

Research paper on hygiene and infection in hospitals hand hygiene

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



Experimental design chosen

The aim of the research proposal is to investigate the impacts of various hand hygiene techniques on transient flora and consequently, overall hospital hygiene and the reduction of infections in the hospital. A quasi experimental technique based on a randomized block design shall be chosen. The blocks shall be based on the techniques of hand hygiene and their impacts on transient responsible for infections. Therefore the blocks shall be; (1) social hand washing, (2) careful hand washing, (3) hygienic hand disinfection and lastly surgical hand disinfection. An equal number of persons practising each of the techniques shall be selected.

Randomized block design is suitable for this research study because it will facilitate comprehensive coverage of the research topic on different facets and minimize nuisance factors (Caliński, Tadeusz & Kageyama, 2003). In this case, blocking will reduce nuisance factors such as number of people using a particular hand hygiene technique, the time of day and the room temperature in which the analysis of transient flora is done. Arranging blocks according to techniques of hand hygiene and their impact on transient flora shall also facilitate qualitative research, which is the best way of responding to the research question.

Choice of subjects for the research

Studies that have shown that 60% of HCP do not adhere to hand hygiene practices in their institutions (Van de Mortel & Murgu, 2006). It is in light of these statistics that the subjects of the research subjects of the research

topic shall be Health Care Personnel (HCP). The importance of choosing HCP is therefore to evaluate the impact of improved hand hygiene practices among this group and its effect on hospital infections, especially noncosomial infections. Noncosomial infections are the infections not present in the patients at the time of admission to the hospital (Ryan, Christian, & Wohlrake, 2001).

The choice of HCP as the subjects of the study stems from the fact that they are more in contact with patients suffering from various illnesses some of them infectious than the patients are amongst themselves. Garner, (2006) asserts that hands of HCP are the most frequent vehicle of noncosomial infections. Moreover, HCPs in any hospital are many and varied. They range from nurses, clinical officers, specialist consultants such as paediatricians and orthopaedics, pharmacists among others. Each of these HCPs has a varying potential as an infection-carrying agent. Therefore, obtaining data from such a wide spectrum of subjects will help in comprehensively covering the research topic.

Recruitment of participants for the research proposal

HCP at a chosen hospital will be informed of the study and interviewed on the various techniques of hand hygiene they currently practice. This will help set the baseline statistics of the study as a prerequisite for randomized block technique of experimental design (Beck & Schmidt, 2001). Volunteer Health Care Personnel will be required to register in a hand hygiene technique they practise frequently. Participating HCP will be representative of gender, the working days (HCP working on weekends to equal those working on

weekdays), Professional categories (reflect an equal number of junior HCP and senior HCP), consider the opportunities the HCP have for hand hygiene.

The blocking of the research into the various techniques of hand hygiene practised by the HCP will offer an avenue to accommodate HCPs from a wider spectrum. The participating HCP will continue using the various substances such as alcohol-based hand-rubs, or water and medicated soaps they have used in the past. The impacts of various hand hygiene techniques on transient flora will then be evaluated.

References

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