

CHAPTER IV

RESEARCH RESULT

This chapter presents the results of the study at NBC, Red Cross Society, Thailand during regular working hours, February 1 to February 29, 2004 with self-deferral and deferred blood donors. The data of respondents was collected from four stations: Self-deferral Questionnaire and Volunteer Screening, Physical Examination and Physician/Trained Nurse Screening, Hemoglobin Test and Technical Staff Screening, and Previous History Check and Information Staff Screening station.

The results presented in the tables are separated by category and section.

Part 1. Socio-demographic data

Part 2. Descriptive analysis of deferred blood donor perception of deferral blood donor system

Part 3. Descriptive analysis of deferred blood donor satisfaction

Part 4. Opinions of deferred blood donor

Part 5. Level of quality of service according to deferred blood donor perception

Part 6. Deferred blood donor satisfaction level

Part 7. Associations between deferred blood donor socio-demographic characteristics and deferred blood donor perception

Part 8. Associations between perception and deferred blood donor satisfaction

Part 9. Associations between deferred blood donor opinions and satisfaction

In general, during this study the total number of blood donors who came and received services of NBC headquarters and mobile units was 35,540 persons; 13,613 at the head quarters. Self-deferred, and deferred by NBC policy and staff at the headquarters was 397 (2.92%); of which 382 (96.22%) decided to participate in this study. The

reasons for not participating included, too busy 7(1.76%), had no time 5(1.25%), and reasons not specified 3(0.76%).

Figure 4.1 Number, Percentage of deferred blood donor during this study

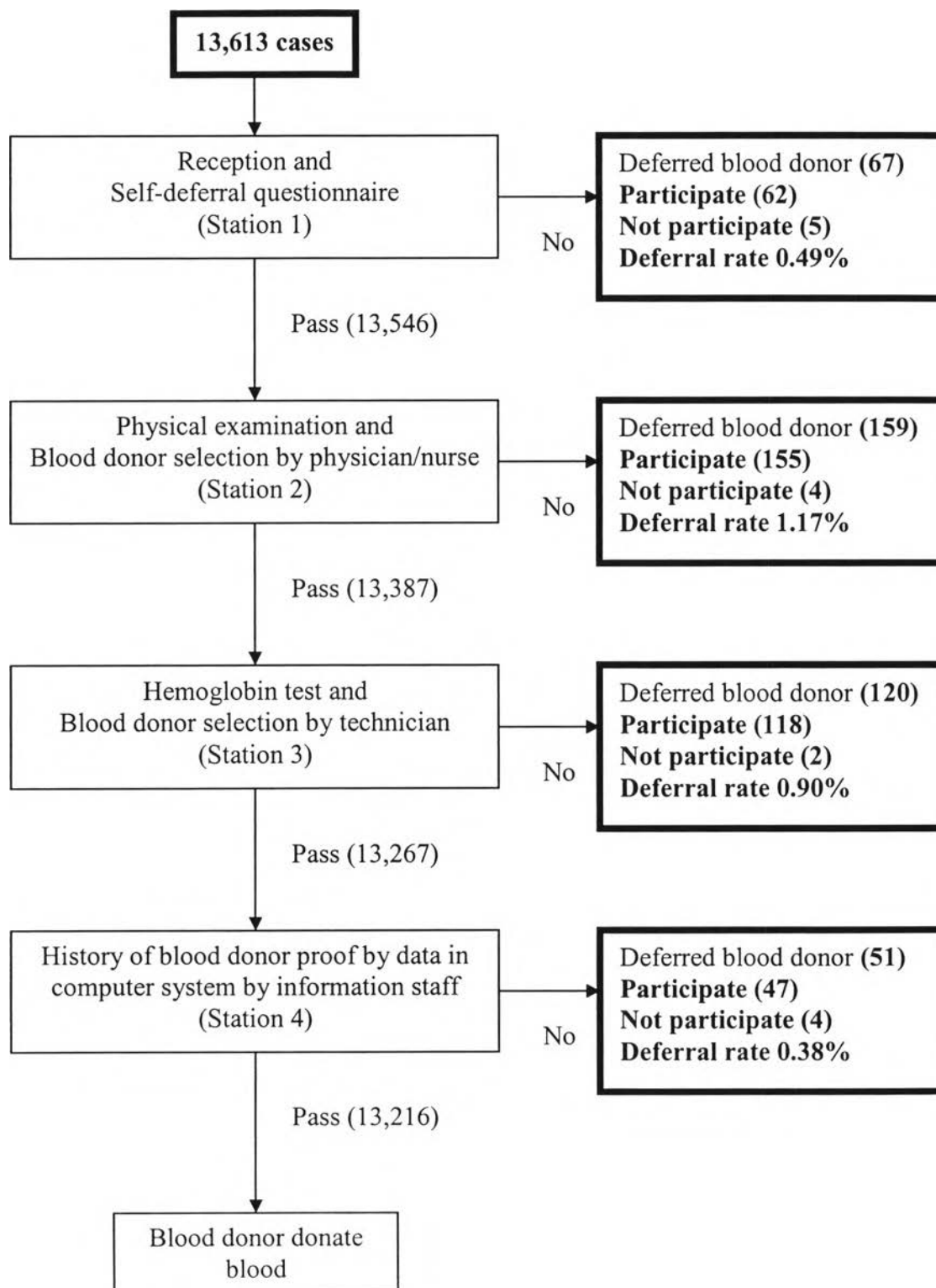


Figure 4.1 represents the percentage of blood donor deferral rate that occurred in the Physical examination and Blood donor selection by physician/nurse, 1.17%, Hemoglobin test and Blood donor selection by technician ,0.90%, Reception and Self-deferral questionnaire, 0.49%, History of blood donor data in computer system by information staff, 0.38% by rank.

PART 1. SOCIO-DEMOGRAPHIC DATA

Data collected from 382 deferred cases (Table 4.1), shows that the majority of cases were in the 26-39 year old group, 163(42.7%) with a mean age of 33.26 years. Only 4(1.0%) were in the less than 17 year old group. The gender ratio male to female was 1: 1.18. The largest group of deferred blood donor 47.8% had less than a Bachelor's degree, while 44.6% had a Bachelor's degree, and 7.6% passed a degree higher than Bachelor's degree. Among occupations 35.3% were private company employee, 26.4% were self-employed, 17.7% were students and 11.1% were government officials.

In respect to respondent's personal income, the largest group was in the range of 5,000-10,000 Baht/month, comprising 27.6% of all income groups. The second and the third largest groups were in 10,001-15,000 Baht (17.3%) and more than 30,000 (13.8%). The percentage of deferred blood donor who donated more than one time was 62.4%; 37.6% were deferred at their first and only visit, 36.3% reported more than four donations.

Table 4.1 Number and Percentage of Deferred Blood Donors by Socio-demographic Characteristics

Socio-demographic Characteristics	Number	%
Age	382	100.0
Less than 17 years	4	1.0
17-25 years	103	27.0
26-39 years	163	42.7
40-55 years	99	25.9
55-60 years	13	3.4
Mean = 33.26 Standard Deviation = 10.72 Median = 31.0		
Min = 15 Max = 59		
Gender	382	100.0
Male	175	45.8
Female	207	54.2
Male: Female = 1:1.18		
Educational Level	381	100.0
Not study	1	0.3
Less than High School	44	11.6
High School	93	24.3
Certificate or Diploma	44	11.6
Bachelor's Degree	170	44.6
Master's Degree or higher	29	7.6
Occupation	379	100.0
Unemployed	30	7.9
Government official	42	11.1
Non-government official	6	1.6
Self-employed	100	26.4
Student	67	17.7
Private company official	134	35.3

Table 4.1 (cont.) Number and Percentage of Deferred Blood Donors by Socio-demographic Characteristics

Socio-demographic Characteristics	Number	%
Income (Baht)	376	100.0
No income	49	13.0
Less than 5,000	38	10.1
5,000- 10,000	104	27.6
10,001-15,000	65	17.3
15,001-20,000	41	10.9
20,001-25,000	18	4.8
25,001-30,000	9	2.4
More than 30,000	52	13.8
Number of blood donations	375	100.0
First time	141	37.6
Second time	51	13.6
Third time	31	8.2
Forth time	16	4.3
More than 4 times	136	36.3

Table 4.2. Percentage of deferred rate by gender

Station	Male (n = 175)	Female (n = 207)	Total
1. Self-deferral Questionnaire and Volunteer Screening	32.3	67.7	100.0
2. Physical Examination and Physician/ Trained Nurse screening station	61.3	38.7	100.0
3. Hemoglobin Test and Technical Staff screening station	23.4	76.6	100.0
4. Previous History Check and Information Staff screening station	63.8	36.2	100.0

Deferred females were deferred at station 1, 67.7% and station 3, 76.6%. These results are higher than in males, who were deferred more at station 2, 61.3% and station 4, 63.8%.

Table 4.3. Percentage of deferred blood donor in each station per visit

Deferral times	Station 1	Station 2	Station3	Station 4	Total number (case)
First time	79.0	29.0	18.6	53.2	141
Second time	12.9	12.9	10.2	23.4	51
Third time	1.6	7.7	13.6	4.3	31
Forth time	0	5.2	6.8	0	16
More than four times	6.5	42.6	49.1	17.0	136
Total number (case)	62	151	116	46	375

Table 4.3 shows the majority of blood donors were deferred at their first visit at station 1 and 4. Even those who donate blood more than four times were frequently deferred at station 2 and 3.

PART 2. DESCRIPTIVE ANALYSIS OF DEFERRED BLOOD DONOR PERCEPTIONS OF BLOOD DONOR DEFERRAL SYSTEM

Tables 4.4 to 4.8 show the detailed results regarding perception at each station, as well as overall perception.

Table 4.9 shows results regarding three areas of perception, as well as overall perception.

Tables 4.4, In the overall performance of the blood center, the responses of the 382 participants demonstrate that a majority agreed with categories: short waiting time

(74.6%), that the staff was helpful (70.4%), and that they received practical explanations (69.4%). Some of the participants disagreed with sufficiency staff (12.0%), the description at each station (11.0%), and the logistics follow-up visit (9.9%).

Table 4.5, In reference to the Self-deferral Questionnaire and Volunteer Screening (n = 62), participants generally agreed with the time needed to find the station (75.8%). Additionally, most agree with post-deferral explanation and practices, as well as with the staffs greeting and willing to listen (72.6%). Some participants disagreed with the descriptions at the station (14.5%), sufficiency of staff (12.9%), and the logistics of a follow-up visit (9.7%)

Table 4.6, In the Physical Examination and Physician/ Trained Nurse screening station (n = 155), participants generally agreed with the short waiting time (73.5%), these was a convenient place for service (71.6%), and sufficiency of staff (68.4%). Several participants disagreed with the description at each station (11.0%), sufficiency of staff (9.7%), and that this was a convenient place for service (8.4%).

Table 4.7, In regards to the Hemoglobin Test and Technical Staff screening station (n = 118), most participants agreed with the short waiting time and adequate explanation (78.8%), as well a clear explanation (78.0%). Some participants, however, disagreed with sufficiency of staff (15.3%), that there was a convenient place for service (14.4%) and the logistics of a follow-up visit (14.4%)

Table 4.8, Dealing with the Previous History Check and Information Staff screening station (n = 47), participants most often agreed with the short waiting time (76.6%), the time needed to find station (72.3%), and the post-deferred explanation practice. Some participants disagreed with the staffs willingness to listen (17.0%), clear

explanation about deferring cause (14.9%), and the time need to find the station (14.9%).

Table 4.4 Number, Percentage and Mean of Deferred Blood Donor Perception about Blood Donor Deferral System, Overall performance (n = 382)

Deferred Blood Donor Perception	Strongly Agree (4)		Agree (3)		Disagree (2)		Strongly Disagree (1)		Mean
	No	%	No	%	No	%	No	%	
1. Place and Environment									3.13
1.1. Time to find this station	91	23.8	263	68.8	26	6.8	2	0.5	3.16
1.2. Description at this station	100	26.2	237	62.0	42	11.0	3	0.8	3.14
1.3. Place suitable*	98	25.7	262	68.6	20	5.2	1	0.3	3.20
1.4. Convenient place for services	77	20.2	264	69.1	37	9.7	4	1.0	3.08
1.5. Enough staff	75	19.6	259	67.8	46	12.0	2	0.5	3.07
1.6. Short waiting	78	20.4	285	74.6	18	4.7	1	0.3	3.15
2. National Blood Center Staff Capability									3.24
2.1. Clear explanation	121	31.7	248	64.9	12	3.1	1	0.3	3.28
2.2. Adequate explanation	114	29.8	249	65.2	18	4.7	7	0.3	3.25
2.3. Practical explanation	108	28.3	265	69.4	8	2.1	1	0.3	3.26
2.4. Staff helpful	88	23.0	269	70.4	24	6.3	1	0.3	3.16
3. National Blood Center Staff Attention									3.21
3.1. Reason for deferral explained	118	30.9	252	66.0	11	2.9	1	0.3	3.27
3.2. Clearly explanation about deferring cause	107	28.0	244	63.9	29	7.6	2	0.5	3.19
3.3. Practice after deferral explanation*	102	26.7	260	68.1	18	4.7	1	0.3	3.22
3.4. Follow-up visit provided	101	26.4	241	63.1	38	9.9	2	0.5	3.15
3.5. Appropriate greeting	113	29.6	259	67.8	7	1.8	3	0.8	3.26
3.6. Staff willing to listen	93	24.3	259	67.8	29	7.6	1	0.3	3.16

* One missing value

Table 4.5 Number, Percentage and Mean of Deferred Blood Donor Perceptions about the Blood Donor Deferral System, Self-deferral Questionnaire and Volunteer Screening (n = 62)

Deferred Blood Donor Perception	Strongly Agree (4)		Agree (3)		Disagree (2)		Strongly Disagree (1)		Mean
	No	%	No	%	No	%	No	%	
	1. Place and Environment 3.14								
1.1. Time to find this station	13	21.0	47	75.8	2	3.2	0		3.18
1.2. Description at this station	13	21.0	39	62.9	9	14.5	1	1.6	3.03
1.3. Place suitable*	16	25.8	43	69.4	2	3.2	0		3.19
1.4. Convenient place for services	17	27.4	41	66.1	4	6.5	0		3.21
1.5. Enough staff	15	24.2	39	62.9	8	12.9	0		3.11
1.6. Short waiting	14	22.6	42	67.7	5	8.1	1	1.6	3.11
2. National Blood Center Staff Capability 3.20									
2.1. Clear explanation	20	32.3	39	62.9	2	3.2	1	1.6	3.26
2.2. Adequate explanation	17	27.4	41	66.1	3	4.8	1	1.6	3.19
2.3. Practical explanation	18	29.0	41	66.1	2	3.2	1	1.6	3.23
2.4. Staff helpful	15	24.2	41	66.1	5	8.1	1	1.6	3.13
3. National Blood Center Staff Attention 3.15									
3.1. Reason for deferral explained	17	27.4	44	71.0	0		1	1.6	3.24
3.2. Clearly explanation about deferring cause	15	24.2	40	64.5	5	8.1	2	3.2	3.10
3.3. Practice after deferral explanation	14	22.6	45	72.6	2	3.2	1	1.6	3.16
3.4. Follow-up visit provided	13	21.0	43	69.4	6	9.7	0		3.11
3.5. Appropriate greeting	14	22.6	45	72.6	2	3.2	1	1.6	3.16
3.6. Staff willing to listen	12	19.4	45	72.6	4	6.5	1	1.6	3.10

* One missing value

Table 4.6 Number, Percentage and Mean of Deferred Blood Donor Perceptions about Blood Donor Deferral System, Physical Examination and Physician/ Trained Nurse Screening (n = 155)

Deferred Blood Donor Perception	Strongly Agree (4)		Agree (3)		Disagree (2)		Strongly Disagree (1)		Mean
	No	%	No	%	No	%	No	%	
	1. Place and Environment								
1.1. Time to find this station	49	31.6	94	60.6	11	7.1	1	0.6	3.23
1.2. Description at this station	49	31.6	89	57.4	17	11.0	0		3.21
1.3. Place suitable	45	29.0	103	66.5	6	3.9	1	0.6	3.25
1.4. Convenient place for services	31	20.0	111	71.6	13	8.4	0		3.12
1.5. Enough staff	34	21.9	106	68.4	15	9.7	0		3.12
1.6. Short waiting	35	22.6	114	73.5	6	3.9	0		3.19
2. National Blood Center Staff Capability									3.34
2.1. Clear explanation	61	39.4	93	60.0	1	0.6	0		3.39
2.2. Adequate explanation	59	38.1	92	59.4	4	2.6	0		3.35
2.3. Practical explanation	56	36.1	98	63.2	1	0.6	0		3.35
2.4. Staff helpful	47	30.3	102	65.8	6	3.9	0		3.26
3. National Blood Center Staff Attention									3.37
3.1. Reason for deferral explained	69	44.5	86	55.5	0		0		3.45
3.2. Clearly explanation about deferring cause	66	42.6	85	54.8	4	2.6	0		3.40
3.3. Practice after deferral explanation*	61	39.4	89	57.4	4	2.6	0		3.37
3.4. Follow-up visit provided	61	39.4	83	53.5	10	6.5	1	0.6	3.32
3.5. Appropriate greeting	61	39.4	91	58.7	1	0.6	2	1.3	3.36
3.6. Staff willing to listen	57	36.8	92	59.4	6	3.9	0		3.33

* One missing value

Table 4.7 Number, Percentage and Mean of Deferred Blood Donor Perceptions about Blood Donor Deferral System, Hemoglobin Test and Technical Staff Screening (n = 118)

Deferred Blood Donor Perception	Strongly Agree (4)		Agree (3)		Disagree (2)		Strongly Disagree (1)		Mean
	No	%	No	%	No	%	No	%	
	1. Place and Environment								
1.1. Time to find this station	23	19.5	88	74.6	6	5.1	1	0.8	3.13
1.2. Description at this station	26	22.0	79	66.9	12	10.2	1	0.8	3.10
1.3. Place suitable	23	19.5	86	72.9	9	7.6	0		3.12
1.4. Convenient place for services	15	12.7	82	69.5	17	14.4	4	3.4	2.92
1.5. Enough staff	13	11.0	85	72.0	18	15.3	2	1.7	2.92
1.6. Short waiting	20	16.9	93	78.8	5	4.2	0		3.13
2. National Blood Center Staff Capability									3.13
2.1. Clear explanation	22	18.6	92	78.0	4	3.4	0		3.15
2.2. Adequate explanation	19	16.1	93	78.8	6	5.1	0		3.11
2.3. Practical explanation	22	18.6	94	79.7	2	1.7	0		3.17
2.4. Staff helpful	17	14.4	94	79.7	7	5.9	0		3.08
3. National Blood Center Staff Attention									3.08
3.1. Reason for deferral explained	21	17.8	92	78.0	5	4.2	0		3.14
3.2. Clearly explanation about deferring cause	15	12.7	90	76.3	13	11.0	0		3.02
3.3. Practice after deferral explanation	17	14.4	92	78.0	9	7.6	0		3.07
3.4. Follow-up visit provided	18	15.3	83	70.3	17	14.4	0		3.01
3.5. Appropriate greeting	26	22.0	90	76.3	2	1.7	0		3.20
3.6. Staff willing to listen	16	13.6	91	77.1	11	9.3	0		3.04

Table 4.8 Number, Percentage and Mean of Deferred Blood Donor Perceptions about Blood Donor Deferral System, Previous History Check and Information Staff Screening (n = 47)

Deferred Blood Donor Perception	Strongly Agree (4)		Agree (3)		Disagree (2)		Strongly Disagree (1)		Mean
	No	%	No	%	No	%	No	%	
	1. Place and Environment								
1.1. Time to find this station	6	12.8	34	72.3	7	14.9	0		2.98
1.2. Description at this station	12	25.5	30	63.8	4	8.5	1	2.1	3.13
1.3. Place suitable	14	29.8	30	63.8	3	6.4	0		3.23
1.4. Convenient place for services	14	29.8	30	63.8	3	6.4	0		3.23
1.5. Enough staff	13	27.7	29	61.7	5	10.6	0		3.17
1.6. Short waiting	9	19.1	36	76.6	2	4.3	0		3.15
2. National Blood Center Staff Capability									3.21
2.1. Clear explanation	18	38.3	24	51.1	5	10.6	0		3.28
2.2. Adequate explanation	19	40.4	23	48.9	5	10.6	0		3.30
2.3. Practical explanation	12	25.5	32	68.1	3	6.4	0		3.19
2.4. Staff helpful	9	19.1	32	68.1	6	12.8	0		3.06
3. National Blood Center Staff Attention									3.10
3.1. Reason for deferral explained	11	23.4	30	63.8	6	12.8	0		3.11
3.2. Clearly explanation about deferring cause	11	23.4	29	61.7	7	14.9	0		3.09
3.3. Practice after deferral explanation	10	21.3	34	72.3	3	6.4	0		3.15
3.4. Follow-up visit provided	9	19.1	32	68.1	5	10.6	1	2.1	3.04
3.5. Appropriate greeting	12	25.5	33	70.2	2	4.3	0		3.21
3.6. Staff willing to listen	8	17.0	31	66.0	8	17.0	0		3.00

Table 4.9 Means of deferred blood donor perception in each station (total mean = 4.00)

	n	Place and Environment	NBC Staff Capability	NBC Staff Attention	Mean
Self-deferral Questionnaire and Volunteer Screening	62	3.14	3.20	3.15	3.16
Physical Examination and Physician/ Trained Nurse Screening (n=155)	155	3.19	3.34	3.37	3.30
Hemoglobin Test and Technical Staff Screening	118	3.05	3.13	3.08	3.09
Previous History Check and Information Staff Screening	47	3.15	3.21	3.10	3.15
Overall	382	3.13	3.24	3.21	3.18

The perception of the blood donor deferral system implementation was divided in to three areas: place and environment, staff capability and staff attention.

Results of data analysis show the mean of overall perception was 3.18, with the highest total mean, 3.30 in the Physical Examination and Physician/ Trained Nurse Screening station. The Hemoglobin Test and Technical Staff Screening station received the lowest rating with a mean of 3.09.

The highest means of Place and environment (3.19), Staff Capability (3.34), and Staff attention (3.37) were found in the in Physical Examination and Physician/ Trained Nurse Screening station. The lowest means of Place and environment (3.05), Staff Capability (3.13), and Staff attention (3.08) were located in the Hemoglobin Test and Technical Staff Screening station.

Table 4.10 Percentage and mean of deferred blood donor perception with strongly agree by rank of list, overall performance (total mean = 4.00)

Rank	Item	Deferred blood donor perception	Percentage	Mean
1	2.1	Clear explanation	31.7	3.28
2	3.1	Reason for deferral explanation	30.9	3.27
3	2.2	Adequate explanation	29.8	3.25
4	3.5	Appropriate greeting	29.6	3.26
5	2.3	Practical explanation	28.3	3.26
6	3.2	Clear explanation about deferring cause	28.0	3.19
7	3.3	Practice after deferral explanation	26.7	3.22
8	3.4	Follow-up visit provided	26.4	3.15
9	1.2	Description at station	26.2	3.14
10	1.3	Place suitable	25.7	3.20
11	3.6	Staff willing to listen	24.3	3.16
12	1.1	Time to find station	23.8	3.16
13	2.4	Staff helpful	23.0	3.16
14	1.6	Short waiting	20.4	3.15
15	1.4	Convenient place for service	20.2	3.08
16	1.5	Enough staff	19.6	3.07

Table 4.10 shows the highest rank in overall performance was clear explanation with 31.1% of participants choosing strongly agree followed by adequate explanation (29.8%).

The lowest ranking form of “strongly agree” by deferred blood donor perception was sufficiency of staff (19.6%). This followed by convenient place for service (20.2%) and short waiting time (20.4%).

Table 4.11 Percentage and mean of deferred blood donor perception with strongly agree by rank of list, Self-deferral Questionnaire and Volunteer Screening (total mean = 4.00)

Rank	Item	Deferred blood donor perception	Percentage	Mean
1	2.1	Clear explanation	32.3	3.26
2	2.3	Practical explanation	29.0	3.23
3	1.4	Convenient place for service	27.4	3.21
	2.2	Adequate explanation	27.4	3.19
	3.1	Reason for deferral explanation	27.4	3.24
4	1.3	Place suitable	25.8	3.19
5	1.5	Enough staff	24.2	3.11
	2.4	Staff helpful	24.2	3.13
	3.2	Clear explanation about deferring cause	24.2	3.10
6	1.6	Short waiting	22.6	3.11
	3.3	Practice after deferral explanation	22.6	3.16
	3.5	Appropriate greeting	22.6	3.16
7	1.1	Time to find station	21.0	3.18
	1.2	Description at station	21.0	3.03
	3.4	Follow-up visit provided	21.0	3.11
8	3.6	Staff willing to listen	19.4	3.10

Table 4.11 shows the highest rank in Self-deferral Questionnaire and Volunteer Screening was clear explanation (32.3%). The next highest categories were practical explanation (29.0%) and convenient place for service (27.4%).

The lowest ranking form of “strongly agree” by deferred blood donor perception was staff’s willingness to listen (19.6%). The next three lowest ranking categories were follow-up visit provided, description at station, and time to find station, all with 21.0%.

Table 4.12 Percentage and mean of deferred blood donor perception with strongly agree by rank of list, Physical Examination and Physician/ Trained Nurse Screening (total mean = 4.00)

Rank	Item	Deferred blood donor perception	Percentage	Mean
1	3.1	Reason for deferral explanation	44.5	3.45
2	3.2	Clear explanation about deferring cause	42.6	3.40
3	2.1	Clear explanation	39.4	3.39
	3.4	Follow-up visit provided	39.4	3.32
	3.3	Practice after deferral explanation	39.4	3.37
	3.5	Appropriate greeting	39.4	3.36
4	2.2	Adequate explanation	38.1	3.35
5	3.6	Staff willing to listen	36.8	3.33
6	2.3	Practical explanation	36.1	3.35
7	1.1	Time to find station	31.6	3.23
	1.2	Description at station	31.6	3.21
8	2.4	Staff helpful	30.3	3.26
9	1.3	Place suitable	29.0	3.25
10	1.6	Short waiting	22.6	3.19
11	1.5	Enough staff	21.9	3.12
12	1.4	Convenient place for service	20.0	3.12

Table 4.12 shows the highest rank in Physical Examination and Physician/ Trained Nurse Screening was reason for deferral explained (44.5%). This was followed by clearly explanation about deferring cause (42.6%) and clear explanation (39.4%). The lowest ranking form of “strongly agree” deferred blood donor perception was convenient place for service (20.0%). This was followed by enough staff (21.9%) and short waiting (22.6%).

Table 4.13 Percentage and mean of deferred blood donor perception with strongly agree by rank of list, Hemoglobin Test and Technical Staff Screening (total mean = 4.00)

Rank	Item	Deferred blood donor perception	Percentage	Mean
1	1.2	Description at station	22.0	3.10
	3.5	Appropriate greeting	22.0	3.20
2	1.1	Time to find station	19.5	3.13
	1.3	Place suitable	19.5	3.12
3	2.1	Clear explanation	18.6	3.15
	2.3	Practical explanation	18.6	3.17
4	3.1	Reason for deferral explanation	17.8	3.14
5	1.6	Short waiting	16.9	3.13
6	2.2	Adequate explanation	16.1	3.11
7	3.4	Follow-up visit provided	15.3	3.01
8	2.4	Staff helpful	14.4	3.08
	3.3	Practice after deferral explanation	14.4	3.07
9	3.6	Staff willing to listen	13.6	3.04
10	1.4	Convenient place for service	12.7	2.92
	3.2	Clear explanation about deferring cause	12.7	3.02
11	1.5	Enough staff	11.0	2.92

Table 4.13 shows the highest rank in Hemoglobin Test and Technical Staff Screening was description at station (22.0%). The next highest were appropriate greeting (22.0%) and time to find station (19.5%).

The lowest ranking form of “strongly agree” by deferred blood donor perception was enough staff (11.0%). The next lowest were convenient place for service and clear explanation about deferring cause (12.7%). This station had the lowest two perception ratings with a place for service and enough staff (2.92).

Table 4.14 Percentage and mean of deferred blood donor perception with strongly agree by rank of list, Previous History Check and Information Staff Screening (total mean = 4.00)

Rank	Item	Deferred blood donor perception	Percentage	Mean
1	2.2	Adequate explanation	40.4	3.30
2	2.1	Clear explanation	38.3	3.28
3	1.3	Place suitable	29.8	3.23
	1.4	Convenient place for service	29.8	3.23
4	1.5	Enough staff	27.7	3.17
5	1.2	Description at station	25.5	3.13
	2.3	Practical explanation	25.5	3.19
	3.5	Appropriate greeting	25.5	3.21
6	3.1	Reason for deferral explanation	23.4	3.11
	3.2	Clear explanation about deferring cause	23.4	3.09
7	3.3	Practice after deferral explanation	21.3	3.15
8	1.1	Time to find station	19.5	3.13
9	1.6	Short waiting	19.1	3.15
	2.4	Staff helpful	19.1	3.06
	3.4	Follow-up visit provided	19.1	3.04
10	3.6	Staff willing to listen	17.0	3.00

Table 4.14 shows the highest rank in Previous History Check and Information Staff Screening was adequate explanation (40.4%). The next two highest were clear explanation (38.3%) and place suitable (29.8%).

The lowest ranking form of “strongly agree” by deferred blood donor perception was the staff’s willingness to listen (17.0%). The next three lowest were follow-up visit provided, staff helpful, and short waiting time at the same percentage, 19.1%.

PART 3 DESCRIPTIVE ANALYSIS OF DEFERRED BLOOD DONOR SATISFACTION

Table 4.15 to 4.19 show details of place and environment in questions 1-5, staff competence in questions 6-9, and staff personnel interest in questions 10-13.

The data from table 4.15 indicates that the highest overall satisfaction rates were greeting and willingness to serve (4.10) and reason for deferral explanation (4.06).

The lowest ranking categories were short wait time and staff advisory (3.91).

Table 4.15 Number, Percentage and Mean of Deferred Blood Donor Satisfaction, Overall (n = 382)

Deferral Blood Donor System	Satisfaction										Mean
	Very high (5)		High (4)		Moderate (3)		Low (2)		Very Low (1)		
	No	%	No	%	No	%	No	%	No	%	
1. Time to find this station	73	19.1	240	62.8	61	16.0	7	1.8	1	0.3	3.99
2. Description at station	66	17.3	236	61.8	65	17.0	13	3.4	2	0.5	3.92
3. Suitable Place	76	19.9	224	58.6	70	18.3	11	2.9	1	0.3	3.95
4. Convenient place for services	72	18.8	237	62.0	57	14.9	14	3.7	2	0.5	3.95
5. Adequate staff	66	17.3	233	61.0	72	18.8	10	2.6	1	0.3	3.92
6. Short wait time	56	14.7	247	64.7	70	18.3	7	1.8	2	0.5	3.91
7. Practice of staff	55	14.4	245	64.1	73	19.1	8	2.1	1	0.3	3.90
8. Staff advisory	63	16.5	233	61.0	76	19.9	9	2.4	1	0.3	3.91
9. Problem solving and assistance	62	16.2	240	62.8	73	19.1	7	1.8	0		3.93
10. Reason for deferral explained	101	26.4	214	56.0	57	14.9	9	2.4	1	0.3	4.06
11. Return visit date given	90	23.6	213	55.8	65	17.0	13	3.4	1	0.3	3.99
12. Greeting and willing to serve	92	24.1	239	62.6	47	12.3	4	1.0	0		4.10
13. Time for listening	78	20.4	228	59.7	69	18.1	6	1.6	1	0.3	3.98

Table 4.16 Number, Percentage and Mean of Deferred Blood Donor Satisfaction, Self-deferral Questionnaire and Volunteer Screening (n = 62)

Deferral Blood Donor System	Satisfaction										Mean
	Very high (5)		High (4)		Moderate (3)		Low (2)		Very Low (1)		
	No	%	No	%	No	%	No	%	No	%	
1. Time to find this station	10	16.1	39	62.9	12	19.4	1	1.6	0		3.94
2. Description at station	7	11.3	40	64.5	10	16.1	4	6.5	1	1.6	3.77
3. Suitable Place	9	14.5	39	62.9	12	19.4	2	3.2	0		3.89
4. Convenient place for services	12	19.4	39	62.9	6	9.7	5	8.1	0		3.94
5. Adequate staff	11	17.7	37	59.7	13	21.0	1	1.6	0		3.94
6. Short wait time	6	9.7	44	71.0	10	16.1	2	3.2	0		3.87
7. Practice of staff	10	16.1	41	66.1	10	16.1	1	1.6	0		3.97
8. Staff advisory	14	22.6	35	56.5	12	19.4	1	1.6	0		4.00
9. Problem solving and assistance	12	19.4	38	61.3	11	17.7	1	1.6	0		3.98
10. Reason for deferral explained	16	25.8	33	53.2	10	16.1	2	3.2	1	1.6	3.98
11. Return visit date given	12	19.4	36	58.1	12	19.4	1	1.6	1	1.6	3.92
12. Greeting and willing to serve	13	21.0	40	64.5	7	11.3	2	3.2	0		4.03
13. Time for listening	13	21.0	40	64.5	7	11.3	1	1.6	1	1.6	4.02

The data from table 4.16 shows high satisfaction by mean in greeting and willingness to serve (4.03) and willingness to listen (4.02). The lowest means were description at station (3.77) and short wait time (3.87).

Table 4.17 Number, Percentage and Mean of Deferred Blood Donor Satisfaction, Physical Examination and Physician/ Trained Nurse Screening (n = 155)

Deferral Blood Donor System	Satisfaction										Mean
	Very high (5)		High (4)		Moderate (3)		Low (2)		Very Low (1)		
	No	%	No	%	No	%	No	%	No	%	
1. Time to find this station	40	25.8	95	61.3	16	10.3	4	2.6	0		4.10
2. Description at station	39	25.2	93	60.0	21	13.5	1	0.6	1	0.6	4.08
3. Suitable Place	45	29.0	84	54.2	23	14.8	3	1.9	0		4.10
4. Convenient place for services	36	23.2	94	60.6	22	14.2	2	1.3	1	0.6	4.05
5. Adequate staff	34	21.9	100	64.5	20	12.9	1	0.6	0		4.08
6. Short wait time	29	18.7	98	63.2	26	16.8	1	0.6	1	0.6	3.99
7. Practice of staff	33	21.3	93	60.0	29	18.7	0		0		4.03
8. Staff advisory	37	23.9	90	58.1	27	17.4	1	0.6	0		4.05
9. Problem solving and assistance	34	21.9	97	62.6	23	14.8	1	0.6	0		4.06
10. Reason for deferral explained	59	38.1	82	52.9	13	8.4	1	0.6	0		4.28
11. Return visit date given	49	31.6	88	56.8	15	9.7	3	1.9	0		4.18
12. Greeting and willing to serve	46	29.7	95	61.3	13	8.4	1	0.6	0		4.20
13. Time for listening	46	29.7	86	55.5	21	13.5	2	1.3	0		4.14

The data from table 4.17 shows high satisfaction by mean in greeting and willing to serve (4.20) and reason for deferral explanation (4.28). The lowest means were found in short wait time (3.99) and practice of staff (4.03).

Table 4.18 Number, Percentage and Mean of Deferred Blood Donor Satisfaction, Hemoglobin Test and Technical Staff Screening (n = 118)

Deferral Blood Donor System	Satisfaction										Mean
	Very high (5)		High (4)		Moderate (3)		Low (2)		Very Low (1)		
	No	%	No	%	No	%	No	%	No	%	
1. Time to find this station	13	11.0	83	70.3	20	16.9	1	0.8	1	0.8	3.90
2. Description at station	10	8.5	80	67.8	23	19.5	5	4.2	0		3.81
3. Suitable Place	13	11.0	78	66.1	22	18.6	4	3.4	1	0.8	3.83
4. Convenient place for services	12	10.2	81	68.6	18	15.3	6	5.1	1	0.8	3.82
5. Adequate staff	10	8.5	78	66.1	24	20.3	5	4.2	1	0.8	3.77
6. Short wait time	12	10.2	82	69.5	22	18.6	1	0.8	1	0.8	3.87
7. Practice of staff	6	5.1	89	75.4	18	15.3	4	3.4	1	0.8	3.81
8. Staff advisory	5	4.2	84	71.2	24	20.3	4	3.4	1	0.8	3.75
9. Problem solving and assistance	9	7.6	81	68.6	24	20.3	4	3.4	0		3.81
10. Reason for deferral explained	15	12.7	80	67.8	21	17.8	2	1.7	0		3.92
11. Return visit date given	18	15.3	69	58.5	27	22.9	4	3.4	0		3.86
12. Greeting and willing to serve	21	17.8	82	69.5	15	12.7	0		0		4.05
13. Time for listening	12	10.2	81	68.6	24	20.3	1	0.8	0		3.88

The data from table 4.18 shows high satisfaction by mean in greeting and willingness to serve (4.05) and time to find station (3.90). The lowest means were in staff advisory (3.75) and adequate staff (3.77).

Table 4.19 Number, Percentage and Mean of Deferred Blood Donor Satisfaction, Previous History Check and Information Staff Screening (n = 47)

Deferral Blood Donor System	Satisfaction										Mean
	Very high (5)		High (4)		Moderate (3)		Low (2)		Very Low (1)		
	No	%	No	%	No	%	No	%	No	%	
1. Time to find this station	10	21.3	23	48.9	13	27.7	1	2.1	0		3.89
2. Description at station	10	21.3	23	48.9	11	23.4	3	6.4	0		3.85
3. Suitable Place	9	19.1	23	48.9	13	27.7	2	4.3	0		3.83
4. Convenient place for services	12	25.5	23	48.9	11	23.4	1	2.1	0		3.98
5. Adequate staff	11	23.4	18	38.3	15	31.9	3	6.4	0		3.79
6. Short wait time	9	19.1	23	48.9	12	25.5	3	6.4	0		3.81
7. Practice of staff	6	12.8	22	46.8	16	34.0	3	6.4	0		3.66
8. Staff advisory	7	14.9	24	51.1	13	27.7	3	6.4	0		3.74
9. Problem solving and assistance	7	14.9	24	51.1	15	31.9	1	2.1	0		3.79
10. Reason for deferral explained	11	23.4	19	40.4	13	27.7	4	8.5	0		3.79
11. Return visit date given	11	23.4	20	42.6	11	23.4	5	10.6	0		3.79
12. Greeting and willing to serve	12	25.5	22	46.8	12	25.5	1	2.1	0		3.96
13. Time for listening	7	14.9	21	44.7	17	36.2	2	4.3	0		3.70

The data from table 4.19 shows high satisfaction by mean in a convenient place for service (3.98) and greeting and willingness to serve (3.96). The lowest means were in practice of staff (3.66) and willingness to listen (3.70).

PART 4 OPINIONS OF DEFERRED BLOOD DONOR

This part contained four questions. The questions were divided under the topics of: deferred blood donor satisfaction including their opinions and reasons; their willingness to return; the time they would return; and their willingness to introduce a friend or relative for donation at NBC.

The results of question 1 are compiled in the form of percentage and descriptive analysis. In table 4.20, Deferred Blood Donor Satisfaction, the overall opinion of participants was “satisfied” (71.2%), with high number also choosing “very satisfied” (24.6%). The highest level of satisfaction was with the Hemoglobin Test and Technical Staff Screening (86.4%). The highest level of dissatisfied (8.5%) and very dissatisfied (2.1%) was with Previous History Check and Information Staff Screening.

Table 4.20 Deferred Blood Donor Satisfaction in opinion part

Satisfaction	Number	%
Overall (n = 382)		
Very Satisfied	94	24.6
Satisfied	272	71.2
Dissatisfied	13	3.4
Very Dissatisfied	3	0.8
Self-deferral Questionnaire and Volunteer Screening (n = 62)		
Very Satisfied	16	25.8
Satisfied	45	72.6
Dissatisfied	1	1.6
Very Dissatisfied	0	0
Physical Examination and Physician/ Trained Nurse Screening (n = 155)		
Very Satisfied	54	34.8
Satisfied	94	60.6
Dissatisfied	6	3.9
Very Dissatisfied	1	0.6
Hemoglobin Test and Technical Staff Screening (n = 118)		
Very Satisfied	13	11.0
Satisfied	102	86.4
Dissatisfied	3	2.5
Very Dissatisfied	0	0
Previous History Check and Information Staff Screening (n = 47)		
Very Satisfied	11	23.4
Satisfied	31	66.0
Dissatisfied	4	8.5
Very Dissatisfied	1	2.1

Table 4.21 The general opinions of deferred blood donor about NBC services:

Positive responses	case(%)	Negative responses	case(%)
Clear explanation	40 (23.67)	Need clearer explanation	8 (4.73)
Comfortable place for services	28 (16.57)	Not suitable place for services	6 (3.55)
Fast service	23 (13.61)	Long time for waiting	2 (1.18)
Good relationship of staff	12 (7.10)		
Good staff Attention	11 (6.51)		
Politeness of staff	9 (5.32)	Staff were not polite	1 (0.59)
Deferral cause explanation	9 (5.32)		
Good advice	9 (5.32)		
Standard service	8 (4.73)		
Cleanness	6 (3.55)		
Good overall environment	4 (2.37)		
Safety practices	3 (1.77)		
		Not enough staff number	13 (7.69)

Table 4.21 shows three major positive responses from participants. There were clear explanation (23.67%), comfortable place for service (16.57%), and fast service (13.61%). Negative responses were given for not sufficiency staff (7.69%), need clearer explanation (4.73%), and not suitable place for services (3.5%).

Table 4.22 “Want to come back” of Deferred Blood Donors

Want to come back	Number	%
Overall (n = 382)*		
Yes	355	92.9
No	26	6.8
Self-deferral Questionnaire and Volunteer Screening (n = 62)		
Yes	52	83.9
No	10	16.1
Physical Examination and Physician/ Trained Nurse Screening (n = 155)		
Yes	144	92.9
No	11	7.1
Hemoglobin Test and Technical Staff Screening (n = 118)		
Yes	117	99.2
No	1	0.8
Previous History Check and Information Staff Screening (n = 47)*		
Yes	42	89.4
No	4	8.5

* One missing value

The percentage of “not want to come back” is highest for the Self-deferral Questionnaire and Volunteer Screening station (16.1%) and lowest for the Hemoglobin Test and Technical Staff Screening station (0.8%).

Reasons deferred blood donors did not want to come back (cases) included:

1. Above age limit for donation. (6)
2. Underlying disease. (5)
3. Blood transmitted disease and waiting confirm action test. (4)

4. NBC services too far from their home. (3)
5. Choose to donate at another site. (2)

Table 4.23 “The Time” that Deferred Blood Donor want to return for donation

Time	Number	%
Overall (n = 356)		
3 Month	204	53.4
6 Month	65	17.0
9 Month	8	2.1
12 Month	21	5.5
Others	58	15.2
Missing	26	6.8
Self-deferral Questionnaire and Volunteer Screening (n = 62)		
3 Month	31	50.0
6 Month	11	17.7
9 Month	1	1.6
12 Month	6	9.7
Others	2	3.2
Missing	11	17.7
Physical Examination and Physician/ Trained Nurse Screening (n = 155)		
3 Month	81	52.3
6 Month	25	16.1
9 Month	2	1.3
12 Month	8	5.2
Others	31	20.0
Missing	8	5.2
Hemoglobin Test and Technical Staff Screening (n = 118)		
3 Month	77	65.3
6 Month	12	10.2
9 Month	2	1.7
12 Month	2	1.7
Others	21	17.8
Missing	4	3.4
Previous History Check and Information Staff Screening (47)		
3 Month	15	31.9
6 Month	17	36.2
9 Month	3	6.4
12 Month	5	10.6
Others	4	8.5
Missing	3	6.4

Most deferred blood donors want to return within three months, except those who were deferred at the Previous History Check and Information Staff Screening station. These donors were more likely to return within six months (36.2%). However several also responded that they would return at three months, 31.9%.

Other responses given as to return time (case) were: 1 week (7), 2 weeks (5), 3 weeks (3), 1 month (4), as soon as possible (12), depended on free time (5), not sure (11), and at the advised time from staff (10).

Table 4.24 Want to introduce blood donation to friend and relative

Wanted to Introduce	Number	%
Yes	373	97.6
No	3	0.8
Missing	6	1.6

Reasons of deferred blood donor in case of answer “No”

1. Blood donation is a decision for each individual.
2. Blood donation promotion was the duty and responsibility of blood center.
3. There are no responses from their experiences.

Recommendations from Deferred Blood Donors about each station

Self-deferral Questionnaire and Volunteer Screening

1. Not enough staff for services in this section.
2. The questionnaire was too strict.
3. The questions were unclear and difficult to understand.
4. The format of the questionnaire was not easy to follow and therefore different to answer.

5. Not enough space for writing on the questionnaire.

Physical Examination and Physician/ Trained Nurse Screening

1. NBC should have the policy to prevent intentional misrepresentation.
2. Staff practice guidelines for blood donor screening should be as flexible as possible.
3. Staff should have more time to answer donor questions.
4. NBC should provide a simple and easy guide book to deferred blood donors.

Hemoglobin Test and Technical Staff Screening

1. This section should be performed by physician or nurse.
2. The place was not suitable for services especially at the weekend.
3. Staff should have more time to answer donor questions.

Previous History Check and Information Staff Screening

1. NBC should apply more computerized systems for screening blood donors.
2. This station did not have enough staff, service and information from staff was not clear.

PART 5 LEVEL OF QUALITY OF SERVICE ACCORDING TO DEFERRED BLOOD DONOR PERCEPTION

Deferred blood donor perception was rated at three levels: high, moderate and low. The perception level of quality of services is represented by the mean of each category and section.

The level of perception referring to mean:

Low = mean 1.00 - 2.00

Moderate = mean 2.01 - 3.00

High = mean 3.01 - 4.00

The overall perception of deferred blood donor regarding the physical environment was mostly highly acceptable about 39%, or moderately acceptable 59%. Staff capability was generally viewed as highly acceptable about 39% or moderately acceptable 60%. Staff attention was viewed as highly acceptable at about 40% or moderately acceptable 59% (Table 4.25).

Table 4.25 Deferred Blood Donor Perception of Quality of Service, Overall (n = 382)

Deferred Blood Donor Perception	Level of Perception					
	High (3)		Moderate (2)		Low (1)	
	No	%	No	%	No	%
Place and environment	150	39.3	227	59.4	5	1.3
Staff capability	150	39.3	229	59.9	3	0.8
Staff attention	153	40.1	226	59.2	3	0.8

Table 4.26 Deferred Blood Donor Perception of Quality of Service, Self-deferral

Questionnaire and Volunteer Screening (n = 62)

Deferred Blood Donor Perception	Level of Perception					
	High (3)		Moderate (2)		Low (1)	
	No	%	No	%	No	%
Place and environment	25	40.3	35	56.5	2	3.2
Staff capability	22	35.5	39	62.9	1	1.6
Staff attention	20	32.3	41	66.1	1	1.6

Table 4.27 Deferred Blood Donor Perception of Quality of Service, Physical Examination and Physician/ Trained Nurse Screening (n = 155)

Deferred Blood Donor Perception	Level of Perception					
	High (3)		Moderate (2)		Low (1)	
	No	%	No	%	No	%
Place and environment	72	46.5	83	53.5	0	0.0
Staff capability	82	52.9	73	47.1	0	0.0
Staff attention	73	47.1	82	52.9	0	0.0

Table 4.28 Deferred Blood Donor Perception of Quality of Service, Hemoglobin Test and Technical Staff Screening (n = 118)

Deferred Blood Donor Perception	Level of Perception					
	High (3)		Moderate (2)		Low (1)	
	No	%	No	%	No	%
Place and environment	32	27.1	85	72.0	1	0.8
Staff capability	28	23.7	89	75.4	1	0.8
Staff attention	37	31.4	80	67.8	1	0.8

Table 4.29 Deferred Blood Donor Perception of Quality of Service, Previous History Check and Information Staff Screening (n = 47)

Deferred Blood Donor Perception	Level of Perception					
	High (3)		Moderate (2)		Low (1)	
	No	%	No	%	No	%
Place and environment	21	44.7	24	51.1	2	4.3
Staff capability	18	38.8	28	59.6	1	2.1
Staff attention	23	48.9	23	48.9	1	2.1

Tables 4.26, 4.27, 4.28, 4.29 show that the overall perception in each station by participants.

At the Self-deferral Questionnaire and Volunteer screening station, half of the participants (56.5%) moderately accepted the place and environment. Most of the participants moderately accepted staff capability (62.9%) and staff attention (66.1%).

At the Physical Examination and Physician/ Trained Nurse screening station, half of the participants (53.5%) moderately accepted the place and environment. Most of the participants highly accepted staff capability (52.9%) and moderately accepted staff attention (52.9%).

At the Hemoglobin Test and Technical Staff screening station, all perceptions were at the moderate level: place and environment (72.0%), staff capability (75.4%), and staff attention (67.8%).

Finally at the Previous History Check and Information Staff screening station, 51.1%, moderately accepted the place and environment, 59.6% accepted staff capability, and staff attention was viewed equally by some as high or moderate (48.9%).

PART 6 LEVEL OF SATISFACTION ACCORDING TO DEFERRED BLOOD DONOR

Satisfaction of place and environment was tested in questions 1-5, staff competence in questions 6-9, and staff attention in questions 10-13.

The level of satisfaction is represented as follows:

Very Dissatisfied = mean 1.00 - 2.00

Dissatisfied = mean 2.01 - 3.00

Satisfied = mean 3.01 - 4.00

Very Satisfied = mean 4.01 – 5.00

Table 4.30 Level of Deferred Blood Donor Satisfaction, Overall (n = 382)

Deferral Blood Donor System	Satisfaction							
	Very Satisfied (4)		Satisfied (3)		Dissatisfied (2)		Very Dissatisfied (1)	
	No	%	No	%	No	%	No	%
Place and environment	97	25.4	250	65.4	34	8.9	1	0.3
Staff capability	89	23.3	249	65.2	40	10.5	4	1.0
Staff attention	120	31.4	225	58.9	34	8.9	3	0.8

Overall, deferred blood donors were satisfied with the deferral system. Satisfaction of deferred blood donors was examined in three major sectors: place and environment, staff capability, and staff attention. The highest rate of satisfaction was with place and environment (90.84%), followed by staff attention (90.31%), and staff capability (88.48%).

Concerning the level of “very satisfied”, staff attention viewed the highest percentage (31.4%). For “very dissatisfied” some participants were not satisfied with staff capability (1.0%).

Table 4.31 Level of Deferred Blood Donor Satisfaction, Self-deferral Questionnaire and Volunteer Screening (n = 62)

Deferral Blood Donor System	Satisfaction							
	Very Satisfied (4)		Satisfied (3)		Dissatisfied (2)		Very Dissatisfied (1)	
	No	%	No	%	No	%	No	%
Place and environment	13	21.0	41	66.1	8	12.9	0	0.0
Staff capability	18	29.0	35	56.5	8	12.9	1	1.6
Staff attention	19	30.6	35	56.5	7	11.3	1	1.6

Approximately half (56.5%) of deferred blood donor were satisfied with staff capability and staff attention, and 66.1% were satisfied with place and environment. The dissatisfaction rate was appropriately 12% for all of the services.

Table 4.32 Level of Deferred Blood Donor Satisfaction, Physical Examination and Physician/ Trained Nurse Screening (n = 155)

Deferral Blood Donor	Satisfaction							
	Very Satisfied (4)		Satisfied (3)		Dissatisfied (2)		Very Dissatisfied (1)	
	No	%	No	%	No	%	No	%
Place and environment	52	33.4	95	61.3	8	5.2	0	0.0
Staff capability	46	29.7	96	61.9	13	8.4	0	0.0
Staff attention	65	41.9	83	53.5	6	3.9	1	0.6

In regards to Physical Examination and Physician/ Trained Nurse Screening, deferred blood donors satisfied with place and environment, staff capability, and staff attention 53.5%, 61.9% and 61.3% respectively. Dissatisfaction was reported in staff capability at 8.4%.

Table 4.33 Level of Deferred Blood Donor Satisfaction, Hemoglobin Test and Technical Staff Screening (n = 118)

Deferral Blood Donor System	Satisfaction							
	Very Satisfied (4)		Satisfied (3)		Dissatisfied (2)		Very Dissatisfied (1)	
	No	%	No	%	No	%	No	%
Place and environment	17	14.4	88	74.6	12	10.2	1	0.8
Staff capability	14	11.9	91	77.1	11	9.3	2	1.7
Staff attention	23	19.5	82	69.5	13	11.0	0	0.0

Hemoglobin Test and Technical Staff Screening had approximately 73.7% of participants responding “satisfied”. 19.5% of respondents viewed staff attention with “very satisfied”, while 11.0% felt dissatisfied.

Table 4.34 Level of Deferred Blood Donor Satisfaction, Previous History Check and Information Staff Screening (n = 47)

Deferral Blood Donor System	Satisfaction							
	Very Satisfied (4)		Satisfied (3)		Dissatisfied (2)		Very Dissatisfied (1)	
	No	%	No	%	No	%	No	%
Place and environment	15	31.9	26	55.3	6	12.8	0	0.0
Staff capability	11	23.4	27	57.4	8	17.0	1	2.1
Staff attention	13	27.7	25	53.2	8	17.0	1	2.1

Previous history check and information staff screening, the highest level of dissatisfaction found in this section was with staff capability and staff attention at 17.0%.

From Table 4.30 to 4.34, the data collected from deferred blood donor satisfaction in the four stations showed blood donors were generally “satisfied”. If we separate the participants into two groups, satisfied and dissatisfied, the highest level of satisfaction was found in station 2 (Physical Examination and Physician/ Trained Nurse Screening station) at place and environment, 94.84%, staff capability, 91.61% and staff attention, 95.48%. The highest level of dissatisfaction was found in two stations, station 1 (Self-deferral Questionnaire and Volunteer Screening station) in place and environment at 12.90%, and station 4 (Previous History Check and Information Staff Screening station) in staff capability, 19.15% and staff attention, 19.15%.

Concerning the level of “very satisfied” station 2 (Physical Examination and Physician/ Trained Nurse Screening station) had a percentage of 41.9% in staff attention.

PART 7 ASSOCIATIONS BETWEEN DEFERRED BLOOD DONOR SOCIO-DEMOGRAPHIC DATA AND PERCEPTION

This study sought to investigate the association between deferred blood donor perception and their socio-demographic characteristic. Perceptions were grouped as “High” or “Moderate-Low” due to the depth of “low level” responds when comparing the data, and in order to properly conduct a Chi-Square table analysis. Chi-Square tests have expected count less than 5. The data analysis in this section defined a p-value less than 0.05 as significant in association.

The results from the table 4.35 to 4.40 present socio-demographic characteristics of deferred blood donors that were not statistically significant in their association with perceptions by age group (0.567), gender (0.065), education (0.576), occupation (0.860), income (0.245), and number of blood donations (0.192).

Table 4.35 Associations between age and perception of quality of services

Age	Level of perception		Total (n)	χ^2	df	p-value
	High	Moderate-Low				
	(%)	(%)				
Less than 25 years	48.6	51.4	107	1.135	2	0.567
25-40 years	54.1	45.9	172			
More than 40 years	55.3	44.7	103			

Table 4.36 Associations between gender and perception of quality of services

Gender	Level of perception		Total (n)	χ^2	df	p-value
	High	Moderate-Low				
	(%)	(%)				
Male	58.3	41.7	175	3.398	1	0.065
Female	48.3	51.7	207			

Table 4.37 Associations between education and perception of quality of services

Education	Level of perception		Total (n)	χ^2	df	p-value
	High	Moderate-Low				
	(%)	(%)				
Less than or equal to Certificate or Diploma	55.5	44.5	182	1.102	2	0.576
Bachelor's degree	50.6	49.4	170			
Master's degree or higher	48.3	51.7	29			

Table 4.38 Associations between occupation and perception of quality of services

Occupation	Level of perception		Total (n)	χ^2	df	p-value
	High	Moderate-Low				
	(%)	(%)				
Government Officer, NGO	52.1	47.9	48	0.756	3	0.860
Private business	55.0	45.0	80			
Private employee	50.0	50.0	134			
Student, Unemployed	54.7	45.3	117			

Table 4.39 Associations between income and perception of quality of services

Income	Level of perception		Total (n)	χ^2	df	p-value
	High	Moderate-Low				
	(%)	(%)				
≤10,000	49.2	50.8	191	2.809	2	0.245
10,001-30,000	54.9	45.1	133			
30,000	61.5	38.5	52			

Table 4.40 Associations between times donated blood and perception of quality of services

Number of blood donation time	Level of perception		Total (n)	χ^2	df	p-value
	High (%)	Moderate-Low (%)				
First time	53.9	46.1	141	3.299	2	0.192
Second to fourth time	47.6	52.4	82			
More than four times	31.3	68.8	16			

PART 8 ASSOCIATIONS BETWEEN PERCEPTION AND DEFERRED BLOOD DONOR SATISFACTION

One of the objectives of this study was to examine possible associations between deferred blood donor perception and deferred blood donor satisfaction. The level of perception and satisfaction were grouped as “High” and “Moderate-Low” due to a lack of “low level” responses when comparing the data, and in order to properly conduct a Chi-Square table analysis. Chi-Square tests have expected count less than 5. The data analysis in this section used a p-value less than 0.05 to define a significant in association.

The results from tables 4.41 to 4.45 present the overall perceptions of deferred blood donor that were statistically significant, <0.001; physical examination and physician/trained nurse screening station, <0.001; hemoglobin test and technical staff screening station, 0.019; previous history check and information staff screening station, 0.001. Only self-deferral questionnaire and volunteer screening station was statistically insignificant by p-value 0.060.

Table 4.41 Association between level of perception of quality of services and level of satisfaction, Overall (n = 382)

Level of Perception	Level of Satisfaction		Total (n)	χ^2	df	p-value
	High (%)	Moderate-Low (%)				
High	91.1	8.9	202	38.519	1	<0.001
Moderate-Low	64.4	35.6	180			

Table 4.42 Association between level of perception of quality of services and level of satisfaction, Self-deferral Questionnaire and Volunteer Screening station (n = 62)

Level of Perception	Level of Satisfaction		Total (n)	χ^2	df	p-value
	High (%)	Moderate-Low (%)				
High	93.3	6.7	30	3.526	1	0.060
Moderate-Low	71.9	28.1	32			

Table 4.43 Association between level of perception of quality of services and level of satisfaction, Physical Examination and Physician/ Trained Nurse Screening station (n = 155)

Level of Perception	Level of Satisfaction		Total (%)	χ^2	df	p-value
	High (%)	Moderate-Low (%)				
High	94.7	5.3	95	17.625	1	<0.001
Moderate-Low	68.3	31.7	60			

Table 4.44 Association between level of perception of quality of services and level of satisfaction, Hemoglobin Test and Technical Staff Screening station (n = 118)

Level of Perception	Level of Satisfaction		Total (%)	χ^2	df	p-value
	High (%)	Moderate-Low (%)				
High	82.7	12.8	47	5.538	1	0.019
Moderate-Low	66.2	33.8	71			

Table 4.45 Association between level of perception of quality of services and level of satisfaction, Previous History Check and Information Staff Screening station (n = 47)

Level of Perception	Level of Satisfaction		Total (%)	χ^2	df	p-value
	High (%)	Moderate-Low (%)				
High	83.3	16.7	30	11.430	1	0.001
Moderate-Low	70.6	29.4	17			

PART 9 ASSOCIATIONS BETWEEN DEFERRED BLOOD DONOR OPINIONS AND SATISFACTION

Table 4.46 Associations between desire to come back for donation and deferred blood donor satisfaction

Need to Comeback	Level of Satisfaction		Total (%)	χ^2	df	p-value
	High (%)	Moderate-Low (%)				
Yes	80.3	19.7	355	8.519	1	0.004
No	53.8	46.2	26			

Result show the desire to come back for donation is associated with deferred blood donor satisfaction at p-value 0.004