

INFECTION CONTROL PRACTICES IN NICU

INTRODUCTION

Hospital Acquired Infections lead to increased incidence of morbidity and mortality among neonates. Factors that make a new-born susceptible to infections may be either extrinsic or intrinsic. Infections can be device related, care-giver related or due to outbreaks, all of which are potentially preventable.

CAUSES

Pre-maturity, low birth weight, mechanical ventilation, central or peripheral lines, shunts and surgeries are considered as few of the risk factors. Lack of awareness and compliance with hand washing techniques is found to be the leading cause for infections NICUs. In developing countries, poor standards of infection control practices during intra-partum and post-partum care could lead to high rates of infection among neonates. Inadequate staffing, and presence of untrained care givers lead to increased levels of stress and burn out resulting in poor quality of care which in turn can increase the level of infection. Improper sterilization of equipment like thermometers, infant weighing scale, feeding utensils etc. can also prove to be fatal for a highly susceptible neonate.

MEASURES TO PREVENT INFECTIONS

Proper physical set up and administrative arrangements can prevent infections to a very great extent. In order to ensure an infection free environment, every neonate should have a minimum of 11.2 square meter excluding sinks and aisles. Each space should have an aisle width of 0.9 meter.

There should be no thoroughfare in the nursing care area. One, hands free sink for four beds is recommended for optimal care. Each single room will have separate hand washing facility. The design of the sink should ensure minimum splashing of water. Hand washing instructions should be displayed in pictorial form near the sink. Hand Hygiene Audit need to be carried out on a daily basis. All equipment in NICU need to be disinfected or sterilized. It may be done terminally, in between patients or as frequently as indicated. Strict sterile techniques need to be followed during all surgical or invasive procedures.

Cap, mask and gown are to be worn by the care giver when indicated. Gown may be worn over the clothing. If one gown is used for each neonate, it should be changed frequently.

All the care givers need to be sensitized regarding the protocols of Bio Medical Waste segregation and disposal.

Housekeeping personal have to be educated about various protocols of cleaning. Order of cleaning will be patient areas, accessory areas and adjacent halls. Adequate measures should be taken to prevent dispersing dust in to the air. Cabinet counters and work surfaces should be cleaned every day and deep cleaning is done on a weekly basis. Walls, windows, storage shelves and non-critical surfaces should be scrubbed periodically with disinfectant solution. Housekeeping personnel should ensure that the hand washing area is scrubbed with detergent on a daily basis and as and when required. Fogging of NICU has to be done once in a week.

In order to minimise infections, policies and protocols need to be aid down with regard to visitors and visiting hours.

TRAINING OF STAFF

All staff working in NICU need to be adequately trained to provide specialized care for the highly susceptible neonates. On the Job training and Continuing Nursing Education will help increase the quality of care.

CONCLUSION

Infection in neonates lead to longer hospital stays, higher treatment cost and neuro- developmental impairment. Loss of life due to Hospital Acquired Infection is a great concern for all. Application of research based knowledge will help in providing infection free environment in NICUs. While taking all measures to keep the area infection free, effort should also be made to identify early signs of infection and remedial measures should be taken immediately. In addition, awareness and compliance to infection control practices by staff will help to keep the infection rates to the minimum possible level.

