

# Ebp

Health & Medicine, Nursing



Meter Dose Inhaler and Spacer in Asthmatic Patients s: According to Doan. et. al , asthma is a widespread disease among children. In Canada, the number of asthmatic children admitted in the emergency department makes about eight percent of all patients admitted in that department. The drugs for curing this illness are either administered using “ Meter Dose Inhaler and Spacer” or “ wet nebulization.” The most commonly applied method of administering medication to asthmatic children is wet nebulization. This method is believed to be efficient, but it exhibit undesirable consequences compared to meter dose inhaler. However, it still remains the most regular method due to its supposedly low cost. Meter dose inhaler is more efficient but is not widely used because it is believed to be more expensive than nebulizer.

The examination involved asthmatic children who were presented to the emergency department for medication. The age under consideration was between two to eighteen years of age. Those included were the ones who had gentle or temperate illness. The participants were taken from “ British Colombia Children’s Hospital and Alberta Children’s Hospital” emergency departments. Research has established that the use of metered-dose inhaler is more advanced and less costly compared to wet nebulizer. The application of this method also reduces the possibility of one patient transmitting the disease to others. This is because each patient can make utilize his or her own apparatus. The evidence has shown that in Canada, only twenty percent of the children in the emergency department applied this method. The limiting factor the use of this method is its associated high expenditure. When the expenditure and the benefit accruing from both methods were

evaluated, the result showed that using meter dose inhaler and spacer is more efficient and cost saving compared to wet nebulizer. This study did not take into consideration the long-term effect of either of the two methods.

The use of Meter dose inhaler and spacer improves the quality of drugs administration to the patients because only one patient is served with each gadget. Also, this method reduces the overall cost of curing asthmatic patients because it shortens the period of admission in hospital. Patients get well faster than expected and consequently the expenditure goes down. This saves the family members of the patient stress of going to visit him or her at the hospital.

The healthcare providers should make use of meter dose inhaler and spacer to administer drugs to asthmatic patients. This method will improve the efficiency because each patient will be using his or her own apparatus. This will reduce the chance of one patient transmitting the disease to others. Also, it will increase the rate of recovery by the asthmatic patients hence reducing their period of stay in the hospital. In addition, the overall cost of patients will drop magnificently. The healthcare providers will have easy moment of training the patients on how to use it.

The use of this analysis was considered for a very short duration of time. This was basically done within two days after admission of the patient into hospital and especially in the emergency department. This also reduced drastically the period of hospitalization among the asthmatic children. The cost of equipment and procedure for administering drugs makes the process a bit expensive. On the other hand, this method reduces the cost of patients' stay in hospital. This is because the patient period of stay in hospital decline

when drugs are administered using meter dose inhaler and spacer as compared to use of nebulizer. There is an estimated overall cost reduction of expenditure by 154. 95 Canadian dollars for every patient treated using meter dose inhaler.

#### Reference

Doan. Q, Shefrin, A., & Johnson, D.,(2011). Journal of the American Academy of Pediatrics 127, (5): 1105-1111