

# Improving Nursing Competency in Teaching Self-Care Management to Patients with Heart Failure

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## ABSTRACT

Heart failure (HF) denotes a significant issue pertaining to healthcare due to its morbidity, mortality, costs associated with care and prevalence. The present study had been carried out under the assumption that accurate education imparted to HF can help ensure that appropriate information gets passed on to the patient. In this study, a pretest and posttest questionnaire were provided to the nurses in order to evaluate areas where they lack the desired knowledge. A well-designed education curriculum was also provided about HF self-care management areas based on the recommendations of the Joint Commission. According to the findings, training was found to improve nurses' knowledge relating to HF and their skills of self-management, that they tend to pass on to the patients, thereby lowering the rates of readmission.

## PROBLEM

- Heart failure remains one of the most chronic cardiovascular diseases that are known to lead to debilitating health conditions
- The economic burden of heart failure is worth nearly USD 31 billion annually, which is inclusive of the cost associated with medications, skipped working days, and overall healthcare (CDC, 2016).
- Heart failure hospitalizations' mean cost stood at USD 23,077 for each patient in the year 2013 and the costs are likely to go up by 127% to 2030 from 2012 (Mozaffarian et al., 2016).
- Hospitals could be liable for a 1–3% penalty for thirty-day heart failure readmissions (CMS, 2016)

## PURPOSE

- This study was aimed at ascertaining nurses' understanding and knowledge relating to HF self-care management and whether it needs improvements via educational intervention at emergency observation unit of the PMC Hospital.
- The provision of education to nurses on HF can help them pass on accurate and appropriate information to the patient so that their self-care practices can improve.

## METHODS

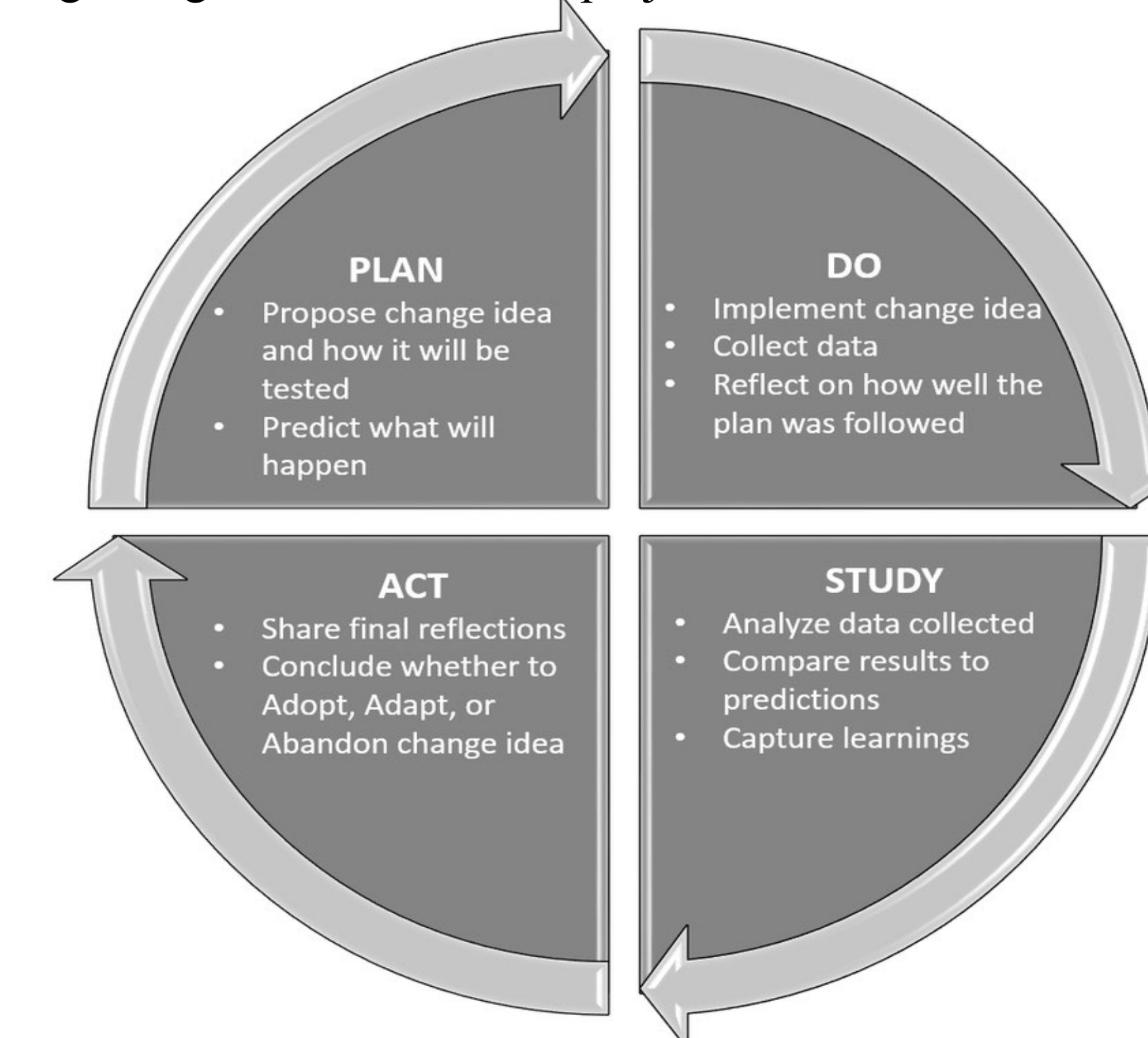
- The target population for this project was registered nurses working in the emergency observation units (RN 1 & RN 11) at PMC Hospital.
- Total of 40 nurses were recruited regardless of their experience or education
- The data collection instruments included pre and post-test questionnaires
- The efficacy was assessed using pre/post-statistical surveys.

## TOOL

- This project entailed the usage of a NKHFEP tool, a 20-item survey tool that is primarily used in an educational intervention with a view to assess nurses' HF-related knowledge.

## GUIDING FRAME WORK

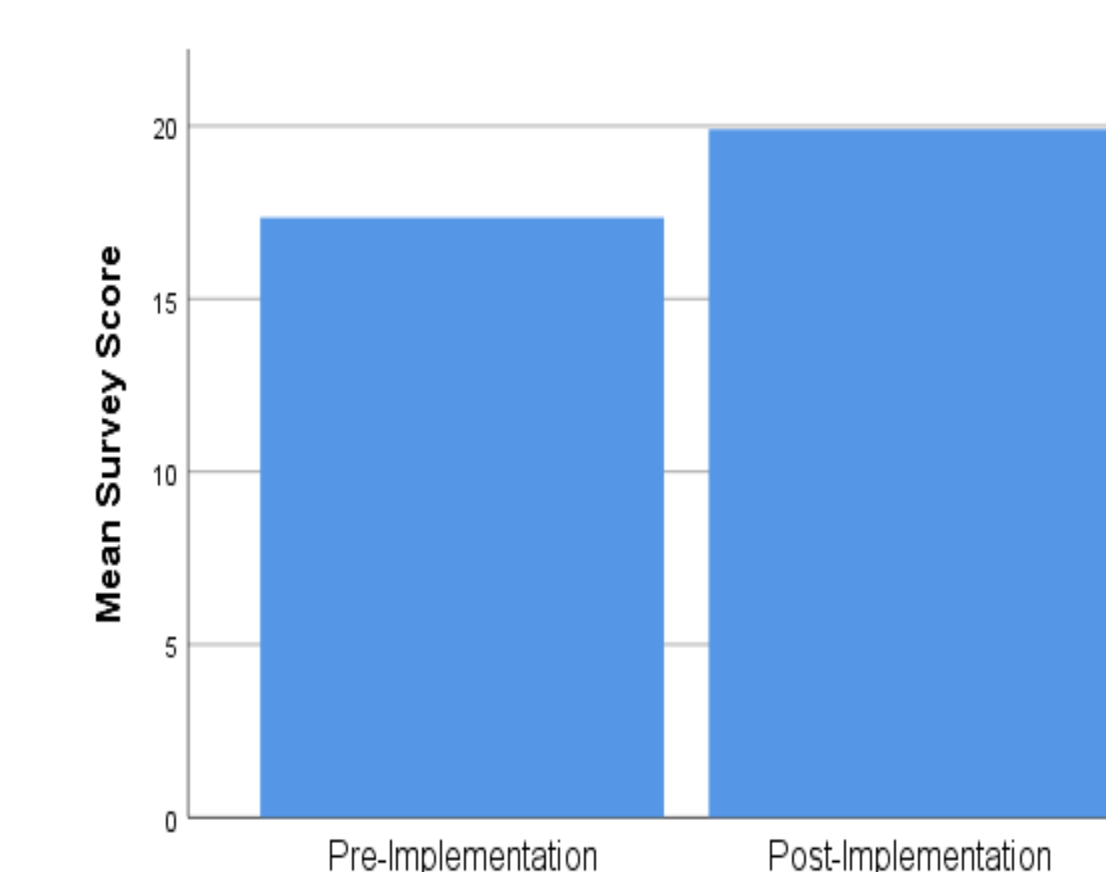
The Plan Do Study Act (or PDSA) model was used as the guiding framework in this project.



## RESULTS

| Score               | Mean  | Median | Std. Deviation | Minimum | Maximum |
|---------------------|-------|--------|----------------|---------|---------|
| Pre-Implementation  | 17.35 | 18     | 1.805          | 14      | 20      |
| Post-Implementation | 19.90 | 20     | 0.379          | 18      | 20      |
| Change in Scores    | 2.55  | 2      | 1.694          | 0       | 6       |

The average score increased by 2.55 points, and the median score increased from 18 to 20 points. The lowest score any nurse received on the post-implementation was 18 points, with the minimum change being 0 (all nurses' scores remained the same or improved from pre to post)



### Pre- and post-implementation survey scores

## CONCLUSION

- The project targeted registered nurses working in the emergency observation units (RN 1 & RN 11) at the PMC Hospital.
- The researcher utilized a pre-test questionnaire in order to establish the baseline knowledge of the nurses concerning their competency in imparting education on self-care to HF patients.
- A well-designed education program was subsequently provided to the nurses regarding HF self-care management areas based on the recommendations made by the Joint Commission
- The educational program was focused on six key areas: activity, diet, management of medication, monitoring of weight, signs of exacerbating condition as well as medical follow ups.
- Post-test questionnaires were then used to measure the extent of their knowledge after the educational intervention was implemented.
- The efficacy of the intervention was assessed using pre as well as post-statistical surveys.
- The conclusive result is that training improves nurses' knowledge and confidence in management of patients with heart failure.

## REFERENCE

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