Pre-Surgery Education with Clients Undergoing Total Hip Replacements

May, 2011

This research, submitted by Sarah Rae, has been approved and accepted in partial fulfillment of the requirements for the degree of Master of Science in Occupational Therapy from the University of Puget Sound.

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Abstract

The purpose of this study was to examine what occupational therapists currently include in pre-surgery education for patients undergoing total hip replacement and the educational methods used to teach the information. The study also examined what occupational therapists perceive as the ideal pre-surgery education program, including content, teaching methods, and the role of occupational therapy. A survey was completed by 57 occupational therapists who had treated clients following total hip replacement in the last year. Respondents indicated that a variety of teaching methods were used to teach the content areas in pre-surgery education. More teaching methods were identified when describing the ideal program than in current pre-surgery education programs. Respondents also indicated that occupational therapy would have a larger role in the ideal pre-surgery education program. The results of this study can be used to modify or develop more comprehensive pre-surgery education programs for patients undergoing planned total hip replacements. For those who are developing a pre-surgery education program, the information about what should be taught and recommended teaching methods can help guide in the development of model programs.
Pre-Surgery Education with Clients Undergoing Total Hip Replacements

In 2004, there were 232,857 total hip replacements performed, primarily for people with arthritis (Centers for Disease Control and Prevention; 2010). In fact, the leading cause of hip pain that leads to a total hip replacement (THR) is osteoarthritis (Keller & Stone, 2009). Hip replacement is often a planned surgery so there is an opportunity to schedule pre-surgery education. Pre-surgery education is beneficial in helping clients know what to expect after surgery (Spalding, 2003). It allows for clients to know exactly what will happen at each step in the rehabilitation process, prepares them mentally and physically to undergo the process, and allows them to plan for adaptations needed to complete activities of daily living upon discharge. Clients have the opportunity to get the adaptive equipment they will need when they are able to go home, and have time to experience and practice with the equipment before surgery. Pre-surgery education has been shown to shorten hospital stays and increase function in those with planned THRs (Siggeirsdottir et al., 2005).

Background

As one of the largest weight bearing joints in the body, the hip is one of the most often replaced joints (American Academy of Orthopedic Surgeons [AAOS], 2009). According to Freid and Bernstein (2010) the number of THRs has increased from 9.2 per 10,000 in 1996 to 17.7 per 10,000 in 2006 among adults 55-64 years old. The cost of the procedure is about $45,000 (AAOS, 2009). In the THR procedure the femoral head is removed and the acetabulum is resurfaced and a metal cup and femoral stem are inserted. In traditional THRs there are two approaches: the posterolateral approach, during which the incision is made behind the hip, and the anterolateral approach, during which the incision is made in front of the hip (AAOS, 2009). The posterolateral approach is the most common approach (Youm, Mauer, & Stuchin, 2005),
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although the anterolateral approach is considered less invasive and is gaining in popularity as clients often require fewer restrictions after surgery (Peak, et al., 2005). THR may be completed secondary to arthritis or injury (Keller & Stone, 2009). Some of the symptoms that indicate the need for a THR are hip pain that limits activity, pain that continues when the hip is not in use, stiffness, limited function, limited range of motion, limited mobility and strength, limited weight bearing, and limited ability to perform activities of daily living (Keller & Stone, 2009). About 87% to 97% of people eventually experience no pain after having a THR (Keller & Stone, 2009).

The number of THRs is likely to increase in coming years. According to Birrell, Johnell, and Silman (1999), the number of THRs is going to increase 40% between 2000 and 2030. This predicted increase is due to the increasing age of the population (Birrell, et al., 1999). The findings of this study may not be fully applicable to the United States since it was conducted in the United Kingdom, although, the population is also aging in the United States so the trend is likely similar (Administration on Aging, 2010).

Post-surgery therapy. The most critical time after a THR for protection and function of the new joint is the first two months (Maher & Bear-Lehman, 2008). Disciplines involved with clients after hip replacement may include nursing, physical therapy, occupational therapy, and social work. Hip precautions for both the posterolateral and anterolateral approach include avoiding hip flexion over 90 degrees, internal rotation over 45 degrees, and no adduction in the first six weeks after surgery (Maher & Bear-Lehman, 2008). For the posterolateral approach the client may be placed on an abduction pillow directly after surgery (Maher & Bear-Lehman, 2008). Peak et al. (2005) found that additional restrictions in the anterolateral approach such as the use of an abduction pillow, elevated toilet seats, avoiding sleeping on same side as THR, and
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avoiding driving decrease client satisfaction and it took longer for clients to return to normal activity.

Hip precautions are given to clients after THRs to protect soft tissue and to avoid hip dislocation (Sharma, Morgan, & Cheng, 2009). Khan et al. (2009) found that about 3% of people who have had a THR will dislocate the hip. This is often painful and can cause other problems. The first time a hip is dislocated the hip is often placed into a brace or cast. Surgery may be needed if the hip dislocates several times.

Occupational therapists may work with clients post-THR on activities of daily living, energy conservation, strengthening, pain management, assistive technology, adaptive equipment, safety, hip precautions, and patient and family training (Keller & Stone, 2009). The occupational therapist must teach the clients adaptive procedures and methods to modify the environment so that all hip precautions can be followed. The therapist may order adaptive equipment such as a reacher, dressing stick, and sock aid. Patients must realize that they must adhere to precautions while competing activities of daily living (Maher & Bear-Lehman, 2008). One way to teach hip precautions is to include them into pre-surgery education.

Pre-surgery education. The research on pre-surgery education focuses on outcomes such as anxiety, pain, and length of hospital stays. One study examined the effect of pre-surgery education on hospital stays and how that affected function and quality of life (Siggeirsdottir et al., 2005). The study contained 50 participants, 27 of whom were assigned to the intervention group and 23 of whom were assigned to the control group. The control group was treated with procedures already in place which did not include pre-surgery education. The intervention group was given preoperative training by a physical therapist or an occupational therapist. The training included exercises and adaptive equipment. There was also a home visit after being discharged.
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The Oxford Hip Questionnaire was used to assess function and the Nottingham Health Profile was used to record how the patients viewed their health. The length of stay in the hospital on average was 11 days for the control group and 5 days for the study group, $U(48) = 6.4$, $p<.001$. All 27 patients from the experimental group returned home while only 10 out of 23 patients from the control group returned directly to their home, but this difference was not statistically significant. Health-related quality of life increased after the surgery for both groups and while the experimental group had a higher increase on the quality of life scale, it was not statistically significant. One major limitation of the study was that the hospital where the study was initiated ran out of funding half way through and many patients had to drop out, resulting in the researchers needing to move the study to a different location.

Vukomanovic Popovic, Đurovic, and Krstic (2008) studied the effectiveness of a short term preoperative education program combined with physical therapy on 45 patients’ early functional recovery. The preoperative education included conversation and booklets. There was no statistically significant difference between the control group and the intervention group on active range of motion which was measured using the Harris Hip Score or Oxford Hip Questionnaire scores relating to hip pain when completing tasks and the ability to complete ADL tasks such as grooming. The experimental group was able to do several tasks earlier than the control group, including walk up and down stairs, $3.7 \pm 1.66 \ vs 5.37 \pm 1.46$, $p \leq 0.002$, use the toilet, $2.3 \pm 0.92 \ vs 3.2 \pm 1.24$, $p \leq 0.02$, and transfer to the chair, $2.2 \pm 1.01 \ vs 3.25 \pm 1.21$, $p \leq 0.006$. The experimental group was also more independent in basic activities such as bed mobility and standing than the control group. There was a significant decrease in the number of total therapy treatments needed for the group that received pre-surgery education, $5.2 \pm 2.35 \ vs 6.85 \pm 1.14$, $p \leq 0.02$. There were some limitations to the study. The Harris Hip Score may not
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have been sensitive enough to detect the subtle differences between the groups for range of motion.

Johansson, Nuutila, Virtanen, Katajisto, and Salantera (2004) performed a systematic review on the effect of preoperative education on orthopedic patients. To be included in the study the articles had to have preoperative education as a nursing intervention and be published in English. Between the eleven articles included in the study there were more than 1000 participants. It was found that preoperative education had a positive effect for orthopedic patients in that it reduced the amount of pain medication needed and increased self-efficacy. There was no reported effect of preoperative education on functional outcomes.

Spalding (2003) conducted an ethnographic qualitative study to determine whether attending pre-surgery education had an effect of the anxiety of clients. She found that attending the training made the clients less anxious by making the “unknown familiar” (Spalding, 2003). This study collected data from patient evaluations, interviews with seven presenters of pre-surgery education, observations, and patient interviews. It was found that letting the patients know what would happen before and after surgery, letting them meet the team that would be caring for them after surgery, and allowing them to get comfortable with the environments in which they would be staying while recovering from the surgery decreased anxiety. One limitation of the study was not being able to control for researcher bias.

Butler, Hurley, Buchanan, and Smith-VanHorne (1996) also examined whether pre-surgery education reduced anxiety, improved coping, and shortened hospital stays. Eighty participants were recruited from a waiting room on an orthopedic floor and 32 of these participants were assigned to the experimental group. The experimental group received a booklet in the mail about four weeks before a planned THR while the control group did not receive
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anything before surgery. The patients who received the booklet were less anxious when they came in for surgery and when they were discharged. They were also more likely to practice the prescribed exercises and required less occupational therapy and physical therapy $F(31,48) = 7.88, p<.001$. There was not a difference in the length of stay between the groups.

Pre-surgery education and occupation. The previous research shows that pre-surgery education increases health related quality of life, reduces the total number of therapy hours needed, decreases anxiety, and lowers reported pain levels. There are some unknowns related to pre-surgery education for those undergoing planned THRs; the previous studies did not mention specifically what was taught in the pre-surgery education. In addition, many of the articles were also unclear about who was teaching the pre-surgery education and the method used to teach it.

The articles reviewed did not mention the inclusion of occupation in the pre-surgery education that was offered. Occupation is conceptualized within occupational therapy as a way to “capture the breadth and meaning of everyday activity” (American Occupational Therapy Association [AOTA], 2008, p 628). Included in occupations are “activities of daily living, instrumental activities of daily living, rest and sleep, education, work, play, leisure, and social participation” (AOTA, 2008, p 630). Many of these areas of occupation could be included in pre-surgery education but the scope of occupation-based education that is included in pre-surgery programs is unknown. Of the studies reviewed, occupational therapy was included in only one pre-surgery education program, so the level of involvement of occupational therapy in pre-surgery education is also unknown. If occupational therapists are involved, or become involved, in pre-surgery education, clients could receive information about ways to complete the activities they do in everyday life post-surgery.
With the lack of knowledge about what is included in pre-surgery education and occupational therapists’ role in pre-surgery education, it is important to gain more information on what is currently included in pre-surgery education. This could help clients undergoing planned THRs receive the best care possible. Therefore, the purpose of this study was to examine what occupational therapists who treat clients who have undergone a planned THR think is currently included in pre-surgery education and the educational methods used, what occupational therapists with and without experience with pre-surgery education think should be included in pre-surgery education, and what occupational therapists see as their ideal role in pre-surgery education.

**Method**

**Research Design**

A survey of occupational therapists who treat clients who have undergone planned hip replacements was used to learn what, in their experience, is included in pre-surgery education and what, in their opinion, would ideally be included in pre-surgery education. A survey was the best way to answer this question as it allowed for a random sample of participants and supported a large number of occupational therapists to participate in the study. Surveys allow for data to be collected on numerous variables and allow multiple uses for the data (Forsyth & Kvz, 2006).

**Participants**

The targeted population for this study was all occupational therapists who had directly treated clients after a planned THR within the last year. The accessible population was members of the American Occupational Therapy Association (AOTA) who belonged to the Physical Disabilities Special Interest Section. The participants were chosen randomly by AOTA from the
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accessible population. The inclusion criteria included licensed occupational therapists who had treated at least one client who had undergone a planned THR within the last year. The initial mailing was comprised of 250 surveys. This number was determined due to time and budget.

Survey

The survey (see Appendix) included demographic information such as the amount of occupational therapy education, time in practice, and practice setting to gain more knowledge about the group. The questions asked what is currently included in pre-surgery education and how it is taught, what ideally would be included and how it would be taught, and what occupational therapy’s role is in pre-surgery education. The survey included multiple choice and open ended questions. The last question on the survey allowed the respondents to share additional information on the subject they think the researcher should know about pre-surgery education. Thorough instructions were included in bold print on the front page of the survey. The response options were lined up along the right hand side of the page, whenever possible, to reduce the number of errors (Forsyth & Kviz, 2006). Factors that may potentially influence the survey results include low response rate, respondents not recalling information accurately, and questions being interpreted in different ways by different people.

Procedure

Approval from the University Institutional Review Board was obtained before beginning the study. A pilot survey was given to occupational therapists who met the inclusion criteria to verify that the questions were easily understood and modifications were made based on their feedback. The final survey was sent out to a random sample of 250 occupational therapists from the AOTA Physical Disabilities Special Interest Section electronic list in March 2011. Although three mailings would have been ideal (Forsyth & Kviz, 2006), due to time and resource
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constraints, only one follow-up mailing was done. The second mailing was sent out three weeks after the first to those who had not returned the survey. The surveys were entered into the SPSS to run statistical analysis.

Data Analysis

Data were entered into SPSS. Descriptive statistics in the form of mean and standard deviation or percentages were used to analyze the data. The second mailing may represent the non-respondent population so the difference between the two mailing groups might indicate the difference between responders and non-responders to some extent.

Results

A total of 104 surveys were returned, which is a response rate of 42%. Of the returned surveys, 57 were completed in their entirety, meaning that these respondents had treated at least one client in the past year with a primary diagnosis of a planned THR. Forty-six surveys were returned in the first mailing and 11 surveys were returned in the second mailing. Due to the small number in the second mailing comparison between mailings was not feasible. Results from the 57 surveys are discussed below.

Surveys were returned from 31 states. Respondents who answered the survey in its entirety had a range of clinical experience from 1 to 30 years with the mean number of years in practice being 13.7, \( SD = 10.99 \). Fifty-one percent of the respondents indicated having a bachelor’s degree as their entry-level occupational therapy degree, 46% indicated having a master’s degree as their entry-level degree, 2% indicated having clinical doctorates degree, and 2% indicated having a post bachelor’s certificate as their entry-level degree. The primary practice setting of respondents was acute care with 42% of responses, 16% of respondents indicated they worked in skilled nursing facilities, while 16% worked in acute in-patient
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rehabilitation centers. Thirty-five percent of respondents indicated that they had experience treating clients who had pre-surgery education, but only after their planned THRs, 9% of respondents indicated that they had experience providing or designing pre-surgery education programs, while 19% of respondents indicated that they both had experience in treating clients after planned THRs and providing or designing pre-surgery education programs. Thirty-six percent of respondents indicated that they had no experience with pre-surgery education for clients with planned THRs.

Content

Current Pre-Surgery Programs. Respondents who had experience with pre-surgery education (68%) were asked what content was currently used in pre-surgery education. They reported that pre-surgery education content included adaptive equipment (100%), self-care activities of daily living (ADL; 97%), hip precautions (97%), functional mobility (94%), what to expect in the hospital (92%), home modifications (86%), caregiver training (81%), and instrumental activities of daily living (IADL) (70%). For content that was not reported as being included by 100% of respondents, remaining respondents reported it was not covered or they were unsure if it was included.

Ideal Pre-Surgery Programs. All respondents were asked to indicate what content they would use if they had the opportunity to create a new pre-surgery education program. All respondents indicated that the ideal pre-surgery education program would address self-care ADL, functional mobility, caregiver training, adaptive equipment, hip precautions, and home modifications. Ninety-eight percent of respondents indicated that the ideal pre-surgery education program would also include IADL and what to expect in the hospital.
Teaching Methods

**Current Pre-Surgery Programs.** Table 1 summarizes teaching methods used in pre-surgery education. Lecture was the most common teaching method, with 61% to 86% of respondents indicating it was used, depending on the content. Respondents indicated that demonstration was the most common teaching method used for self-care ADL (78%). Practice was used by less than 37% of respondents and was most commonly used in self-care ADL. Respondents indicated that video was used less frequently than other methods and was most commonly for teaching hip precautions (20%).

**Ideal Pre-Surgery Programs.** Table 1 also summarizes the most common teaching methods recommended for the ideal pre-surgery education program. The most recommended teaching method was demonstration, which 93% of the respondents reported they would use when teaching about adaptive equipment. The biggest change in teaching methods between current and ideal programs occurred in the use of practice. There was an increase of over 30% of respondents for six of the eight content areas who reported the ideal program should use practice, compared to current programs. For example, 42% reported current programs provide opportunities to practice with adaptive equipment, but 80% reported practice should be used. The only teaching method that fewer respondents would use in the ideal program was lecture, with fewer respondents recommending it in five of the eight content areas, compared to current programs.

Format and Disciplines

**Current Pre-Surgery Programs.** Respondents indicated that pre-surgery education was taught most often two weeks before having surgery (42%), while 17% of respondents were
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unsure how long before surgery the education session took place. Respondents stated that the vast majority of pre-surgery education took place in a group format (72%) and in only one session (81%). The most common provider of pre-surgery education according to the respondents was physical therapy (89%) followed by occupational therapy (78%) and nursing (70%), with the most common teaching team including occupational therapy, physical therapy, and nursing (28%). According to the respondents nursing often took the lead in providing pre-surgery education (59%) followed closely by physical therapy (45%).

Ideal Pre-Surgery Programs. Fifty-one percent of respondents indicated that the ideal pre-surgery education would be taught two weeks before having surgery, 23% indicated it would be best taught 1 week before surgery, 5% indicated it should take place less than one week before surgery, while 21% indicated it should take place more than two weeks prior to surgery. The majority of respondents indicated that the ideal number of sessions would be one session (47%), although 38% of respondents indicated that two sessions would be ideal and 13% recommended three or more sessions. The ideal format for pre-surgery education would include both group and individual sessions (57%), followed group sessions alone (29%), with 15% suggesting individual sessions only. All respondents indicated that occupational therapy be included in the ideal pre-surgery education program. Ninety-five percent of respondents indicated that physical therapy should be included in pre-surgery education and 58% indicated that nursing should be included. Forty-nine percent of respondents indicated that a team of occupational therapy, physical therapy, and nursing should provide pre-surgery education and 35% indicated that a team of occupational and physical therapy should provide the pre-surgery education.
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Discussion

As the number of planned hip replacements increases in the future, the need for pre-surgery educational programs may also increase. Respondents in the current study reported that content areas included on the survey would be addressed more frequently for the ideal program than they are currently being covered. When therapists were asked to design the ideal pre-surgery education program they often used more teaching methods than they reported were being used in current pre-surgery education programs. In comparing responses, all teaching methods across all content areas in the ideal program increased except for lecture, which decreased in five content areas. In the current pre-surgery education program, video was reportedly used less than 19.5% of the time while in the ideal program it was would be used more than 25% of the time. The use of practice increased across content areas at least 14% and often by much more between the ideal and current pre-surgery program according to the respondents. The final result was that the ideal program would make use of more teaching techniques and address all content areas.

Vakil, Hoffman, and Myzliek (2008) studied the use of active and passive learning in older adults. Active learning involves the learner actually doing something, including applying the information (Vakil, Hoffman, Myzliek, 1998). Twenty-four older adults were included in this study. One group was given practice with the Tower of Hanoi Puzzle which consists of 4 discs that had to be moved to the other side of the puzzle in the same order. The other group received verbal instructions on how to complete the puzzle. They found that passive learning methods were effective for immediate recall. Active learning had little impact on immediate recall but increased recall one week later, although this increase was not statistically significant. When required to transfer the information learned to a more difficult task the group that used active learning strategies benefited more than the passive learning group.
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In the current study, the only active teaching method included on the survey was practice. The number of respondents who recommended practice in the ideal program increased from 14% to 56% compared to those who reported the use of practice in current pre-surgery education programs. Including more active learning methods such as practice in pre-surgery education may help clients to retain the information for a longer period of time and generalize learning to novel situations in their home and community.

In a study done by Vukomanovic, Popovic, Đurovic, and Krstic (2008), preoperative education included conversation and booklets. In the current study, handouts and lecture alone were not the ideal method used to teach pre-surgery education. Handouts and lecture were often included in pre-surgery education but they were used with additional active teaching methods.

Butler, Hurley, Buchanan, and Smith-VanHorne (1996) did a study in which the experimental group received a booklet in the mail about four weeks before a planned THR. They found that pre-surgery education had a positive effect on clients. In the current study handouts were used more than 60% of the time in the ideal program they were often used in combination with other teaching methods. More active teaching methods used in pre-surgery education may have a more positive effect on clients.

Respondents indicated that occupational therapy would be included 100% of the time in the ideal program, whereas currently occupational therapy is included 77% of the time. Occupational therapists see a role for themselves in pre-surgery education. Many of these prior studies did not mention who was providing the pre-surgery education. The content areas included in pre-surgery education fall within the domains of occupational therapy practice (AOTA, 2008). The ideal format for pre-surgery was marked as both group and individual sessions while currently the majority of sessions are group sessions. The number of sessions
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between the ideal and the current programs remained at one although, more respondents marked that ideally the education would be given 2 weeks before surgery. The ideal timing for pre-surgery education remained two weeks before the surgery. In order for the ideal program to be given, individual sessions would need to be offered alongside group sessions and a combination of occupational therapy, physical therapy, and nursing would need to be involved, although financial implications of adding more professions or adding individual sessions needs to be explored. With knowledge about how the timing of pre-surgery education, the ideal number of sessions, and the ideal format, pre-surgery education can be designed to better match the ideal pre-surgery education program according to occupational therapists.

Occupational therapists see a role for themselves in pre-surgery education. Many of these prior studies did not mention who was providing the pre-surgery education and how the education was provided. With knowledge about how the timing of pre-surgery education, the ideal number of sessions, and the ideal format, pre-surgery education can be designed to better match the ideal pre-surgery education program according to occupational therapists.

Limitations

The survey for this study was a newly created instrument, therefore its reliability and validity are unknown. The wording of some of the questions may have been confusing, as some of the respondents did not answer all of the questions. Although the sample was randomly chosen from AOTA it may not adequately represent the occupational therapy practitioners who are not AOTA members. The low response rate is also a limitation because it may not be able to generalize the results to all occupational therapy practitioners.
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Further Research

Further research needs to be done on pre-surgery education and might include studies to determine cost and effectiveness of different teaching methods for those undergoing planned THRs. Although this study describes what content occupational therapists felt should be included and the most appropriate teaching methods, more research needs to be done on how to implement a new pre-surgery education program. The amount of time spent in pre-surgery education also needs to be researched further, especially if multiple methods of teach are included. Much of the literature on pre-surgery education and planned THRs did not occur in the United States. Future research needs to be done on what is currently happening in the United States with pre-surgery education and planned THRs. Studies on what is being taught for pre-surgery education with other elective procedures may also be beneficial.

Implications

Occupational therapy can and should be included in pre-surgery education. Occupational therapists can bring functional meaning into pre-surgery education. This study gives an idea about what is currently included in pre-surgery education, which the current literature does not provide. This study also provides an understanding of how content is being taught in pre-surgery education. With knowledge of the information being taught, occupational therapists can advocate for their position in pre-surgery education. With information about what is currently being taught and what ideally would be taught from these occupational therapists’ point of view, pre-surgery education programs may be able to be modified to better match the ideal program. For those who are developing a pre-surgery education program, the information about what is taught and how it is taught can help them to provide a program that would be ideal for their clients.
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Conclusion

The ideal pre-surgery education program differs from current pre-surgery education programs in the number and types of teaching methods used to teach the content. Also what content is included also differs between ideal and current programs. With knowledge of what is currently included in pre-surgery education and what ideally could be included, occupational therapists can adjust the current program to be more like the ideal program and maximize the role of occupation therapy in pre-surgery education.
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Sample Survey

Pre-operative Education and Planned Total Hip Replacements

Please select one answer for each of the following questions unless additional instructions are given. If you have any questions or concerns please feel free to contact me through email at srae@pugetsound.edu or call (253) 879-3527. Thank you for your time and effort.

1. Have you treated at least one client over the last year with a primary diagnosis of a planned total hip replacement?
   a) Yes
   b) No

   *If no, discontinue the survey. Please submit the survey in the postage-paid envelope provided. Receiving your survey is helpful in tracking non-respondents. Thank you.*

2. What is the level of your entry level occupational therapy education?
   a) Bachelors Degree
   b) Masters Degree
   c) Clinical Doctorates Degree (OTD)

3. How many years have you been practicing occupational therapy? ________________

4. What setting do you consider to be your primary practice setting? (Circle only one)
   a) Acute Care
   b) Acute In-Patient Rehabilitation
   c) Sub-Acute In-Patient Rehabilitation
   d) Skilled Nursing Facility
   e) Out-Patient Rehabilitation
   f) Home Care
   g) Other ____________________

5. What best describes your experience with pre-operative education for patients with planned total hip replacements? (Circle all that apply)
   a) I have been involved in designing and/or providing pre-operative education
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b) I have treated patients post-operatively who have had pre-operative education delivered by other therapists.

c) I have no experience with pre-operative education for patients with planned total hip replacements

*If you circled “c” please skip to question number 13.*

6. Check all of the content and teaching methods you have used or seen used in pre-operative education for clients undergoing a planned total hip replacement (Check all that apply)

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<th>Unsure if Included</th>
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</table>


7. Is there anything that is not typically included in the pre-operative education that you feel would have been beneficial to the clients? If so, please list and describe why you think this information is not included?

8. In your experience, how long before the planned total hip replacement does the pre-operative education typically occur?
   a) Less than 1 week
   b) 1 week
   c) 2 weeks
   d) 3 weeks
   e) 4 weeks
   f) More than 4 weeks
   g) Unsure

9. What format is pre-operative education typically given in?
   a) Group
   b) Individual
   c) Both
   d) Unsure

10. In your experience, how many pre-operative education sessions does each client typically attend prior to surgery? __________    If unsure, check here   □

11. In your experience, who provides the pre-operative education? (Circle all that apply)
    a) Occupational Therapists
    b) Physical Therapists
    c) Nurses
    d) Other____________________

12. In your experience, who takes the lead in providing the pre-operative education? (Circle all that apply)
    a) Occupational Therapists
    b) Physical Therapists
    c) Nurses
    d) Other____________________
PRE-SURGERY EDUCATION

13. If you had the opportunity to develop a new pre-operative program for people undergoing a planned total hip replacement, what would you include and how would you teach the information? (Check all that apply even if you are involved in a current program and would not make any changes.)

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<th>Check the box that matches the information you teach and the method you would use to teach it</th>
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<th>Unsure if Included</th>
<th>Lecture</th>
<th>Demonstration</th>
<th>Practice</th>
<th>Video</th>
<th>Handouts</th>
<th>Other Teaching Methods (Please Describe)</th>
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<td>Instrumental Activities of Daily Living, such as Care of Others, Care of Pets, and Home Management</td>
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14. What format would you use to teach the pre-operative education?
   a) Group
   b) Individual
   c) Both
PRE-SURGERY EDUCATION

15. How many pre-operative education sessions would you have clients attend prior to surgery? __________

16. Who would provide the pre-operative education? (Circle all that apply)
   e) Occupational Therapists
   f) Physical Therapists
   g) Nurses
   h) Other__________________

17. How far in advance of the surgery would the training take place?
   a) Less than 1 week
   b) 1 week
   c) 2 weeks
   d) 3 weeks
   e) 4 weeks
   f) More than 4 weeks

18. Is there anything else that you think is important to know about pre-operative education for clients with planned total hip replacements?

Please submit the survey in the postage-paid envelope provided. Thank you.
### Methods Used to Teach Content in Pre-Surgery Education Programs

<table>
<thead>
<tr>
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<th>Lecture</th>
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*Note: All numbers are represent percentages. Current=Current Program; Ideal=Ideal Program; Differences=Differences between ideal and current program.*
I would like to thank Anne Birge James, PhD, OTR/L and Tatiana Kaminsky, PhD, OTR/L for all of their guidance and support throughout this project. This study was funded in part by a grant from the University of Puget Sound Enrichment Committee.