Research J. Pharm. and Tech. 10(7): July 2017

ISSN 0974-3618 (Print) 0974-360X (Online) www.rjptonline.org



# **RESEARCH ARTICLE**

# A Prospective Study on Quality of Life in Menorrhagia Patients with Anemia

# Dr. T. S. Shanmuga Rajan<sup>1</sup>, S. Yeswanthi<sup>2</sup>

<sup>1</sup>Associate Professor, Department of Pharmaceutics, VISTAS, Vels University, Pallavaram, Chennai, India.
<sup>2</sup>School of Pharmaceutical Sciences, VISTAS, Vels University, Pallavaram, Chennai, India
\*Corresponding author E-mail: shanmuga5@velsuniv.org

## **ABSTRACT:**

**BACK GROUND:** Menorrhagia is heavy menstrual bleeding which causes anemia due to heavy blood loss i.e., more than 80ml. The purpose of this study is how did menorrhagia effects on women's quality of life. The main aim of the study is to assess the quality of life in menorrhagia with anemia.

**METHODS AND MATERIALS:** A total of 100 patients were included in the study with heavy menstrual bleeding. The PCS and MCS scoring were done by using SF-12 questionnarie. The statistics were done by using student t test.

**RESULTS:** The age group of 26-35 (41%) and 77% of married people were mostly affected. The haemoglobin level of menorrhagia patients were found to < 12g/dl. The PCS and MCS scoring before and after counselling are  $39.6\pm4.12$ ,  $51.2\pm3.66$ (PCS),  $34.7\pm1.16$ ,  $49.6\pm2.19$  (MCS) respectively. The P value is <0.05\* and <0.01\*\* is calculate by using student t test. The PCS and MCS were significantly increased after counselling.

**CONCLUSION:** Menorrhagia with anemia has negative effect on women's quality of life. Hence, the study concludes that quality of life was improved on anemia in menorrhagia patient's after counselling. We recommended for the further research study should focus on abnormalities in menorrhagia patients, for the effective treatment and better patient compliance.

**KEYWORDS:** quality of life, physical component scoring, mental component scoring.

# **INTRODUCTION:**

Menorrhagia is defined as heavy menstrual bleeding which may last more than 7 days. It can cause menstrual bleeding of more than 80ml in each cycle.<sup>1</sup> Heavy menstrual bleeding (HMB) is a common problem among women of reproductive age and has a major impact on a woman's quality of life, disturbing physical activity and work performance as well as social and emotional life<sup>2</sup>.

The causes of menorrhagia in gynecological and endocrinological conditions in terms of organic pathology (primarily fibroids) and anovulation/hormonal imbalance, with remaining etiologies being systemic disorders such as hypothyroidism and iatrogenic causes including intrauterine devices and use of anticoagulants<sup>3</sup>.

 Received on 27.04.2017
 Modified on 24.05.2017

 Accepted on 31.05.2017
 © RJPT All right reserved

 Research J. Pharm. and Tech. 2017; 10(7): 2233-2235.
 DOI: 10.5958/0974-360X.2017.00395.X

Menorrhagia is largely responsible for anemia and also iron deficiency anemia. Both of which have negative effects on women's quality of life. Heavy menstrual bleeding is the common cause for the iron deficiency anemia. Mostly women of age 25-40 were mostly effected with menorrhagia<sup>4</sup>.

Menorrhagia patients mostly have pain and discomfort, which effects health related quality of life in women<sup>5</sup>. Anemia is the major cause in patients with heavy menstrual bleeding due to heavy blood loss i.e., more than 80ml<sup>6</sup>.

Anemia is defined as the lack of red blood cells or haemoglobin. Haemoglobin is a main part of red blood cells and binds oxygen. The causes for this mostly are heavy menstrual bleeding, decreased red blood cell production<sup>7</sup>. Quality of life is the perceived quality of life on individual's daily life, which includes emotions, aim, social and physical aspects<sup>8</sup>. In many studies it shows that menorrhagia has negative effects on women's quality of life <sup>9</sup>.

The aim of the study was to assess women's quality of life in menorrhagia with anemia using SF-12 questionnaire.

# MATERIALS AND METHODS: SAMPLE SIZE: 100 patients

### **INCLUSION CRITERIA:**

- Female patients of 18-45 years of age
- Patients who diagnosed with menorrhagia

## **EXCLUSION CRITERIA:**

- Patients below 18 years and above 45 years of age.
- Patients who underwent hysterectomy and bilateral oophorectomy.
- Pregnancy and lactating women.

#### **STUDY DESIGN:**

A prospective study

### STUDY INSTRUMENT: SF 12 questionnaire

### **DURATION:** 12 months

It is a prospective study. The women patients who are having complaints of menorrhagia were included in the study. The information is collected like patients name, age family history, past medical history. The data was collected directly i.e., via face to face with SF-12 questionnaire. The questionnaire forms consist regarding physical health and mental health. The study was conducted after obtaining informed consent form from the patient. The study was approved by the ethics committee IEC/DOPV/2015/2016.

### **RESULTS:**

The following results were obtained when the data collected.

### Table 1: Distribution based on Age

Age	No. Of patients	Percentage
18-25	29	29%
26-35	41	41%
36-45	30	30%

Table 1 shows that age group 26-35 were mostly affected with menorrhagia.

### Table 2 : Distribution based on BMI

BMI	No. Of patients	Percentage	
<18	21	21%	
19-25	57	57%	
>25	32	32%	

Quality of life is the perceived quality of life on Table 2 shows that people with menorrhagia there will individual's daily life, which includes emotions, aim, be changes in BMI.

#### Table 3: Distribution based on Marital status

Marital status	No.of patients	Percentage
Un married	23	23%
Married	77	77%

Table 3 shows that 77% of married people affected with menorrhagia.

#### Table 4: Distribution based on partum status

Partum status	No. Of patients	Percentage
Pre partum	37	37%
Post partum	63	63%

Table 4 shows that 63% post partum people were affected with menorrhagia.

#### Table 5: Distribution based on anemic status

Hb level	No.of patients	Percentage
<7g/dl	39	39%
7-9 g/dl	21	21%
9-12 g/dl	40	40%

Table 5 shows that people are mostly having anemia due to heavy menstrual bleeding.

#### Table 6: PCS and MCS before and after counselling

	Before	After	P value
	counselling	counselling	
PCS	39.6±4.12	51.2±3.66	< 0.05*
MCS	34.7±1.16	49.6±2.19	<0.01**

Table 6 shows that PCS and MCS were improved significantly improved after counselling.

Table 7:	Comparison	of	PCS	and	MCS	in	pre	partum	and	post
partum										

		Before counselling	After counselling	P value
	Pre partum	39.16±2.16	52.32±4.14	<0.05*
PCS	Post partum	37.10±3.14	49.16±3.73	<0.01**
	P value	>0.05	>0.05	
	Pre partum	33.36±4.11	47.46±4.21	<0.05*
MCS	Post partum	38.40±3.12	51.32±3.16	<0.01**
	P value	>0.05	>0.05	

Table 7 shows that PCS and MCS were significantly improved after counseling.

## **DISCUSSION:**

Sule Gokylidiz et al shows that Menorrhagia is considered to be one of the most significant causes of ill health in women. One in 20 women aged between 30 and 49 years consults her general practitioner each year **REFERENCE:** 1. Sule Gokyildz., I

Sergio simoes de souse et al shows that Hemoglobin and QoL showed significant improvement after treatment 2. (p < 0.001). Hemoglobin level was the only independent predictor of the QoL measured by SF-36 physical (p = 0.03) and mental (p = 0.04) composites scores. The impact on the QoL was associated with the hematimetric parameters.

Pirkko peuranpaa et al shows that after treatment of HMB, HRQoL increased more in initially anemic than in nonanemic women, indicating that the increase of HRQoL is linked to correction of anemia.

Our study shows that age group of 26-35 were mostly affected. Married people are mostly affected with menorrhagia.

In this study it indicates that people with menorrhagia are mostly having anemia (table 7). Anemia is caused 7. due to heavy blood loss.

The PCS and MCS were calculated by SF-12 scoring.  $_{8.}$  This is calculated by using student t test.

These are improved significantly after counseling.

### **CONCLUSION:**

Menorrhagia has negative effects on women's quality of life. Therefore, quality of life of the women consulting the clinics with menorrhagia complaint should be investigated and effective approaches should be designed accordingly.

The physical and mental component summaries showed statically significant difference determined by student t test.

Hence, the study concludes that quality of life was improved on anemia in menorrhagia patient's after counselling.

We recommended for the further research study should focus on abnormalities in menorrhagia patients, for the effective treatment and better patient compliance.

### **ACKNOWLEDGEMENT:**

The authors are grateful to the management of Vels Institute of Science Technology and Advanced Studies (VISTAS).

#### Sule Gokyildz., Ergul Aslan, Nezihe Kizilkaya Beji, and Meltem Mecdi in 2013The Effects of Menorrhagia on Women's Quality of Life in Journal ISRN Obstetrics and Gynecology Published on 8 July 2013 pg no: 1-7

- Miss Zoe Penn conducted on A national audit to assess patient outcomes and experiences of care for women with heavy menstrual bleeding in England and Wales
- Trine S. Karlsson, Lena B. Marions, Måns G. Edlund in 2014 Heavy menstrual bleeding significantly effects the quality of life in jounal ACTA obstetricia et Gynecologica published on january 2014 vol:93 page no: 52-57.
- 4. Sergio simoes de souza, Aroldo F. Camargos, Marcia cristina Franca Ferreira, Franscisco de Assis Nunes Pereira, Carolina Passos de Rezende, Cicero Augusto Alves Arauj, Agnaldo Lopes Silva Filho in 2010: haemoglobin levels predict quality of life in women with heavy menstrual bleeding. Published on may 2010; 281(5): 895-900.
- Bushell.DM, Martin ML, Moore KA, Richter HE, Rubin A, Patrick DL. in 2010 : Menorrhagia impact questionnaire; assessing the influence of heavy menstrual bleeding on quality of life. Published in 2010 december; 26 (12): 2745- 2755.
- Pirkko Peuranpaa., Satu Heli Ovaara-Peippol, Ian Fraser2, Jorma Paavonen3 and Ritva Hurskainen1 in 2014: Effects of anemia and iron deficiency on quality of life in women with heavy menstrual bleeding. 2014; (93): 654-660.
- Niiket Paksoy Erbay Dar Nazmi Bilir, Lütfiye Hilal Özcebe, Songül Vaizo lu, Dilek Asla in 2011: evaluation of health related quality of life of women living in turkey. Published in 2011; 41 (2): 307-316.
- Suar caki kilic, Nazan Sarper, Emine Zengin, Sema Aylan Gelen in 2013: screening bleeding disorders in adolscents and young women with menorrhagia. Published in 2013; (30); 168-176.
- Isabelle Gote, Philip Jacobs, Dphil, CMA, And David Cumming, Mbchb in 2014: work loss associated with increased menstrual loss in the US. Published in October 2010 vol .100 No.4 (683-687).