
Results

The results of the study will be presented in the following sequence:

Part (I): demographic characteristics of study subject at medical and surgical units of Benha University Hospital .Table (1)

Part (II): Descriptive statistics (mean and stander division) for total scores of study variable about staff nurses and head nurse's perception of element empowerment, dimension of empowerment and organizational commitment at medical and surgical units of Benha University Hospital. Table (2- 4)

Part(III): Mean \pm SD score for elements of empowerment, dimension of empowerment and organizational commitment according to demographic characteristics among study subject. Table (5-19)

Part(IV): Frequency distribution of level of empowerment, dimension and organizational commitment among study subject. Table (20)

Part (V): Relationship between elements of empowerment and organization commitment among study subject. Table (21)

Part(VI): Relationship between dimension of empowerment and organization commitment among study subject. Table (22)

Part (VII): Correlation Coefficients between elements of empowerment dimension of empowerment and organizational commitment among study subject. Table (23-24)

Table (1): Demographic characteristics of study subjects

Variable	Type of nurse				Total (289)	
	Staff nurse (no=260)		Head nurse (no=29)			
	No	%	No	%	No	%
Department						
Medicine	175	90.2	19	9.8	194	67
Surgery	85	89.5	10	10.5	95	33
Age(years)						
19-29	150	96.8	5	3.2	155	54
30-39	85	85.9	14	14.1	99	34
≥40	25	71.4	10	28.6	35	12.1
Mean±SD	28.46±7.99		36.62±8.01		t-test 5.221	
Experience (years)						
1-5	96	97.0	3	3.0	99	34
6-10	47	85.5	8	14.5	55	19
11-15	54	90.0	6	10.0	60	21
16-20	39	45.1	2	4.9	41	14
>20	24	70.6	10	29.4	34	12
Mean±SD	10.62±8.27		16.21±10.04		t-test 3.377	
Qualification						
Diploma degree	183	95.3	9	4.7	192	66
Diploma +Specialty	22	88.0	3	12.0	25	9.0
Technical institute	51	96.2	2	3.8	53	18
B.SC degree	4	21.1	15	78.9	19	6.5
Marital statues						
Married	186	88.6	24	11.4	210	73
Not married	74	93.7	5	6.3	79	27
Total	260	90.0	29	10.0	289	100

Table (1) shows demographic characteristics of nurse and head nurses, they included in the study served in two departments. The majority of staff nurse and head nurses working in medicine units (90.2% and 9.8%) respectively. As regards to

age of study subjects the higher percent of staff nurse (96.8%) was in the group age 19-29 years, mean \pm SD related ages were (28.46 \pm 7.99 and 36.62 \pm 8.01) respectively.

As regarding to the years of experience were longer in staff nurse (97.0%) mainly having <5years of experiences, the mean \pm SD years of experience were (10.62 \pm 8.27 and 16.21 \pm 10.04) respectively. While the majority having technical institute related staff nurse were (96.2%). Finally, according to marital status the highest percent in staff nurses not married (93.7%).

Table (2): scores of overall element empowerment at work among studies subjects

Elements of empowerment	Maximum score	Type of nurses		t.test	P
		Staff nurse (no=260)	Head nurse (no=29)		
		X±SD	X±SD		
Opportunity	15	10.66±2.10	10.5±2.68	0.33	>0.05
Support	15	11.34±2.31	11.4±1.92	0.17	>0.05
Information	15	9.83±2.45	10.0±2.69	3.35	>0.05
Resources	15	11.68±2.11	10.1±1.83	3.97	**<0.001
Formal power	15	11.01±2.06	9.9±3.05	2.62	*<0.05
Informal power	20	16.26±2.27	15.9±2.96	0.87	>0.05
Total	95	70.78±8.73	67.8±11.2	1.72	>0.05

(*Statistical significant difference $P \leq 0.05$ ** highly statistical significant difference $P \leq 0.001$)

In table (2) the total scores of element empowerment are compared between staff nurses and head nurses. It can be noticed that staff nurses had higher mean score of total elements of empowerment than head nurses were (70.78±8.73 and 67.76±11.19) respectively.

There was significant difference between staff nurses and head nurses in relation to resources and formal power as elements of empowerment (11.68±2.11 and 10.1±1.83) and (11.01±2.06 and 9.9±3.05) respectively in both elements. While staff nurses took high scores (11.68±2.11).

Table (3): scores of overall dimension of empowerment at work among studies subjects

<i>dimension of empowerment</i>	Maximum score	Type of nurses		t.test	P
		Staff nurse (no=260)	Head nurse (no=29)		
		X±SD	X±SD		
Autonomy	25	17.3±4.24	18.0±4.18	0.84	>0.05
Responsibility	20	16.02±2.57	16.52±2.79	0.99	>0.05
Participation	30	20.19±5.2	22.14±5.03	1.917	>0.05
Total	75	53.51±10.2	56.66±11.1	1.557	>0.05

(Statistical significant difference $P \leq 0.05$)

Table (3) shows that the total scores of dimension empowerment at work are compared between staff nurses and head nurses. It can be noticed that head nurses had higher mean score of total dimension of empowerment at work compared to staff nurses (56.66±11.1 and 53.51±10.22) respectively.

There was statistically non significant difference, participation constituted highest dimension between head nurses and staff nurses (22.14±5.03 and 20.19±5.2) respectively. While head nurses took highly scores (22.14±5.03).

Table (4): Total scores of organizational commitment among studies subjects.

Items	Type of nurses		t.test	P
	Staff nurse (No=260)	Head nurse (No=29)		
	X±SD	X±SD		
- Satisfaction with job	4.4±1.01	4.69±1.17	1.421	>0.05
- Aspects of current job related satisfaction (workplace moral, benefits...)	22.26±4.6	22.76±4.83	0.553	>0.05
- A reason of continue to work (caring for other, the flexible schedule,...)	15.97±2.15	15.21±2.6	1.779	>0.05
- Types of problems of work that cause dissatisfaction (Problem with supervisor or nurses , Problem with co-workers....)	19.35±1.67	19.45±2.64	0.27	>0.05
- Reasons you would leave work for (Poor pay, poor benefits...).	20.88±2.98	20.24±3.81	1.057	>0.05
-At your facility the amount of turnover among nursing there is. By turnover we mean assistants leaving and new nursing starting work.	3.61±1.61	3.62±1.29	0.03	>0.05
- Turnover interferes with the ability to do the job.	3.78±1.7	3.31±1.69	1.4	>0.05
-Reasons of turnover interfere with the ability to do job (workload/ not enough time to do work ...)	7.64±1.32	7.93±1.9	1.094	>0.05
-If a friend or family member needed care and asked your advice about staying at your work department place.	4.55±1.66	4.93±1.6	1.174	>0.05
-If a friend or family member asked your advice about taking a nursing job	4.53±1.81	3.93±1.77	1.707	>0.05
-If a friend or family member asked your advice about becoming at nursing, at your work place.	4.17±1.73	3.86±1.83	0.912	>0.05
- You are currently looking for a different job.	2.2±0.96	2.38±1.18	0.93	>0.05
- You will leave the job in the next year.	1.97±1.08	2.31±1.26	1.571	>0.05
-Your next job will be as (nurses, head nurse.....).	2.35±1.28	2.48±1.3	0.527	>0.05
Maximum score	135			
Total	117.67±9.88	117.1±11.95	0.776	>0.05

(Statistical significant difference $P \leq 0.05$)

In table (4) the total scores of organizational commitment are compared between staff nurses and head nurses. It can be noticed that staff nurses had higher mean score of total organizational commitment compared to head nurses which is (117.67 ± 9.88 and 117.1 ± 11.95) respectively.

There was differences statistically no significant difference, as regard of the total various organizational commitment questions, head nurses generally higher scores compared to staff nurses, regarding to aspects of their current job related satisfaction (workplace moral, benefits...) were (22.76 ± 4.83 and 22.26 ± 4.6) respectively .The least item was " Will they leave the job in the next year" between two group staff nurses and head was (1.97 ± 1.08 and 2.31 ± 1.26) respectively.

Table (5):Mean±SD elements of empowerment according to their department among studies subject

Elements of empowerment	Staff nurse (n=260)		Head nurse (n=29)	
	Medicine (n=175)	Surgery (n=85)	Medicine (n=19)	Surgery (n=10)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Opportunity	10.4±2.2	11.2±1.9	10.3±2.5	11.0±3.1
Support	11.3±2.4	11.4±2.2	10.9±1.8	12.4±1.9
Information	9.7±2.4	10.1±2.6	9.4±2.9	11.2±1.8
Resources	11.8±2.1	11.4±2.1	9.9±1.9	10.4±1.8
Formal power	10.9±2.1	11.2±2.0	9.5±2.8	10.6±3.5
Informal power	16.3±2.3	16.1±2.2	15.2±3.1	17.2±2.2
Total	70.4±8.5	71.6±9.3	65.1±10.9	72.8±10.2

Table (5) shows that the mean scores for elements of empowerment of nurses and head nurses according to their department, head nurses & staff nurses have higher total mean scores (72.8±10.2 and 71.6±9.3) respectively at the same surgery department related to informal power as elements of empowerment while head nurses took highly scores(17.2±2.2).

Table (6): Mean±SD elements of empowerment according to their age among studies subject

Elements of empowerment	Staff nurse (n=260)			Head nurse (n=29)		
	1-29 (n=150)	30-34 (n=85)	≥40 (n=25)	1-29 (n=5)	30-34 (n=14)	≥40 (n=10)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Opportunity	10.7±1.9	10.7±2.6	10.2±1.0	10.6±2.2	11.1±2.1	9.7±3.5
Support	11.6±1.9	10.7±3.0	12.0±1.4	11.4±1.5	11.4±1.9	11.4±2.3
Information	9.3±2.6	10.4±1.9	11.2±2.2	9.2±3.9	9.7±2.1	10.8±2.8
Resources	11.5±2.1	12.1±2.0	11.6±2.0	9.8±1.8	10.1±1.6	10.2±2.3
Formal power	11.0±2.1	10.8±2.3	11.6±0.9	9.0±3.5	10.5±2.0	9.5±3.9
Informal power	15.9±2.2	17.3±2.1	17.0±1.0	15.4±1.7	16.1±2.7	15.7±3.9
Total	69.6±8.8	72.1±8.8	73.6±6.9	65.4±8.3	68.9±10.5	67.3±13.9

In table (6) the mean scores for elements of empowerment of nurses and head nurses according to their age group, staff nurses & head nurses have higher mean scores (17.3±2.1 and 16.1±2.7) respectively at the same age 30- 39 years related to informal power as elements of empowerment.

Table (7): Mean±SD elements of empowerment according to their years of experience among studies subject

Elements of empowerment	Staff nurse (n=260)					Head nurse (n=29)				
	1-5 (n=96)	6-10 (n=47)	11-15 (n=54)	16-20 (n=39)	>20 (n=24)	1-5 (n=3)	6-10 (n=8)	11-15 (n=6)	16-20 (n=2)	>20 (n=10)
	Mean±sD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Opportunity	10.6±1.9	10.7±1.7	10.3±2.8	11.6±2.3	10.2±1.1	9.7±2.5	11.4±1.9	11.0±2.5	11.0±1.4	9.7±3.5
Support	11.7±2.0	10.9±1.4	10.7±3.8	11.5±1.2	11.9±1.3	12.0±1.7	11.3±0.9	10.5±2.1	14.0±1.4	11.4±2.3
Information	9.5±2.5	8.3±2.2	10.6±2.2	10.6±1.9	11.2±2.2	11.3±2.1	8.5±2.4	9.8±2.7	10.5±3.5	10.8±2.8
Resources	11.7±1.8	10.8±2.4	12.7±1.8	11.4±2.3	11.5±2.1	9.7±1.5	10.3±1.4	9.0±1.4	12.5±0.7	10.2±2.3
Formal power	11.3±2.1	10.5±1.9	11.3±2.2	10.2±2.3	11.6±0.9	11.0±3.0	9.4±2.9	9.7±2.0	13.0±1.4	9.0±3.9
Informal power	15.7±2.2	15.0±2.0	17.8±2.2	16.7±2.0	17.0±1.0	16.0±2.0	15.8±2.2	15.2±3.0	19.0±1.4	15.7±3.9
Total	70.4±8.0	66.3±8.0	73.3±8.3	72.2±10.6	73.3±6.9	69.7±8.0	66.5±8.5	65.2±12.1	80.0±5.7	67.3±13.9

Table (7) shows that mean scores for elements of empowerment among nurses and head nurses according to their years of experience were that head nurses reported higher mean score (19.0±1.4) with 16-20 years of experience, while staff nurses (17.8±2.2) related 11-15 years of experience related to the same item is informal power as elements of empowerment.

Table (8): Mean±SD elements of empowerment according to their qualification among studies subject

Elements of empowerment	Staff nurse (n=260)				Head nurse (n=29)			
	Diploma (n=183)	Diploma specialty (n=22)	Technical institute(n=51)	B.SC (n=4)	Diploma (n=9)	Diploma specialty (n=3)	Technical institute(n=2)	B.SC (n=15)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Opportunity	10.4±2.0	12.5±2.6	10.6±2.1	11.5±1.0	8.6±3.2	13.0±1.7	10.0±1.4	11.3±1.9
Support	11.2±2.5	12.0±1.0	11.5±2.1	12.3±2.1	10.9±2.8	12.3±2.3	13.0±1.4	11.3±1.2
Information	9.7±2.4	11.0±2.0	9.7±2.7	10.3±1.3	10.1±3.4	11.0±0.0	13.5±2.1	9.3±2.2
Resources	11.6±2.0	12.0±3.1	11.9±2.1	11.8±1.9	10.2±2.3	10.7±2.9	10.5±0.7	9.8±1.3
Formal power	10.6±2.0	12.5±1.5	11.9±2.1	10.8±1.3	9.8±3.3	12.7±1.2	8.0±7.1	9.7±2.5
Informal power	16.4±2.4	18.0±2.0	15.1±2.4	16.0±1.4	15.0±4.5	18.0±1.7	17.5±2.1	15.7±1.8
Total	70.0±7.8	78.0±12.3	70.5±9.0	72.5±5.7	64.6±15.8	77.7±9.8	72.5±12.0	67.1±7.2

Table (8) shows that mean scores for elements of empowerment among nurses and head nurses according to their qualification, the higher mean scores of nurses and head nurses related to informal power were equal , with diploma specialty in both group (18.0±2.0 and 18.0±1.7)respectively.

Table (9): Mean \pm SD elements of empowerment according to their marital statues among studies subject

Elements of empowerment	Staff nurse (n=260)		Head nurse (n=29)	
	Married (n=186)	Not married (n=74)	Married (n=24)	Not married (n=5)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
Opportunity	10.7\pm2.1	10.6\pm2.0	10.7\pm2.0	9.6\pm5.2
Support	11.0\pm2.4	12.1\pm1.8	11.6\pm2.0	10.6\pm1.5
Information	9.8\pm2.5	10.0\pm2.4	9.9\pm2.9	10.2\pm0.8
Resources	11.5\pm2.1	12.1\pm2.0	10.3\pm1.8	9.21.6
Formal power	10.7\pm2.1	11.7\pm1.8	9.8\pm3.2	10.6\pm2.5
Informal power	16.4\pm2.2	15.9\pm2.3	15.7\pm3.1	16.8\pm2.2
Total	70.2\pm9.1	72.3\pm7.4	67.9\pm11.5	67.0\pm11.0

In table (9) the mean scores for elements of empowerment of nurses and head nurses according to their marital statues, staff nurses have higher total mean scores who are not married (72.3 \pm 7.4),while head nurses have higher scores related to informal power as elements of empowerment who are not married were (16.8 \pm 2.2), as elements of empowerment.

Table (10): Mean \pm SD dimension of empowerment according to their department among studies subject

Dimension of empowerment	Staff nurse (n=260)		Head nurse (n=29)	
	Medicine (n=175)	Surgery (n=85)	Medicine (n=19)	Surgery (n=10)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
Autonomy	17.2\pm4.5	17.6\pm3.8	17.2\pm4.2	19.8\pm3.4
Responsibility	16.1\pm2.5	15.9\pm2.7	15.8\pm3.0	17.8\pm1.7
Participation	19.8\pm5.4	21.0\pm4.6	21.2\pm5.7	24.0\pm3.0
Total	53.0\pm10.7	54.6\pm9.0	54.1\pm11.9	61.6\pm7.4

Table (10) shows that the mean scores for dimension empowerment of nurses and head nurses according to their department, head nurses & staff nurses have higher total mean scores (61.6 \pm 7.4 and 54.6 \pm 9.0) respectively at the same surgery department related to participation as dimension of empowerment, while head nurses took highly scores (24.0 \pm 3.0).

Table (11): Mean±SD dimension of empowerment according to their age among studies subject

Dimension of empowerment	Staff nurse (n=260)			Head nurse (n=29)		
	1-29 (n=150)	30-34 (n=85)	≥40 (n=25)	1-29 (n=5)	30-34 (n=14)	≥40 (n=10)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Autonomy	17.9±3.3	15.9±5.6	18.7±2.3	17.2±2.4	16.8±3.5	20.1±5.1
Responsibility	16.0±2.7	16.0±2.3	16.4±2.6	16.4±2.2	15.4±2.6	18.1±2.7
Participation	20.5±5.5	18.9±5.0	23.0±1.8	21.6±7.1	21.2±4.0	23.7±5.4
Total	54.3±9.6	50.8±11.6	58.0±6.0	55.2±10.8	53.4±9.2	61.9±12.7

In table (11) the mean scores for dimension of empowerment of nurses and head nurses according to their age group, head nurses have higher mean score than staff nurses (61.9±12.7). Head nurses with ages ≥40 had higher mean scores(23.7±5.4) than staff nurses in the same ages (23.0±1.8) related to same items participation as dimension of empowerment.

Table (12): Mean±SD dimension of empowerment according to their years of experience among studies subject

Dimension of empowerment	Staff nurse (n=260)					Head nurse (n=29)				
	1-5 (n=96)	6-10 (n=47)	11-15 (n=54)	16-20 (n=39)	>20 (n=24)	1-5 (n=3)	6-10 (n=8)	11-15 (n=6)	16-20 (n=2)	>20 (n=10)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Autonomy	17.4±3.3	18.6±3.5	15.8±6.8	16.7±2.6	18.9±2.0	18.3±2.5	16.9±3.6	16.0±3.0	17.5±5.0	20.1±5.1
Responsibility	16.1±2.3	15.2±3.1	16.7±2.1	15.7±2.7	16.3±2.7	16.7±3.1	15.8±1.9	15.0±3.5	16.0±0.0	18.1±2.7
Participation	20.4±5.0	20.0±6.3	19.2±6.6	19.6±2.2	23.0±1.8	24.3±5.5	20.0±5.3	21.8±4.4	20.5±2.1	23.7±5.4
Total	53.8±8.6	53.8±11.1	51.7±14.6	52.0±5.9	58.2±6.1	59.3±11.1	52.6±9.8	52.8±10.3	54.0±2.8	91.9±12.7

Table (12) shows that mean scores for dimension of empowerment among nurses and head nurses according to their years of experience were that head nurses reported higher mean scores (24.3±5.5) in 1-5 years of experience ,while staff nurses (23.0±1.8) that have >20 years of experience related to same items Participation as dimension of empowerment.

Table (13): Mean±SD dimension of empowerment according to their qualification among studies subject

Dimension of empowerment	Staff nurse (n=260)				Head nurse (n=29)			
	Diploma (n=183)	Diploma specialty (n=22)	Technical institute(n=51)	B.SC (n=4)	Diploma (n=9)	Diploma specialty (n=3)	Technical institute(n=2)	B.SC (n=15)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Autonomy	17.0±4.5	18.5±1.5	17.9±4.1	16.0±2.4	17.8±6.0	21.3±2.3	20.5±3.5	17.1±3.0
Responsibility	16.2±2.1	16.5±3.6	15.0±3.3	16.3±0.5	16.0±4.1	19.3±0.6	17.5±2.1	16.1±1.9
Participation	20.1±5.1	20.5±1.5	20.2±6.6	24.3±1.0	21.7±6.6	24.7±2.9	23.0±1.4	21.8±4.8
Total	53.3±10.2	55.5±3.6	53.2±12.4	56.5±3.0	55.4±15.8	65.3±5.8	61.0±4.2	55.1±8.6

Table (13) shows that mean scores for dimension of empowerment among nurses and head nurses according to their qualification ,the higher mean scores of head nurses(24.7±2.9)who have diploma specialty related to participation, while the staff nurses with B.Sc had mean scores(24.3±1.0) lower than head nurse related same items as dimension of empowerment .

Table (14): Mean±SD dimension of empowerment according to their marital statues among studies subject

Dimension of empowerment	Staff nurse (n=260)		Head nurse (n=29)	
	Married (n=186)	Not married (n=74)	Married (n=24)	Not married (n=5)
	Mean±SD	Mean±SD	Mean±SD	Mean±SD
Autonomy	17.2±14.4	17.7±3.8	11.3±4.0	21.6±3.3
Responsibility	15.9±2.5	16.4±2.7	16.1±2.8	18.4±1.7
Participation	19.8±4.8	21.2±5.9	21.2±4.9	26.8±3.0
Total	52.8±10.1	55.3±10.4	54.5±10.6	66.8±7.5

In table (14) the mean scores for dimension of empowerment of nurses and head nurses according to their marital statues, head nurses have higher total mean scores (66.8±7.5) than staff nurses and also head nurses who are not married have higher mean scores were (26.8±3.0 and 21.2±5.9)respectively related items of participation as dimensions of empowerment.

Table (15): Mean \pm SD organizational commitment according to their department among studies subject

<i>Commitment Scores</i>	Staff nurse (n=260)		Head nurse (n=29)	
	Medicine (n=175)	Surgery (n=85)	Medicine (n=19)	Surgery (n=10)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
	117.4\pm9.9	117.4\pm9.6	115.5\pm11.8	120.1\pm12.3

Table (15) shows that the mean scores for organizational commitment of nurses and head nurses according to their department, head nurses have higher total mean scores (120.1 \pm 12.3) at surgery department .

Table (16): Mean \pm SD of organizational commitment according to a their age among studies subject

<i>Commitment Scores</i>	Staff nurse (n=260)			Head nurse (n=29)		
	1-29years (n=150)	30-34years (n=85)	\geq 40 (n=25)	1-29years (n=5)	30-34years (n=14)	\geq 40 (n=10)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
	118.4\pm9.1	115.7\pm11.5	120.7\pm6.3	112.0\pm8.3	117.5\pm14.6	119.1\pm9.4

In table (16) the mean scores of organizational commitment among nurses and head nurses according to a their age staff nurse at age \geq 40 years had higher mean scores than head nurses in the same year were (120.7 \pm 6.3 and 9.1 \pm 9.4) receptively.

Table (17): Mean \pm SD of organizational commitment according to their years of experience among studies subject

	Staff nurse (n=260)					Head nurse (n=29)				
	1-5 (n=96)	6-10 (n=47)	11-15 (n=54)	16-20 (n=39)	>20 (n=24)	1-5 (n=3)	6-10 (n=8)	11-15 (n=6)	16-20 (n=2)	>20 (n=10)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
<i>Commitment Scores</i>	118.1\pm9.8	119.5\pm7.7	114.8\pm13.0	117.4\pm8.2	120.3\pm6.1	112.3\pm11.2	121.1\pm13.2	106.2\pm8.5	131.0\pm5.7	119.1\pm9.4

Table (17) shows that mean scores of organizational commitment among nurses and head nurses according to their years of experience were that head nurses reported higher mean scores (131.0 \pm 5.7) related to the years of experience (16-20years) than staff nurses (120.3 \pm 6.1) that have >20 years of experience .

Table (18): Mean \pm SD of organizational commitment according to their qualification among studies subject

	Staff nurse (n=260)				Head nurse (n=29)			
	Diploma (n=183)	Diploma specialty (n=22)	Technical institute(n=51)	B.SC (n=4)	Diploma (n=9)	Diploma specialty (n=3)	Technical institute(n=2)	B.SC (n=15)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
<i>Commitment Scores</i>	118.2\pm10.2	117.6\pm9.5	116.2\pm8.7	119.8\pm11.3	117.1\pm12.4	128.3\pm2.1	115.5\pm5.0	115.2\pm12.8

Table (18) shows that mean scores of organizational commitment among nurses and head nurses according to their qualification, the total higher mean score of head nurses(128.3 \pm 2.1) who have diploma specialty ,while the highest score related to staff nurses with B.SC degree were (119.8 \pm 11.3).

Table (19): Mean \pm SD of organizational commitment according to their marital status among studies subject

Commitment Scores	Staff nurse (n=260)		Head nurse (n=29)	
	Married (n=186)	Not married (n=74)	Married (n=24)	Not married (n=5)
	Mean \pm SD	Mean \pm SD	Mean \pm SD	Mean \pm SD
	117.8\pm9.9	117.6\pm9.8	11.6\pm11.9	124.4\pm10.1

In table (19) the mean scores of organizational commitment of nurses and head nurses according to their marital statues, head nurses have higher total mean scores as not married were (124.4 \pm 10.1) than staff nurses who are married (117.6 \pm 9.8).

Table (20): Frequency distribution of elements of empowerment, dimensions of empowerment and organizational commitment level according to total studies subjects

	Staff nurse		Head nurse		Total		X ²	P value
	No	%	No	%	No	%		
Element of empowerment								
Low	12	4.6	3	10.3	15	5.2	2.013	>0.05
Moderate	147	56.5	14	48.3	161	55		
High	101	38.8	12	41.4	113	39.1		
Dimension of empowerment								
Low	38	14.6	4	13.8	42	14.5	5.283	>0.05
Moderate	141	54.2	10	34.5	151	52.2		
High	81	31.2	15	51.7	96	33.2		
Commitment								
Low	38	14.6	8	27.6	46	15.9	5.98	* <0.05
Moderate	198	76.2	16	55.2	214	74.1		
High	24	9.2	5	17.2	29	10		
Total	260	100	29	100	289	100		

Table (20) describes a comparison between staff nurses and head nurses who talked about moderate scores related to elements, dimension of empowerment and Commitment. There was statistical significant at ($P \leq 0.05$), the majority of both nurses and head nurses who have moderated commitment (76.2% and 55.2%). There was also high commitment in nurses (9.2% and 17.2%) respectively were less commitment in nurses and head nurses (14.6% and 27.6%) respectively.

Table (21): Relation between elements of empowerment level and organization commitment level among total studies subjects

Elements empowerment level	Commitment level						Total	
	Low		Moderate		High			
	No	%	No	%	No	%	No	%
Low	2	4.3	13	6.1	0	0	15	5.2
Moderate	33	71.7	111	51.9	17	58.6	161	55.7
High	11	93.9	90	42.1	12	41.4	113	39.1
Total	46	100	214	100	29	100	289	100

$$X^2 = 7.85$$

$$P > 0.05$$

Table (21) shows that relation between elements of empowerment level ,organization commitment level among total studies subjects and level commitment are not significantly distributed according to level of elements for empowerment ($X^2 = 7.85$ at $P > 0.05$). Highly empowered nurses were low committed (93.9%) while moderately empowered nurse were low commitment at (71.7%).

Table (22): Relation between dimension empowerment level and organizational commitment level of total studies subjects

Dimension level	Commitment level						Total	
	Low		Moderate		High			
	No	%	No	%	No	%	No	%
Low	24	52.2	17	7.9	1	3.4	42	14.5
Moderate	19	41.3	119	55.6	13	44.8	151	52.2
High	3	6.5	78	36.4	15	51.7	96	33.2
Total	46	100	214	100	29	100	289	100

$$X^2 = 69.05$$

$$P^{**} < 0.01$$

Table (22) shows the relation between dimension empowerment level and organizational commitment level of total studies subjects. Level of commitment is significantly distributed according to level of dimension of empowerment ($X^2 = 69.05$ at $P < 0.01$). Highly empowered nurses were highly committed (51.7%) while moderately empowered nurses were moderately commitment at (55.6 %).

Table (23): Correlation coefficients between total elements of empowerment, total dimension of empowerment and organizational commitment among total studies subjects

Elements of empowerment	Commitment	
	r	P value
Opportunity	0.04	>0.05
Support	* 0.22	<0.05
Information	*-0.21	<0.05
Resources	*-0.16	<0.05
Formal power	*-0.14	<0.05
Informal power	*-0.37	<0.05
Dimension of empowerment		
Autonomy	*0.42	<0.05
Responsibility	0.44	>0.05
Participation	*0.42	<0.05

Table (23) shows correlation coefficients between total elements of empowerment , total dimension of empowerment and organizational commitment among total studies subjects that are significant positive correlation between all elements and dimension of empowerment and total commitment scores. Most items of commitment are also significantly and positively correlated with elements of empowerment expect opportunity which was no significantly correlated with commitment .Most of total commitment scores are also significantly and positively correlated with dimension of empowerment expect responsibility which was no significantly correlated with commitment.

Table (24): correlation coefficients between total empowerment and total dimension and organizational commitment among total studies subjects

	Commitment	
	r	P value
Elements of empowerment	-0.16	*<0.05
Dimension of empowerment	0.395	*<0.05

(*statistical significant difference $P \leq 0.05$)

Table (24) shows correlation coefficients between total empowerment , total dimension and total organizational commitment among total studies subjects that are significant positive correlation between total commitment scores and elements and dimension of empowerment at ($P < 0.05$).