follows:

Section 1   The Socio-demographic characteristics

Section 2   The rate of cervical cancer screening.

Section 3   Knowledge factors

Section 4   Factors in perception of cervical cancer regarding:

    4.1   Susceptibility

    4.2   Severity

    4.3   The advantage of cervical cancer screening.

Section 5   The association between related factors and cervical cancer
            screening.

Section 6   The conclusion of the association between related factors and
            cervical cancer screening.

Section 1.   The socio-demographic characteristics

The subjects between 35-44 years old were the major group of respondents
(46.8%), 45-54 years and 55-64 years were 37.2% and 16.0%, respectively. The
youngest was 35 years, while the oldest was 64 years.

♦ Marital status, 98.4% of respondents were married, 87.2% were couples,
  there maiming 11.2% were widows, divorcees, and separated ones.
  Only 1.6% were unmarried.

♦ Religion: The majority of respondents were Buddhist (72.2%), only
  22.8% was Muslim.

♦ Education: The majority of respondents had finished their primary
  school (76%), while the secondary school was 9.6%, and 7.2% were
  un-educated.

♦ Occupation: 57.6% were agriculture, 26.8% were employees, 9.2%
  were commerce, 3.2% were housewife, 2.8% were officer / state
  enterprise, 0.4% were others and unemployed.

♦ Average income: The majority of respondents (69.2%) had 2,000-
  6,000 Baht per month, the minimum was 1,000 Baht per month, and
  the maximum was 50,000 Baht per month.

♦ Age at first marriage: 71.6% were married at 20 years old or over, 28.4% were lower than 20 years old, the youngest group was married at 15 years old, and the oldest was 37 years.

♦ The number of children of respondents: The majority (69.1%) had more than 2 children, 29.7% had 1-2 children, and 1.2% had none (Table 4.1).

Table 4.1 : **The frequency and percentage of socio-demographic characteristics of respondents (n = 250)**

Characteristics	Frequency	Percentage
Age (Year)		
35-44	117	46.8
45-54	93	37.2
55-64	40	16.0
Mean = 46.4 SD = 7.48 min =35 max = 64		
Marital status		
Single	4	1.6
Couple	218	87.2
Widow, divorce, separate	28	11.2
Religion		
Buddhist	193	77.2
Muslim	57	22.8
Education		
un-education	18	7.2
Primary school	190	76.0
Secondary school	24	9.6
Diploma	8	3.2
Bachelor	10	4.0

Table 4.1 : **(Cont.) The frequency and percentage of socio-demographic characteristics of respondents (n = 250)**

Characteristics	Frequency	Percentage
Occupation		
Agriculture	144	57.6
Employee	67	26.8
Commerce	23	9.2
Housewife	8	3.2
Officer/state enterprise	7	2.8
Others	1	0.4
Family Income (Baht per month)		
Under 2,000	11	4.4
2,001- 4,000	91	36.4
4,001- 6,000	82	32.8
6,001- 8,000	30	12.0
8,001- 10,000	15	6.0
10,001 and more	21	8.4
Mean = 6,383 SD = 6,424 min = 1,000 max = 50,000		
Age at first marriage (year) (n= 246)		
Under 20	70	28.4
20-29	163	66.3
30 and more	13	5.3
Mean = 21.29 SD = 4.81 min = 15 max = 37		
Number of children (n= 246)		
None	3	1.2
1-2	73	29.7
3 and more	170	69.1
Mean = 3.31 SD = 1.72 min = 0 max =8		

Section 2.   The rate of cervical cancer screening

The majority of respondents (56.8 %) were never screened for cervical cancer, while the others (43.2%) ever used cervical cancer screening and majority of this group ever screened 1-3 times was 30.4 %, and more than 3 times was 8.4 % (Table 4.2).

Table 4.2:   The frequency and percentage of respondents classified by the rate and time of cervical cancer screening. (n = 250)

Screening		Frequency	Percentage
Never		142	56.8
Ever		108	43.2
	95% CI 37.1- 49.3		
Once		37	34.3
2-3 times		39	36.1
More than 3 times		21	19.4
Can not recall		11	10.2

22.2% of respondents had last cervical cancer screened for more than five years ago. Those who had screened less than one year was 20.4% (Table 4.3).

Table 4.3:   The frequency and percentage of interval of last screening

The interval	Frequency	Percentage
Less than 1 year	22	20.4
1-2	21	19.4
3-4	21	19.4
5 and more	24	22.2
Can not recall	20	18.5
Total	108	100

Based on this study, it was 50.9% of respondents who had screening at the government hospital, followed by the private hospital and private clinic that were equally divided at 18.5%. District health center was 11.1% and Songklanakarin Hospital was the least (0.9%). Table 4.4 showed the details

Table 4.4:   The frequency and percentage of respondents classified by places of service. (n = 108)

Service place	Frequency	Percentage
Health center	12	11.1
Government hospital	55	50.9
Private hospital	20	18.5
Private clinic	20	18.5
Others, Songklanakarin Hospital	1	0.9

For satisfaction in service place, most of respondents were satisfied in health center and private hospital (100 %). While government hospital and private clinic were 96.4% and 95%, respectively. Some were unsatisfied because they did not receive information and staff were impolite. (Table 4.5)

Table 4.5:   The frequency and percentage of respondents classified by service places and the appreciation of services. (n = 108)

Service place	Frequency	Feeling on services %	
		Satisfy	Unsatisfied
Health Center	12	100	0
Government hospital	55	96.4	3.6
Private hospital	20	100	0
Private clinic	20	95.0	5.0
Others	1	100	0

The reasons for selecting the service place for cervical cancer screening: 75% were for convenience, 38% for good services, 17.6% for economic price, 6.5% for fame of place, and 2.8% were by appointment. (Table 4.6)

Table 4.6: **The frequency and percentage of reasons for selected service place.** **(n =108)**

Reason	Frequency	Percentage
Convenience	81	75.0
Economic price	19	17.6
Good service	41	38.0
Reputation	7	6.5
Others or the appointment	3	2.8

Note: Can be selected more than one reasons.

The causes of cervical cancer screening: 50% for abnormal symptoms, 24.1% was by the suggestion of health staff, while the annual post delivery check up was 23.2%, and 3.7% was persuaded by friends. (Table 4.7)

Table 4.7: **The frequency and percentage of causes for cervical cancer screening. (n = 108)**

Cause	Frequency	Percentage
Abnormality	54	50.0
Suggestion of health staff	26	24.1
Annual check up	25	23.2
Post delivery check up	25	23.2
Persuaded by friends	4	3.7
Others	1	0.9

Note: Can be selected more than one causes.

90.7 % of respondents in cervical cancer screening had normal results, 5.6 %

had unknown results, and 3.7 % had abnormal results. (Table 4.8)

Table 4.8: **The frequency and percentage of the result of cervical cancer screening (n=108)**

The result	Frequency	Percentage
Normal	98	90.7
Abnormal	4	3.7
Unknown result	6	5.6

The reasons of respondents who never had screening of cervical cancer were

because they felt normal, with no symptoms, at 88.7%, followed by fear and

embarrassment (22%). The other minor reasons regarding unavailable time, expense,

and inconvenient travel were less than 10%. There was no one selected who disliked

staff. (Table 4.9)

Table 4.9: **The frequency and percentage of cause for respondents who never had screening of cervical cancer. (n = 142)**

Cause	Frequency	Percentage
Normal symptom	126	88.7
Fear	31	21.8
Embarrassment	32	22.5
Unavailable time	10	7.0
Dislike the staff	0	0
Inconvenient travel	1	0.7
Expensive	6	4.2
Others or (they are not ill in assume)	1	0.7

Note: Can be selected more than one causes.

There were 55.6% of respondent's opinions that they would go to the screening, followed by 32.4% who were not sure, and 12% would not go. (Table 4.10)

Table 4.10: **The frequency and percentage of opinions of respondents will go for cervical cancer screening.**

Going to screening	Frequency	Percentage
Yes	139	55.6
No	30	12.0
Not sure	81	32.4
Total	250	100

Regarding the expense of cervical cancer screening, 38.4% of respondents did not know about the expense, 34% of them knew that it was free of charge, 18.4% expected not too expensive, and 9.2% thought it was expensive. (Table 4.11)

Table 4.11: **The frequency and percentage of expense in cervical cancer screening.**

The expense	Frequency	Percentage
Without charge	85	34.0
Cheap	46	18.0
Expensive	23	9.2
Do not know	96	38.4
Total	250	100

As regards the percentage of respondents who received information about cervical cancer; 75.6% received while 24.4% did not. (Table 4.12)

Table 4.12: **The frequency and percentage to receive cervical cancer information.**

Receive information	Frequency	Percentage
No	61	24.4
Yes	189	75.6
Total	250	100

Section 3. The factors of knowledge

The major respondents (55.2%) had high level of knowledge about cervical cancer, while 40.8% and 4% were in moderate and low level, respectively (Appendix E). The highest frequency of correct answers in the positive questions about cervical cancer were: 96.8% in item 5 "Cervical cancer in early stage can be completely cured". Whereas item 9 "A regular screening can prevent invasive stage of cervical cancer was 93.6%. Item 1 "Cervical cancer is not a communicable disease" was 88.8%. Item 3 "Cervical cancer cases not always appear bleeding per vagina" was 81.6%. Item 2 "Early stage of cervical cancer had any abnormality shown" was corrected at 67.2%. For the highest frequency of wrong answers in negative questions, 94.8% were for item 6 "Severe bleeding and leucorrhoea are usual with no need to see the doctor". Item 10 "Healthy women can never get cervical cancer" was 87.6%, item 8 "Cervical cancer screening is no need for vigorous and healthy women" was 83.2%. Item 7 "Boiled herbal medicine in ancient style can succeed the remedy" was 72.4%. Most of wrong answer was item 4 "Doing hard work can cause cervical cancer" which was 38.8%. Table 4.13 showed the details.

Table 4.13: The frequency and percentage of respondents classified by knowledge of cervical cancer. (n = 250)

Subject	Right		Wrong	
	Frequency	%	Frequency	%
1. Cervical cancer is not a communicable disease.	222	88.8	28	11.2
2. The early stage of cervical cancer do not have abnormal symptom.	168	67.2	82	32.8
3. Not every case of cervical cancer present bleeding per vagina.	204	81.6	46	18.4
4. Doing a hard work can cause cervical cancer.*	97	38.8	153	61.2
5. Early stage of cervical cancer can be completely cured.	242	96.8	8	3.2
6. Severe bleeding and leucorrhoea are usual.*	13	5.2	237	94.8
7. Boiled herbal medicine in ancient style can succeed the remedy.*	69	27.6	181	72.4
8. Cervical cancer screening is not needed for vigorous and healthy women.*	42	16.8	208	83.2
9. Regular screening can prevent invasive stage of cervical cancer.	234	93.6	15	6.0
10. Healthy women do not have opportunity to get cervical cancer.*	31	12.4	219	87.6

* Raw score of negative items

Section 4.   Factors in perception to cervical cancer

4.1 Susceptibility of cervical cancer

The most of respondents (90.4%) were moderate level in perception to the susceptibility of cervical cancer (Appendix E). 46.8% strongly agreed with item 1 "Married women get more chance of cervical cancer than unmarried". 57.2% agreed with item 7 "To clean every time after urination can prevent cervical cancer", while 31.2% strongly disagreed with item 10 "It is not necessary for healthy women to have annual cervical cancer screened", and 68% disagreed with item 4, "Healthy women will never suffer from cervical cancer" Therefore, they had misunderstanding the most on item 9 "Without abnormal bleeding per vagina, means no cervical cancer", at 30.4%, as presented in Table 4.14.

Table 4.14:   Percentage of respondents classified by perception to the susceptibility of cervical cancer (n = 250)

Subject	Percentage				
	strongly agree	agree	disagree	strongly disagree	mean
	4	3	2	1	
1. Married women get more chance of cervical cancer than unmarried.	46.8	41.6	9.6	2.0	3.3
2. The less in number of child, is the less chance of cervical cancer.	19.6	41.6	36.0	2.8	2.8
3. Young married women(17 yr) get more chance of cervical cancer.	18.4	38.8	40.8	2.0	2.7

Table 4.14: **(Cont.) Percentage of respondents classified by perception to the susceptibility of cervical cancer (n = 250)**

Subject	Percentage				mean
	strongly agree 4	agree 3	disagree 2	strongly disagree 1	
4. Healthy women never get chance of cervical cancer.*	5.2	12.4	68.0	14.4	2.1
5. Bad odor of leucorrhoea in regular, will never cause cervical cancer.*	5.6	23.2	50.0	21.2	2.1
6. Chronic infection of venereal disease never cause cervical cancer.*	10.0	19.2	48.0	22.8	2.2
7. Cleaning every after urination can prevent cervical cancer.	10.8	57.2	30.8	1.2	2.8
8. Women who have mother younger sister, elder sister with cervical cancer, can get more chance of cervical cancer.	12.0	36.8	44.0	7.2	2.5
9. Without abnormal bleeding per vagina, means no cervical cancer.*	2.4	28.0	62.8	6.8	2.3
10. There is not need for annual cervical cancer screening, if there is no symptoms.*	2.8	10.8	55.2	31.2	1.9

* Raw score of negative items

4.2 Severity of cervical cancer

The perceptive in severity of respondents were 88% in moderate level (Appendix E). The most strongly agreement by 44% of respondents in perception of the severity of disease was item 4 "Invasive stage of cervical cancer are torture and painful". Many women (60%) agreed with item 9 "Women suffered from invaded stage cervical cancer can lost their duty". The main disagreement at 59.6% was item 6 "Any stage of the cervical cancer are incurable", and the most extreme disagreement in item 10 "Although there is cervical cancer patient in the family, still they are not in trouble" was 26%. (Table 4.15)

Table 4.15: Percentage of respondents classified by perception to the severity of cervical cancer (n = 250)

Subject	Percentage				
	strongly agree 4	agree 3	disagree 2	strongly disagree 1	mean
1. The invasive stage of cervical cancer is curable.*	10.8	26.4	50.0	12.8	2.4
2. Cervical cancer treatment cost a lot of money.	20.4	50.4	27.2	2.0	2.9
3. Cervical cancer can spread to other organs.	24.0	46.0	27.6	2.4	2.9
4. Invasive stage cancer is painful and torture.	44.0	50.8	4.4	0.8	3.4
5. Invasive stage of cancer cannot cause the death.*	8.0	35.2	46.8	10.0	2.4
6. Any stages of cervical cancer are incurable.*	7.2	20.4	59.6	12.8	2.2

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Table 4.15: (Cont.) Percentage of respondents classified by perception to the severity of cervical cancer (n = 250)

Subject	Percentage				
	strongly agree 4	agree 3	disagree 2	strongly disagree 1	mean
7. The expense of cervical cancer treatment do not trouble on the family financial.*	4.8	29.6	47.2	18.4	2.2
8. Abnormal bleeding per vagina is a normal sign of menopausal women. *	6.0	32.0	55.2	6.8	2.4
9. Invasive stage of cervical cancer cause the lost of duty.	15.2	60.0	22.4	2.4	2.9
10. Although the existence of cervical cancer patient, family will not be in a trouble.*	2.0	15.6	56.4	26.0	1.9

* raw score of negative items

4.3 The advantage of cervical cancer screening.

Most of the respondents (50.8%) were in high-level perception. It is almost equal to moderate level (49.2%) (Appendix E), for perception about the advantage and the obstacle in cervical cancer screening. 65.2% strongly agreed with item 1, believing that regular screening can be prevented cervical cancer. Main agreement at 48.8% was item 3 "Cervical cancer examination does not waste much time". Main disagreement was item 4 "There could be more leucorrhoea after cervical cancer screening" at 77.6%. The strong disagreement was item 9 "The always busy schedule of the staffs is major inconvenience for cervical cancer screening" at 30.4%. (Table 4.16)

Table 4.16:   The percentage of respondents classified by perception for the advantage and obstacle in cervical cancer screening. (n = 250)

Subject	Percentage				
	strongly agree	agree	disagree	strongly disagree	mean
	4	3	2	1	
1. Regularly screening of cervical cancer can be the prevention.	65.2	34.4	0.4	0.0	3.7
2. Early stage of cervical cancer can be found by annual screening.	52.0	46.0	2.0	0.0	3.5
3. Cervical cancer screening does not waste much time.	44.4	48.8	6.4	0.4	3.4
4. More leucorrhoea found after cervical cancer screening.*	2.0	14.4	77.6	6.0	2.1
5. Cervical cancer screening can causes pelvic sharp pain*	4.4	34.4	56.4	4.8	2.4
6. It is better to pay for screening than for the treatment.	51.6	44.0	1.6	2.8	3.4
7. Health centers are more economical than hospital in terms of payment.	26.0	47.2	25.6	1.2	3.0
8. Cervical cancer screening is painful.*	2.4	19.2	73.2	5.2	2.2
9. Inconvenience of cervical cancer screening is the busy of staff.*	1.2	6.8	61.6	30.4	1.8

* Raw score of negative items

Section 5. **The association between related factors and cervical cancer screening.**

In consideration of the association between socio-demographic characteristics and the cervical cancer screening, the respondents in 45-54 age group were the major group who had ever screened (46.2%). While the women in 55-64 age group was the highest group who had never screened (65%).

For marital status, it was found that the singles were fewer group for having cervical cancer screening which was only 25%. Married women were the largest group who had ever screened.

In terms of religion, Muslim women were the largest group who had ever screened (59.7%). While Buddhist were the largest group who never had screened for cervical cancer (61.1%).

As regards the educational level, the respondents in secondary school or higher were the major group who had ever screened (61.9%). The uneducated group was the largest number who never had cervical cancer screening test (66.7%).

The respondents who were officers and state enterprise, employees, and agriculture were the largest group who ever had cervical cancer screening test (44%).

The respondents having income rate higher than 10,000 Baht/ month were the largest group who ever had cervical cancer screening test (66.7%), while the largest

group of never screened were the families with income lower than 6,000 Baht/ month (39%).

Respondents who were first-married at the age of 20 and older were 86.8%, whereas, those who were married at the age lower than 20 years were 37.1%.

Women who had 1-2 children were the largest group who ever had cervical cancer screening test, while the group with no children was the least (37.5%).

Using test of differences between groups ever and never had cervical cancer screening with socio-demographic characteristics such as religion, education, and family income, there was sufficient evidence to conclude that the percentage of women who had cervical cancer screened compared to those who never had were significantly different ($p < 0.05$). However, for age, marital status, main occupation, age at first-married, and number of children, there was insufficient evidence to conclude that the percentage of women who had cervical cancer screened compared to those who never had were significantly different ($p > 0.05$), as results in Table 4.17.

Table 4.17: Percentage of respondents classified by socio-demographic characteristics

Characteristics	Cervical cancer screening		n
	Ever	Never	
Age (years)			
35-45	43.6	56.4	117
45-54	46.2	53.8	93
55-64	35.0	65.0	40
$x^2 = 1.453$ df = 2 p-value = 0.484			
Marital status			
Single	25.0	75.0	4
Married	43.5	56.5	246
$x^2 = 0.549$ df = 1 p-value = 0.636			
Religion			
Buddhist	38.9	61.1	193
Muslim	57.9	42.1	57
$x^2 = 6.4968$ df = 1 p-value = 0.011*			
Education			
Uneducated	33.3	66.7	18
Primary school	40.0	60.0	190
Secondary school	61.9	38.1	42
$x^2 = 7.496$ df = 2 p-value = 0.024*			
Main occupation			
Agriculture	43.8	56.3	144
Commerce, House wife	38.7	61.3	31
Employee, Officer State enterprise, others	44.0	56.0	75
$x^2 = .292$ df = 2 p-value = 0.864			
Family income			
Not more than 6000	39.1	60.9	184
6,000-10,000	48.9	51.1	45
10.001-more	66.7	33.3	21
$x^2 = 6.548$ df = 2 p-value = 0.038*			

Table 4.17: **(Cont.) Percentage of respondents classified by socio-demographic characteristics**

Characteristics	Cervical cancer screening		n
	Ever	Never	
Age at first married			
Under 20 years	37.1	62.9	70
20-29 years	40.6	54.0	163
30 years or more	46.2	53.8	13
$x^2 = 1.607$ df $= 2$ p-value $= 0.448$			
Number of children			
None	37.5	62.5	16
1-2	48.3	51.7	60
3 or more	42.4	57.6	170
$x^2 = 0.896$ df $= 2$ p-value $= 0.639$			

For the knowledge of respondents, it was found that high knowledge level group (47.1%) was the largest number who had cervical cancer screened. The highest number who never had cervical cancer screening was low-level knowledge (70%). (Table 4.18)

Table 4.18: **Percentage of respondents classified by level of knowledge about cervical cancer**

Level of knowledge	Cervical cancer screening		n
	Ever	Never	
Low	30.0	70.0	10
Moderate	39.2	60.8	102
High	47.1	52.9	138
$x^2 = 2.226$ df $= 2$ p-value $= 0.329$			

Women with high level of perception to the susceptibility of cervical cancer were the highest number for who ever had cervical cancer screening (54.2%). There was no low level perception in this group. Follow the table 4.19

Table 4.19: Percentage of respondents classified by level of perception to susceptibility of cervical cancer

Level of perception	Cervical cancer screening		n
	Ever	Never	
Moderate	42.0	58.0	226
High	54.2	45.8	24
$x^2 = 1.301$ df = 1 p-value = 0.355			

The women with high perception of the severity of cervical cancer were the highest for having cervical cancer screening (48.1%). The low to moderate level perception groups were the highest for never having cervical cancer screening test (57.4%), as shown in Table 4.20

Table 4.20: Percentage of respondents classified by perception to the severity of cervical cancer

Level of perception	Cervical cancer screening		n
	Ever	Never	
Moderate	42.6	57.4	223
High	48.1	51.9	27
$x^2 = 0.118$ df = 1 p – value = 0.731			

Group of women with high-level perception to the advantage and the obstacle of cervical cancer screening were the largest for ever having cervical cancer screened at 49.6%. None of them were in low-level perception (Table 4.21).

Table 4.21: Percentage of respondents classified by level of perception to the advantage and obstacle of cervical cancer screening

Level of perception	Cervical cancer screening		n
	Ever	Never	
Moderate	36.6	63.4	123
High	49.6	50.4	127
$x^2 = 3.803$ df = 1 p-value = 0.051			

Using test of differences between the two groups, one ever had cervical cancer screening, and the other group never had screened found that factors in knowledge, factors in perception to the susceptibility, severity of cancer and perception to the advantage and the obstacle of cervical cancer screening, there were insufficient evidence to conclude that the percentage of women who had cervical cancer screening compared to those who never had cervical cancer screening were significantly different among those two groups.

Section 6. The conclusion of association between related factors and cervical cancer screening

The test of association between groups ever and never had cervical cancer screening suggested that, socio-demographic factors such as religion, education, and family income, were significantly different between those two groups. Age, marital status, first-married age, main occupation and number of children were not significantly different between those two groups.

Moreover, the factors such as knowledge, perception of the susceptibility, the severity, the advantage and obstacle of cervical cancer screening were not significantly different between those two groups.

Table 4.22: Association test between related factors and cervical cancer screening.

Factors n = 250	x^2	df	p- value
Characteristic			
Age	1.453	2	0.484
Marital status	0.549	1	0.636
Religion	6.498	1	0.011*
Education	7.496	2	0.024*
Main occupation	0.292	2	0.864
Family income	6.548	2	0.038*
Age at first married	1.607	2	0.448
Number of children	0.896	2	0.639
Knowledge factor	2.226	2	0.329
Factors in perception			
Susceptibility	0.854	1	0.355
Severity	0.118	1	0.731
The advantages and obstacles	3.803	1	0.051

* Significant at .05