

DECLARATION

I, Gayle Anne Partridge, declare that this research report is my own work. It is being submitted in partial fulfilment of the requirements for the degree of Master of Science in Nursing at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at this or any other University.

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21st day of May, 2010

ABSTRACT

This quasi-experimental study assesses the value of simulation based learning for a medical flight crew within an air ambulance service based in Johannesburg, South Africa.

The purpose of this study was to assess the value of simulation based learning for air medical crew in performing synchronized cardioversion efficiently, effectively and safely within the air medical environment.

The objectives were to determine if there is a difference between the experimental group that had been exposed to a simulation-based learning experience versus a control group that had not, in respect of performing synchronized cardioversion and scene management pertaining to this skill. This was a quasi-experimental study in which stratified random sampling was done to divide the participants into the control and experimental groups using medical qualification as homogenous subsets.

The outcome of the study showed that the control group was quicker to first shock than the participants in the experimental group. However, the participants in the experimental group performed the skill more effectively, with regard to doing / following the correct steps in performing the skill of synchronized cardioversion and were safer practitioners. None of the variants within the sample groups had a significant effect on performance of the skill.

The conclusion is that within this specific air ambulance service, simulation- based learning improved the performance of synchronized cardioversion in comparison to the normal orientation / training provided in the service.

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