



Division of Orthopaedic Surgery

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Title of Project: Does increased peri-operative communication improve patient satisfaction after Total Joint Arthroplasty?

Abstract

Background: Total joint arthroplasty (TJA) is a very successful procedure. It is reported with relatively high satisfaction rates. One of the pillars in improving patient satisfaction is strengthened communication between surgeons and patients. Technology has made this easier and convenient. The aim of this trial was to determine whether peri-operative cell phone massaging patients undergoing Total Joint Arthroplasty (TJA) improved the satisfaction rate.

Methods: We conducted a randomised controlled trial (RCT) of 90 patients and were left with 80 patients at final analysis, 40 participants in each group. The intervention group received short message services (SMSs) in the peri-operative period (day before surgery up to 6 weeks post-operatively) and were compared to the control group which followed the traditional routine. The primary outcome was the satisfaction rate evaluated using a questionnaire. Secondary outcome was functional improvement evaluated using the Harris hip score (HHS) and the Oxford knee score (OKS). Differences between the groups were evaluated using the Pearson's chi-squared test. An independent sample t-test used to analyse continuous variables

Results: In the study group, 57.5% were satisfied, 22.5% very satisfied, 12.5% indifferent and 7.5% were dissatisfied *versus* the control group's 77.5% satisfied, 17.5% indifferent and 5% dissatisfied. Asked if they would recommend TJA at CMJAH to their family/friends 80% answered yes, 12.5% unlikely and 7.5% were indifferent in the control group. In the study group 57.5 % answered yes, 20% highly recommend it, 15% were indifferent and 7.5% unlikely. There was no statistically significant difference in pre-operative HHS i.e., p -value = 0.07 and post-operative HHS i.e., p -value = 0.61 between the groups. There was statistical



significance in pre-operative OKS between the two groups i.e., p -value = 0.00000032 and for post-operative OKS i.e., p -value = 0.00086.

Conclusion: The satisfaction rate of patients receiving SMSs is equivalent and comparable to that of patients using traditional forms of communication. The quality of the satisfaction is superior for SMS patients. Patients receiving peri-operative SMSs while undergoing TKA do functionally better. Peri-operative SMSs are beneficial for patients undergoing TJA.