

## To Assess the Effectiveness of Planned Teaching on Knowledge Regarding Prevention of Hemorrhoids Among General Population

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### Abstract

**Background:** Hemorrhoids, also called as piles are masses or clumps of tissues which consist of muscle and elastic fibres with enlarged, bulging blood vessels and surrounding supporting tissues present in the anal canal of an individual. It is a condition characterized by the prolapsed of an anal cushion that may result in bleeding and pain.<sup>1</sup> **Objectives:** 1. To assess the knowledge regarding prevention of hemorrhoids. 2. To assess the effectiveness of planned teaching on knowledge regarding prevention of hemorrhoids. 3. To associate the findings with demographic variables. **Material and Methods:** Total 60 people, male and female were included in this study. Data regarding demographic and knowledge regarding prevention of hemorrhoids was collected based on planned teaching on knowledge regarding prevention of hemorrhoids. **Results:** There was a significant difference between pre-test and post test knowledge scores interpreting planned teaching on knowledge regarding prevention of hemorrhoids. Mean value of pre-test is 3.87 and post test is 15.55 and a standard deviation value of pre-test is 1.420 and post test is 2.715. The paired t test value is 0.214 and *p* value is 0.101. Hence it is statistically interpreted that the planned teaching on knowledge regarding prevention of hemorrhoids is effective. Hence, the findings of this study reveal that the research hypothesis ( $H_1$ ) is accepted and the null hypothesis ( $H_0$ ) is rejected. **Conclusion:** The actual cause of hemorrhoids remains unknown. But it is proposed to be caused by temperament, body habits, customs, passions, sedentary life, tight-laced clothes and climate. Patients with spinal cord injuries constipation, chronic diarrhoea, poor bathroom habits, postponing bowel movements, and a poor-fibre diet are also considered to be contributing causes. Imparting knowledge regarding hemorrhoids help them to live quality of life and to take preventive measures to avoid its complications.

**Keywords:** Hemorrhoids; Prevention; Knowledge; Planned teaching and General population.

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### Introduction

Hemorrhoids, also called as piles are masses or clumps of tissues which consist of muscle and elastic fibres with enlarged, bulging blood vessels and surrounding supporting tissues present in the anal canal of an individual. It is a condition characterized by the prolapsed of an anal cushion that may result in bleeding and pain. This condition is a common ailment among the adults. More than the men and women aged 50 years will experience hemorrhoid symptoms at least

once during their lifetime. However, there have been incidences where children and the elderly have also been diagnosed with this condition. Hemorrhoid disease is said to be the fourth leading outpatient gastrointestinal diagnosis, accounting for 3.3 million ambulatory care visits in the United States. Although so common, only around 4% seek medical help.<sup>1</sup>

The actual cause of hemorrhoids remains unknown. But it is proposed to be caused by temperament, body habits, customs, passions, sedentary life, tight-laced clothes, climate. Patients with spinal cord injuries constipation, chronic diarrhoea, poor bathroom habits, postponing bowel movements, and a poor-fibre diet are also considered to be contributing causes. Other causes that have been attributed to this condition are genetic predisposition, increased intra-abdominal pressure from many causes, including prolonged forceful Valsalva defecation, obstruction of venous outflow secondary to pregnancy, and constipated stool in the rectal ampulla. Increased body mass index is also considered to be one of the contributing factors.<sup>2</sup>

Although the treatment for hemorrhoids is usually surgery and endoscopic therapy for the symptomatic hemorrhoids, most patients are thought to self-treat with over-the-counter therapy. As a result, the actual burden of the disease remains unknown. Hence the purpose behind this study is to gain knowledge regarding prevention of hemorrhoids.<sup>3</sup>

Worldwide, the prevalence of symptomatic hemorrhoids is estimated at 4.4% in the general population. In the United States, up to one third of the 10 million people with hemorrhoids seek medical treatment, resulting in 1.5 million related prescriptions per year (Jan 18, 2017). As to reduce the prevalence rate of hemorrhoids and to prevent occurrence of hemorrhoids there is need for this study.<sup>4</sup>

## Materials and Methods

The aim of the study is to assess the effectiveness of planned teaching on knowledge regarding prevention of hemorrhoids among general population.

**Ethical consideration:** The study was carried out after obtaining permission from the Institutional Ethics Committee (IEC), Datta Meghe institute of medical sciences (Deemed to be university) Sawangi (Meghe), Wardha.

Interventional study with one group pre-test post test design. A total of 60 samples were selected including male and female among general population from Wardha City, Maharashtra. Non-probability convenient sampling technique was used for selection of sample. The study was conducted in the month of feb 2018-19. Pre-test was conducted using a self-administered questionnaire with introduction of planned teaching and post test was conducted after seven days.

The subjects were explained about the nature and purpose of study. A written consent was obtained from the participants prior to their recruitment in the study and permission was granted from the Grampanchayat of area Sawangi Meghe, Wardha for conducting the study. They were assured about the confidentiality of the data.

## Objectives

1. To assess the knowledge regarding prevention of hemorrhoids.
2. To assess the effectiveness of planned teaching on knowledge regarding prevention of hemorrhoids.
3. To associate the post test knowledge with demographic variables.

## Results

**Table 1:** Distribution of General People of Study Population According to their Demographic Characteristics n = 60

| Demographic variables | Frequency | Percentage [%] |
|-----------------------|-----------|----------------|
| 1. Age in years:-     |           |                |
| a. 20-30 Years        | 16        | 26.66%         |
| b. 30-40 Years        | 21        | 35.00%         |
| c. 40-50 Years        | 13        | 21.66%         |
| d. 50-60 Years        | 10        | 16.66%         |
| 2. Gender:-           |           |                |
| a. Male               | 30        | 50.00%         |
| b. Female             | 30        | 50.00%         |
| 3. Education:-        |           |                |
| a. Illiterate         | 12        | 20.00%         |
| b. Secondary          | 29        | 48.33%         |
| c. Higher Secondary   | 16        | 26.66%         |
| d. Graduate           | 03        | 05.00%         |
| 4. Occupation:-       |           |                |
| a. Private job        | 19        | 31.66%         |
| b. Farmer             | 14        | 23.33%         |
| c. Government job     | 14        | 23.33%         |
| d. Other              | 13        | 21.66%         |
| 5. Diet Pattern:-     |           |                |
| a. Vegetarian         | 18        | 30.00%         |
| b. Non - vegetarian   | 10        | 16.66%         |
| c. Mixed diet         | 32        | 53.33%         |

**Table 2:** Pretest Knowledge Score

n = 60

| Sr. No. | Level of Knowledge | Score range | Percent range of score | frequency | Percentage |
|---------|--------------------|-------------|------------------------|-----------|------------|
| 1.      | Poor               | 1-5         | 0-25                   | 51        | 85%        |
| 2.      | Good               | 6-10        | 26-50                  | 09        | 15%        |
| 3.      | Very Good          | 11-15       | 51-75                  | 00        | 00%        |
| 4.      | Excellent          | 16-20       | 76-100                 | 00        | 00%        |

**Table 3:** Effectiveness of Planned Teaching on Knowledge Regarding Prevention of Hemorrhoids Among General Population

n = 60

| Test       | Mean  | SD    | Paired 't' test | Df | p- value | Significant  |
|------------|-------|-------|-----------------|----|----------|--------------|
| Pre- test  | 3.87  | 1.420 |                 |    |          |              |
| Post- test | 15.55 | 2.715 | 0.214           | 59 | 0.101    | 0.101 > 0.05 |

df= n-1, 60-1= 59

The table 1 shows that 26.66% of people were in age group of 20–30 years, 35.00% of people were in age group of 30–40 years, 26.66% of people were in age group of 40–50 years and 26.66% of people were in age group of 50–60 years respectively. As per gender 50.00% subjects were males and 50.00% were females. 20% people were illiterate, 48.33% people were with secondary education, 26.66% people were with higher secondary education and 5% people were graduates respectively. 31.66% people were having Private Job, 23.33% people were Farmer, 23.33% people were having Government job and 21.66% people were having other jobs respectively. 30% people were vegetarian, 16.66% people were non-vegetarian and 53.33% people were taking mixed diet.

The Table 2 shows that, 85% of the people have poor knowledge and information about hemorrhoids. 15% of the people have good knowledge and information about hemorrhoids. No one comes under very good and excellent level of knowledge category.

The table 3 shows that Mean value of pre-test is 3.87 and post test is 15.55 and a standard deviation value of pre-test is 1.420 and post test is 2.715. The paired t test value is 0.214 and *p* value is 0.101. Hence it is statistically interpreted that the planned teaching on knowledge regarding prevention of hemorrhoids was effective.

## Discussion

This study was supported by the studies conducted worldwide.

Br Med J (Clin Res Ed) stated that one hundred and thirty seven previously untreated out-patients with first- and second-degree hemorrhoids were allocated at random to treatment by infrared

coagulation (n = 66) or rubber band ligation (n = 71). Complete follow up was obtained in 122 patients (60 who had undergone infrared coagulation (group 1), and 62 rubber band ligations (group 2)) at periods from three months to one year after completion of treatment. Infrared coagulation produced a satisfactory outcome in 51 patients (85%): 34 were rendered asymptomatic and 17 improved. Rubber band ligation produced a satisfactory outcome in 57 patients (92%): 33 were rendered asymptomatic and 24 improved. Both methods were equally effective in first and second-degree hemorrhoids.<sup>5</sup>

The incidence of side effects, particularly discomfort, during and after treatment was significantly higher in those treated by rubber band ligation (*p* less than 0.001). This appeared to be an appreciable deterrent to future patient compliance. The number of patients losing more than 24 hours from work was higher after rubber band ligation than after infrared coagulation. The number of treatments necessary to cure symptoms did not differ significantly between the two methods. Infrared coagulation was significantly faster than rubber band ligation (*p* less than 0.001). Infrared coagulation is a simple, fast, and effective outpatient method for the treatment of first- and second-degree hemorrhoids with fewer troublesome side effects and higher patient acceptability than rubber band ligation.<sup>6</sup>

## Conclusion

The aim of the study was to assess the effectiveness of planned teaching on knowledge regarding prevention of hemorrhoids; with the help of this study awareness can be spread regarding hemorrhoids and its prevention strategies. People will be aware regarding the cause of hemorrhoids and they can take measures to prevent it.

**Interest of conflict:** None declared

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