



## **Commingling Conceptual Framework to Ludwig Von Bertalanffy's General System Theory in Evidence Based Research**

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### **ABSTRACT**

*The conceptual framework is a general fusion of all the related concepts. In the current situation, the theoretical framework refers to a Ludwig von Bertalanffy's general system theory. This was the 1<sup>st</sup> introduced by Ludwig Von Bertalanffy, which is used to develop the conceptual framework, to evaluate the impact of education training on knowledge and practice regarding MEWS among staff nurses working in selected Hospital. The Ludwig von Bertalanffy's general system theory components include Input, Throughput, Output, Evaluation, and Feedback that adds a clear guideline for the research work. Quantitative research approach can be used for study with pre-experimental research design; Sample can be Registered nurses by adopting purposive sampling technique. Structured questionnaire for knowledge and observational checklist for practice can be used before and after administration of Education training for a period of 1 month. Statistical Analysis by utilising both descriptive and inferential statistics. The effectiveness of the study can be evaluated, and findings can be sorted as the degree of knowledge that is adequate, moderate, or inadequate, as well as the degree of practice, which can be rated as satisfactory or unsatisfactory. The theoretical framework will give us reference for conceptual framework to attain the goal of the study which is assessing the effectiveness of education training knowledge and practice on MEWS among staff nurses and their relationship will be checked with the variables and explore with hypothesis.*

**KEYWORDS:** Conceptual framework, Ludwig Von Bertalanffy's General system theory, Theoretical framework, Evidence based research, MEWS (Modified Early Warning System).

Received 29.09.2022

Revised 21.10.2022

Accepted 11.11.2022

### **INTRODUCTION**

The conceptualization is the process of providing a specific reference frame for clinical practice, research and education [1-5]. They also provide research direction for related questions about phenomenon and represent solutions to practical problems [1-3]. The general system theory developed by Ludwig Von Bertalanffy, explains the concepts as input, throughput, output, and feedback, which is the modified conceptual framework for this study.

The present study aims to develop and evaluate the structured education training on Modified early warning system [MEWS] from the perspective of the knowledge and practice among staff nurses working in hospital. It offers a thorough, organised, and ongoing framework for programme evaluation. The general system theory describes the creation, application, and assessment of programmes.

#### **INPUT:**

Input is something put into a system or expended in its operation to achieve output or a result [2-7]. Here, the assessment of pre-test knowledge and practice scores of staff nurses working in hospital on MEWS can be done by using tool structured knowledge questionnaire and observation checklist. Which has very high level of relationship with variables such as, age, gender, educational qualification, experience, working area and source of information?

#### **THROUGH PUT:**

Throughput is an action that is required to perform the desired task [2-7]. Here, Administration of structured education training on MEWS [Aims and objectives, Curriculum plans, Teaching methods and Delivery of teaching], determine the level of knowledge and practices of Registered nurses.

#### **OUTPUT:**

Output is the information produced by a system for process from a specific input [2-10]. Here, Output refers to the knowledge and practice gained by Registered nurses regarding MEWS re-assessed by using tools after administration of education training

#### **EVALUATION:**

Evaluation is the performance of several aspects of data or power processing that can be used, to evaluate and monitor the system for more effective performance [6-11]. Here, the assessment measures the level of knowledge and practice acquired by registered nurses of the hospital regarding MEWS.

#### **FEEDBACK:**

The system continuously monitors the system itself and the environment for information that guides its operation [3-7]. The feedback information from the environmental responses to the system output is utilized by the individuals in adaptive modification and adjustment to their interaction with the environment [2]. Feedback can be positive, negative or neutral [4-11].

Here, feedback can be measured by the output; this can be adequate, moderate, inadequate level of knowledge and for practice it can be satisfactory or unsatisfactory. If staff nurses gain adequate knowledge and practice after administration of structured education training on MEWS considered useful to update the knowledge of staff nurses.

#### **METHODS:**

Quantitative research approach can be used for study and pre-experimental research design can be used. Sample can be Registered nurses chosen by using purposive sampling technique. Structured questionnaire for knowledge and observational checklist for practice can be used before and after administration of Education training for a period of 1 month. Statistical Analysis can make use of both descriptive and inferential statistics.

#### **RESULT**

The study's findings should show the degree of knowledge, which might be adequate, moderate, or inadequate, as well as the degree of practice, which can be rated as satisfactory or unsatisfactory. This demonstrates the effectiveness of education training on MEWS. Hence regularly organised education teaching programme will help in gaining knowledge and practices regarding MEWS among Staff nurses to have adequate knowledge and skills.

#### **DISCUSSION**

The theoretical framework will give us reference for conceptual framework to attain the goal of the study which is assessing the effectiveness of education, training and practice on MEWS among staff nurses in the selected hospital<sup>3</sup>. According to the goals of the study, general system theory is used as theoretical framework to incorporate in the conceptual framework and the concepts, constructs, variables and relationship will be tested or explored with the hypotheses H1-Mean post-test knowledge & practice score of staff nurses who received Educational training program regarding MEWS will be significantly higher than the mean pre-test knowledge & practice score and H2- The post-test knowledge and practice rating will significantly associate with their chosen variable.

#### **CONCLUSION**

Theoretical framework is incorporated to the conceptual framework in the research study. General system theory was used to prepare the conceptual framework and cast off to do the study. In this conceptual framework variables and constructs are explore and described and test the relationship between them.

#### **ACKNOWLEDGMENT**

I would like to thank SGT University, management for their support.

#### **COFLICT OF INTEREST**

There is no conflict of interest, according to the authors.

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#### **CITATION OF THIS ARTICLE**

A Pihal , S. Jasmin Debora , S Singh. Commingling Conceptual Framework to Ludwig Von Bertalanffy's General System Theory in Evidence Based Research. Bull. Env. Pharmacol. Life Sci., Spl Issue [4]: 2022: 539-541