

Reliability and Validity of the Gujarati Version of Menopause Rating Scale in Postmenopausal Women

Radha Anand Pathak¹, Gira Thakrar²

2nd year MPT¹, Senior Lecturer²,
JG College Of Physiotherapy, Ahmedabad

Corresponding Author: Radha Anand Pathak

ABSTRACT

Background: Menopause is one of the essential phase in women's life and it brings range of physiological modifications that impacts women's life permanently. During this menopausal transition women experience variety of symptoms which can last from months to years. So the need of study was to translate the Menopause Rating Scale into Gujarati language in order to evaluate postmenopausal women's symptoms severity and quality of life.

Method: The Menopause Rating Scale was translated into Gujarati language through double forward and backward translation. The translation and its comparative evaluation with the authentic scale was assessed and acknowledged by the professional committee. The reliability and validity of Gujarati Menopause rating scale became accomplished with the sample size of 30 post menopausal women. Menopause Rating Scale questionnaire has 11 questions covering somato-vegetative domain, psychological domain and urogenital symptoms of menopause.

Statistical analysis – Data was analyzed by SPSS Software, Version 16

Result: Menopause Rating Scale in Gujarati showed high validity and good co-relation with Menopause Rating Scale-English. Menopause Rating Scale showed Cronbach's alpha was 0.738

Conclusion: The Menopause Rating Scale in Gujarati language can be used in clinical work with postmenopausal women for evaluating severity of their signs and symptoms and quality of life in India.

Keywords: Menopause rating scale, Quality of life, Post menopausal symptoms, Gujarati

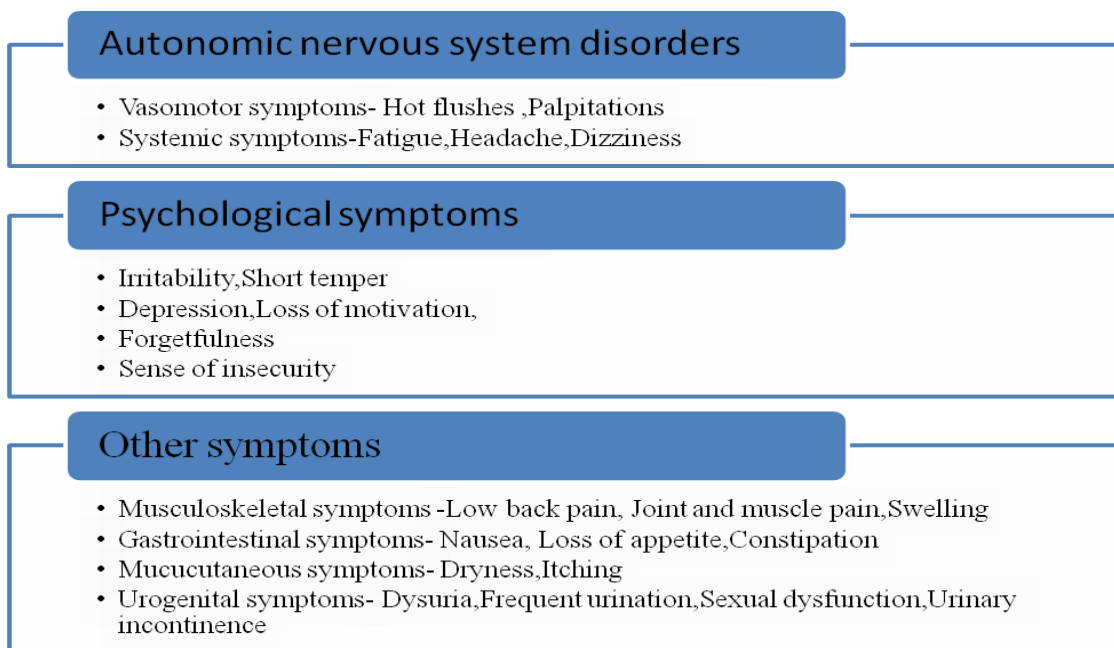
INTRODUCTION

Menopause or the Climacteric is physiological process which defined as the permanent cessation of menses due to lack of ovarian follicular activity. ⁽¹⁾ It is a point in women life when the menstrual cycle stops more than 1 year and there is fall in the levels of estrogen and progesterone which are the two most essential hormones in the female body. (WHO). ⁽²⁾

Age at natural menopause occurs (last period from natural cause) is 40-

61 years ⁽³⁾ and the median age for the last period is 51 years. ⁽⁴⁾

In female body the level of estrogen decreases and level of FSH and LH increases which causes imbalance of the hormones and the imbalance of these hormones leads to changes in the body and responsible for menopausal symptoms. Primary health concern related to menopause are following: vasomotor changes, osteoporosis, sexual problems psychological problems and heart diseases. ⁽⁵⁾



Menopause Rating Scale (MRS) is an 11-object tool consisting of following three dimensions:

- 1 .Somatic symptoms (4 items)
2. Psychological symptoms (4 items)
3. Urogenital symptoms (3items).

The somatic symptoms consist of hot flushes, heart discomfort, joint and muscular discomfort and sleep problems. The psychological symptoms consist of depressive mood, irritability, anxiety and physical and mental exhaustion. The urogenital symptoms consist of sexual problems, bladder problems and dryness of the vagina. Possible answers were based on the severity of symptoms using a five-point likert scale with 0=none, 1=mild, 2= moderate, 3= severe, and 4=very severe. The severity of symptoms ranged from a very least 0 to a most of 44 and was calculated by adding the scores of the three subscales. ⁽⁶⁾

The first translation was carried out from German to English. ⁽⁷⁾ It was developed by researchers at the Berlin Centre for Epidemiology and Health Research (ZEG). ⁽⁸⁾ Currently the subsequent variations of Menopause Rating Scale are available: Brazilian, English, French, German, Indonesian, Italian,

Mexican/Argentine, Spanish, Swedish and Turkish language ⁽⁹⁾ but so far it was not translated in to Gujarati language. So need of the study is to translate Menopause rating scale in Gujarati to evaluate postmenopausal women's symptoms severity and quality of life.

MATERIALS AND METHODS

An observational study was conducted and carried out mainly in 2 stages first translation phase and second validation phase.

Before starting the translation work of MRS (Menopause Rating Scale) author's approval was taken.

Procedure

First, two independent professional bilingual translators were given the questionnaire to translate the original English version into the Gujarati language and forward translation was done.

A meeting involving the two independent professional bilingual translators and a member from the research group was conducted to review, reconcile and harmonize the forward translation.

The reconcile forward translation was then translated back into English by another two independent bilingual

translators and backward translation was done.

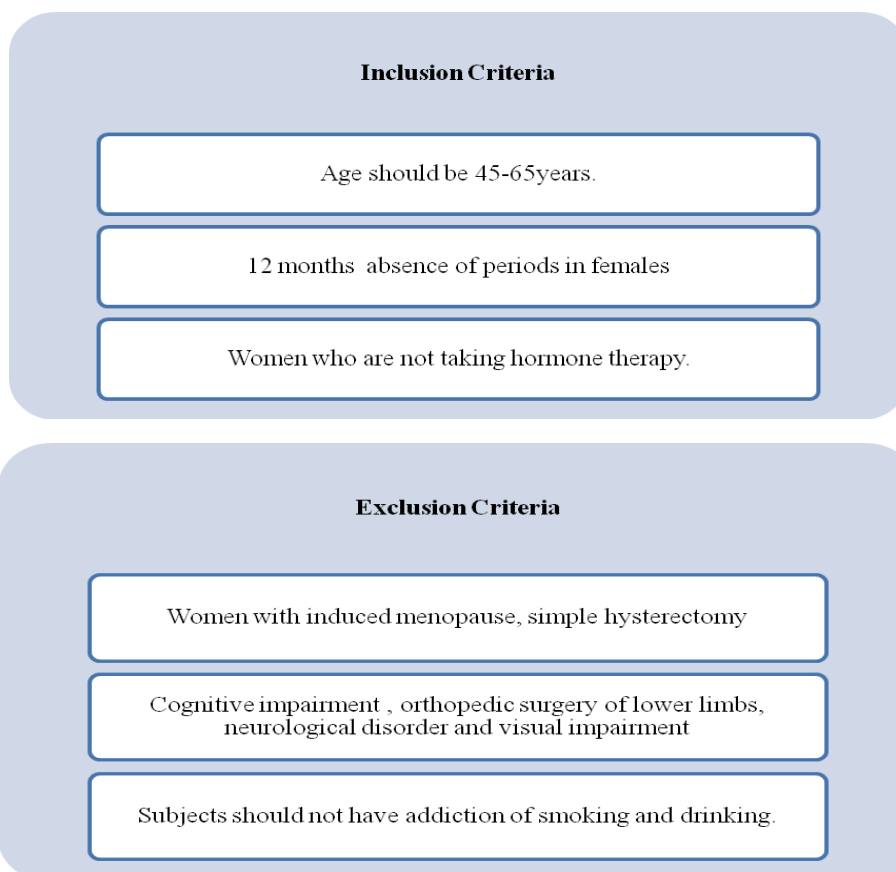
Next the research group together with the professional forward translators reviewed and compared the backward translation with the original English questionnaire.

The aim of this process was to reconcile the questionnaire by producing the final forward translation.

The professional committee consisted of 5 professionals working in Medicine Nursing Physiotherapy Gynaecologist with age group between 35-55 years and 8 years of experience.

METHOD

30 postmenopausal women were included in this study from different societies of Ahmedabad Gujarat.



Written informed consent was taken from the subjects and questionnaire was handed to them to fill up the scale. All patients were asked whether they understood the items and whether they could interpret the questions.

The scores were calculated for each subject and recorded (to check test retest reliability of menopause rating scale)

RESULT

The mean age of postmenopausal women was 52.16 years.

Test -retest reliability of Gujarati MRS was determined by means of Intraclass Correlation Coefficients (ICC) at 95% confidence interval and assessed by Cronbach's alpha which was 0.738.

Intraclass correlation coefficient			
	Intraclass correlation	95% coefficient interval	
Average measures	0.738	Lower bound	Upper bound
-	-	0.574	0.858

DISCUSSION

To our expertise translation is important for the spread of information, knowledge and ideas and it is only medium through which people come to know different works that expands their knowledge. So study was conducted as there was a need for an instrument to measure quality of life in Gujarati postmenopausal women. The purpose of this study was to establish a dependable and legitimate Gujarati version of MRS by translation and adaptation.

No difficulties were encountered in translation phase of study. The structural integrity of original scale items was maintained.

According to National health profile 2019, the general life expectancy for women improved as much as 70.2 years. The common age of menopause is around 48 years but now it strikes Indian women as young as 30-35 years.⁽¹⁰⁾ Due to increase in life expectancy women will have to face longer periods of menopause.

The Study of Women's Health Across the Nation (SWAN) measured health related quality of life of about 3000 women and observed that numerous of the signs and symptoms related to menopause (e.g. hot flashes, night sweats, vaginal dryness, leaking urine) have been additionally related to lower quality of life.^(11, 12)

Several researches indicated that QOL turned into impaired in menopausal women due to the fact menopausal length is associated with numerous physical and intellectual modifications that could affect women's fitness outcomes.

Quality of life is a subjective perception which is modified by the cultural habits in which one lives. The World Health Organization (WHO) defines Quality of life as "An individual's perception of their position in life in the context of the cultural and value system in which they live and in relation to their goals expectations standards and concerns."⁽¹³⁾

The reduced estrogen levels in postmenopausal length can additionally

have an effect on both the physical and mental state of women. Budakoglu et al⁽¹⁴⁾ 2007 conducted study on "Quality of life and postmenopausal symptoms among women in a rural district of the capital city of Turkey" on 338 women with age group between 40-80 years and concluded that Quality of life is worse in postmenopausal women than premenopausal women and in also older than younger women in the postmenopausal period. Thus rural populations are primarily in need of public health care in the postmenopausal period.

Renuka Malik et al (2019)⁽¹⁵⁾ conducted study on "Hindi translated version of menopausal rating score questionnaire: a method to evaluate postmenopausal symptoms in India" on 30 bilingual postmenopausal women and she concluded that MRS-H can be widely used in India to study the menopausal symptoms in women as the cronbach's alpha estimate for this scale was 0.7 and the authors recommend its use in menopausal women in India.

Tatjana Gazibara et al (2015)⁽¹⁶⁾ conducted study on "Validation of the Menopause Rating Scale in Serbian language" on 200 peri- and postmenopausal women and concluded that translated Serbian version of the MRS for testing Health Related Quality of Life of menopausal women showed excellent validity. The MRS in Serbian language might be similarly used amongst perimenopausal and postmenopausal women because the cronbach's alpha estimate for this scale was 0.884 and it may be used for estimating the extent of bothersome climacteric signs and symptoms. However they recall that this scale displays signs and symptoms and perceptions of postmenopausal women in a incredibly highly manner. Because Serbian version of the MRS can be used in daily clinical work with menopausal women in Serbian language.

Urooj Sadiq et al (2019)⁽¹⁷⁾ conducted study on "Translation and reliability analysis of menopause rating

scale (MRS) in Urdu language” on 130 women with age between 40-55 years and concluded that Urdu version of MRS can be used in Pakistani women as the cronbach’s alpha value was 0.869 and also they would have an opportunity to talk about their issues that arise during the translation phase of menopause.

Gehanath Baral et al (2019) (18) conducted study on “Menopause Rating Scale: Validation and Applicability in Nepalese Women” Nepali version of menopausal rating scale was developed. And an adequate level of reliability and validity was obtained and the Cronbach’s alpha estimate for this scale was 0.77. So this scale points towards usefulness, to measure quality of life in menopausal women.

It is essential to apply this self administered questionnaire in patients’ native language to evaluate postmenopausal symptoms and also improves the course of treatment regarding symptoms.

CONCLUSION

The Menopause Rating Scale (MRS-G) in Gujarati language can be utilized in daily clinical work with postmenopausal women for assessing their sign and symptoms and quality of life in India.

Limitation

Future studies should include larger sample size.

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