Nursing Section

To Assess the Utility of BASNEF Model on the Quality of Life among Peri-menopausal Women

VISHRANTI BHAGWAN GIRI[1], VAISHALI TAKSANDE[2]

ABSTRACT

Introduction: Post-menopausal health issues has always been given attention, while only few people are aware the health issues associated with peri-menopause. Symptoms include tremendous fluctuations in hormone levels, irregularities in the menstrual cycle, vasomotor and psychological issues.

Aim: The present study is aimed to assess the utility of Belief, Attitude, Subjective Norms, Enabling Factors (BASNEF) model to improve quality of life among perimenopausal women in the rural community setting and to compare the quality of life before and after intervention, the association between the selected demographic variables and the quality of life in the experimental and control groups will be assessed.

Materials and Methods: The present interventional analytical quasi-experimental study will be conducted on study population from Vidarbha region of Maharashtra. In this study, two stage cluster sampling technique will be used to select the study participants. Age group of perimenopausal women will be 40-55 years. Study participants will be screened as per inclusion/exclusion criteria and divided into two groups. One group will receive intervention of BASNEF model while another group will be control group. The BASNEF intervention will be divided into five phases for five days, follow-up visits will be conducted at first and third month of phase four. During intervention period and further up to three months, an educational pamphlet based on care during menopause will be provided to the participants and contact number will be provided to ask any doubts during this period. Primary outcome includes assessment of the utility of BASNEF model on quality of life among perimenopausal women. Secondary outcome includes increase in knowledge, change in belief and attitude, to know participation of subjective norms and to make aware about enabling factors.

Conclusion: The conclusion will be drawn from the result will be published in peer reviewed journal.

INTRODUCTION

Perimenopausal women are defined as those women who have experienced irregular menses within the last 12 months or the absence of menstrual bleeding for more than three months, but less than 12 months [1]. Post-menopausal health issues has always been given attention, while only few people are aware the health issues associated with peri-menopause. Symptoms include tremendous fluctuations in hormone levels, irregularities in the menstrual cycle, vasomotor and psychological issues [2].

During menopausal transitional phase, women feels little discomfort and some others may have severe and multiple symptoms. Symptoms reported by women have been distributed into several categories, including physical disturbances such as vasomotor symptoms like hot flush, psychological complaints such as mood swings and some other physical symptoms, that may impair personal or social interactions and diminish the overall quality of life among women. These symptoms had a negative effect on the quality of life of the perimenopausal and the post-menopausal women [3]. According to a study conducted on the quality of life among perimenopausal women, those women belonging from local community of Karnataka, shows that physical and psychological symptoms were more common than the vasomotor and sexual symptoms. Researcher concluded that there is need to plan effective intervention to improve quality of life in perimenopausal women [4].

Rationale of study: Climacteric period includes the peri-menopause, Menopause, and postmenopause. During this stages, natural changes of life takes place along with some health problems that occurs like menopausal symptoms, osteoporosis and Coronary Heart Diseases. Researchers give emphasis on the three areas as health promotion, disease prevention and treatment or management [5]. In recent areas, medical professions have been focusing on training and education programme to improve quality of life. During peri-menopause, premenpause and post-menopausal period, women need health care provider for education and awareness to improve their health [6]. Knowledge is an essential requirement to utilise the accessible health services and attitude is an organising principle for doing an action [7].

BASNEF model is one of the comprehensive models that is always used to modify existing behavior into new one. It is based on 'theory of reasoned action'. This model could improve all aspects of women health, not only by raising awareness and changing patients beliefs and attitudes, but also helps to encourage emotional bonding among people through their participations [8]. One recent study said that, in the present situation BASNEF model is utilised to reduce internet addiction in female students [9]. As there has been no study conducted in India by using BASNEF model, the quality of life of perimenopausal women will be improved with the help of BASNEF model.

MATERIALS AND METHODS

It is an Interventional analytical study; with the help of two stages cluster sampling technique that will be conducted in rural community settings of two region of the Maharashtra. [Table/Fig-1] shows the schematic diagram of present study.

Inclusion criteria:

1. The women whose age group between 40 years-55 years.

1
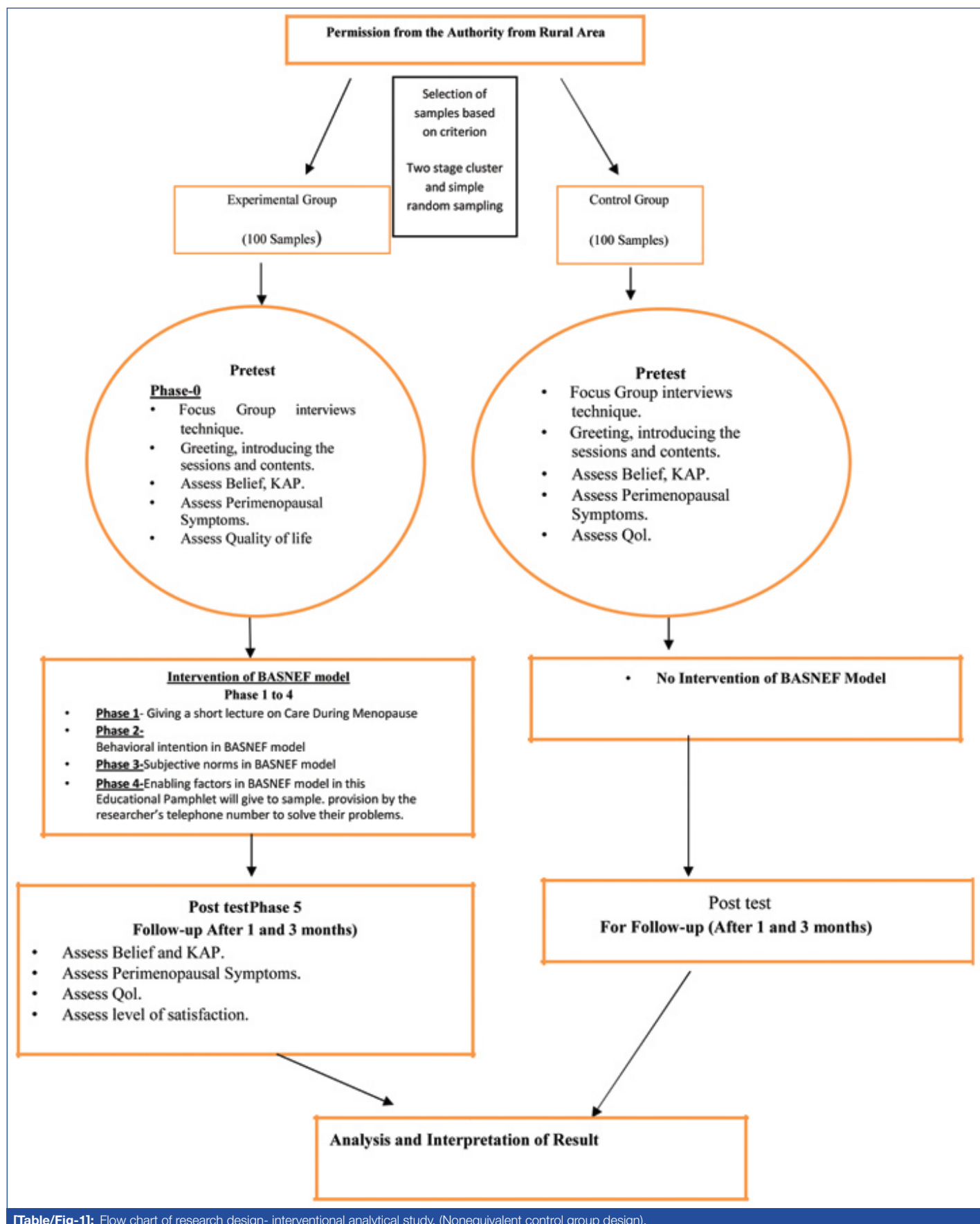
[Table/Fig-1]: Flow chart of research design- interventional analytical study. (Nonequivalent control group design).

2. The women who have husband, friends or family members of perimenopausal women.

3. All women showing any symptoms of perimenopausal like hot flush, heart discomfort, sleep problems, irritability, physical and mental exhaustion, sexual problems, bladder problems, dryness of vagina, joint and muscular discomfort.

4. The women are who versed and understand Marathi and Hindi.

5. Women who are willing to participate in the study.

Exclusion criteria:

1. Women who were attended psychological counseling and education programme on care during menopause.

2. Women who have severe mental and physical disability.

3. Women those who are health professionals.

4. Womens who are living single (without family as well as friends)

5.   Women want to withdraw from the study.

6.   Not fulfilling study schedule.

Sample size: Sample size has been calculated by using following formula.

$$n_1 = \frac{(\sigma_1^2 + \sigma_2^2 / \kappa)(z_{1-\alpha/2} + z_{1-\beta})^2}{\Delta^2}$$

The notation for the formula are: n_1=sample size of Group 1; n_2=sample size of Group 2; σ_1=standard deviation of Group 1; σ_2=standard deviation of Group 2; Δ=difference in group means; κ= ratio= n2/n1; $Z_{1-\alpha/2}$=two-sided Z value (eg. Z=1.96 for 95% confidence interval);

$Z_{1-\beta}$=power

So, K=1; SD of first group=4.89; SD of second group=4.64. Hence, Δ=9.64-8.22=1.42

$$N = \frac{(4.89*4.89+4.64*4.64)(1.96+0.84)^2}{1.42*1.42} = 97.97 = 100 \text{ in each group}$$

Interventions: Intervention will be given to the experimental group and control group will get routine care. [Table/Fig-2] gives details of intervention.

Outcome measures: Primary outcome include assess the utility of BASNEF model on quality of life among perimenopausal women. Secondary outcome include to increase the knowledge, change in belief and attitude, to know participation of subjective norms and to make aware about enabling factors.

Data management and monitoring: The demographic data (age, occupation, education, marital status, types of family), does she know to during menopause and source of information will be recorded, when they enrolled. Baseline Existing Knowledge, Belief, Attitude, Severity of symptoms and quality of life as well as after intervention i.e., at the end of third months of intervention will be recorded.

STATISTICAL ANALYSIS

Statically analyses will be performed using Statistical Package for the Social Sciences (SPSS) software and open epi software. Paired t-test, (Wilcoxon sign Rank) and unpaired t-test (Wilcoxon rank test), Wilcoxon will be used to analyze data within the group. Mann-Whitney test will be applied to see comparison between the groups. ANOVA will be used to see the association with selected demographic variables.

Ethics and disseminations: This study is approved by the Institutional Ethics Committee from DMIMS (DMIMS (DU)/IEC/2018-2019/7346/A).

RESULTS

This study is planned to assess the utility of BASNEF model on the quality of life among perimenopausal women. In this, the study will assess six domains of quality of life. Educational programme based on BASNEF model will improve knowledge about care during menopause. As well as intervention of BASNEF model can improve health promoting behavior and practices. Proper care during peri-menopause may reduce severity of symptoms. With the help of BASNEF model, perimenopausal women will include subjective norms in their care and be aware about enabling factors. If this model proved to be useful in perimenopasual group, then it can be used widely in India on peri-menopause and other conditions.

Phase	Hours	Content of the session
Phase 0: Initial assessment, familiarity with the groups, briefing the study to the groups	Starting session **Day**-01 **Time**-1 hour	Greeting, introducing the session facilitator and womens to each other, and explaining the numbers and the structure of the educational sessions.
		Signing the informed consent form.
		Completing the study instruments and performing the initial measurements. Pre-test will be conducted.
Phase 1: Increasing the knowledge and changing the patient's behaviors, beliefs and attitudes according to the BASNEF model.	**Day**-02 **Time**-2 hours	Giving a short lecture on Menopause and lifestyle modification to change the perimenopausal women beliefs and attitude and to motivate them to receive more information on care during menopause.
		Definition and concept of peri-menopause, premenopause and menopause, its causes and contributing factors.
		Explaining the progressive and silent effects of menopause.
		Explaining the effect of symptoms of peri-menopause on the body and quality of life.
		Explaining the care during various symptoms.
		Presenting a list of Investigations to be carried out in Menopause.
		Explaining about the Hormone Replacement Therapy and their advantages and side-effects,
		Explaining importance of diet and exercise in their life to improve quality of life.
		A comparison between lifestyle modification and medical therapy
Phase 2: Behavioural intention in BASNEF model	**Day**-03 **Time**-2 hours	Dividing the Menopausal behavior and quality of life into smaller components.
		Teaching the perimenopausal womens what behavior is exactly expected of them and how to do it.
		- Teaching the women's some practical methods of Exercises.
		Teaching the patients some practical stress management methods.
		Explaining the level of appropriate physical activity to reduce and keep the ideal weight considering the body mass index.
		- Presenting the women's how to stop harmful behaviour, such as lack of exercises, Diet.
		Explaining appropriate diet to get adequate calcium.
Phase 3: Subjective norms in BASNEF model	**Day**-04 **Time**-1 hour	A meeting will held for people that were significantly effective in the perimenopausal women's lifestyle such as their spouse, friends children, etc., to discuss on their role in lifestyle and behavior modification and symptoms management and in improving quality of life.
Phase 4: Enabling factors in BASNEF model	During all meeting **Day**-05 **Time**-1 hour	An educational pamphlet was given to all perimenopausal womens to strengthen and to keep the continuity of the educational training. All patients were informed how to use the services of the healthcare centers and how to receive the necessary care. Also, there will be provision by the researcher's telephone number to solve their problems and asking their possible questions during the study.
Phase 5: Evaluation	One month and 3 month after the Phase 4	Conducting the post-test (completing the Quality of life questionnaire).

[Table/Fig-2]: Phases of the intervention of BASNEF Model according to (Belief, Attitude, Subjective Norms, and Enabling Factors).

CONCLUSION(S)

Conclusion will be drawn after the statistical analysis of result.

REFERENCES

[1] Al Dughaither A, AlMutairy H, AlAteeq M. Menopausal symptoms and quality of life among Saudi women visiting primary care clinics in Riyadh, Saudi Arabia. Int J Womens Health. 2015;7:645-53. doi: 10.2147/IJWH.S84709.

[2] Blake J, Contestabile E, Fortier M. Evaluation, decision-Making and follow-up. Journal SOGC. 2001;23(12):1214-20.

[3] Poomalar GK, Arounassalame B. The quality of life during and after menopause among rural women. J Clin Diagn Res. 2013;7(1):135-39. doi: 10.7860/JCDR/2012/4910.2688. Epub 2013 Jan 1. PMID: 23450244; PMCID: PMC3576769.

[4] Rao A, Kamath A, Kumar P, Nayak G. A study of quality of life among perimenopausal women in selected coastal areas of Karnataka, India. Journal of Mid-life Health. 2012;3(2):71.

[5] Taechakraichana N, Jaisamrarn U, Panyakhamlerd K, Chaikittisilpa S, Limpaphayom KK. Climacteric: concept, consequence and care. J Med Assoc Thai. 2002 Jun; 85 (1): S1-15.

[6] Shobeiri F, Jenabi E, Khatiban M, Hazavehei S, Roshanaei G. The effect of educational program on quality of life in menopausal women: A clinical trial. Journal of Menopausal Medicine. 2017;23(2):91.

[7] Karmakar N, Majumdar S, Dasgupta A, Das S. Quality of life among menopausal women: A community-based study in a rural area of West Bengal. J Midlife Health. 2017 Jan-Mar; 8 (1): 21-27.

[8] Hubley J. Understanding behaviour: the key to successful health education. Trop Doct. 1988 Jul; 18 (3): 134-8.

[9] Gholamian B, Shahnazi H, Hassanzadeh A. The effect of educational intervention based on BASNEF model for reducing internet addiction among female students: A quasi-experimental study. Italian Journal of Pediatrics. 2019;45(1).

PARTICULARS OF CONTRIBUTORS:
1. Ph.D. Scholar, Lecturer, College of Nursing Government Medical College and Hospital, Aurangabad, Maharashtra, India.
2. Professor, Department of Obstetrics and Gynaecological Nursing, Smt. Radhikabai Meghe Memorial College of Nursing, Datta Meghe Institute of Medical Sciences, Sawangi, Meghe, Wardha, Maharashtra.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:
Vishranti Bhagwan Giri,
Sakshi Varad Vinayak Society, Aurangabad, Maharashtra, India.
E-mail: vishrantigiri@gmail.com

AUTHOR DECLARATION:
• Financial or Other Competing Interests: None
• Was Ethics Committee Approval obtained for this study?   Yes
• Was informed consent obtained from the subjects involved in the study?   Yes
• For any images presented appropriate consent has been obtained from the subjects.   Yes