

Applying Florence Nightingale's Theory in Life: In Relation To the Prevention and Management of Ventilator-Associated Pneumonia (VAP)

SHATHA SAIF SULTAN ALI

Department of Pharmaceutical Technology, Faculty of Pharmacy and Biochemistry, University of Buenos Aires,

Buenos Aires, Argentina.

Email-id: sultalali09@gmail.com

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ABSTRACT

Global warming is an important issue that everyone has to notice and need to do effective method to reduce the effect. In this paper one such method is discussed to reduce the effect called as Nightingale's theory. It implements use of renewable resources for usage.

KEYWORDS: global warming, Nightingale's theory.

INTRODUCTION

Florence Nightingale established the Environmental Theory to advocate for the care for and the alteration of the environment – to enhance population health and safety. Particularly, the theory states that the nature of the environment determines mortality rates and comorbidities associated with different health conditions (Johnson & Webber, 2015). Therefore, the theorist indicated that solutions to illnesses should involve focusing on the environment to ensure that it is altered positively to achieve optimal patient outcomes (de Almeida, Cruz & De Carvalho, 2015). In this case, the patient care problem to which Nightingale's Environmental Theory is applied concerns ventilator-associated pneumonia (VAP) – a leading hospital-acquired infection. Indeed, VAP constitutes a lung infection occurring in individuals on mechanical ventilation breathing machines. Hence, the condition is more likely to affect critically ill patients under intensive care unit (ICU) and forms a leading source of increased mortality and illness. Causes of VAP include prior use of antibiotics, colonized pathogenic microorganism aspiration within the gastrointestinal and oropharynx tract, longer duration of mechanical ventilation, and intubation (Mughal & Ali, 2017). Therefore, it is evident that VAP arises from a compromised environmental quality in hospital environments. Based on these outcomes, Nightingale's Environmental Theory advocates for the alteration of such hospital environments to restore patient confidence and enhance satisfaction. For the case of VAP, specific strategies that are

worth embracing include hand hygiene (via disinfection or washing after and before each patient contact, the use of sterile equipment, and the use of gloves) and high-level disinfection and cleaning of reusable ventilator equipment (including oxygen analyzers, spirometers, and resuscitation bags – with the aim of preventing cross-transmission). Other environmental alterations, in response to Nightingale's Environmental Theory, could include oral care and selective digestive decontamination, the early initiation of enteral nutrition, and the reduction in the frequency of tracheal intubation – by using non-invasive mechanical ventilation. Through *An Inconvenient*

Truth, Al Gore highlighted some of the causes of global warming and the impact of this environmental adversity on the quality of life. Indeed, the United States' former Vice President acknowledged that moral obligation forms a central path that could be exploited to curb global warming. As such, *An Inconvenient Truth* indicates that political approaches are unlikely to realize a lasting solution to global warming. One of the notable effects that might arise from global warming, as suggested in the film, concerns the rise in the world's sea level. With this increase projected to be about twenty feet, Gore states that the negative effects are likely to arise due to the potential of global warming to cause the collapse of regions such as West Antarctica. Gore proceeds to state that flooding along the coastline might be a tertiary effect arising

from the increase in the sea level, with the latter being a direct effect of global warming. The eventuality is that not only are lives likely to be lost but massive population displacements might also be experienced. Therefore, the need to apply the Environmental Theory in addressing global warming as an environmental problem cannot be overstated. Particularly, applying Nightingale's ideas about environmental alteration implies that global warming, an issue that Gore highlights, could be addressed through mechanisms such as the use of energy-efficient machinery, advocacy for renewable sources of energy, and the monitoring of

atmospheric carbon emissions in different parts of the world.

References

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