

Example of plans and problem-solving strategies on cvl essay

[Health & Medicine](#), [Disease](#)



Plan and problem-solving strategies refer to the ways, methods, actions or guidelines that need to be taken by the healthcare fraternity as whole in order to solve the problems with central venous line. These guidelines are intended to provide evidence-based instructions for preventing a number of catheter-related infections pandemic in the healthcare facilities. The problem is brought about by the new registered nurses (RNs) who are not trained on how to handle or operate the central venous devices. The emergence of new technology in the nursing field requires the health care professionals to move ahead with the same trend.

The reason is that clinicians can be in a position to attend the increasing number of patients primarily seeking treatment at the intensive care unit (ICU). In U. S 250000, cases of bloodstream infection (BSI) are reported yearly of which 80000 (32%) catheter-related bloodstream infection (CRBSI) occur in ICU annually. Jones & Fraser, (2007) noted, “ The infection in turn increases the expenses of treating patients costing between \$300 million to 2. 5 billion each year”. Currently, there are several types of type of central venous devices used at the hospitals. The examples include PICC lines, Hickman, Groshong catheter and totally implantable venous access system (TIVAS) among others.

According to Haga et al., (2013), “ Most vital advances in the prevention of CRBSI are the identification of personality threat factors with the issue”. The factors include; (a) long time hospitalization before vascular catheterization. (b) Heavy microbial migration on the hub of the central venous catheters. (c) Extended time of catheterization. (d) Excessive microbial colonization at the placement area (e) Jugular or femoral vein insertion instead of subclavian. (f)

Inexperienced operator or lack of best practice during catheter insertion. (g)
Insufficient maintenance and care of the catheter after insertion.

(h) Complete parenteral nutrition done through a catheter (i) Type of catheter used. The strategies and guidelines to prevent central venous line infections have developed to target the variables above.

The following are measures taken to prevent CVL infection at the time vascular devices are inserted. Hygiene; hand hygiene before inserting the catheter is very crucial practices that can be used to prevent the infection. For hands decontamination, the nurses must use alcohol-based foams/gels that have been proofed to reduce the rate of CVL infection. The primary strategy is to promote hand hygiene entails educating staffs who perform catheter insertion on the significance of the practice. Following this education, research shows that the hospitals where nurses disinfect the hands before any job have decreased from 39% to 10% per 1000 catheter days.

Thus, indicating that hand hygiene is necessary to decrease the rate of infection in a hospital with an ICU setup. Second is catheter-cart kits; another study done shows that the use of a system-based intervention with a catheter kit containing a sizeable sterile drape with 2% chlorhexidine gluconate. Chlorhexidine use for skin antisepsis is effective than povidone iodine. This strategy has been widened to include essential items required to insert catheters that minimize interference relating to the unavailability of the required equipments thus maintenance of sterile venue hence reducing rate of infection.

Third, is optimum sterile barrier precautions; the use of maximum barrier

precautions which include a sterile gown, full body drape, cap, gloves and mask during catheter insertion. This also has been found to reduce the rate of CVL infection and the current U. S Healthcare infection control practices advisory committee (HICPA) guidelines recommends its use during insertion of all catheters. The use of this evidence-based practice has been on the rise at the non-federal and federal hospital because it is available, cost effective and reliable to use. Fourth, is subclavian vein; the site of insertion can also influence the risk of an infection due to the amount of bacterial colonization at every entry site. The use of subclavian vein as the placement point of choice has been found to reduce the rate of infection compared to jugular or femoral vein insertion at the ratio of 3. 7% to 20% respectively. This reason makes the clinicians to use subclavian vein and not the other two.

After inserting catheter, additional measures have can be applied to ensure that, there is a lower rate of infection and thus securing the safety of the patient in the hospital at the ICU. The measures and practice include; disinfecting of hubs, injection ports, and needleless connectors prior to the use of the catheter. Removing the unnecessary central venous catheter will also help reduce CVL infection because the risk of developing disease enhances each day with CVC on the body. The last but not least measure is the institutional initiatives, which include educational interventions, use of CVL checklist and a specialized central venous catheter team. Research also shows that educational programs that emphasize appropriate signs for CVL device insertion reviewing the right process for catheter placement and maintenance reduced the rate of CVL infections.

There were several barriers when implementing the plan to the nurses. They

include some of the nurses were unaware or lack knowledge about the catheters, unsupportive staff. In addition, other nurses do not create time to read the information, lack of access to the information for those who were absent during the presentation. Wallis, (2012) noted, “ As a leader, solutions to these barriers have to be sought and implemented so that the information is access by all”. First, is to train and educate the nurses, who lack knowledge on CVL devices, and be supportive and encourage the clinicians about the importance of the information and plan. Nurses can also be encouraged to access the hospital’s database by opening accounts for each one and that they will use their employment number as a password to access this plan. The clinicians who were away on leave or off duty will have a presentation later and thus ensuring that they too get the information and plan.

In conclusion, it is essential for nurses to be enlightened on how the central venous line infection is caused and how to prevent the same. When this is accomplished then the number of patients dying due to the infection reduces and nurses will have fulfilled their duties of ensuring patient safety.

Reference

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