

# Patient Satisfaction with the Service at Menopause Clinic, Maharaj Nakorn Chiang Mai Hospital

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**Objective:** To evaluate patient satisfaction of service at the Menopause Clinic and to identify factors affecting patient satisfaction.

**Material and Method:** Cross sectional descriptive study was conducted at the Menopause Clinic, Maharaj Nakorn Chiang Mai hospital. Three hundred twenty six subjects were included. The questionnaire consists of two parts, demographic and patient satisfaction. The patient satisfaction was evaluated in five aspects.

**Results:** The overall patient satisfaction level was good (mean  $4.2 \pm 0.71$ ). The satisfactions about service behavior, quality of care and health information were in excellent level (mean  $4.29 \pm 0.69$ ,  $4.25 \pm 0.65$ , and  $4.26 \pm 0.69$ , respectively). The satisfaction about clinic facilities/conveniences and medical expense were in good level (mean  $3.83 \pm 0.79$  and  $3.87 \pm 0.75$ ). There are three variables that could affect patient satisfaction: Occupation and level of education affected satisfaction in medical expense aspect ( $p < 0.001$  and  $p < 0.05$ ) and number of visits affected the clinic facilities/convenience aspect ( $p < 0.05$ ).

**Conclusion:** Some patient characteristics affected the patient satisfaction. However, system and structure of service in different setting hospitals are of concerned.

**Keywords:** Patient satisfaction, Menopause

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The Institution of Quality Improvement and Hospital Accreditation have defined general standards for hospitals to assure the principle of hospital management. These standards cover improved hospital quality, resource utilization, work process and quality evaluation. Meanwhile, the National Plan for Economy and Social development No. 9 (year 2002-2006) announced that all Thai people have the right to receive quality health care services. All hospitals, including government and private hospitals should provide a quality service and obtain hospital accreditation. The customer center has been a core of services over the past decade. Therefore, patient satisfaction is a goal for the health care organization and should be used as an important service indicator.

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Maharaj Nakorn Chiang Mai Hospital has received hospital accreditation from the Institute of Hospital Quality Improvement and Accreditation since 2002, and it still maintains improved quality. The Menopause clinic, an outpatient unit, has served menopause women in Chiang Mai and nearby provinces for 10 years. The authors are aware of quality improvement and emphasize on the customer center. Patient satisfaction has become the authors first priority. The present study was designed to evaluate patient satisfaction with the service at the Menopause Clinics and identify factors that affect the satisfaction. The results will be used as a service indicator for the authors service.

#### **Material and Method**

A cross-sectional descriptive study was conducted at the Menopause Clinic, Maharaj Nakorn Chiang Mai Hospital. Women who attended the Clinic between December 2006 and February 2007 were invited to participate in the present study. The questionnaire used in the present study was modified from the OP

voice from the Institute of Hospital Quality Improvement and Accreditation<sup>(1)</sup> and was validated by experts from the hospital accreditation team. The reliability of the questionnaire was 0.97 (alpha Conbach co efficiency). It consisted of two parts, demographic data and patient satisfaction. The patient satisfaction part included 23 questions, which were categorized into five aspects, personnel service behavior, quality of care, health information, clinic facilities/conveniences, and medical expense. The response scale was rated from 1-5. The mean score of each aspect was interpreted as 5 levels 4.21 to 5.00 means excellent, 3.41 to 4.20 means good, 2.61 to 3.40 means moderate, 1.81 to 2.60 means fair, and 1.00 to 1.80 means poor.

### Data analysis

SPSS for Windows was employed for data analysis. Data were reported as frequency, percentage, mean, and standard deviation. In each aspect, the mean patient satisfaction between groups of demographic variables was compared using the ANOVA or Kruskal-Wallis method for non-parametric variables and p-value < 0.05 was considered to indicate statistical significance.

### Results

Three hundred twenty six women were enrolled into the present study. The mean age was  $54.45 \pm 6.57$ . Thirty two point eight percent of the subjects were employed by the government/state enterprises. The majority of them (55.0%) had received a Bachelor degree or higher. Almost half of them (47.5%) had an income of more than 20,000 baht/month and most of them (81.9%) had their health care paid for by the government. Most of the subjects (67.2%) had visited the Menopause Clinic more than 10 times (Table 1).

The overall level of patient satisfaction was good (mean score  $4.2 \pm 0.71$ ). The level of satisfaction about personnel service behavior, quality of care, and health information was excellent (mean score  $4.29 \pm 0.69$ ,  $4.25 \pm 0.65$  and  $4.26 \pm 0.69$  respectively). Meanwhile, patient satisfaction with the clinic's facilities/conveniences and medical expense were at the good level (mean score  $3.83 \pm 0.79$  and  $3.87 \pm 0.75$  respectively) (Table 2).

The authors found that mean patient satisfaction in all aspects was not significantly different in the following variables, marital status, income per month, and who pay for the health care cost. Three variables that affect patient satisfaction

included occupation, level of education, and number of visits. The occupation and the level of education affected patient satisfaction regarding medical expense and the number of visits affect the clinic's facilities/convenience. After the post hoc analysis was performed, the authors found that the employee group had a lower mean satisfaction in medical expense than other occupations, and those with a bachelor degree or higher had a higher mean satisfaction in medical expense than those with a secondary level of education. The subjects who visited the Menopause Clinic for the first time had a higher mean satisfaction with the clinic's facilities/convenience than those who visited more than 10 times, 6-10 times and 2-5 times respectively (Table 3).

**Table 1.** Demographic data of subjects

	Number	Percent
Mean age	$54.45 \pm 6.57$	
Occupation		
Housewife/retired	171	52.5
Government service/state enterprises	107	32.8
Merchant/business	25	7.7
Employee	19	5.8
Agriculture	4	1.2
Education		
Primary	78	23.9
Secondary	33	10.1
Certificate/diploma	36	11.0
Bachelor degree or higher	179	55.0
Marital status		
Married	237	72.7
Widowed/divorced	50	15.3
Single	39	12.0
Income per month		
Less than 5,000 baht	32	9.8
5,001-10,000 baht	39	12.0
10,001-15,000 baht	56	17.2
15,000-20,000 baht	44	13.5
More than 20,000 baht	155	47.5
Payment		
By government	267	81.9
Self paid	33	10.1
Social security/National welfare	26	8.0
Number of visits		
First time	12	3.7
2-5 times	53	16.3
6-10 times	42	12.9
More than 10 times	219	67.2

**Table 2.** Patient satisfaction level with the service at the menopause clinic (shown in percent, mean and SD n = 326)

Patient satisfaction aspects	Patient satisfaction level							Level
	Excellent	Good	Moderate	Fair	Poor	$\bar{x}$	SD	
Personnel service behavior	40.3	48.9	10.1	0.5	0.2	4.29	0.69	excellent
Quality of care	36.6	52.5	10.7	-	0.2	4.25	0.65	excellent
Health information	38.8	49.0	11.3	0.8	0.1	4.26	0.69	excellent
Clinic's facilities and convenience	22.1	44.6	28.4	4.4	0.6	3.83	0.79	good
Medical expense	19.2	50.2	29.1	0.8	0.8	3.87	0.75	good
Overall satisfaction	33.0	48.4	16.8	1.5	0.3	4.12	0.71	good

## Discussion

The present study evaluated patient satisfaction with the service at the Menopause Clinic in Maharaj Nakorn Chiang Mai Hospital in five aspects, which were personnel service behavior, quality of care, health information, clinic's facilities/convenience, and medical expense.

The overall satisfaction score was at the good level. This can be explained in many ways. First, 67.20% of the subjects had visited the Menopause Clinic more than 10 times before, so they were familiar with the services provided by the clinic. This familiarity resulted in an understanding of the workflow and limitations of services, and led to be easily satisfied with the service<sup>(2)</sup>. Secondly, the mean age of the subjects was  $54.45 \pm 6.58$ , which is considered middle age. This factor may support patient satisfaction as older people tended to be more satisfied than the younger ones<sup>(3,4)</sup>. Marital status is another factor that was tested in the present study; the authors found that mean patient satisfaction was not significantly different among the four groups, which is in contrast to previous studies<sup>(4,5)</sup>. This may be due to the different in aspects of patient satisfaction and the health care setting compared to the previous study. Furthermore, more than half of the subjects had a higher education (bachelor degree or higher), but still had a good level of satisfaction, which was in contrast to other studies that found those with no education or only primary education had higher satisfaction scores<sup>(4,5)</sup>. This may be because of other factors that involved patient satisfaction in the present study such as mean age, who pay for the medical expense or number of visits. This may support the idea that patient satisfaction involves a wider range of determinants, including quality judgment, needs, and perceptions of equity<sup>(6)</sup>.

The other factor that could result in patient satisfaction is improvement in the hospital's service. Since 1998, Maharaj Nakorn Chiang Mai has promoted hospital accreditation activities in all units including the Menopause Clinic. The authors involved in quality improvement to enhance customer satisfaction. The patient satisfaction in the outpatient service at Maharaj Nakorn Chiang Mai Hospital was evaluated in a previous study in 1999<sup>(7)</sup>. That study found patient satisfaction with convenience at the moderate level. In the present study, there was a high level of patient satisfaction with the clinic's facilities and convenience. This result implied that the authors' quality improvement activities had assisted us in reaching our goal.

The patient satisfaction with personnel service behavior, quality of care and health information was at the excellent level. This may be the result of the clinic's policy. The clinic encourages its staffs to attend the continuing education therefore, they are updated with health information and have the ability to implement the knowledge that is useful for patient care.

Patient satisfaction with medical expense was found to be at the good level. This may be due to the majority of the presented subject (81.9%) had their medical expense paid by the government, regardless of income or occupation. Furthermore, Maharaj Nakorn Chiang Mai is a governmental hospital, medical expenses are usually lower than that of private hospital and are at an acceptable level.

In the present study, mean patient satisfaction between groups of various patient characteristics was compared in each aspect. The authors found that some demographic data such as marital status, income and who paid for the medical expense did not associate with patient satisfaction, which differed from previous studies. Some studies found that married patients had a higher score in the information part, and single or

**Table 3.** Comparison of mean patient satisfaction between groups of demographic variables

Patient characteristics	Patient satisfaction aspects				
	Personnel service behavior $x \pm SD$	Quality of care $x \pm SD$	Health information $x \pm SD$	Clinic's facilities/convenience $x \pm SD$	Medical expense $x \pm SD$
<b>Occupation</b>					
Housewife/retired	4.29 $\pm$ 0.56	4.26 $\pm$ 0.60	4.26 $\pm$ 0.58	3.85 $\pm$ 0.59	3.95 $\pm$ 0.69
Agriculture	4.50 $\pm$ 0.58	4.58 $\pm$ 0.50	4.42 $\pm$ 0.69	4.50 $\pm$ 0.58	4.50 $\pm$ 0.57
Employee	4.15 $\pm$ 0.50	3.96 $\pm$ 0.51	4.11 $\pm$ 0.43	3.68 $\pm$ 0.49	3.29 $\pm$ 0.51
Merchant/business	4.24 $\pm$ 0.49	4.37 $\pm$ 0.47	4.35 $\pm$ 0.61	4.00 $\pm$ 0.69	3.96 $\pm$ 0.75
Government service/ State enterprises	4.31 $\pm$ 0.53	4.26 $\pm$ 0.57	4.25 $\pm$ 0.64	3.76 $\pm$ 0.66	3.78 $\pm$ 0.75
p-value	0.691	0.126	0.717	0.061	0.001
<b>Education</b>					
Primary	4.57 $\pm$ 0.54	4.23 $\pm$ 0.57	4.29 $\pm$ 0.56	3.95 $\pm$ 0.60	3.81 $\pm$ 0.70
Secondary	4.14 $\pm$ 0.37	4.10 $\pm$ 0.48	4.17 $\pm$ 0.36	3.67 $\pm$ 0.47	3.59 $\pm$ 0.85
Certificate/diploma	4.34 $\pm$ 0.53	4.20 $\pm$ 0.58	4.19 $\pm$ 0.54	3.82 $\pm$ 0.58	3.75 $\pm$ 0.64
Bachelor degree or higher	4.33 $\pm$ 0.57	4.30 $\pm$ 0.59	4.27 $\pm$ 0.65	3.81 $\pm$ 0.66	3.96 $\pm$ 0.71
p-value	0.129	0.316	0.566	0.149	<0.05
<b>Marital status</b>					
Single	4.28 $\pm$ 0.56	4.18 $\pm$ 0.65	4.15 $\pm$ 0.71	3.65 $\pm$ 0.62	3.73 $\pm$ 0.63
Married	4.28 $\pm$ 0.53	4.24 $\pm$ 0.55	4.25 $\pm$ 0.57	3.84 $\pm$ 0.62	3.89 $\pm$ 0.72
Widowed/divorced	4.31 $\pm$ 0.61	4.35 $\pm$ 0.62	4.35 $\pm$ 0.59	3.94 $\pm$ 0.63	3.84 $\pm$ 0.84
p-value	0.940	0.368	0.283	0.090	0.443
<b>Income per month (baht)</b>					
< 5,000	4.33 $\pm$ 0.64	4.28 $\pm$ 0.65	4.41 $\pm$ 0.63	4.13 $\pm$ 0.72	3.83 $\pm$ 0.89
5,001-10,000	4.13 $\pm$ 0.50	4.18 $\pm$ 0.52	4.17 $\pm$ 0.52	3.81 $\pm$ 0.55	3.81 $\pm$ 0.63
10,001-5,000	4.28 $\pm$ 0.51	4.21 $\pm$ 0.62	4.23 $\pm$ 0.57	3.79 $\pm$ 0.56	3.87 $\pm$ 0.66
15,000-0,000	4.27 $\pm$ 0.60	4.29 $\pm$ 0.60	4.17 $\pm$ 0.59	3.79 $\pm$ 0.72	3.86 $\pm$ 0.79
> 20,000	4.32 $\pm$ 0.52	4.27 $\pm$ 0.56	4.28 $\pm$ 0.61	3.81 $\pm$ 0.60	3.88 $\pm$ 0.72
p-value	0.353	0.852	0.386	0.095	0.983
<b>Payment</b>					
By government	4.29 $\pm$ 0.55	4.25 $\pm$ 0.57	4.23 $\pm$ 0.59	3.81 $\pm$ 0.63	3.88 $\pm$ 0.70
Self paid	4.29 $\pm$ 0.48	4.21 $\pm$ 0.65	4.37 $\pm$ 0.54	3.93 $\pm$ 0.57	3.64 $\pm$ 0.88
Social welfare insurance or National public welfare	4.29 $\pm$ 0.57	4.37 $\pm$ 0.55	4.37 $\pm$ 0.64	3.97 $\pm$ 0.63	3.92 $\pm$ 0.76
p-value	0.994	0.520	0.238	0.258	0.163
<b>Number of visits</b>					
First time	4.44 $\pm$ 0.49	4.44 $\pm$ 0.66	4.53 $\pm$ 0.73	4.19 $\pm$ 0.60	4.00 $\pm$ 0.74
2-5 times	4.21 $\pm$ 0.68	4.22 $\pm$ 0.64	4.21 $\pm$ 0.65	3.63 $\pm$ 0.67	3.88 $\pm$ 0.60
6-10 times	4.31 $\pm$ 0.50	4.25 $\pm$ 0.58	4.13 $\pm$ 0.53	3.71 $\pm$ 0.52	3.65 $\pm$ 0.84
> 10 times	4.29 $\pm$ 0.52	4.25 $\pm$ 0.56	4.28 $\pm$ 0.58	3.88 $\pm$ 0.62	3.89 $\pm$ 0.73
p-value	0.751	0.678	0.161	<0.05	0.240

divorced patients had higher scores for comfort and cleanliness<sup>(4)</sup>. This may be due to the different aspects of patient satisfaction or the clinic setting, which was discussed previously. Another reason, even though the presented subjects had several levels of income per month, only 10.1% of them needed to pay for medical expense by themselves. This may be the reason

why the mean patient satisfaction in all aspects was not significantly different. The present study agreed with that of Hall JA and Doman MC, who found that patient satisfaction was not associated with ethnic, sex, or income<sup>(5)</sup>. The present study showed that the employee group had a lower mean satisfaction with medical expense than other groups, while the previous

study found that labor had the highest mean satisfaction score<sup>(8)</sup>. This may be because the mean age of the subjects participating in the studies was different from the previous study and most of the subjects in the present study had government/organization paid for them. Education level was also associated with patient satisfaction. The authors found that subjects with a bachelor degree or higher education had a higher mean satisfaction with medical expense than those with a secondary level of education. This is in contrast to a meta analysis, which found that greater satisfaction was significantly associated with less education<sup>(5)</sup>. This could be because patient satisfaction varied by different factors which differed from study to study.

The frequency of visits is another factor that should be considered. The present study showed that patient satisfaction with the clinic's facilities/convenience was significantly different between the numbers of visits, which is in agreement to the previous studies<sup>(9,10)</sup>. This may be because during the early visits patients were more passive and less critical about how they were treated. Furthermore, as the level of interaction increased with their physicians, patients gained more information and became more critical about the professional practices.

### Conclusion

Patient satisfaction is widely being measured as an indication of how effective a service is. Even though the present study revealed over all patient satisfaction at the good level, quality improvement should be continued, and evaluation of patient satisfaction should be updated, due to the change in various circumstances. The authors also found that some patient's characteristics can affect patient satisfaction in many aspects therefore, understanding the factors influencing patient satisfaction is important for health care personnel in order to foster the relationship with patients and meet their expectations. However, the system and structure of a service in different settings and hospitals are of concern.

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## ความพึงพอใจของผู้ป่วยต่อบริการของคลินิกวัยทอง โรงพยาบาลมหาชานครเชียงใหม่

สมศักดิ์ เชาว์ศิริชูร์สีรี, นริสา ศรีบัณฑิตมงคล, วรารณ์ จันทรวงศ์, สุปรานี น้อยอ้อ, กัลยา แสงจันทร์

**วัตถุประสงค์:** เพื่อศึกษาระดับความพึงพอใจ และปัจจัยบางประการที่มีผลต่อความพึงพอใจของผู้ป่วยต่อบริการของคลินิกวัยทอง โรงพยาบาลมหาชานครเชียงใหม่

**วัสดุและวิธีการ:** ศตวรรษที่มารับบริการที่คลินิกวัยทอง จำนวน 326 ราย ตอบแบบสอบถามที่ตัดแปลงจาก OP voices ของสถาบันพัฒนาและรับรองคุณภาพโรงพยาบาล ค่าความเชื่อมั่นของแบบสอบถาม = 0.97 ข้อมูลที่ได้แบ่งเป็น 2 สวน คือ ข้อมูลส่วนบุคคล และข้อมูลเกี่ยวกับความพึงพอใจ

**ผลการศึกษา:** ความพึงพอใจโดยรวมต่อบริการของคลินิกวัยทอง อยู่ในระดับดี ( $4.2 \pm 0.71$ ) ความพึงพอใจด้านพนักงานบริการ คุณภาพของบริการ และข้อมูลที่ได้รับอยู่ในระดับดีมาก ( $4.29 \pm 0.69$ ,  $4.25 \pm 0.65$  และ  $4.26 \pm 0.69$  ตามลำดับ) ด้านสิ่งอำนวยความสะดวก และค่าวัสดุพยาบาลอยู่ในระดับดี ( $3.83 \pm 0.79$  และ  $3.87 \pm 0.75$ ) ปัจจัยที่มีผลต่อความพึงพอใจได้แก่ อารีพ และระดับการศึกษา มีผลต่อด้านค่าวัสดุพยาบาล ( $p < 0.001$  and  $p < 0.05$ ) และจำนวนครั้งที่มารับบริการมีผลต่อด้านความสะอาด และสิ่งอำนวยความสะดวก ( $p < 0.05$ )  
**สรุป:** ปัจจัยส่วนบุคคลมีผลต่อความพึงพอใจของผู้ป่วย อย่างไรก็ตามควรพิจารณาถึงความแตกต่างในด้านโครงสร้าง และระบบการให้บริการของแต่ละโรงพยาบาลด้วย

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