

Patients satisfaction after primary total hip arthroplasty

Hina Gul¹, Sadaf Awan², Roohi Waqas¹, Aymun butt³, Zurriat Fatima³, Sobia Kanwal⁴

ABSTRACT

Background: Total hip arthroplasty is a surgery in which the diseased ball and socket of the hip joint is completely removed and replaced with artificial materials and satisfaction is a state felt by a person who has experienced a performance or an outcome that fulfill his or her expectation. Prevalence of total hip arthroplasty is 5.26%.

Objectives: The objective of the study was to determine the patient satisfaction level after primary total hip arthroplasty.

Methods: This was a descriptive cross sectional study with a sample size of 51 patients. Both genders are included with an age range of 45-65years and the patients who enrolled six months after surgery. Those patients were excluded who refused to participate in the study, those patients undergoing revision hip arthroplasty and patients who have any congenital deformity of lower limb. A self-administrated patient-satisfaction questionnaire was used. The questionnaire was valid and reliable and used in a previous study. Data was analyzed by using Statistical Package of Social Sciences (SPSS). Value of Cronbach's alpha was 0.86 which was considered highly reliable. Informed consent was obtained from every single patient.

Results: Mean age of patients was 55.72, with range minimum 46 years to maximum 65 years. Satisfaction after six months of total hip arthroplasty in patients was somewhat high, 46.1% and the percentage of patients who were dissatisfied was 8.8%.

Conclusion: Patient satisfaction is higher after total hip arthroplasty. Patients are satisfied with the result of the surgery, improving pain and improving functional activities.

Key words: musculoskeletal, physical therapy, satisfaction, total hip arthroplasty

DOI: <https://doi.org/10.33897/fujrs.v1i2.244>

Introduction:

Satisfaction is a state felt by a person who has experienced a performance or an outcome that fulfills his or her expectation.(1) Patient hopes are progressively more significant factor in present quality concepts, in the light of recent guiding principles. Now a days, many hospital managements are using patient satisfaction as a key factor in order to screen and increase excellence of quality services besides patient's improvement in health quality. If we look from patient's point of view, then psychological satisfaction is necessary to decrease the time period of rehabilitation

and return to normal daily living activities after surgery. Satisfaction level varies from person to person and includes many domains. Satisfaction of the patient also provides a mean to rule out individual's problems and also to find a way out.(2)

Total hip arthroplasty (THA) is one of the most efficacious orthopedic reconstructive procedures and is often indicated to improve function and ameliorate degenerative symptoms in patients who failed non-operative management.(3) Total hip arthroplasty is a surgery in which the diseased ball and socket of the hip joint are completely removed and replaced with artificial materials.(4) The prevalence of total hip arthroplasty in USA population increasing day by day as 1.52% in 2011, this prevalence reached 5.26% in 2015. With increasing age and late stage arthritis, joint replacements are very common. Joint replacements are commonly used to improve the quality of life and to be independent in daily living activities. But pre-decided plan of care is required after surgery throughout an individual's life span.(5)

Hip arthroplasty provides excellent pain relief and improves functional status. Patient's satisfaction is the

Affiliations: ¹Lahore Medical & Dental College, ²Allama Iqbal Medical College, ³Ghurki Trust Teaching Hospital, ⁴Ittefaq Hospital

Correspondence: Hina Gul

Email: hina.gul@lmdc.edu.pk

Received: March 24th 2021; **Revision:** May 24th 2021

Acceptance: June 20th 2021

How to Cite:

Gul H, Awan G, Waqas R, butt A, Fatima Z, Kanwal S. Patients satisfaction after primary total hip arthroplasty. Foundation University Journal of Rehabilitation Sciences. 2021 July;1(2): 55-7.

most important measure of success for today's patient-centered model of care.(1) Several extrinsic and intrinsic etiological factors affect the surgical procedures and activities of daily living of the patients who performed hip arthroplasty. Rehabilitation after total hip arthroplasty is important to return into activities of daily living. Physical therapist plays an important role in reduction of pain, good range of motion, and minimum disruption of muscle tissues after surgery.(2) Presence of risk factors before hip replacement like advance age, female sex, increase body mass index and limited mobility contribute to poor satisfaction of the patient and late recovery.(6)

Methods:

This study was carried out at Ghurki Trust Teaching Hospital, Lahore over the period of 6 months after approval of synopsis. The sample size was 51 collected through non-probability convenience sampling. Sample size was calculated by using World Health Organization (WHO) software under this formula with 5.26% prevalence (P), 0.09 precision (d) and 95% confidence interval (1- α). Patients of both genders who undergo total hip arthroplasty, aged 45-65 and who enrolled six months after surgery were included. Patients who refused to participate in the study, the patients undergoing revision hip arthroplasty and those with any congenital deformity of lower limb were excluded. A self-administrated patient-satisfaction questionnaire was used. The questionnaire was valid and reliable as it was used in a previous study. Value of Cronbach's Alpha was 0.86 which was considered highly reliable. Informed consent was obtained from every single patient. Data was analyzed using Statistical Package for Social Sciences (SPSS) version 21. The study variables were presented in the form of descriptive statistics e.g. tables, bar charts, graphs. The numeric data like age was presented in the form of Mean \pm S.Dev.

Results:

Table-1 shown below indicates that total number of patients is 51, mean age is 55.72, standard deviation is 6.132, and maximum age of patients is 65.

Table-1: Mean age Distribution among target population

Sample Size	51
Mean	55.72
Std. Deviation	6.132
Minimum	46
Maximum	65

Figure-1 indicates patient's satisfaction after total hip arthroplasty. Patient who are very satisfied having frequency 17 (33.3%), partially satisfied having frequency 19 (37.3%), partially dissatisfied having frequency 12 (23.5%), very dissatisfied were 3 (5.9%).

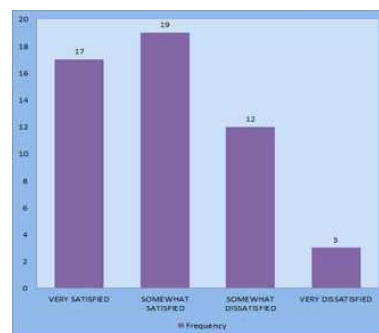


Figure 1: How satisfied are you with the result of your surgery?

Figure-2 shows that overall satisfaction in all patients who are satisfied is 27.43, patients who are partially satisfied are 46.1, patients who are partially dissatisfied are 24.5 or those who are totally dissatisfied are 8.8.

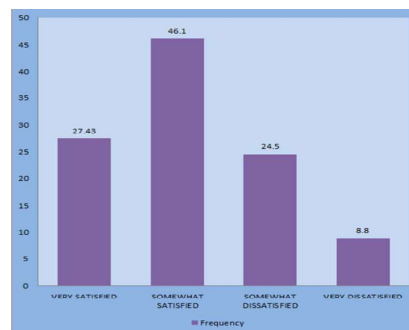


Figure 2: Patient's Total Satisfaction after Total Hip Arthroplasty

Discussion:

Tom schaal along with his fellow colleagues, conducted a research in 2016 to rule out the determinants of patient satisfaction and their willingness to return after primary total hip replacement.(1) They concluded a high level of satisfaction. According to this study, patients who were very satisfied with the results of their surgery were having frequency 17(33.3%) and those fall in somewhat satisfied category are having frequency 19(37.3%). On the other hand, satisfaction with the results of surgery for improving pain were having frequency 28(54.9%). This study also establishes an overall patient satisfaction that is 75% after six months of total hip arthroplasty. In 2014, quality of life after total hip replacement showed a high level of patient satisfaction.(7) The current study also supports this study by an overall 75% patient satisfaction after six

months of total hip arthroplasty. Raymond, along with his fellows conducted a prospective cohort study in 2011, concluded that satisfaction relates intensely with postoperative functional scores, pain score and functional restoration. The results of the current study also proves these factors.(8)

Harbinson GJ et al. in 2014 concluded that THA single stage is safe for the management of bilateral hip disorders with over all only 0.5% complications.(9) According to Tang H et al. in 2014 in china 8.1% patients were not satisfied with this surgery and the strongest risk factor for dissatisfaction was muscle weakness.(10)

Another research in 2015 by K Osmanski-Zenk with his fellows on Quality of Outcome after Primary Total Hip Replacement at a Maximum Care Hospital in Relation to Preoperative Influencing Factors concluded that the quality of results after primary THR depends on preoperative factors(6); this is one of the limitation of the current study that we did not measure the preoperative influencing factors before measuring the patient satisfaction. The other limitation of the study was that it was done in a single hospital setting and due to which sample size of the study remained too small owing to shortage of time duration.

Conclusion:

According to results, patients' satisfaction after six months of total hip arthroplasty was high. Patients are satisfied with the result of the surgery, improving pain, improving home and yard activities and also satisfied with recreational activities.

Disclaimer:

The study is part of research project carried out for DPT degree program in UHS Lahore.

Conflict of interest: None to report

Funding source: None to report

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Authors Contribution:

Hina G: Critical revision of the article for important intellectual content

Sadaf A: Data collection

Roohi W: Design of the work

Aymun B: Statistical analysis

Zurriat F: Statistical analysis

Sobia K: Conception of the work

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