Nursing Intervention plans for Acute care patient

**Executive Summary**

This report is based on a case study of Mrs Eleanor, who has passed through the hemicolectomy and midline incision surgery. According to her past life history, due to the reason of several health complications like hypertension, high blood pressure, and hypercholesterolemia, she may experience various co-morbid conditions during the 24-hour post-operative stage. Therefore, in order to reduce the level of adverse conditions, assessment is required for identifying the clinical complications, like diarrhoea, septicaemia, and constipation. Nursing intervention planning is also required for reducing the occurrence percentage. Besides this, a complete discharge planning can be performed for delivering the optimum health care level.

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# Introduction

Acute care patients mostly require excessive support during the pre-operative and post-operative stage apart from the time of surgeries, for coping with their acute health conditions raised by their acute diseases. In order to assist the acute care patients, nurses need to play the most considerable role for managing their health requirements and providing the opportunity of quick recovery. Besides their physical status, acute care nurses also need to focus on their mental stability as most of the acute care patients undergo a phase of mental trauma after completion of surgical processes. This assignment highlights the potential issues after hemicolectomy surgery, process of assessment, nursing role in intervention planning, rationale behind intervention, and a brief discussion plan.

# Plan A: Nursing Intervention Plan

Through analysing the given data and information about the pre-operative history and postoperative condition of Eleanor, nursing intervention plan can be developed by focusing on the associated risk factors and their likelihoods. According to the statement of Santana *et al.* (2018), nursing intervention plans can support the nurses in following a regulatory process for delivering best care to the acute care patients.

|  |  |  |  |
| --- | --- | --- | --- |
| Assessments | Problems or Issues | Interventions | Rationale |
| Diarrhoea and constipation are the two most common post-operative issues occurred among the patients having colectomy or midline incision surgery. Both of the diseases can be assessed through blood testing, stool testing, and colonoscopy or sigmoidoscopy procedures. The further risk factor associated with this is enhancement of malnourishment condition or poor water balance level. Besides this, in many cases, the diarrhoea and constipation level has been diagnosed as constant in nature. | Associated risk of Diarrhoea and constipation | * Nurses need to review the dietary pattern of the patient, amount of food and liquid intake and compare this information with the standard amounts.
 | * Proper amount of roughage and fibre intake can assist Mrs Eleanor to overcomes the issue of dietary inefficiency. Besides this, adequate amount of fluid can support in retaining the consistent nature of stool, thus help in avoiding constipation (Williams *et al.* 2017).
 |
| After every surgical procedure, acute pain in some parts of the body, especially at the area of surgery, is a common problem. In this case, the acute pain happened after hemicolectomy can spread into the surrounded area along with increasing the level of discomfort. Assessing the condition of Mrs Eleanor reveals her pain score as 6 out of 10. In case of hemicolectomy, patient may sometimes feel excessive vomiting and nauseating conditions.  | Acute pain | * Nurse can focus on investigation and reporting of the pain area surrounded the area of surgery, especially in the abdominal part, for measuring the presence of abdominal rigidity, rebound tenderness, and involuntary guarding.
* Administration of medication and supportive relaxation techniques can be taught by nurses.
 | * Peritoneal inflammation is required to diagnose for delivering proper medical interventions.
* The second intervention technique can support Mrs Eleanor in taking rest with proper way, thereby refocusing their attention from pain and discomfort level.
 |
| In case of hemicolectomy, patients sometimes face skin impairment, such as rashes, puss erection from the place of surgery, or infection. As opined by Wick *et al.* (2015), surgical wound may sometimes help in spreading the infection throughout the entire blood of body, causing septicaemia, and ultimately death. Assessment of skin impairment can be performed through blood testing and wound observation. | Irritation around the place of surgery | * In order to prevent this type of infection, regular wound observation and proper dressing is required for preventing many types of skin impairment.
* Nurses can irrigate wound by several mechanisms, such, through using normal saline, antibiotic solution, and diluted Hydrogen Per Oxide.
 | * Skin impairment or wound operation can occur at any time, during 6-8 month complete healing. Therefore, regular dressing and serous change drainage can help in prevent irritation and infection.
* The second intervention mechanisms are required for treating the pre-operative infection or intra-operative contamination.
 |
| Due to the reason of higher physical and mental stress, patients may sometime undergo the phase of nutrient imbalance. This condition can be assessed by nutritional assessment, by which nurses can understand the desired food choice of Mrs Eleanor. Besides this, bowel sound auscultation can also be followed. | Risk for improper and imbalanced nutrition | * Nurses need to encourage and motivate patients, like Mrs Eleanor, in taking proper amount of food by their choice and buttermilk, yogurt, and many others.
* Various odour-causing foods are required to be restricted.
 | * Desired food choices may help in mental satisfaction. The food named in the intervention assist in reducing odour and gas formation.
* Food sensitivity may further decrease the desire of food eating (Nunan *et al.* 2017).
 |

**Table 1: Nursing Intervention Plan**

(Source: Created by author)

# Plan B: Analysis of identified clinical issues

## Co-morbidity of Mrs Eleanor according to her health condition

Based on the medical definition, the term ‘co-morbidity’ can be defined as the presence of more than one additional disease, which can be co-occurred with a primary health-issue (Avenevoli *et al.* 2015). For example, patients having Major Depressive Disorder and Social Anxiety Disorder can be termed as co-morbid, due to the presence of both depression and anxiety. Therefore, through analysing the past life history of Eleanor, highly co-morbid situation is present in this case. For example, Mrs Eleanor’s past medication history includes myocardial infarction, hypercholesterolemia, hypertension, asthma, and bronchitis. This high co-morbid condition of her health is related with her 40 years habit of smoking.

As opined by Conway *et al.* (2016), smoking can cause lung cancer, asthma, bronchitis, and many other respiratory problems. Besides this, the smoking habit, higher cholesterol level, and hypertension level of Eleanor is also related with the myocardial infarction, due to which she has experienced with left coronary artery stenting. Apart from this, as her father had died due to the reason of bowel cancer, therefore an increased risk related with bowel cancer is present as a genetic issue. Therefore, based on this information, it can be stated that the process of general anaesthesia can impose a significant threat to the condition of Mrs Eleanor, due to the reason of affecting heart, increasing blood pressure, and smoking habits.

## Potential clinical complications

According to the past and present health issues of Eleanor, different types of co-morbid complication can occur during the 24hours post-operative surgical process. According to the statement of Chan *et al.* (2015), the 24-hour postoperative time is critical for patients, as most of the after surgical impacts start at this time. In this case, due to the reason of bowel surgery by hemicolectomy and midline incision, the two related co-morbidities are diarrhoea and septicaemia.

***Diarrhoea-*** After any types of surgery in the bowel area, diarrhoea is one of the most common issues during the initiation of postoperative period. As opined by Watkins (2015), due to the reason of colon shortening, stool can pass with a faster speed. This complication is not life-threatening, as it reduces after 6-8 week and colon can begin normal functioning. However, in case of long piece removal, faster passing of stool may become chronic side effect.

***Septicaemia-*** Septicaemia is a disease, in which the entire blood circulation system of an individual gets affected due to the reason of bacterial contamination. Surgeries like hemicolectomy, appendectomy, cataract surgery, caesarean surgery, and many others, have a higher risk of septicaemia. In this case, septicaemia can occur due to the reason of skin impairment at the surrounded area of surgery. During the postoperative time, skins become excessively sensitive, due to which bacterial infection can easily affect the area. After infection, bacteria can enter into the bloodstream and spread throughout the body. As a result, patients sometimes undergo through a phase of multi-organ failure, and at last death (Saul, 2018).

## Nursing interventions for clinical complications

The above mentioned clinical complication are required to manage by implementing proper nursing intervention planning, which can be as follows-

|  |  |  |  |
| --- | --- | --- | --- |
| Clinical complications | Assessment | Intervention | Rationale |
| Diarrhoea | * Identifying the level of discomfort, cramping, frequency of pain, nature of stool, and bowel sensations
* Stool culture
* Evaluation of defecation pattern
* Assessment of hydration status and fecal impaction
 | * Nurses can keep record of patient weight and increase or decrease value.
* Dietary fibres, bulking agents, and stimulants are required to incorporate in the prescribed diet plan developed by the surgeons (Tebala *et al.* 2016).
 | * Accurate documentation of the daily weight measurement can help in understanding and analysing the body fluid balance of a patient.
* Dietary fibres, bulking agents, and stimulants help in fluid absorption from stool, thickening stool, and increasing gastrointestinal motility.
 |
| Septicaemia | * Identification of pathogenic microorganisms in blood through blood culture technique
* Testing functionality of liver
* Hematologic blood studies
 | * Regular dressing of the surgical area is required for avoiding the skin impairment and bacterial entry through the wounded place.
* Gentle clearance of the wounded area is required to perform for reducing the risk of cross-contamination. (Ellis, 2017)
* Contamination can also occurred through the surgical equipments, as they can also remain contaminated by nosocomial pathogens. For example, the indwelling catheters are required to clean before using for Mrs Eleanor.
 | * Regular dressing is crucial for identifying or recognising the portal entry area, by which pathogenic microorganisms can enter.
* Clearance with proper medical solutions can prevent the percentage of bacterial entry.
* Various types of nosocomial infection can be occurred due to the reason of using contaminated equipments.
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**Table 2: Nursing Care intervention plan**

(Source: Created by Author)

## Analysis of case study with the interventions

Based on the past medical history of Eleanor, it can be stated that she has a higher chance of septic shock as well as diarrhoea, due to the reason of various pre-operative complications. According to the previous history of Mrs Eleanor, since she had a 40-year habit of daily smoking, therefore, increasing heart risk is present in her case. Besides this, due to the reason of bowel surgery, diarrhoea and septic shock can be occurred. Therefore, focusing on these risks, the interventions mentioned above are required to include. As mentioned by (), proper diet chart is essential for the patients, like Eleanor, in order to avoid the issue of diarrhoea. Besides this, it is also required to measure the nature of stool frequency of output, weight gaining, or losing pattern, and many other factors that are associated with this disease. Besides this, Woodfield*,* Jamil & Sagar(2016) has mentioned that the risk of septicaemia including skin irritation, impairment and infection can be reduce through blood testing and liver functionality testing. It can be avoided by increasing regular dressing and cleaning procedures.

# Part C: Discharge Planning

Since management of post-operative condition is critical, therefore, it is required to develop a discharge planning, for supporting the patients in returning to their normal lives. This discharge planning is mainly required during the residential care setups. In case of Mrs Eleanor, the discharge planning may be as follows-

|  |  |
| --- | --- |
| Medicines | * In order to manage the acute pain level, different pain relief medications are required to be prescribed.
* Physicians can prescribe bowel movement softeners, which help Mrs Eleanor in her bowel movement and preventing the possibilities of c constipation.
* Warfarin and heparin are two renowned blood clot thinners, which can prevent in blood clotting, in the area of surgery. (Kelly *et al.* 2015) stated that blood clot could be the reason of heart attack, stroke, and death. Thus, it is necessary to check the presence of blood clotting in surgical area or other internal parts of body.
* Antibiotics are also necessary to reduce fever and prevent bacterial infection.
* Maintaining the medicine list without missing any dosage is required for patients like Mrs Eleanor, in order to cope up with the health changes after surgery (DeHaas *et al.* 2016).
 |
| Eating pattern | Easy digestive foods, low fibre foods, and acidophilus preparations are required to be follow by Mrs Eleanor. Proper foods include eggs, macaroni, creamy peanut butter, and white bread. These foods can reduce the bowel movement, by preventing colon traumas. Avoidance of raw fruits, nuts, vegetables, and whole-wheat breads is required. Besides this, she also needs to stop her smoking habits (Colombara *et al.* 2015). |
| Activity | * Supportive environment including helpful family members and friends can accelerate the patient recovery program for person. Two daughters of Mrs Eleanor need to provide proper support to Mrs, Eleanor after successful completion of surgical procedure. Since Mrs Eleanor has suffered from increased depression due to the reason of her elder marriage divorce, thus extreme mental support is necessary for her. Nurses can guide her in following several mental relaxation techniques and complementary alternative therapies (Johnson *et al.* 2016).
* Regular walking to a certain distance can be helpful for Mrs Eleanor, as it reduces her difficulty level related with bowel movement. Residential care nurses need to keep record her daily walking distance and total walking hour per day.
* Mrs Eleanor needs to avoid heavy compound lifting with more than 10 pounds weight till six weeks after hemicolectomy and midline incision surgery.
* Driving is also prohibited after this surgical process as it can affect the area of surgery. Extreme pressure on surgery area can lead to cause bleeding or infection,
* Since Mrs Eleanor has work schedules as a local volunteer at the Local St. Vincent De Paul centre, thus consultation with the surgeon is necessary for her to return into her working life. McNutt *et al.* (2015) mentioned that generally people generally return to work after 5 to 6 weeks.
 |
| Other home-based care | * Proper infection control procedure for managing the irritation in the surgical area is required.
* In case of three to four month long bloody or watery diarrhoea, Mrs Eleanor needs to take supportive intervention care by medication or other processes.
* Prescribed diet are required to be followed including low fibre diet supplements, Slow changes in the food can be performed after consulting with the surgeon. Mrs Eleanor can also use shakes or nutritional supplements (Trippia *et al.* 2016).
* Adequate intake of water is also necessary for preventing the stage of constipation, which is a common issue after hemicolectomy or midline incision surgery.
* It is necessary to maintain the medicines as per the direction provided.
* Mrs Eleanor requires providing special attention during the time of washing or cleaning in the surgical or incised area.
 |
| Requirement of healthcare provider at the time of-  | * High fever, approximately 100.4 degree F or above
* Diarrhoea, Nausea and vomiting
* Excessive pain in abdomen part
* Redness, swelling, or drainage surrounded the incision area
* Constipation along with dark black and bright red stools
* Light-headedness, breathing shortage, chest pain
 |

**Table 3: Discharge planning for Mrs Eleanor**

(Source: Created by Author)

# Conclusion

Therefore, based on the entire discussion, it can be concluded that it is necessary to focus on the co-morbid condition after certain types of internal surgical procedures. Besides this, assessment of present health condition of Mrs Eleanor is necessary for maintaining her health and safety level.

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# Appendix



**Figure 1: Hemicolectomy**

(Source: Intestinal Atony, 2018)