

#### **CHAPTER IV**

#### **RESRACH RESULT**

#### 1. Introduction

This chapter presents the result of the study. This was a cross sectional study performed at Bhumibol Adulyadej Hospital, Bangkok, Thailand. The study population for this study was all patients who were admitted and discharged from the hospitals 23 wards. The study population consisted of all patients admitted as inpatients in the hospital for the 30 day time period of the study duration which started on 22<sup>nd</sup> of February 2008 till 22<sup>nd</sup> March 2008. Of the 250 questionnaires that were distributed for this study, 228 were eligible for analysis, 5 were ineligible due to consent form not being signed, 7 were lost at the hospital and 10 were returned blank. 228 questionnaires, a response rate of 91.2% were analyzed for this study. The data for this study were obtained from the 23 wards in the hospitals which resulted to 228 respondents. A comprehensive data table for the study is attached as appendix E.

### 2. Demographic Features

#### 2.1 Gender

Group 1 had more female respondent's (53.85%) than male (46.15%)

Group 2 had more female respondent's (68.49%) then male (31.51%)

Group 3 had more male respondents (55.04%) than female (44.96%)

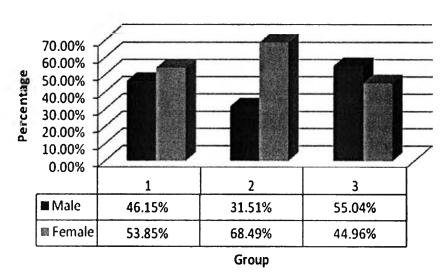


Figure 2: Respondent Gender

# 2.2 Age

Group 1 had respondent with minimum age of 17 years old; maximum of 80 and average age of 40.83.

Group 2 had respondent with minimum age of 16 years old; maximum of 80 and average age of 42.44.

Group 3 had respondent with minimum of 14 years old; maximum of 84 and average age of 46.99.

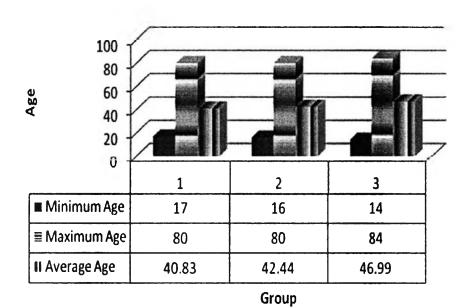


Figure 3: Respondent Age

### 2.3 Martial status

Group 1 had higher married respondent (68%) followed by 24% single and 8% separated/widow.

Group 2 had higher married respondent (79.45%) followed by 15.07% single and 5.48% separated/widow.

Group 3 like the two previous groups had higher married respondent (60.94%) followed by 28.13% single and 10.94% separated/widow.

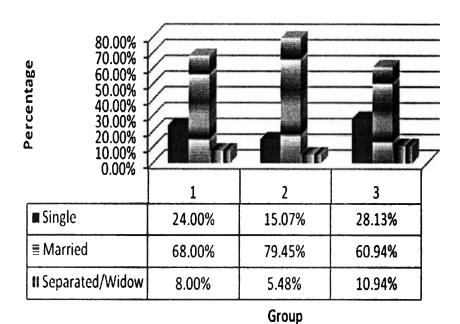


Figure 4: Respondent Martial Status

#### 2.4 Education

Group 1 had higher primary or below education respondent (44%) followed by 40% with secondary education and 16% with a bachelor's degree.

Group 2 had higher secondary education respondent (43.84%) followed by 30.14% with primary education or below and 26.03% with a bachelor's degree.

Group 3 had higher secondary education respondent (48.41%) followed by 26.19% with a bachelor's degree and 25.40% with primary education or below.

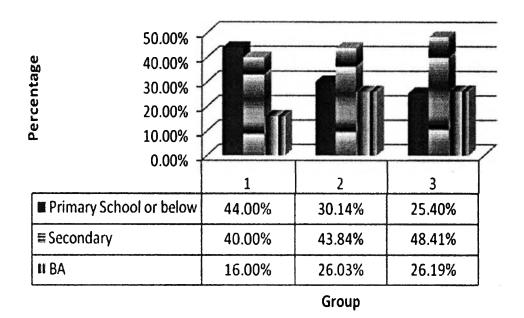


Figure 5: Respondent Education

### 2.5 Occupation

Group 1 had 40%, the highest percentage of respondent with 'others' as occupation; private at 28%; government at 20%; housewife at 12% and 0% for military.

Group 2 had 42.86%, the highest percentage of respondent with "others" as occupation; housewife at 28.57%; private at 14.29% and government and military were equal at 7.14% respectively.

Group 3 had 30.71% the highest percentage of respondent with "others" as occupation; private at 24.41%; government at 20.47%; housewife at 15.57% and

## militaryat8.66%.

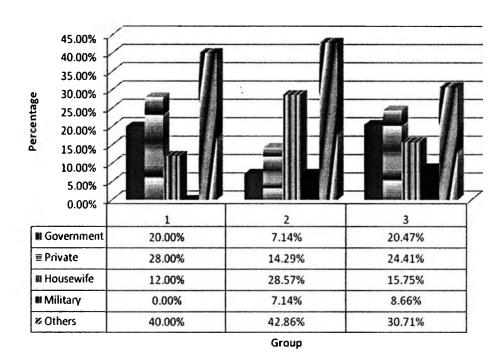


Figure 6: Respondent Occupation

### 2.6 Income

Group 1 had an average income of 10,153.48 baht/month Group 2 had an average income of 15,411.71 baht/month Group 3 had an average income of 17,606.59 baht/month

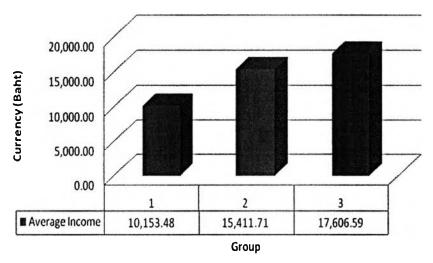


Figure 7: Respondent Income

#### 2.6 Responsible person or agency paying medical services

Group 1 had 30.77% of respondent using CSMBS as payment method; 26.92% used SSS or WSC; 23.08% used UCS; 15.38% paid out of pocket and 3.85% had private insurance.

Group 2 had 39.44% of respondent using CSMBS as payment method; 29.58% used UCS; 15.49% used SSS or WCS; 14.08% paid out of pocket and 1.41% used private insurance.

Group 3 had 49.61% of respondent using CSMBS as payment method; 26.77% used UCS; 16.54% used SSS or WCS; 6.30% paid out of pocket and 0.79% paid using private insurance.

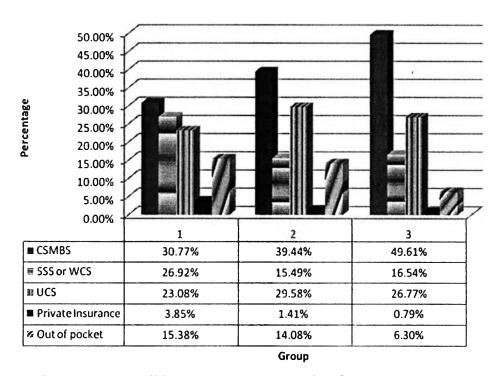


Figure 8: Responsible person or agency paying for medical services

# 2.8 Length of Stay (LOS)

Out of the total 228 respondent in this survey;

Group 1 (length of stay 1 - 2 days) had 26 patients;

Group 2 (length of stay 3 - 5 days) had 73 and

Group 3 (length of stay 5 days and above) had 129

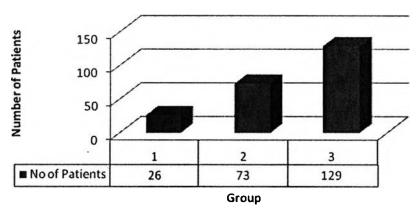


Figure 9: Length of Stay (LOS)

#### 2.9 Inpatient department admitted to in hospital

Group 1 had 72.73% of respondent being admitted to other departments; 13.64% of respondent where admitted to medical and surgical departments respectively and none (0%) in the maternity department.

Group 2 had equal percentage of 38.46% of respondent admitted to surgical and other departments respectively, followed by 20% in medical and 3.08% in maternity department.

Group 3 had 35.87% of respondent admitted in the medical department, 35.48% in surgical, 30.65% in others and none (0%) being admitted in maternity department.

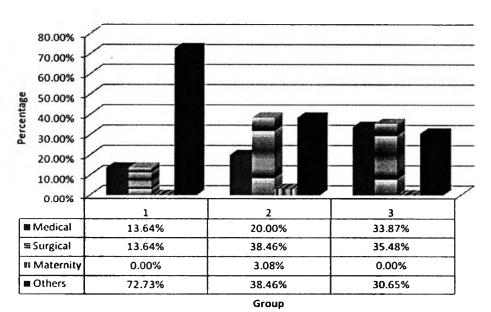


Figure 10: Inpatient department admitted to in hospital

### 2.10 What disease treatment did you receive at the Hospital?

Below figure show the top 3 disease treatment respondent received at the hospital. There was a wide variety of other disease treatment respondent came for at the hospital and to mention a few:

Group 1: Accident, appendicitis, postpartum hemorrhage

Group 2: Asthma, Pneumonia, UTI

Group 3: Diabetic, Lung, Bronchitis

But the majority of the respondent that came to the hospital for treatment was as follows (Figure 11):

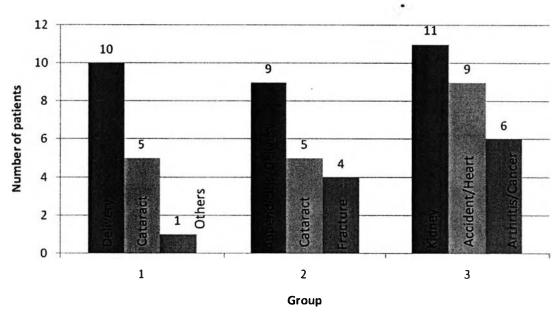


Figure 11: Treatment received for at the hospital

## 3. Assessment of services offered at the hospital

### 3.1 Why did you choose this hospital?

Group 1 had 24.69% of respondent choosing this hospital due to "easy access"; 17.28% due to "not being expensive"; 14.81% due to "pleasant facilities"; 12.35% due to "modern equipment", 11.11% for both "specialists" and "prompt service" and 8.64% were "regular patients" of the hospital.

Group 2 had 21.79% choosing this hospital due to "easy access"; 14.96% due to "modern equipments" and "pleasant facilities" respectively; 14.53% due to "prompt service"; 13.68% due to "specialist"; 10.26% cause it is "not too expensive" and 9.83% are "regular patient" of the hospital.

Group 3 had 18.20% choosing this hospital "due to easy access"; 16.13% due to "pleasant facilities" and "regular patients" respectively; 14.52% due to

"specialists"; 13.82% due to "modern equipment"; 12.67% due to "prompt service" and 8.53% due to the hospital being "not expensive".

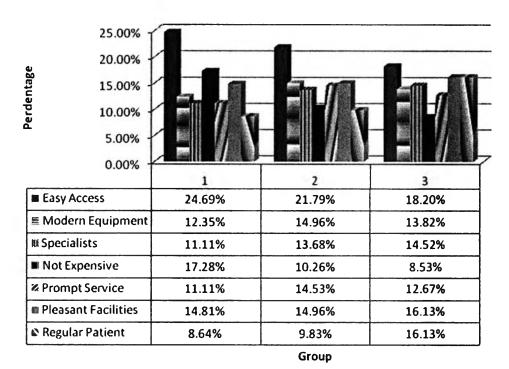


Figure 12: Why did you choose this hospital?

### 3.2 Did you get advices on your illness and what you should do?

Group 1 had 100% of the respondent say that the advice given to them on there illness was clear.

Group 2 had 97.26% of respondent state they received clear advice on illness and 2.74% did receive advice on illness but was not clear.

Group 3 had 94.57% of respondent state they received clear advice on illness, 4.65% did receive but it was not clear and 0.78% said they did not receive any advice on illness.

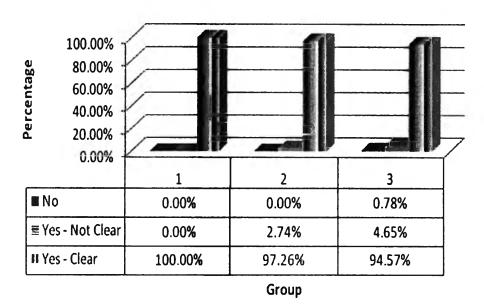


Figure 13: Did you get advices on your illness and what you should do?

## 3.3 Did you get the results of laboratory examination or x-ray?

Group 1 had 79.17% of respondent who stated they received clearly the results of lab and x-ray reports, 8.33% stated they did receive but not clear and 12.50% stated they received none.

Group 2 had 83.10% of respondent who stated they clearly received the results of lab and x-ray reports; 8.45% mentioned they received but not clearly and 8.45% mentioned they received none.

Group 3 had 89.06% of respondent who stated they received clearly the results of lab and x-ray reports; 6.25% mentioned they received but it was not clear and 4.69% mentioned they received none.

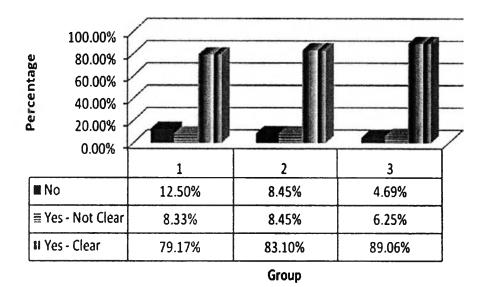


Figure 14: Did you get the results of lab examination or x-ray?

## 3.4 Did you get the explanation about your treatment or operation?

Group 1 had 84% of the respondent mention that they received clear explanation for treatment and operation, 12% received none and 4% received explanation but not clear.

Group 2 had 97.10% of the respondent mention that they received clear explanation for treatment and operation; 1.45% received explanation but not clear and 1.45% received none.

Group 3 had 88.80% of the respondent mention they received clear explanation for treatment and operation; 6.40% received explanation but not clear and 4.80% mentioned they received none.

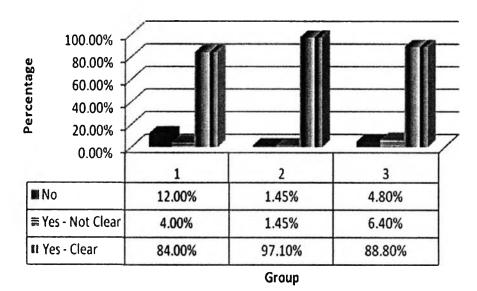


Figure 15: Did you get explanation about your treatment plan or operation?

## 3.5 Did you get advices before discharged?

Group 1 had 91.67% of patient sample mention that they received advice before discharge; 4.17% mentioned that they received but not clear and 4.17% received none.

Group 2 had 95.77% of the patient sample mention that they received advice before discharge; 2.82% stated they received none and 1.41% stated they received advice but not clear.

Group 3 had 93.22% of the patient sample mention that they received advice before discharge; 5.08% mentioned they received none and 1.69% stated they received advice but not clear.

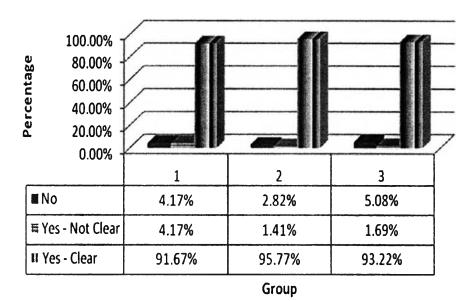


Figure 16: Did you get advices before discharge?

## 3.6 Did you know the physicians who treat you?

Group 1 had 52% of the respondent mention that they know their doctors name; 32% mentioned they did not know and 16% mentioned yes but do not know the name.

Group 2 had 83.33% of the respondent mention that they know their doctors name; 12.50% mentioned yes but do not know the name and 4.17% did not know. Group 3 had 93.75% of the respondent mention that they know their doctors name; 4.69% mentioned yes but do not know the name and 1.56% did not know.

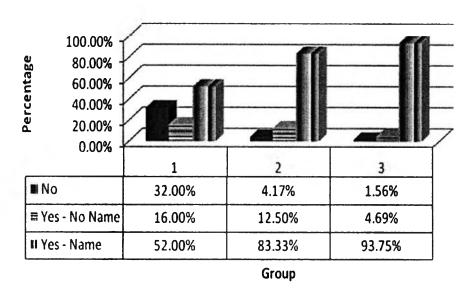


Figure 17: Did you know the physicians who treat you?

## 4. Patient assessment of general services at the hospital

### 4.1 Cleanliness of room

Group 1 had 68% of the respondent mention that cleanliness of room is good; 20% mentioned fair and 12% mentioned it to be very good.

Group 2 had 59.15% of the respondent mention that the cleanliness of room is good; 25.35% mentioned very good and 15.49% mentioned it to be fair.

Group 3 had 63.78% of the respondent mention that the cleanliness of room is good; 25.20% mentioned it very good and 11.02% mentioned it to be fair.

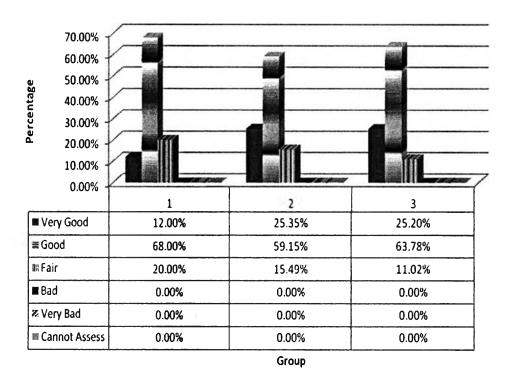


Figure 18: Cleanliness of room

#### 4.2 Convenience of room

Group 1 had 60% of the patient sample mention that convenience of room was good; 24% mentioned it to very good and 16% mentioned it to be fair.

Group 2 had 51.39% of the patient sample mention that convenience of room was good; 26.39% mentioned it to be very good; 20.83% mentioned it to be fair and 1.39% mentioned it to be bad.

Group 3 had 64.84% of the patient sample mention that convenience of room was good; 23.44% mentioned it to be very good and 11.72% mentioned it to be fair.

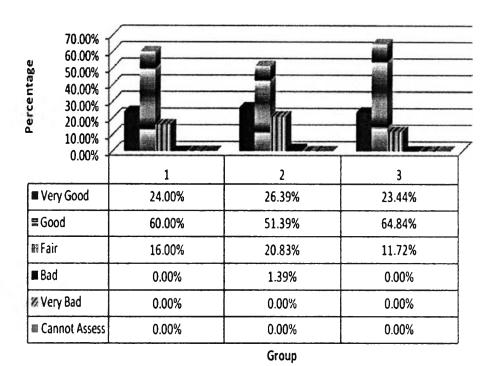


Figure 19: Convenience of room

## 4.3 Staffs' coordination and cooperation

Group 1 had 56% of the patient sample mention that coordination and cooperation of staffs where good; 24% mentioned it to be very good and 20% mentioned it to be fair.

Group 2 had 52.86% of the patient sample mention that coordination and cooperation of staffs where good; 40% mentioned it to be very good and 7.14% mentioned it to be fair.

Group 3 had 49.61% of the patient sample mention that coordination and cooperation of staffs where good; 44.09% mentioned it to be very good and 5.51% mentioned it to be fair.

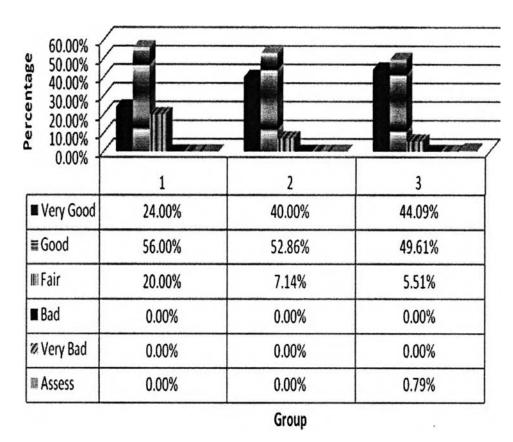


Figure 20: Staffs' coordination and cooperation

## 4.4 Physicians' ability

Group 1 had 52% of respondent mention that physicians' ability to be very good and 48% mentioned it to be good.

Group 2 had 61.97% of respondent mention that physicians' ability to be very good; 33.80% mentioned it to be good and 4.23% mentioned it to be fair.

Group 3 had 64.84% of respondent mention that physicians' ability to be very good; 32.81% mentioned it to be good; 1.56% mentioned it to be fair and 0.78% mentioned they cannot assess the service.

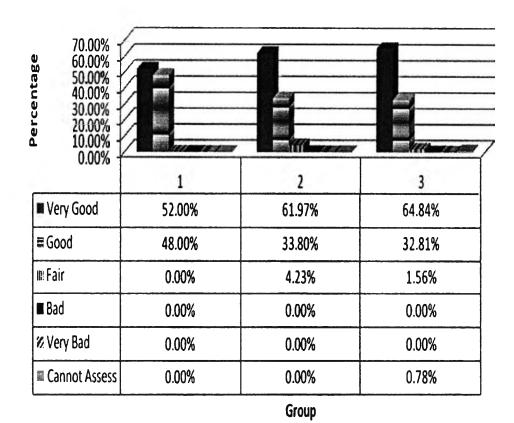


Figure 21: Physicians' ability

### 4.5 Physicians physical examination

Group 1 had 56.52% of respondent mention that physicians' physical examination to be good and 43.48% mentioned it to be very good.

Group 2 had 47.83% of respondent mention that physicians' physical examination to be very good; 47.83% mentioned good and 4.35% mentioned it to be fair.

Group 3 had 55.81% of respondent mention that physicians' physical examination to be very good; 40.31% mentioned it to be good; 3.10% mentioned it to be fair and 0.78% mentioned it cannot assess the service.

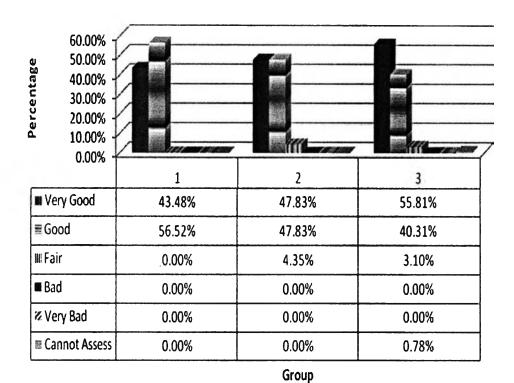


Figure 22: Physicians' physical examination

## 4.6 Physicians' responsiveness

Group 1 had 60% of respondent mention that the physicians' responsiveness was good and 40% mentioned it to be very good.

Group 2 had 56.34% of respondent mention that the physicians' responsiveness was very good; 40.85% mentioned it to be good and 2.82% mentioned it to be fair. Group 3 had 50.39% of respondent mention that the physicians' responsiveness was very good; 46.51% mentioned it to be good; 2.33% mentioned it to be fair and 0.78% mentioned that they could not assess this service.

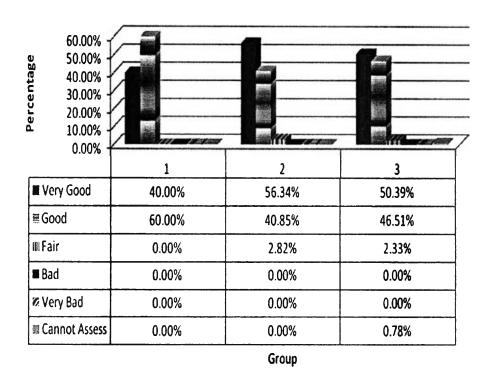


Figure 23: Physicians' responsiveness

# 4.7 Physicians' attention to take care

Group 1 had 68% of respondent mention that physicians' attention to take care was good; 28% mentioned it to be very good and 4% mentioned it to be fair.

Group 2 had 50.70% of respondent mention that physicians' attention to take care was very good; 43.66% mentioned it to be good and 5.63% mentioned it to be fair. Group 3 had 50.39% of respondent mention that physicians' attention to take care was very good; 43.41% mentioned it to be good; 4.65% mentioned it to be fair and 1.55% mentioned that they cannot assess this service.

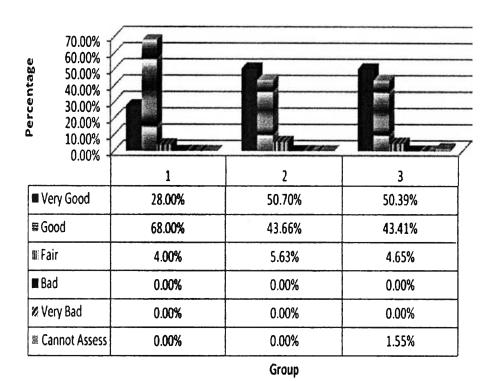


Figure 24: Physicians' attention to take care

### 4.8 Physicians' manner

Group 1 had 68% of respondent mention that physicians' manner was good and 32% mentioned it to be very good.

Group 2 had 55.56% of respondent mention that physicians' manner was good; 43.06% mentioned it to be very good and 1.39% mentioned it to be fair.

Group 3 had 55.04% of respondent mention that physicians' manner was very good; 42.64% mentioned it to be good; 1.55% mentioned it to be fair and 0.78% mentioned that they cannot assess this service.

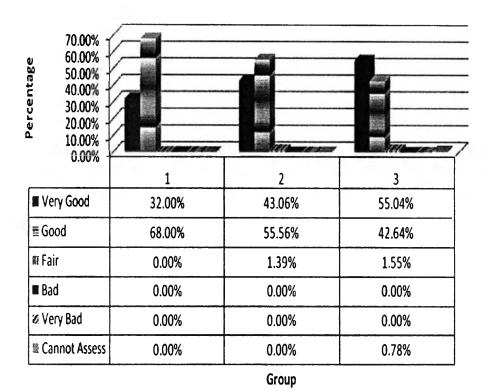


Figure 25: Physicians' manner

## 4.9 Nurses' ability

Group 1 had 60% of respondent mention that nurses' ability was good and 40% mentioned it to be very good.

Group 2 had 52.11% of respondent mention that nurses' ability was good; 42.25% mentioned it to be very good and 5.63% mentioned it to be fair.

Group 3 had 48.84% of the respondent mention that nurses' ability was very good; 47.29% mentioned it to be good; 3.10% mentioned it to be fair and 0.78% mentioned that they cannot assess this service.

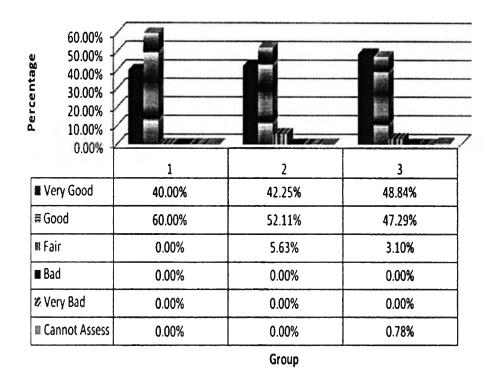


Figure 26: Nurses' ability

## 4.10 Nurses' responsiveness

Group 1 had 52% of respondent mention that nurses' responsiveness was very good; 40% mentioned it to be good and 8% mentioned it to be fair.

Group2 had 47.22% of respondent mention that nurses' responsiveness was very good; 44.44% mentioned it to be good and 8.33% mentioned it to be fair.

Group 3 had 55.91% of respondent mention that nurses' responsiveness was good; 37.80% mentioned it to be very good and 6.30% mentioned it to be fair.

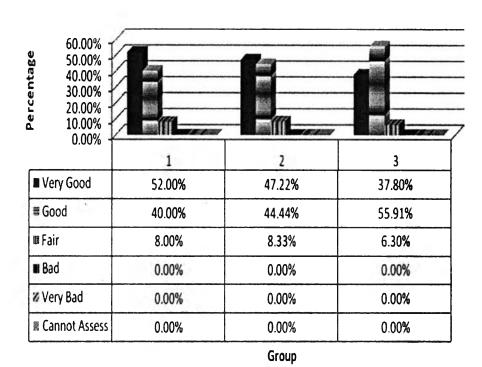


Figure 27: Nurses' responsiveness

#### 4.11 Nurses' attention to take care

Group 1 had 52% of respondent mention that nurses' attention to take care was good; 40% mentioned it to be very good and 8% mentioned it to be fair.

Group 2 had 47.89% of respondent mention that nurses' attention to take care was good; 43.66% mentioned it to be very good and 8.45% mentioned it to be fair.

Group 3 had 50% of respondent mention that nurses' attention to take care was good; 46.09% mentioned it to be very good and 3.91% mentioned it to be fair.

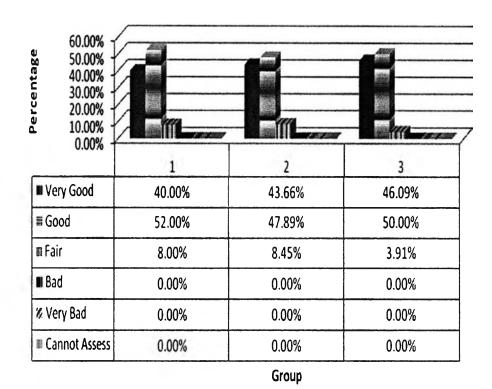


Figure 28: Nurses' attention to take care

#### 4.12 Nurses' manners

Group 1 had 54.17% of respondent mention that nurses' manner was good; 33.33% mentioned it to be very good and 12.50% mentioned it to be fair.

Group 2 had 45.07% of respondent mention that nurses' manner was very good; 45.07% mentioned it to be good; 8.45% mentioned it to be fair and 1.41% mentioned it to be bad.

Group 3 had 51.59% of respondent mention that nurses' manner was good; 42.06% mentioned it to be very good and 6.35% mentioned it to be fair.

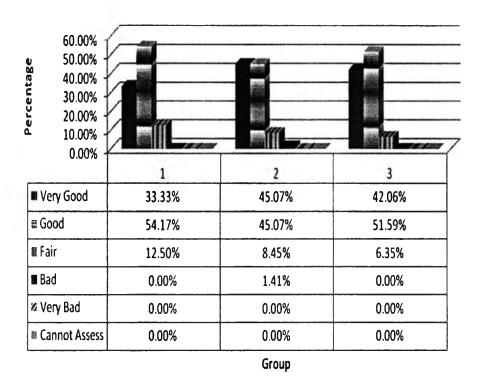


Figure 29: Nurses' manners

#### 4.13 Others staff's manner

Group 1 had 56% of respondent mention that manners of other staffs' to be good; 24% mentioned it to be very good and 20% mentioned it to be fair.

Group 2 had 58.57% of respondent mention that manners of other staffs' to be good; 21.43% mentioned it to fair and 20% mentioned it to be very good.

Group 3 had 57.14% of respondent mention that manner of other staffs' to be good; 26.98% mentioned it to be very good and 15.87% mentioned it to be fair.

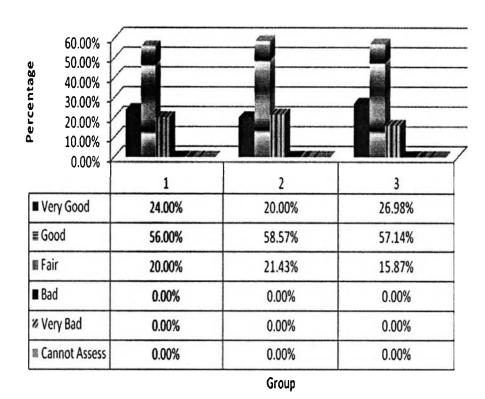


Figure 30: Others staffs' manner

#### 4.14 Overall satisfaction with hospital care

Group 1 had 62.50% of respondent mention that their overall satisfaction with hospital care was good; 33.33% mentioned it to be very good and 4.17% mentioned that they cannot assess.

Group 2 had 47.22% of respondent mention their overall satisfaction with hospital care was very good; another 47.22% mentioned it to be good and 5.56% mentioned it to be fair.

Group 3 had 49.22% of respondent mention their overall satisfaction with hospital care was good; 46.09% mentioned it to be very good and 4.69% mentioned it to be fair.

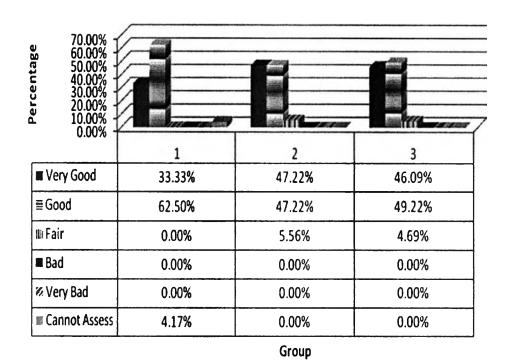


Figure 31: Overall satisfaction with hospital care

## 5. Final patient assessment of hospital services

#### 5.1 Will you recommend this hospital to friends and family in future?

Group 1 had 88.46% of respondent mention they would recommend this hospital to relatives or friends; 7.69% were not sure if they would recommend and 3.85% would definitely not recommend.

Group 2 had 84.93% of respondent mention they would recommend this hospital to relatives or friends; 13.70% were not sure if they would recommend and 1.37% would definitely not recommend.

Group 3 had 89.60% of respondent mention they would recommend this hospital to relatives or friends; 9.60% were not sure if they recommend and 0.80% would definitely not recommend.

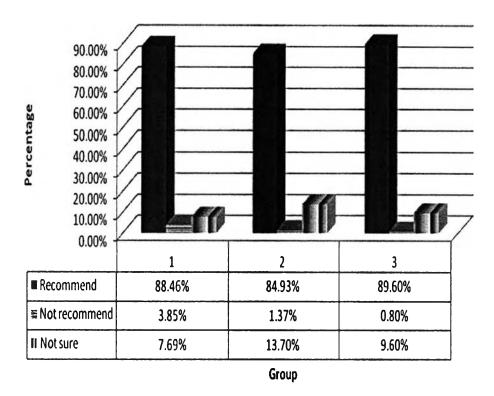


Figure 32: Will you recommend this hospital to relatives or friends if they get ill?

## 5.2 Will you come back to this same hospital in future if you get ill?

Group 1 had 70.83% of respondent mention they would come back to this hospital if ill again and 29.17% mentioned they were not sure.

Group 2 had 78.08% of respondent mention they would come back to this hospital if ill again and 21.92% mentioned they were not sure.

Group 3 had 88.19% of respondent mention they would come back to this hospital if ill again; 11.02% mentioned they were not sure and 0.79% was absolutely not to come back to this hospital.

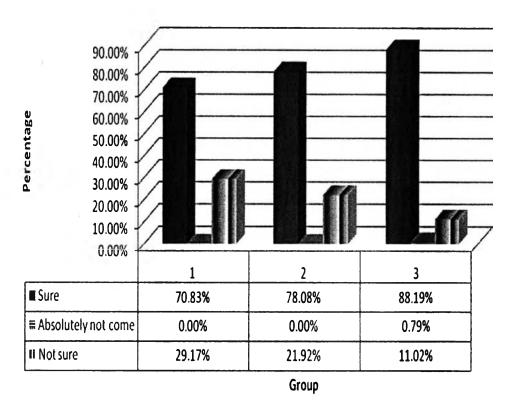


Figure 33: Will you come back to this hospital if you get ill again?

5.3 Suggest three most important quality of services need improvement in this hospital.

There was a variety of suggestions that was obtained from the 228 respondents. Suggestions were made in variety of services such as facility, services, hospital environment and food. The three most suggested important quality of services need improvement in this hospital by the respondent were as follows:

- 1 Inadequate medical staffs
- 2 Long waiting time for hospital services
- 3 Cleanliness of hospital

## 6. Statistical Analysis

Few of the variables from the questionnaire were picked for further statistical analysis after seeing certain trends using descriptive statistic. Fisher's exact test was performed where out of the nine variables, only one variables was found to be statistical significant. There was a significant association (p-value .046) between the question, 'Did you get the explanation about your treatment plan or operation?' and patient satisfaction. Another variable 'Staffs' coordination and cooperation' had a p-value of .084 which almost had a significant association.

Table 4: Statistical Analysis

	Item	Trend	P-value
1	Advice on illness	Downward	.533
	(Question # 12)		
2	Did you get the results of	Upward	.282
	laboratory examination or x-		
	ray? (Question 13)		
3	Did you get the explanation	Upward-	.046*
	about your treatment plan or	Downward	
	operation? (Question # 14)		
4	Cleanliness of room	Upward	.393
	(Question 17)		
5	Convenience of room	Downward-	.122
	(Question # 18)	Upward	0.0.4
6	Staffs' coordination and	Upward	.084
	cooperation		
	(Question # 19)	<b>.</b>	1 000
7	Physicians' responsiveness	Downward	1.000
	(Question # 22)	D 1	1.000
8	Physicians' attention to take	Downward	1.000
^	care (Question # 23)	D	575
9	Other staffs' manner	Downward-	.565
	(Question 29)	Upward	