https://menj.journals.ekb.eg
Print ISSN: 2735-3974
Online ISSN: 2735-3982
DOI: ----------

MNJ
Menoufia Nursing Journal
Faculty of Nursing
Menoufia University

Effect of Pre and Postoperative Nursing Intervention on Activities of Daily Living and Quality of life among Patients undergoing Hip Replacement

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Abstract: The patient with hip replacement becomes a chronic patient who require a successful recovery post surgery. Successful recovery requires not only proper surgical technique but also effective pre and postoperative nursing care to improve their activity of daily livings and enhance their quality of life. **Purpose:** To determine the effect of pre and postoperative nursing intervention on activities of daily livings and quality of life among patients undergoing hip replacement. **Setting:** The study was conducted at orthopedic departments at Menoufia University and Shebin El-Kom teaching hospitals. **Sampling:** A consecutive sample of 80 adult patients who were planned for hip replacement surgery was assigned randomly and alternatively into two equal groups, 40 patients for each group. **Instruments:** Two instruments were used for data collection: Structured interview questionnaire and hip disability and osteoarthritis outcome score. **Results:** Pre intervention about half of both study and control groups had sever hip disability related function and activity of daily living scores (55.0 % and 57.5% % respectively) that were highly significantly improved among study group to none complains at follow up period (60.0% of study group compared to 5.0% of control group for function and activity of daily living score respectively). Also pre intervention about half of both study and control groups had sever hip disability related quality of life score (47.5 % and 52.5% respectively) that were highly significantly improved among study group to none complains at follow up period (72.5% compared to 7.5% for quality of life score respectively) .**Conclusions:** Pre and postoperative nursing intervention has a positive impact on improving activities of daily living and quality of life among patients undergoing hip replacement. **Recommendations:** Supervised health teaching regarding pre and postoperative care should be given for hip replacement patients to improve their activities of daily livings and quality of life.

Key words: *Activities of daily livings, hip replacement, nursing intervention and quality of life.*

Introduction

Every year, more than a million total hip replacement procedures are carried out globally. This number is anticipated to double throughout the following ten years as the population matures (Fontalis et al., 2021). Hip replacement is a surgical procedure in which the hip joint is replaced by a prosthetic implant, that is, a hip prosthesis (Evans et al., 2019).

Hip replacement is indicated for patients who have failed conservative or previous surgical treatment options for a deteriorated hip joint due to osteoarthritis, rheumatoid arthritis and avascular necrosis and who continue to have significant decrease in the activities of daily living (Ali & Abo El-Fadl, 2021).

The role of the hip prosthesis mainly is to totally or partially solve arthralgia, vascular deficiency of the hip, changes in pressure coefficients, instability and functionality of the hip joint. The patient with HA becomes a chronic patient and the proper preoperative and postoperative nursing management becomes the therapeutic conduct of choice (Marcu et al., 2021). This procedure has evident positive outcomes in the management of both simple and complex very late hip arthritis (Hetaimish et al., 2020).

Persistent pain likely has a relevant impact on the patient's activities of daily living and their quality of life, which is a serious matter of suffering in addition to pain (Erlenwein et al., 2017). In most cases, following HA, pain disappears and the quality of life is improved considerably. The result of the surgery depends on a series of factors, among which: the preoperative preparation, the surgeon's and nurses ability, the patient's general condition, the patient's compliance to nursing care and the individualized rehabilitation educational program (IRP) (Madara et al., 2019).

A structured intervention programme developed by nurses, with the aim of empowering people to achieve the greatest possible autonomy and independence in self-care, plays a key role, as the need for functional recovery after surgery is extremely important, both in terms of restoring functional capacity and returning to social and professional life (Pinto, 2016). The patient's preoperative preparation involves performing a specific physical therapy program (PTP), which should begin before surgery, aiming to increase the stability of the joint, muscles on which prosthesis is to be fitted, thus ensuring a rapid and complete postoperative recovery outcomes (Madara et al., 2019).

The role of rehabilitative nurse during preoperative period should focus on education as a strategy to provide information about the surgical procedure and rehabilitation exercises with the goal of improving quality of life and activities of daily livings (ADLs) (Sousa and Carvalho, 2017). While postoperative exercises for HA patients can lead to improve the performance of activities of daily livings (ADLs) which is a central goal of the individualized rehabilitation program. Achieving this goal is essential for increasing individual independence, thereby improving the quality of life (QOL) for HA patients (Tetreault et al., 2020).

The nurse should also encourage the patients to undertake the prescribed exercise regime to enhance activities of daily living during the recovery period. Moreover the nurse educates patients before they are discharged to promote continuity of therapeutic regimen (e.g. progressive limbs exercise), also to be

active participation and understanding of the rehabilitation process and home care after THA (Miller et al., 2017).

The nurse should emphasize that it is vital for patients to incorporate regular exercises into life to achieve full recovery after a hip replacement. Regular post-operative exercises will allow them to return to everyday activities within 3-6 weeks after surgery; and return to driving at six weeks. These exercises are geared to restore blood flow, strength and mobility. It is important to gradually increase walking, sitting, standing, and climbing stairs (Ortho, 2022).

Guidelines after hip joint replacement aim to reduce the healthcare variations, improve accuracy of follow-up and promote effective recovery. A lot of benefits for the geriatric and community nurse, who will guide patients to apply guidelines, which will lead to decrease/prevent complications after hip joint replacement surgery (Hall, 2020).

Meanwhile, nurses must become aware what nursing intervention are and how the out-patient nurses utilize it to improve care for patient and their QOL after surgery (Rosenfeld, 2019). Perioperative nursing interventions and the provided training support to patients who are scheduled for hip prosthesis surgery are effective on increasing the level of post-operative comfort and activities in their daily lives (Karabulut & Gurcayir, 2017).

Significance of the study

It is estimated that 88 cases per 100,000,000 per year of hip replacement surgery were performed worldwide in 2017 (Ortho bullets, 2017). In Egypt, there are 10 to 15 thousand hip joints are installed annually in Egypt (El Ganzouri, 2016). A71 hip replacement surgeries were performed in Menoufia University Hospital in 2017 (Statistical records of surgery, Menoufia University Hospital, 2017) while the total number of hip replacement patients in Shebin El-Kom Teaching Hospital were 68 patients in 2017 (Statistical records of surgery, Shebin El-Kom Teaching Hospital, 2017).

Little research findings have indicated that pre and postoperative nursing intervention for hip replacement patients led to improvement of activities and quality of life because this intervention has a positive influence on patients' overall healing process that lead to improve activities and quality of life (Yager & Stichler, 2015). Therefore, the current study was carried out to determine the effect of integrative pre and postoperative nursing intervention on activities of daily living and quality of life among those patients.

Purpose of the study

The purpose of the current study was to determine the effect of pre and postoperative nursing intervention on activities of daily livings and quality of life among patients undergoing hip replacement.

Research Hypotheses

The following research hypotheses were formulated to achieve the aim of the study:

1. Patients undergoing hip replacement who receive pre and postoperative nursing intervention (study group) will have higher total score of activities of daily living than patients who do not (control group).
2. Quality of life score for patients undergoing hip replacement who receive pre and postoperative nursing intervention (study group) will be better than patients who do not (control group).

Method

Research design:

A quasi experimental research design was utilized to achieve the aim of this study.

Setting:

The study was conducted at orthopedic departments at Menoufia University and Shebin El-Kom teaching hospitals.

Sampling:

A consecutive sample of 80 adult patients who were planned for hip replacement surgery were assigned randomly and alternatively into two equal groups, 40 patients for each group. Group one was the study group. They received the designed pre and postoperative nursing intervention along with routine hospital care. Group two was the control group. They only received routine hospital care.

Inclusion criteria:

The study subjects were selected according to the following criteria:

- Patients should be admitted within at least 24 hours to orthopedic department before the surgery.

Exclusion criteria:

- Any cognitive impairment detected by patient's history or during explanation of consent procedure because these conditions may impair the ability to receive nursing intervention.
- Previous history of unilateral or bilateral leg deformities to avoid interference with the designed intervention that may affect the results.

Sampling technique:

The sample size was determined based on the following equation: n0 = Z2 p q / e2 which was valid where n0 was the sample size, Z2 was the desired confidence level is 95% (1.96) (The value for Z was found in statistical tables which contain the area under the normal curve) and e was the desired level of precision 0.05 (±5%).So n0=3.92÷.05=78.4. This sample size was increased to 80 patients to compensate for attrition rate.

Instruments of the study:

Two instruments were used by the researchers for data collection, these instruments were:

- **Instrument 1:** Structured interview questionnaire.
- **Instrument 2:** Hip Disability and Osteoarthritis Outcome Score (HOOS).

Instrument I: Structured interview questionnaire:

It was developed by the researchers to assess baseline patient's personal and medical and surgical characteristics. It comprised of two parts as the following:

- **Part one: Personal data**: It comprised of seven questions about patient's age, sex, marital status, ……and occupation
- **Part two: Medical data**: It comprised of questions related to present medical history.

Instrument II: Hip Disability and Osteoarthritis Outcome Score(HOOS):

It was developed by Nilsdotter et al., (2003) to assess the patients' opinion about their hip and associated problems. It was used for adult population with hip disability to evaluate hip symptoms and functional limitations. It consists of 6 subscales: symptoms, stiffness, pain, function and daily living, function, sports as well as recreational activities and quality of

life (QOL). These subscales include 40 items: 10 items for pain, 5 items for other symptoms (3 for symptoms and 2 for stiffness), 17 items for function and ADL, 4 items for function, sport and recreational activities and 4 items for hip related QOL. Each item was scored from 0 to 4. Scores were summed for each subscale and transformed to a 0 – 100 scale. The higher HOOS, the less dysfunction. A total score of <70 is considered a poor result; 70 – 80 is considered fair, 80 –90 is good, and 90 –100 is an excellent result. The test-retest reliability was found to be 0.82 to 0.98 and the construct validity was shown to be good (Ornetti et al., 2010).

Reliability:

The first instrument was tested for reliability using a test retest method and a person correlation coefficient formula was used. The period between both tests was two weeks and the results was 0.97. While second was proved to be valid and reliable (Ornetti et al., 2010).

Pilot study:

A pilot study was conducted prior to data collection on 10% of the study sample (8 patients) to test the feasibility, clarity and applicability of the instruments then necessary modifications were done so these patients were excluded from the study sample.

Ethical Considerations:

An approval from Ethical and research committee of the Faculty of Nursing, Menoufia University was obtained. A written consent was obtained from all subjects who met the inclusion criteria and agree to participate in the study after explanation of the purpose of study. Each subject was reassured that any obtained information would be confidential and would only be used for the study purpose. The researcher emphasized that participation in the study was entirely voluntary and anonymity of the subjects were assured through coding data.

Procedure

Written approval: A formal letter from the Dean of Faculty of Nursing, Menoufia University was sent to the responsible authorities of both hospitals to obtain their permission to carry out the study after explanation of the purpose of the study.

- Data collection was extended over a period of 12 months from the first of October 2020 to end of September 2021.
- Patients who agreed to participate in the study and fulfilled the inclusion criteria were interviewed individually by the researchers in orthopedic departments at Menoufia University and Shebin El-Kom Teaching Hospitals (before operation and immediately after operation then second day postoperative) then the follow up was performed after the subjects were discharged in outpatient clinics
- The study was conducted in two consecutive phases: preoperative and postoperative phases as following:

1) The preoperative phase:

- All subjects of both groups were assessed individually for biodemographic data utilizing the first instrument part one and two. It took about 10-15 minutes.
- All subjects of both groups were assessed for hip symptoms and functional limitations using instrument II (Hip Disability and

Osteoarthritis Outcome Score) .It took about 15-20 minutes for each subject

- The researchers prepared an instructional booklet about pre and postoperative nursing care after assessment as well as extensive literature review (Glassou et al., 2017). This booklet was supported by illustrative pictures and included information about pre and postoperative nursing management for hip replacement surgery as assessment of the subject's condition such as vital signs, prevent swelling, maintain postoperative nutrition, sleeping and getting up from the bed.

- The researchers interviewed each subject of the study group individually in his/her room in the first day after admission for three teaching sessions; each of 40-60 minutes according to subject's level of understanding. The previously prepared booklet was distributed by the researchers at the beginning of first session. Lecture, group discussion, video, demonstration and return demonstration were used for illustration. The prepared protocol of care conducted through the following sessions:

  - **During the first session:** At the beginning of the session, the researchers demonstrated for each subject method of using the overhead trapeze for changing position.

- Also the researchers taught each subject about postoperative nutrition: eating a diet rich in fiber such as whole grains, fruits and vegetables, taking enough fluids to avoid constipation (8-10 glasses / cups per day), eating lean proteins such as lean meat, poultry, and fish to speed healing and recovery after surgery and restore strength.

  - **During second session**, the researchers educated them about necessary postoperative precautions: avoiding acute flexion of hip not greater than 90°, crossing legs, hip adduction or internal rotation and elevating bed more than 45 degrees. Moreover proper position of affected extremity was demonstrated in which each subject was instructed to use 1 or 2 pillows between both knees and ankles and to change positions when feeling uncomfortable.

  - **During third session**, the researchers refreshed the previous learnt knowledge and taught each patient specific postoperative exercises (ankle pumps, quadriceps setting, gluteal sets, heel slides, hip abduction, hip internal/external rotation and hip flexion/extension). The researchers mentioned that each exercise should performed 10 times per set twice a day. Moreover the researchers emphasized the importance of scheduled follow up and physician visits.

2) The postoperative phase:

- This phase began immediately postoperatively (within two hours from operation as nurse informed

the researchers the time of leaving the operating room in which the researcher reinforced the necessary postoperative restrictions and proper position of the affected extremity which should be held in slight abduction by an abduction splint.

- The researchers reminded patients of study group to frequently change of position every 2 hours and allow body to rest.
- After patient's condition became stable in 3rd day postoperatively, the researchers assisted all subjects of study group to perform all previously learnt postoperative exercises to improve blood flow to lower extremities to prevent DVT.
- The researchers encouraged each subject of study group to perform progress exercises by increasing resistance and repetitions.
- All subjects of both groups was assessed twice postoperatively (after 15 day and after one month) for their hip disability using instrument II.
- A comparison was done between both groups (study and control groups) to assess the effect of pre and postoperative nursing intervention on their activities of daily living and quality of life.

Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software (Statistical Package for the Social Sciences, version 26, SPSS Inc. Chicago, IL, USA). For quantitative data, mean and standard deviation were calculated. For qualitative data, which describe a categorical set of data by frequency, percentage or proportion of each category, comparison between two groups was done using Chi-square test ($\chi 2$). For comparison between means of two groups of parametric data of independent samples, student t-test was used. For comparison between means of two groups of non-parametric data of independent samples, Z value of Mann-Whitney test was used. For comparison between means of two related groups (pre and post program intervention data) of parametric data, paired t-test was used. Correlation between variables was evaluated using Pearson's correlation coefficient (r). The level of significance was set as P-value < 0.001 was highly statistically significance difference, P-value < 0.05 was statistically significance difference and P-value > 0.05 was no statistically significance difference.

Results:

Table (1): This table shows that, more than one third of studied sample (study and control groups) were 55 to 65 years (45 % & 35% respectively). Less than two thirds of them were males (60.0% and 62.5% respectively). Concerning marital status, the majority of study and control group groups were married (80% and 87.5% respectively). As regard level of education, about one third of both study and control groups (37.5% and 30.0% respectively) were illiterate.

There were no statistically significant differences between both groups regarding all personal characteristics.

Table (2): This table shows that, more than one third of both study and control groups (37.5% and 40% respectively) admitted to hospital because of erosion in the hip joint because of osteoporosis. More than half of them (57.5% and 55% respectively) performed hip replacement for reducing sever hip pain.

There were no statistical significant differences between both groups regarding all present medical history.

Table (3): It is clear that pre intervention about half of both study and control groups had total sever pain score (50 % and 52.5% respectively) , severe hip disability related total function and activity of daily living scores (55 % and 57.5% respectively)and sever hip disability related total function, sports and recreational activities score (55 % and 62.5% respectively) that were highly significantly improved among study group to none complains at follow up period (67.5% compared to 12.5% for pain respectively, 60% compared to 2% for function and daily living respectively and 65% compared to 0% for function, sports and recreational activities respectively) .

Figure (1): This figure shows that, pre intervention no one of both groups had non total hip disability and osteoarthritis outcome level that was highly significantly improved among study group to 65% compared to 7.5% of control group during follow up period.

Table (1): Percentage distribution of studied subjects according to their personal characteristics. (n=80)

Personal characteristics	Studied subjects (n=80)				X2	p-value
	Study group (n=40)		Control group (n=40)			
	No	%	no	%		
Age						
25 – < 35 years	5	12.5	6	15.0	2.214	.529
35 – < 45 years	6	15.0	10	25.0		
45 – < 55 years	11	27.5	10	25.0		
55-65 years	18	45.0	14	35.0		
Sex						
Male	24	60.0	25	62.5	.053	.818
Female	16	40.0	15	37.5		
Marital status						
Single	8	20.0	5	12.5	.827	.363
Married	32	80.0	35	87.5		
Education level						
Illiterate	15	37.5	12	30.0	7.086	.131
Read and write	12	30.0	17	42.5		
Secondary education	6	15.0	7	1 7.5		
University education	7	17.5	4	10.0		
Occupation						
Housewife	14	35.0	12	30.0	6.454	.091
Manual work	7	17.5	17	42.5		
Administrative work	12	30.0	7	17.5		
Not working	7	17.5	4	10.0		

Table (2): Percentage distribution of present medical history of studied subjects. (n=80)

Present medical history	Studied subjects (n=80)				X2	p-value
	Study group (n=40)		Control group (n=40)			
	no	%	no	%		
Causes of present hospitalization						
• Hip joint erosion caused by osteoporosis	15	37.5	16	40.0	5.575	.233
• Rheumatoid arthritis	13	32.5	11	27.5		
• Bone fractures	9	22.5	13	32.5		
• Hip joint erosion caused by osteoporosis and rheumatoid arthritis	1	2.5	0	0.0		
• Hip joint erosion caused by osteoporosis and bone fractures	2	5.0	0	0.0		
Duration of present complain						
• A week - < a month	5	12.5	0	0.0	15.893	.001
• Month - < two months	13	32.5	4	10.0		
• 2-3 months	11	27.5	10	25.0		
• > 3 months	11	27.5	26	65.0		
Reasons of hip-replacement surgery*						
• Reducing hip pain	23	57.5	22	55.0	2.054	.561
• Help improving hip joint function	18	45.0	17	42.5		
• Hip joint diseases	1	2.5	1	2.5		
Types of hip replacement						
• Total hip replacement	27	67.5	32	80.0	1.614	.204
• Partial hip joint replacement	13	32.5	8	20.0		
The waiting period before surgery						
• Less than three days	20	50.0	26	65.0	1.841	.175
• From three days to a week	20	50.0	14	35.0		

N.B: Reasons of the waiting period before surgery for both group were for investigations and x-ray

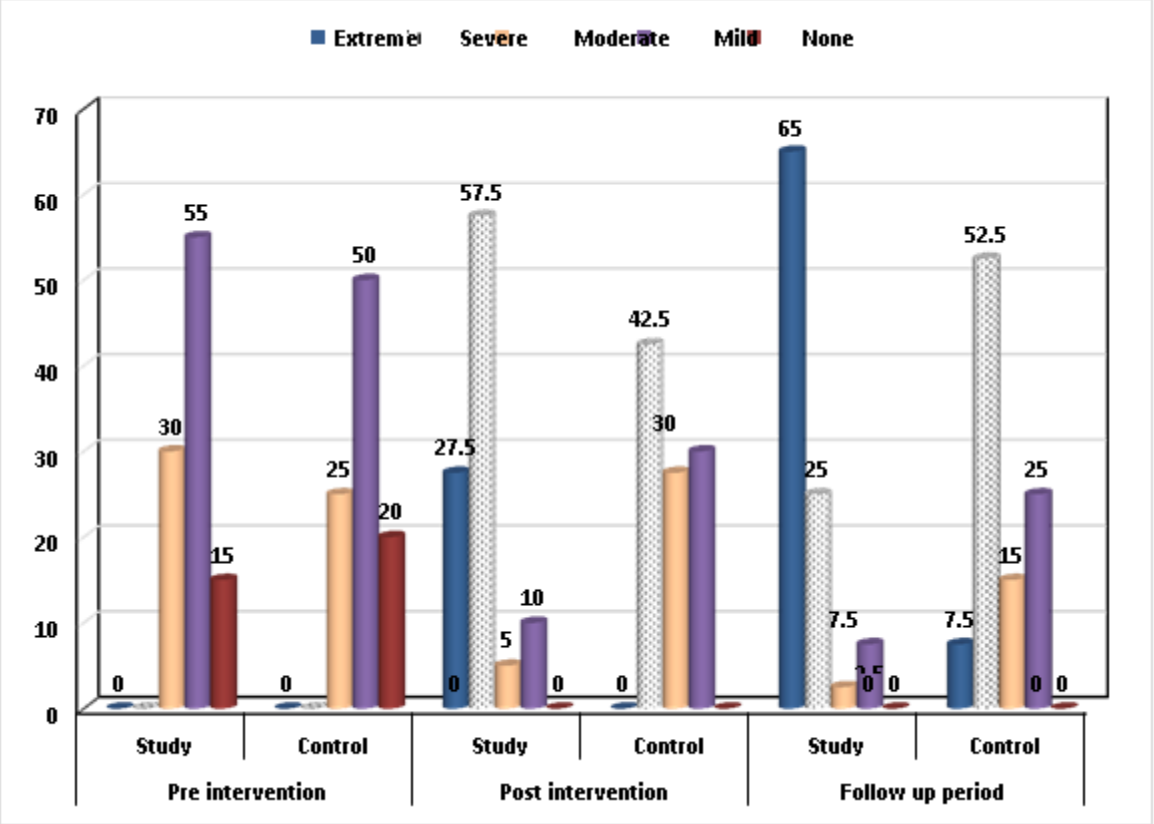
* Some subjects of study group chose more than one answer.

Table (3): Distribution of studied subjects regarding their subtotal score of Hip Disability and Osteoarthritis Outcome throughout study period (n=80).

HOOS score	Pre program				Post program				Follow-up program			
	Study group (n=40)		Control group (n=40)		Study group (n=40)		Control group (n=40)		Study group (n=40)		Control group (n=40)	
	no	%	No	%	no	%	no	%	no	%	no	%
Total symptom's and stiffness score												
None	0	0.0	0	0.0	13	32.5	0	0.0	27	67.5	3	7.5
Mild	1	2.5	0	0.0	20	50.0	0	0.0	12	30.0	22	55.0
Moderate	7	17.5	3	7.5	6	15.0	17	42.5	1	2.5	9	22.5
Severe	15	37.5	17	42.5	1	2.5	15	37.5	0	0.0	6	15.0
Extreme	17	42.5	20	50.0	0	0.0	8	20.0	0	0.0	0	0.0
X^2/p-value	2.968/0.397				58.51/.000**				34.54/.000**			
Total pain score												
None	0	0.0	0	0.0	15	37.5	0	0.0	27	67.5	5	12.5
Mild	0	0.0	1	2.5	21	52.5	19	47.5	12	30.0	22	55.0
Moderate	18	45.0	11	27.5	3	7.5	16	40.0	1	2.5	9	22.5
Severe	20	50.0	21	52.5	1	2.5	5	12.5	0	0.0	4	10.0
Extreme	2	5.0	7	17.5	0	0.0	0	0.0	0	0.0	0	0.0
X^2/p-value	5.492/0.139				26.66/.000**				28.46/.000**			
Total function and daily living's score												
None	0	0.0	0	0.0	8	20.0	0	0.0	24	60.0	2	5.0
Mild	0	0.0	0	0.0	20	50.0	18	45.0	10	25.0	22	55.0
Moderate	15	37.5	13	32.5	7	17.5	7	17.5	1	2.5	4	10.0
Sever	22	55.0	23	57.5	5	12.5	15	37.5	5	12.5	12	30.0
Extreme	3	7.5	4	10.0	0	0.0	0	0.0	0	0.0	0	0.0
X^2/p-value	.308/.857				13.10/.004*				27.79/.000**			
Total function, sports and recreational activities' score												
None	0	0.0	0	0.0	10	25.0	0	0.0	26	65.0	0	0.0
Mild	0	0.0	0	0.0	22	55.0	12	30.0	6	15.0	16	40.0
Moderate	9	22.5	8	20.0	8	20.0	7	17.5	8	20.0	5	12.5
Sever	22	55.0	25	62.5	0	0.0	21	52.5	0	0.0	19	47.5
Extreme	9	22.5	7	17.5	0	0.0	0	0.0	0	0.0	0	0.0
X^2/p-value	0.500/.779				34.00/.000**				50.23/.000**			
Total quality of life's score												
None	0	0.0	0	0.0	15	37.5	0	0.0	29	72.5	3	7.5
Mild	1	2.5	0	0.0	15	37.5	11	27.5	4	10.0	19	47.5
Moderate	0	0.0	2	5.0	5	12.5	17	42.5	2	5.0	9	22.5
Sever	19	47.5	21	52.5	5	12.5	10	25.0	5	12.5	8	20.0
Extreme	20	50.0	17	42.5	0	0.0	2	5.0	0	0.0	1	2.5
X^2/p-value	3.343/.342				25.82/.000**				37.05/.000**			

* Statistically significance p<0.05 ** highly statistically significance p<0.001

Figure (1): Distribution of studied subjects regarding their total level of Hip Disability and Osteoarthritis Outcome through study period. (n=80)



X21/p-value between study and control pre- intervention = 0.468/0.792
X22/p-value between study and control post intervention = 22.13 /0.000**
X23/p-value between study and control during follow-up period = 29.48 /0.000**

Discussion:

According to specialized studies, hip replacement has proven to be successful in the treatment of functionally decompensated hip osteoarthritis, leading to pain relief and improved functionality. Patients, who have undergone hip replacement, in terms of the clinical image-quality of life relationship, went through the following situations that need to be managed: reduced quality of life due to pain and disabilities during the preoperative period, increased quality of life due to no restrictions during the immediate postoperative period and individual adaptation of each patient to the prosthesis Therefore, active nursing care during the periooperative period is particularly important to improve activities of daily livings and the quality of life among these patients (Okafor & Chen, 2019) .

In this study, the effect of pre and postoperative nursing intervention on activities of daily livings and the quality of life among patients undergoing hip replacement was investigated.

The results of the current study stated that pre intervention, more than half of both groups had severe hip disabilities and osteoarthritis outcome score. While there were highly statistically significant improvement of hip disabilities and osteoarthritis outcome score (daily living activity and quality of life) at post intervention and follow-up period among study group than

control group. These results were supported by the study done by Abd El-Naby et al., (2021) who showed that there was a statistically significant difference between study and control groups regarding their functional status after implementing nursing instructions along the three times of assessment postoperatively (at two weeks, one month and two months of discharge). The researchers' interpretation for this result is that practicing exercise, as one of given nursing instructions, could decrease pain intensity which encourages the patients to practice activity of daily living.

Also this result supported by by Qi et al. (2017) who studied "effects of comprehensive nursing on the pain and joint functional recovery of patients with hip replacements" in China and Moyer et al., (2017) who studied "the value of preoperative exercise and education for patients undergoing total hip and knee arthoplasty" in Canada. They revealed that an improvement of the levels of activity of daily living and quality of life for study than control group after hip joint replacement and implementation of preoperative exercises for study group. On the same line, a study performed by Yip, (2019) who studied "nursing care for patients undergoing total hip arthroplasty" at Queen Mary hospital and Ward, (2017) who studied "a physiotherapy-led exercise program after total hip replacement" at Queen Margaret University. They mentioned that nursing care given to patients led to better activity of daily living and quality of life after operation.

Moreover the results of the present study were matching with those of a study done by Ali and Abo El-Fadl, (2021) who revealed that, there was highly statistically significant improvement in activities of daily living and quality of life after program implementation. From the researcher's point of view this is due to positive effect of pre and postoperative nursing intervention for patients undergoing hip replacement on improving functioning and daily living activities & as well as quality of life.

These findings supported hypotheses number one and two.

Conclusions:

- Perioperative nursing intervention have positive impact on improving activities of daily living and hip related quality of life among patients undergoing hip replacement.

Recommendations:

- Supervised health teaching regarding pre and postoperative care should be provided for patients undergoing hip replacement to improve activities of daily living and hip related quality of life.
- A similar study can be replicated at different settings and on a larger probability sample to allow for greater generalization of the findings.

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