

# Enhancing Self-Efficacy: A Nurse-Led Intervention for Postmenopausal Women with Urinary Incontinence

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## ABSTRACT

Urinary incontinence has been identified as a widely prevalent, yet less screened and rarely treated health issue among postmenopausal women in India. **Aim:** To evaluate the feasibility of Nursing Intervention for self-efficacy of postmenopausal women with Urinary Incontinence. **Study design:** Quasi experimental time series design with non-equivalent control group design was employed. **Place and duration of study:** The study was conducted for three months in two old age homes in Coimbatore, Tamil Nadu **Methodology:** Two old age homes were selected and randomly assigned to interventional and control settings. Ten samples with urinary incontinence were selected by non-purposive sampling and allotted to interventional (n=10) and control group (n=10) respectively. The interventional group received the nursing intervention for three months whereas the control group received the routine care. The self-efficacy was assessed at baseline, 4<sup>th</sup> week, 8<sup>th</sup> week and 12<sup>th</sup> week. **Results:** There was a significant difference of baseline and posttest III scores in interventional group (MD=20.10) compared to the control group (MD=2.70). **Conclusion:** The nursing intervention was effective in improving the self-efficacy of post-menopausal women with Urinary Incontinence living in aged homes.

**Key words:** Urinary Incontinence, Postmenopausal incontinence, Self efficacy, Nursing Intervention

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## 1. INTRODUCTION

Women experience significant hormonal decline during the menopausal phase, resulting in tremendous changes in various body processes, including urinary system which impacts the woman's life [1]. Fall in the level of estrogen at menopause leads to atrophy of pelvic floor muscles resulting in urinary incontinence (UI) [2]. A combination of Pelvic floor muscle exercises, bladder retraining and behavioural modification based comprehensive interventions are effective approaches to the UI management [3]. UI is not a risk for others but it causes social withdrawal and low self-esteem [4]. Only one in four women with symptoms of UI opt for treatment, while others live with the burden, pressurized by social stigma, shame, embarrassment and accepting it as normal part of aging compromising quality of life [5]. Implementing strategies and raising awareness in older women can help them regain their confidence, improve their well-being, and lead more fulfilling lives [6]. Self-efficacy for urinary incontinence refers to a person's

level of confidence in voluntarily controlling the urge to urinate and prevent incontinence episodes. Higher levels of self efficacy for UI are positively related to adhering to treatment schedules [7]. Enhanced knowledge of the burden and unmet psychological needs of women is essential to understand and design the effective interventions for prevention and treatment of UI in low- and middle-income countries [8].

### 1.1 Purpose of the study

The study was aimed to evaluate feasibility and the effect of evidence based; holistic Nursing Intervention tailored to the needs of the women on self-efficacy of post-menopausal women residing in old age homes.

## 2. MATERIAL AND METHODS

**2.1. Research approach and design** -Evaluative approach was used. Quasi experimental time series research design with non-equivalent control group was used.

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**2.2. Population and setting** -The study was conducted among postmenopausal women residing in two old age homes in Coimbatore, Tamil Nadu, India.

**2.3 Sampling size and technique**

2.3.1. In phase I, the two old age homes were randomly allocated to Interventional and control setting. Postmenopausal women were screened for urinary incontinence.

2.3.2 In phase II, the women with urinary incontinence in each setting, were recruited by non-randomized purposive sampling and allotted to interventional group(n=10) and control group (n=10) respectively.

**2.4.1 Inclusive criteria**

- Women aged 55 years -65 years with amenorrhoea for atleast 12 months and having complaints of urinary incontinence
- Post menopausal women cognitively sound enough to understand the intervention
- Post menopausal women physically capable of performing the intervention

**2.4.2 Exclusive criteria**

- Women who cannot perform the intervention due to physical or cognitive limitations
- Women with pelvic organ prolapse
- Bedridden women who cannot perform the intervention
- Women with neurogenic bladder diseases.
- Women with congenital urogenital issues.
- Women with known malignancy of the urogenital tract

**2.5 Instruments for data collection**

Part I- The data on the demographic and clinical variables was collected using a questionnaire

Part II- The level of self efficacy was collected using Geriatric self-efficacy Index (GSE-UI) for Urinary Incontinence.

**2.6. Intervention**

The interventional group was provided the evidence based, holistic intervention which included, awareness on pelvic muscle strengthening, group muscle strengthening exercises under supervision, group and individual discussions, individualized behavioural modification support and need based self-management training for urinary incontinence management by the

researcher for three months. The control group received the routine care.

**2.7 Ethical considerations**

Ethical clearance was obtained from the Institutional ethical committee. The aim and nature of study was clearly explained to the samples and consent was obtained.

**2.8 Data collection**

The baseline assessment was done at the first day. The post-tests I, II and III were conducted at the end of 4<sup>th</sup> week,8<sup>th</sup> week and 12<sup>th</sup> week.

**3. RESULTS AND DISCUSSION**

**3.1. Report of analysis**

The data was analysed using descriptive and inferential statistics in SPSS based on the objectives.

Fig 1 Distribution of level of self efficacy among postmenopausal women

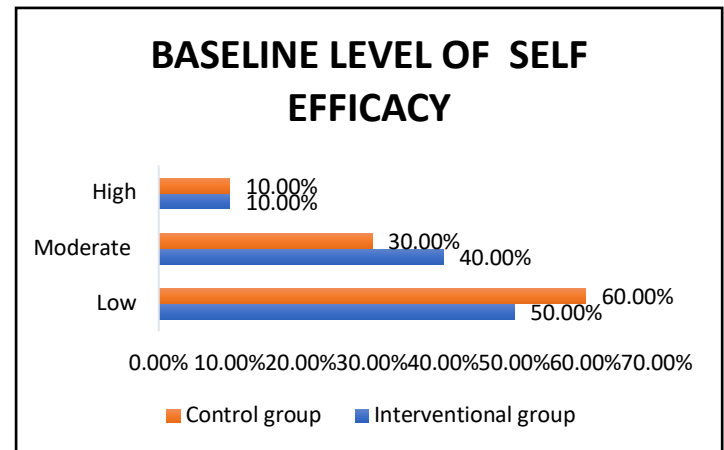


Fig 1 reveals that the majority of women in both groups had low level of self efficacy and nearly half of the women in both groups had moderate level of self efficacy. Only 10% of women in both groups had high level of self efficacy. The data depicts clearly that nearly 90% of women had decreased self-efficacy at baseline.

**Table 1. Multiple comparison of self efficacy scores between pretest, post-test-I, post-test-II and post-test-III using Bonferroni t-test n=20**

Assess ment	Experi ment	Repeated ANOVA test score	Bonferroni t-test
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		Mean	SD	F value	P value	Comparison	MD	P value
Interventional group	Pretest	56.20	6.56	F=23.66	P=0.001**			-
	Post-test-I	62.80	7.67			Pretest vs post-I	6.60	0.01
	Post-test-II	70.10	3.98			Pretest vs Post-test II	13.90	0.01
	Post test-III	76.30	3.65			Pretest vs Post test - III	20.10	0.01
Control group	Pretest	57.00	9.49	F=1.59	P=0.20	-		-
	Post-test-I	58.00	9.19			Pretest vs post test -I	1.00	0.44
	Post-test-II	59.00	7.38			Pretest vs Post test -II	2.00	0.38
	Post test-III	59.70	7.80			Pretest vs Post test - III	2.70	0.18

MD= Mean difference

Table 1 reveals the Statistical significance calculated using Repeated measures analysis of variance F-test and multiple comparison of pretest with post-test-I, post-test-II and post-test-III calculated using Bonferroni t-test.

### 3.2 Discussion

The analysis shows that in the Interventional group the mean difference of pre-test and post-test I (MD=6.60), post-test II(MD=13.90), post-test III(MD=20.10) increased progressively ( $P=0.01$ ). In the control group the mean difference has no significant difference. The result reveals that the intervention is effective in enhancing self-efficacy of postmenopausal women with Urinary Incontinence. The result is contradicted by the

result of the study performed by Nelson (2020) which showed no improvement in self-efficacy observed following a self-management programme and hence recommended that interventions need to be prepared with an aim to enhance the level of confidence [9].

### 4. CONCLUSION

The study reveals that the intervention is feasible and can be adopted in the chosen settings. The intervention has also been found effective in improving self-efficacy of postmenopausal women with UI.

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