

Results

The result of the present study included the following parts:

Part I: Socio-demographic characteristics of studied sample (nurses and women) table (1-2).

Part II: Nurses knowledge regarding pregnancy, antenatal care, labor, puerperium, newborn care, and quality table (3-8).

Part III: quality of maternal care divided into three elements:

1- Structure: Environmental characteristics of the studied maternal and child health centers, delivery equipment, and supplies according to quality standards table (9-10)

2- Process: Nurses performance toward maternal and newborn health care according to quality standards table (11-16).

3- Outcomes: Satisfaction of the studied women regarding the presented health care services(17-19).

Part IV:

- The relation between socio-demographic characteristics of the studied nurses and their total knowledge and performance table (20-21).
 - The relation between socio-demographic characteristics of the studied women and their satisfaction degree table (22).
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Part1: Socio-demographic characteristics of studied sample **(nurses and women)**

Table (1): Percentage distribution of socio-demographic characteristics of the studied nurses. (N=67)

Socio-demographic characteristics	Frequency	%
Age in years		
• 20-	31	46.3
• 30-	23	34.3
• 40+	13	19.4
Mean± SD=31.63±8.26		
Level of education		
• Diploma of secondary school nursing	16	23.9
• Diploma of secondary school nursing and specialty	31	46.3
• Technical institute of nursing	8	11.9
• Bachelor degree in nursing science	12	17.9
Years of experience		
• <10	29	43.3
• 10-	27	40.3
• 20 +	11	16.4
Marital status		
• Married	51	74.5
• Unmarried	16	25.5
Number of children		
• <3	20	29.8
• 3-	30	44.7
• 5+	17	25.5

Table (1) Shows that the mean age of studied nurses was (31.63±8.26) years, 46.3 % of them had diploma of secondary school nursing and specialty, 74.5% of them were married and 43.4% of them had less than ten years of experience.

Table (2): Percentage distribution of Socio-demographic characteristics of the studied women. (N=110)

Socio-demographic categories	Frequency	%
Age in years		
• <20	28	25.5
• 20-	32	29.1
• 30-	35	31.8
• 40+	15	13.6
Mean± SD=29.12±7.40		
Level of education		
• Illiterate	5	4.6
• read and write	15	13.6
• Basic education	0	0
• Secondary education	70	63.6
• Universal education	20	18.2
Marital status		
• Married	100	90.8
• unmarried	10	9.2
Occupation		
• Working	36	32.7
• Not working	74	67.3

Table (2): Reveals that the mean age of studied women was (29.12±7.40) years, 63.6% had a secondary level of education, 90.8% of them were married, and 67.3% of them were not working.

Figure (1): Percentage distribution of studied women regarding their obstetric history

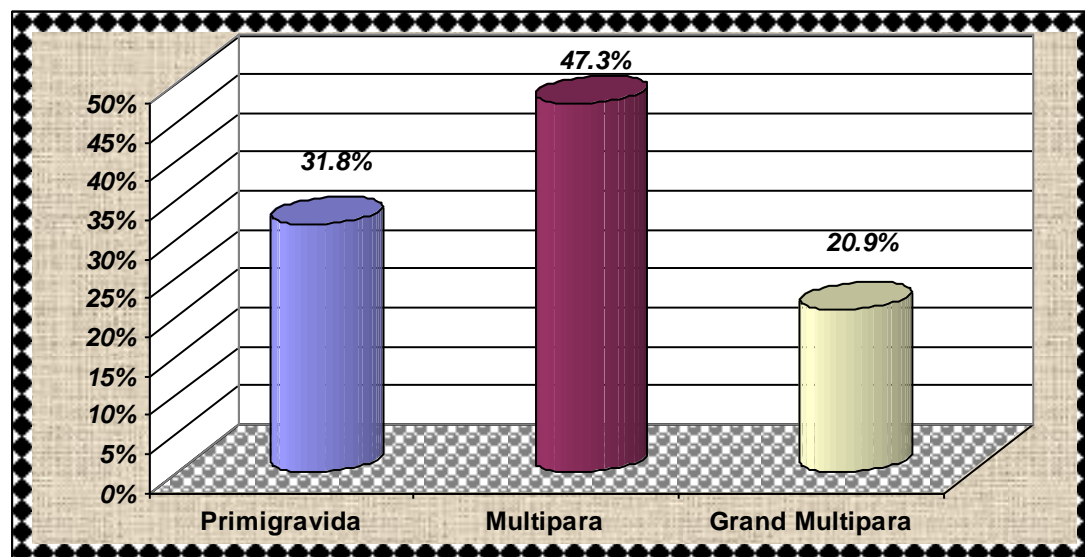


Figure (1): Shows that 47.3% of studied women were multipara.

Figure (2): Percentage distribution of the studied women in relation to the reason of visiting MCH centers.

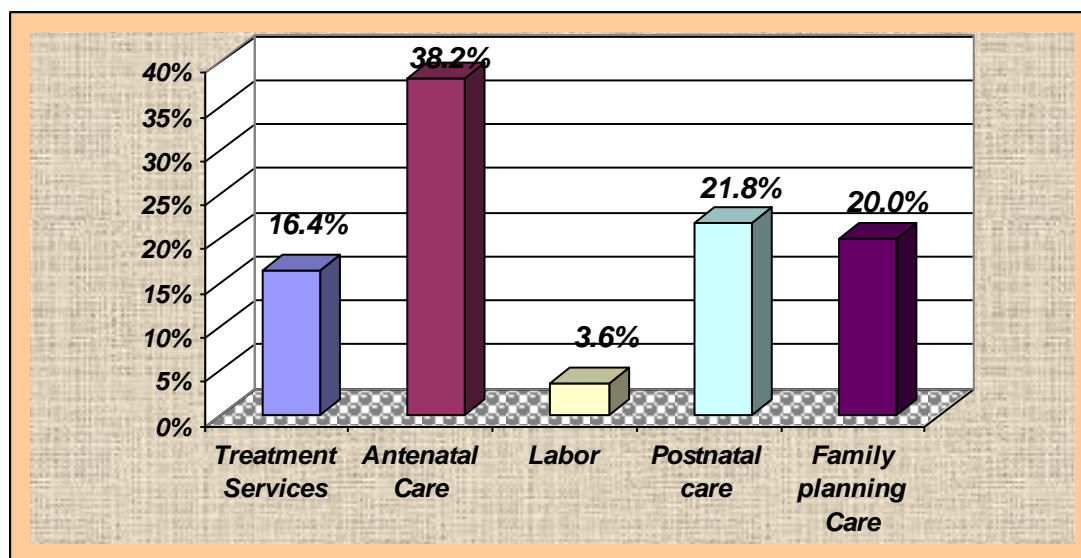


Figure (2): Shows that 38.2% of studied women visit MCH centers to receive antenatal care, while only 3.6% of women visit it for labor.

Part II: Nurses knowledge regarding pregnancy, antenatal care, labor, peuperium, newborn care, and quality (table, 3-8).

Table (3): Mean scores of knowledge of the studied nurses regarding pregnancy pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	Pre	Post		
Anatomy of female reproductive system	1.03 \pm 0.46	1.90 \pm 0.30	13.24	<0.001
Signs of pregnancy	0.90 \pm 0.80	1.45 \pm 0.21	15.41	<0.001
Physiological changes during pregnancy	0.32 \pm 0.74	1.60 \pm 0.64	17.62	<0.001
Psychological changes during pregnancy	0.15 \pm 0.67	1.80 \pm 0.21	19.82	<0.001
Danger signs of pregnancy	0.90 \pm 0.90	1.30 \pm 0.30	13.44	<0.001
Weight gain during pregnancy	0.20 \pm 0.49	1.80 \pm 0.64	16.16	<0.001
Meaning of antenatal care nursing	0.50 \pm 0.50	1.80 \pm 0.60	14.27	<0.001
Purpose of antenatal care	0.62 \pm 0.66	1.80 \pm 0.60	13.52	<0.001

Table (3): Shows that there was a highly statistically significant difference regarding studied nurses' knowledge about pregnancy and its physiological changes pre/ post program, with the highest mean score regarding their knowledge about anatomy of female reproductive system.

Table (4): Mean scores of knowledge of the studied nurses regarding nursing care during antenatal period pre / post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Nursing role during first antenatal visit	1.01 \pm 0.66	1.76 \pm 0.62	7.10	<0.001
Nursing role during subsequent antenatal visit	0.40 \pm 0.42	1.80 \pm 0.40	17.82	<0.001
Health education topics at first trimester	0.70 \pm 0.64	1.65 \pm 0.62	15.69	<0.001
Health education topics at second trimester	0.60 \pm 0.65	1.85 \pm 0.62	16.53	<0.001
Health education topics at third trimester	0.34 \pm 0.66	1.65 \pm 0.56	17.37	<0.001
Technique of calculating expected date of delivery	0.40 \pm 0.65	1.60 \pm 0.52	16.29	<0.001

Table (4): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' knowledge about nursing care during antenatal period, with the highest mean score regarding the health education topics at the third trimester.

Table (5): Mean scores of knowledge of the studied nurses regarding normal labor pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Stages of labour	0.20 \pm 0.43	1.80 \pm 0.41	18.72	<0.001
Presumptive signs of labour	0.60 \pm 0.52	1.80 \pm 0.50	16.74	<0.001
True signs of labor	0.54 \pm 0.68	1.66 \pm 0.64	15.43	<0.001
Nursing care during first stage of labor	0.40 \pm 0.68	1.85 \pm 0.66	17.16	<0.001
Women preparation for delivery	0.60 \pm 0.46	1.65 \pm 0.41	14.68	<0.001
Nursing care during second stage of labor	0.40 \pm 0.41	1.85 \pm 0.40	16.48	<0.001
Nursing care during third stage of labor	0.65 \pm 0.50	1.86 \pm 0.42	14.94	<0.001
Nursing care during fourth stage of labor	0.64 \pm 0.42	1.66 \pm 0.31	13.60	<0.001
Nursing care for the neonate	0.64 \pm 0.40	1.75 \pm 0.33	14.57	<0.001

Table (5): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' knowledge about normal labor, with the highest mean score regarding their knowledge about nursing care during third stage of labor.

Table (6): Mean scores of knowledge of the studied nurses regarding normal puerperium pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Meaning of puerperium	0.40 \pm 0.70	1.58 \pm 0.66	15.53	<0.001
Purpose of nursing care during puerperium	0.40 \pm 0.85	1.80 \pm 0.72	18.96	<0.001
Danger signs during puerperium	0.50 \pm 0.66	1.60 \pm 0.60	17.57	<0.001
Meaning of lochia	0.40 \pm 0.70	1.70 \pm 0.65	16.87	<0.001
Physiological changes during puerperium	0.50 \pm 0.77	1.80 \pm 0.64	17.67	<0.001
psychological changes during puerperium	0.30 \pm 0.78	1.75 \pm 0.74	18.89	<0.001
Nursing care during puerperium	0.65 \pm 0.65	1.86 \pm 0.54	16.17	<0.001

Table (6): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' knowledge about normal puerperium, with the highest mean score regarding their knowledge about nursing care during puerperium.

Table (7): Mean scores of knowledge of the studied nurses regarding breast feeding and neonatal care pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Purpose of breast feeding	0.70 \pm 0.66	1.85 \pm 0.54	16.16	<0.001
Breast care	0.90 \pm 0.82	1.75 \pm 0.78	15.86	<0.001
Cord care	0.90 \pm 0.57	1.80 \pm 0.55	14.54	<0.001
Diaper care	0.60 \pm 0.72	1.60 \pm 0.69	15.86	<0.001
Neonate immunization	1.02 \pm 0.67	1.90 \pm 0.65	11.64	<0.001
Health education topics related to puerperium	0.40 \pm 0.77	1.80 \pm 0.72	18.84	<0.001
Weaning	0.60 \pm 0.68	1.82 \pm 0.56	16.64	<0.001

Table (7): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' knowledge about breast-feeding and neonatal care, with the highest mean score regarding their knowledge about neonate immunization.

Table (8): Mean scores of knowledge of the studied nurses regarding process of quality pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Meaning of quality	0.30 \pm 0.69	1.72 \pm 0.58	18.17	<0.001
Elements of quality accreditation	0.50 \pm 0.86	1.50 \pm 0.82	17.86	<0.001
Methods of quality assessment	0.66 \pm 0.59	1.72 \pm 0.87	14.55	<0.001
Factors affecting success and continuity of quality	0.40 \pm 0.72	1.70 \pm 0.84	17.85	<0.001

Table (8): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' knowledge about process of quality, with the highest mean score regarding their knowledge about meaning of quality and methods of quality assessment.

Part III: Quality of maternal care divided into three elements

1- Structure: Environmental characteristics of the studied maternal and child health centers, delivery equipment, and supplies according to quality standards

Table (9): Percentage distribution of environmental characteristics of the studied maternal and child health centers according to standards of quality. (N=11 centers)

Items	Inadequate		Partial adequate		Completely adequate	
	No	%	No	%	No	%
General structure	4	36.3	5	45.5	2	18.2
Reception site	3	16.6	6	54.5	2	18.2
Structure of health care delivery room	2	18.2	7	63.6	2	18.2
Sterilization room	0	0.0	6	54.5	5	45.5
Waiting area	0	0.0	5	45.5	6	54.5
Toilets	2	18.2	6	54.5	3	36.3

Table (9): Indicates that 63.6% of the studied maternal and child health centers had partially adequate structure of health care delivery room, while 54.5% of them had adequate waiting area and partially adequate sterilization room.

Table (10): Percentage distribution of equipment and supplies at the studied maternal and child health centers according to standards of quality. (N=11 centers)

Item	Inadequate		Partial adequate		Completely adequate	
	No	%	No	%	No	%
<i>Delivery equipment</i>						
Delivery supplies and instrument	6	54.5	3	27.3	2	18.2
Neonatal care instruments	6	54.5	3	27.3	2	18.2
Delivery surgical instruments	6	54.5	3	27.3	2	18.2
Delivery bags for home delivery	0	0.0	0	0.0	11	100
<i>Linens and supplies</i>						
Delivery linens	9	81.8	0	0.0	2	18.2
Neonatal supplies	9	81.8	0	0.0	2	18.2
Surgical supplies	9	81.8	0	0.0	2	18.2
Medications	9	81.8	0	0.0	2	18.2
Laboratory supplies	9	81.8	0	0.0	2	18.2
Pharmacological supplies	5	45.5	0	0.0	6	54.5
Other supplies(soap)	2	18.2	0	0.0	9	81.8
Recording files	0	0.0	0	0.0	11	100

Table (10): Illustrates that most of the studied maternal and child health centers 81.8% had inadequate linens and supplies of delivery including (delivery linens, neonatal supplies, surgical supplies, medications and, laboratory supplies).

2-process: Nurses performance toward maternal and newborn health care according to quality standards

According to research hypothesis: The quality improvement program will improve the maternal health care. (Table 11-18)

Table (11): Mean scores of performance of the studied nurses according to standards of quality in relation to antenatal care at 1st antenatal visit pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Registration and take past history	0.66 \pm 0.66	1.70 \pm 0.54	9.45	<0.001
Anthropometric measure	1.04 \pm 0.46	1.14 \pm 0.34	7.40	<0.001
Vital signs	0.32 \pm 0.56	1.70 \pm 0.50	11.54	<0.001
Abdominal examination	0.65 \pm 0.71	1.89 \pm 0.42	12.94	<0.001
Extremities examination	0.64 \pm 0.53	1.40 \pm 0.84	7.94	<0.001

Table (11): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' performance during antenatal care in the 1st antenatal visit, with the highest mean score regarding their performance at abdominal examination.

Table (12): Mean scores of performance of the studied nurses according to standards of quality during regular antenatal care for registered pregnant mothers pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	Pre	Post		
Registration and take past history	1.12 \pm 0.74	1.59 \pm 0.60	7.67	<0.001
Anthropometric measure	0.98 \pm 0.88	1.80 \pm 0.51	10.33	<0.001
Vital signs	0.45 \pm 0.48	1.68 \pm 0.50	12.99	<0.001
Abdominal examination	0.60 \pm 0.81	1.84 \pm 0.44	8.73	<0.001
Extremities examination	0.52 \pm 0.63	1.34 \pm 0.50	13.57	<0.001
Laboratory investigation	0.70 \pm 0.60	1.65 \pm 0.53	13.01	<0.001
Nursing action	0.70 \pm 0.40	1.65 \pm 0.67	18.49	<0.001
Home visit	0.70 \pm 0.70	1.90 \pm 0.40	11.65	<0.001

Table (12): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' performance during antenatal care for registered pregnant mothers, with the highest mean score regarding their performance toward home visit.

Table (13): Mean scores of performance of the studied nurses according to standards of quality during first stage of labor pre/ post program. (No= 67)

Characteristics	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Greeting woman	0.80 \pm 0.72	1.75 \pm 0.50	11.78	<0.001
Taking medical history	1.02 \pm 0.85	1.63 \pm 0.52	10.34	<0.001
Obstetric history	1.03 \pm 0.60	1.78 \pm 0.43	12.52	<0.001
Explain labor process to woman	0.60 \pm 0.76	1.55 \pm 0.74	13.57	<0.001
Vital signs	0.50 \pm 0.74	1.58 \pm 0.72	14.57	<0.001
Laboratory investigation	0.30 \pm 0.63	0.90 \pm 0.65	9.69	<0.001
Nursing care	0.70 \pm 0.42	1.85 \pm 0.46	15.73	<0.001
Check progress of labor	0.20 \pm 0.48	1.85 \pm 0.45	25.71	<0.001

Table (13): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' performance at the first stage of labor, with the highest mean score regarding their performance regarding their nursing role at the second stage and check progress of labor.

Table (14): Mean scores of performance of the studied nurses according to standards of quality during second, third, and fourth stages of labor pre/ post program. (No= 67)

Characteristics	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Nursing care during 2 nd stage of labor	0.63 \pm 0.69	1.40 \pm 0.62	11.66	<0.001
Care of the neonate	0.60 \pm 0.86	1.80 \pm 0.71	13.52	<0.001
Nursing care during 3 rd stage of labor	0.56 \pm 0.59	1.59 \pm 0.88	11.98	<0.001
Nursing care during 4 th stage of labor	0.45 \pm 0.72	1.75 \pm 0.68	16.94	<0.001
Neonatal examination	0.45 \pm 0.80	1.84 \pm 0.47	18.89	<0.001

Table (14): Shows that there was a highly statistically significant difference pre and post program regarding studied nurses' performance at second, third, and fourth stages of labor, with the highest mean score regarding their performance at neonatal examination.

Table (15): Mean scores of performance of the studied nurses during postnatal care pre/ post program. (No= 67)

Items	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Preparation of home visit schedule	0.80 \pm 0.80	1.85 \pm 0.53	15.78	<0.001
Planning for home visit	0.60 \pm 0.50	1.78 \pm 0.40	14.78	<0.001
Nursing activities at first home visit	0.70 \pm 0.40	1.80 \pm 0.47	16.23	<0.001
Nursing activities at second home visit	0.60 \pm 0.48	1.80 \pm 0.46	18.76	<0.001
Nursing activities at third home visit	0.60 \pm 0.40	1.85 \pm 0.46	19.73	<0.001
Nursing activities at fourth home visit	0.50 \pm 0.35	1.70 \pm 0.30	15.04	<0.001
Nursing activities at fifth home visit	0.95 \pm 0.67	1.80 \pm 0.53	13.04	<0.001
Proper referral	0.60 \pm 0.46	1.65 \pm 0.47	16.73	<0.001

Table (15): Shows that there was a highly statistically significant difference regarding studied nurses' performance at during postnatal care pre/ post program, with the highest mean score regarding their performance toward their preparation to home visits and their performance at the third home visit.

Table (16): Mean scores of performance of the studied nurses regarding nursing role as a health educator pre/ post program.
(No= 67)

Health education	Mean \pm SD		Paired t test	P value
	<i>Pre</i>	<i>Post</i>		
Learning materials	0.50 \pm 0.42	1.85 \pm 0.40	25.92	<0.001
Prenatal health education during early pregnancy	1.02 \pm 0.72	1.70 \pm 0.50	16.04	<0.001
Prenatal health education during 3 rd trimester	0.60 \pm 0.62	1.40 \pm 0.41	13.32	<0.001
Postnatal health education	1.20 \pm 0.42	1.85 \pm 0.32	11.24	<0.001

Table (16): Shows that there was a highly statistically significant difference pre/ post program regarding studied nurses' performance as a health educator, with the highest mean score of their performance at using learning materials and providing health education at post natal period.

Figure (3): Percentage distribution of the studied nurses in relation to their total performance score pre/ post program.

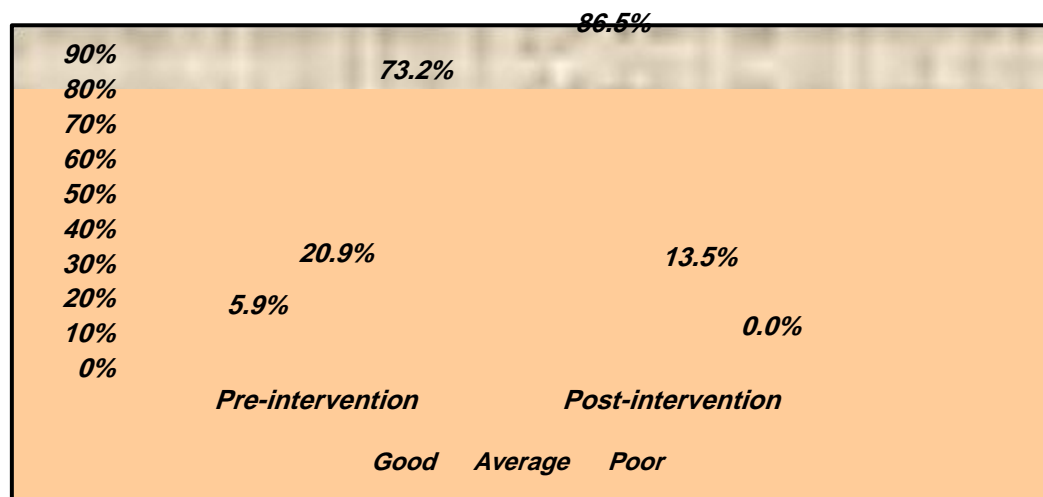


Figure (3): Shows that there was highly statistically difference between total score of nursing performance pre/ post program

3- Outcome: Satisfaction of the studied clients regarding the presented health care services

Table (17): Women's satisfaction regarding environmental characteristics of the studied maternal and child health centers. (N=110)

Items	Satisfactory		Unsatisfactory	
	Frequency	%	Frequency	%
Cleaning:				
Maternal and child health center	25	22.7	80	77.3
Health care delivery room	39	35.5	66	64.4
Toilets	48	43.6	62	56.4
Bed linens	35	31.8	75	68.2
Ventilation of environment	42	38.2	68	61.8
Quite	32	29.1	78	70.9
Place for waiting	52	47.3	58	52.7
Times of waiting	52	47.3	58	52.7

Table (17): Indicates that, 77.3%, 68.2%, and 70.9% of the studied women were unsatisfied regarding the cleaning of the MCH, cleaning of bed linens and the ventilation and quite of the MCH respectively.

Table (18): Women's satisfaction regarding physician performance at the studied maternal and child health centers. (N=110)

Physician performance	Satisfactory		Unsatisfactory	
	Frequency	%	Frequency	%
Attendance at all time	24	21.8	86	78.2
Diagnostics and treatment skills	21	19.1	89	80.9
Communication	23	20.9	87	79.1
Response toward their complain	21	19.1	89	80.9
Response toward women's needs	28	25.5	82	74.5
Explanation of treatment procedures	27	24.5	83	75.5

Table (18): Illustrates that, 80.9 %, 79.1 %, and 78.2 % of the studied women were unsatisfied regarding physician diagnosis and treatment skills, communication skills and the time of attendance respectively.

According to research question No. 2: Is the quality of nursing performance will improve client satisfaction: (table 19, Figure 4)

Table (19): studied women satisfaction regarding nurse's performance at the studied maternal and child health centers pre/ post program. (N=110)

Nursing performance		Satisfactory		Unsatisfactory		Mc-Nemar test	P value
		No	%	No	%		
Activities	<i>Pre</i>	24	21.8	86	78.2	83.12	<0.001
	<i>post</i>	96	87.3	14	12.7		
Communication	<i>Pre</i>	43	39.1	67	60.9	81.18	<0.001
	<i>post</i>	99	90	11	10		
Reaction	<i>Pre</i>	32	29.1	78	70.9	80.14	<0.001
	<i>post</i>	86	78.2	24	21.8		
Giving knowledge	<i>Pre</i>	38	34.5	72	65.5	68.53	<0.001
	<i>post</i>	98	89.1	12	10.9		
Responding toward their complain	<i>Pre</i>	28	25.5	82	74.5	72.07	<0.001
	<i>post</i>	96	87.3	14	12.7		
Explaining the procedures before implementation	<i>Pre</i>	45	40.9	65	59.1	36.09	<0.001
	<i>post</i>	94	85.5	16	14.5		

Table (19) showed that there was a highly statistically significant difference pre/ post program regarding studied client s' satisfaction about nursing performance at the studied MCH.

Figure (4): Percentage distribution of the studied client s' total satisfaction regarding nursing performance.

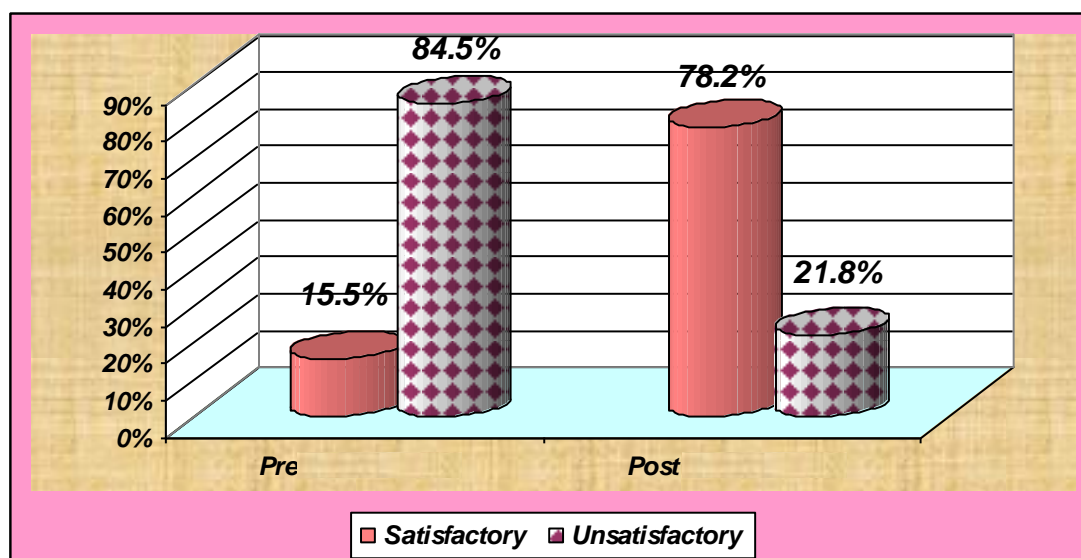


Figure (4): Shows that there was a highly statistically significant difference pre/ post program regarding studied client s' satisfaction about nursing performance at the studied MCH

According to research question No. 1: Is the socio-demographic characteristics of nurses affect their performance?

Part 4: The relation between studied nurses total performance, knowledge score and their socio-demographic characteristics.

Table (20): Distribution of the studied nurses' total performance score in relation to their soci-demographic characteristics.

Socio- demographic Characteristics	Total performance score post program				Total		X ²	P value
	Average N=15		Good N=52					
	No	%	No	%	No	%		
Age in years							2.72	>0.05
• 20-	5	55.56	4	44.44	9	21.95		
• 30-	6	40.0	9	60.0	15	36.59		
• ≥40	4	23.53	13	76.47	17	41.46		
Educational level							1.42	>0.05
•Diploma of secondary school nursing	5	31.25	11	68.75	16	23.99		
•Diploma of secondary school nursing and specialty	7	22.58	24	77.42	31	46.27		
•Technical institute of nursing	1	12.50	7	87.50	8	11.94		
•Bachelor degree in nursing science	2	16.67	10	83.23	12	17.91		
Years of experience							9.57	<0.05
• >10	5	7.5	24	35.8				
• 10-	5	7.5	22	32.8				
• ≥20	5	7.5	6	8.9				
Marital status							0.219	>0.05
• Married	10	20	40	80	50	74.63		
• Not married	5	29.41	12	70.59	17	25.35		
Number of children							8.46	<0.05
• >3	5	7.5	15	22.4				
• 3-	7	10.4	23	34.3				
• ≥5	3	4.5	14	20.9				

Table (20): Shows that there was a statistically significant difference between studied nurses total performance score, and their level of education, socioeconomic standards, and years of experience.

Table (21): Distribution of the studied nurses total knowledge score in relation to their socio-demographic characteristics.

Socio- demographic Characteristics	Total knowledge score immediate post- intervention				X ²	P value
	Average N=9		Good N=58			
	No	%	No	%		
Age in years						
20-	2	2.9	29	43.3	5.66	<0.05
30-	3	4.5	20	29.9		
≥40	4	5.9	9	13.5		
Educational level						
Diploma of secondary school nursing	3	4.5	13	19.3	5.38	<0.05
Diploma of secondary school nursing and specialty	3	4.5	28	41.8		
Technical institute of nursing	0	0.0	8	11.9		
Bachelor degree of nursing science	3	4.5	9	13.5		
Years of experience						
>10 years	2	2.9	27	40.4	5.25	<0.05
10-20 years	3	4.5	24	35.8		
≥20 years	4	5.9	7	10.5		
Marital status						
Married	5	7.5	45	67.2	7.18	<0.05
Not married	4	5.9	13	19.4		
Number of children						
>3	4	5.9	16	23.8	6.76	<0.05
3-	3	4.5	27	40.6		
≥5	2	2.9	15	22.3		

Table (21): Illustrates that there was a statistically significant difference between studied nurses total knowledge score, and their, age, level of education, socioeconomic standards, and years of experience.

According to research question No. 3: Is there a relation between client socio- demographic characteristics and their satisfaction? :

Table (22): Distribution of the studied women total satisfaction score in relation to their socio-demographic characteristics.

Socio- demographic Characteristics	Total satisfaction score post intervention		X ²	P Value
	Unsatisfactory N=24	Satisfactory N=86		
	%	%		
Age in years				
• <20	6	22	5.97	<0.05
• 20-	4	28		
• 30-	9	26		
• ≥40	5	10		
Educational level				
• Illiterate	0	5	7.89	<0.05
• Read and write	2	13		
• Secondary education	14	56		
• Universal education	8	12		
Occupation				
• Work	10	26	1.25	>0.05
• Housewife	14	60		
Marital status				
• Married	20	80	0.441	>0.05
• Single	2	3		
• Widow	2	3		

Table (22): Indicates that there was a statistically significant difference between studied clients total satisfaction score, and their age, and level of education.