



A study on improving nursing instruction for post total knee replacement patients in orthopedic ward in Taiwan

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INTRODUCTION

Preparation, education, continuity of care for patients are essential after a total knee replacement, especially they are almost elderly. The patient and family members are most likely to be scared and frustrated because it is difficult for them to get around with home care after a total knee replacement. The purpose of this study was designed to promote the nursing instruction rate for post total knee replacement patients in orthopedic ward. The quality improvement 2012, and the members included physicians, nurses, physiotherapists (PTs). The goal was set as the average of complete rate of nursing instruction of 90%.

METHOD

The study was done in the orthopedic ward with a total of 54 beds. we found unsatisfied poor outcomes with the home care of post total knee replacement patients; therefore, we carry on root cause analysis and provide strategies for solving the problem. Through 80/20 principle and matrix analysis, priorities were determined, and the solutions included (1) reinforced education training programs for nurses in ward and cognitive tests, (2) physicians, nurses and physiotherapists co-produced the education video for taking care of total knee replacement patients, (3) established protocols of post total knee replacement care and set up the knee replacement care operational standards, (4) revised education booklet for joint replacement surgery, and (5) check-up system for nurses. Evaluation was then done through auditions, demonstrations, and tests.

RESULT

Basic information

The study enrolled 97 participants. The participants included 21 (21.6%) men and 76 (78.4%) women. The mean age was 69.9 years, and 32 (33%) participants were aged 75 years and 80 (82.5%) participants were married, and 91 (93.8%) participants lived with their families. Mean length of stay was 6.12 days.

Main Result

- (1) after the project was conducted, the testing score of nurses with knowledge of post knee replacement care rate from 74.5 to 100.
- (2) complete rate of nursing instruction for post total knee replacement patients lifted from 62.5% to 95.7%.
- (3) updating knee replacement operating standards of the orthopedic ward.
- (4) making knee replacement health education teaching video.

TABLE

Table 1: Testing score of nurses for post knee replacement care

Item	pretest	posttest
1. The operative limb cannot stand on the floor.	50%	100%
2. Legs need to clamp pillow for three months post THR	100%	100%
3. Postoperative cannot give pain medicine often.	90%	100%
4. Limbs cannot cross over exceed the midline post THR.	85%	100%
5. Can sit on the sofa at home in three month.	95%	100%
6. Put pillows just below the knee post TKR.	65%	100%
7. Cannot bend the knee due to a wound in the front of knee.	55%	100%
8. Ankle movement for 5 minutes frequently.	55%	100%
9. Ice packing for operative wound at least two weeks.	85%	100%
10. Cannot take the car go home post THR .	65%	100%
Average	74.5%	100%

Table 2: Complete rate of nursing instruction

Item	Pre	Post
1. Use continuous passive motion (CPM)	66.7%	93.3%
2. Physical therapy	45.2%	94.0%
3. Use assistive devices	48.3%	94.3%
4. Prevent fall down	80.0%	98.3%
5. Nonpharmacologic approaches to pain	72.1%	98.8%
<i>Average</i>	<i>62.5%</i>	<i>95.7%</i>

CONCLUSIONS

The aim of this study was to establish and evaluate the effects of a health education for TKR. A complete health education measure not only can improve the expertise of nurses but also let patients and their families have high satisfaction and improvement in function and quality of life for patients and their families.

Relevance to clinical practice

The nursing care provided to a TKA patient will help the patient recover safely and quickly. We recommend establishing a health education standard operation procedure responsible for the implementation in clinical practice, so that patient care will not be limited to the hospitalisation period.

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