

Teaching Plan

Incentive Spirometer Teaching for Health Restoration

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Patient Education

B.F., a 32-year-old male, was brought into the Emergency Department after experiencing severe abdominal pain, accompanied by nausea, vomiting, and abdominal bloating. Following a computerized tomography (CT) scan of his abdomen, he was diagnosed with cholecystitis and soon after went into surgery for a cholecystectomy. Along with B.F.'s cholecystitis diagnosis, it was also discovered that he had gallstones. He was recovering on the Medical Surgical unit and being treated for his pain due to having gallstones. After a head-to-toe assessment and learning more about this patient, Professor Heidi Benson approved the teaching topic of incentive spirometry. Potter et al. (2020) explains, "Incentive spirometry encourages voluntary deep breathing by providing visual feedback to patients about inspiratory volume. It is a commonly used intervention that promotes deep breathing and is thought to prevent or treat atelectasis in the postoperative patient" (p.935).

The purpose of patient education for B.F. is the restoration of health because he is otherwise a healthy and active individual. It is important to teach this patient how to decrease the risks during hospital stays and restore him to the active lifestyle he was living before this surgery. According to Potter et al. (2020), "Patients recovering often seek information about their conditions and need information and skills to help them regain or maintain their levels of health" (p. 343).

It was important to determine B.F.'s preferred way of learning. B.F. stated that he was already aware of the type of learner he was when asked if he had any background knowledge regarding types of learning. He relayed that he was a kinesthetic learner, so a psychomotor approach was used for the teaching. "Kinesthetic learners process knowledge by moving and participating in hands-on activities" (Potter et al., 2020 p. 352). With this knowledge, B.F.

benefited most by learning about the incentive spirometer while using a hands-on approach to demonstrate how to use it. A YouTube video called, *Learn to use an Incentive Spirometer*, from the channel, My Doctor- Kaiser Permanente (<https://youtu.be/-O-Zawtb32o>), was also provided for B.F. to watch in the hospital and at home after discharge.

Nursing Process

Before patient teaching, it was important to assess the patient physically and discover if any obstacles may need to be addressed. These obstacles can include language barriers, cognitive impairments, or a lack of motivation. After assessing B.F., it was clear that he was eager to get back to his active lifestyle. There was no clear need to find motivators or use the motivational interviewing technique since he was compliant from the start. The patient showed great self-efficacy through his confidence in his ability to follow the regimen. B.F. expressed that he had a pain level of 0/10 which was an indication that it was a good time to teach him.

Another important aspect of patient teaching includes the teaching environment. Before the teaching session started, B.F. was made comfortable, the room was well lit without any distractions, and the proper equipment was in the room for teaching purposes.

When assessing B.F.'s level of knowledge regarding incentive spirometry, he stated he had seen one before, but had never used one or knew what it was for. The focus of the teaching session included the importance of the incentive spirometer, how to use it, and that he should use it 10 times intermittently every hour while awake. He was made aware that if he did not comply with this teaching, the risk for hospital-acquired pneumonia and atelectasis increased. This type of teaching factor leans towards the emotional factors influencing teaching because it shows the patient the risks of not taking the teaching seriously.

Throughout the teaching, B.F. showed confidence in his ability to successfully use the incentive spirometer, however it was important to assess his compliance and consistency. After the teaching was completed, the patient asked questions and demonstrated the use of the incentive spirometer correctly. It was also important for him to use the teach-back method. According to Ignatavicius et al., (2020), "The teach-back method requires that the nurse ask the patient an open-ended question where the patient will explain the information that was provided to them during the teaching session" (p. 679). This allowed B.F. to assess what he knows. It also gives the nurse the ability to fill in any gaps where he may be confused or have questions.

After interpreting objective data and the data B.F. provided in his assessments, the nursing diagnosis that relates most to the patient is knowledge deficit related to inadequate information as evidenced by the patient stating, "I have seen one of those before, but don't know how to use it or what it's for," the patient was not aware of the increased risk of pneumonia after surgery with a lack of mobility. The patient stated that he had not been educated on this topic before and after his surgery.

After the nursing diagnosis and patient's learning needs were determined, goals and expected outcomes were set with the involvement of the patient. According to Potter et al.(2020), "Patient participation ensures a more relevant, meaningful plan" (p.353). Creating both goals and outcomes for a patient that reaches the SMART (specific, measurable, attainable, relevant, and time-framed) plan creates motivation for the patient to reach the goals and outcomes. According to Potter et al. (2020), "Goals of patient education identify what a patient needs to achieve to gain a better understanding of a health care topic and to better manage his or her illness and outcomes describe the specific behaviors that a patient must achieve to meet each goal" (p. 353). B.F. was encouraged to offer suggestions for the goals that were going to be implemented. B.F.

chose the SMART outcome to use the incentive spirometer correctly 10 times every hour that he was awake throughout the shift with the goal being to not find any new signs or symptoms of the development of pneumonia.

The interventions that created an effective learning environment for the patient included the reinforcement of learning through frequent repetition and follow-up sessions by intermittently assessing the patient's use of the incentive spirometer and answering any questions the patient may have. Ackley et al., (2020) provides the rationale example, "Frequent and regular educational sessions, including 'boost' sessions, improved medication, and self-care management outcomes for those with a chronic condition," to support the above intervention that follow-up sessions improve the outcomes of the goals put into place for the patient (p. 566). Also, the access to the YouTube video provided an extra source of information for the patient to go back to at any point if there were any questions or confusion. "The use of multimedia education (video, audio, and self-paced computer programs) as an adjunct with current programs was most effective" (Ciciriello et al, 2013 as cited in Ackley et al., 2020, p. 566). Finally, the patient was expected to summarize the information he was taught about the incentive spirometer to his wife when she came in to visit, which provided the opportunity to reassess the knowledge the patient retained a few hours after the initial teaching. "Summarizing is a concise review of key aspects of an interaction. It brings a sense of satisfaction and closure to an individual conversation" (Potter et al., 2020, p. 336).

The expected outcomes and goals that the patient set for himself were achieved and all interventions applied to the patient's care were effective. Throughout the shift, B.F. used the incentive spirometer 10 times every hour that he was awake. He showed excitement when nurses found him using the incentive spirometer to show that he was following through with using it.

Additional teaching was given since the goal for the day just included the current shift, he would need to continue the regimen every day while in the hospital and at home while recovering. The patient continued to show great motivation and interest in a fast recovery, so there were no signs to be concerned that he would not follow through with this regimen.

References

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