

Effectiveness of Black Cumin Water in Involution of Uterus among Post Natal Mothers in Selected Maternity Center at Coimbatore

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Abstract: A quasi - experimental study (Two group pretest - posttest) was performed to assess the effectiveness of black cumin water in involution of uterus among post - natal mothers in selected Maternity center at Coimbatore. Thirty samples were selected using convenient sampling technique. Experimental group received black cumin water for 30 ml thrice a day for three days from the date of delivery and Control group didn't receive any intervention. The data were obtained and analyzed using descriptive and inferential statistics. The study concluded that black cumin water was effective in involution of uterus. The pretest mean value of experimental group is 18.6 and the posttest Fundal mean value is 13.2 likewise in the control group the pretest mean value is 17.7 and the posttest mean value is measured about 15.8. This shows that highly significant in experimental group with the calculated t value of 10.88.

Keywords: Black cumin water, Uterine involution, Postnatal care, Maternal health, Quasi - experimental study

1. Introduction

The uterus is to be centralized and with a measuring tape, the Fundal height is measured above the symphysis pubis. Following delivery, the fundus lies about 13.5 cm (5 1/2 inches) above the symphysis pubis. During the first 24 hours the level remains constant; thereafter there is a steady decrease in height 1.25 cm (1/2 inches) in 24 hour so that by the end of 2nd week the uterus becomes a pelvic organ. The rate of involution there after slows down until by 6 weeks, the uterus becomes almost normal

Black cumin (*Nigella sativa*) is a flowering plant found throughout India, Arabia, and Europe. Black Cumin, are used in cooking and in traditional medicine for inflammation, infection, and cancer. Constituents from *Nigella sativa* demonstrated immune modulatory, antioxidant, antiparasitic and hepatoprotective effects in vitro and in animal studies. *Nigella sativa* seed may be useful in the treatment of asthma, hypertension, rheumatoid arthritis, dyspepsia and diabetes in humans. Thymoquinone, a major constituent of *Nigella sativa*, exhibited anti - epileptic effects in children with refractory seizures.

Need for study

The usual involution of uterus immediately in postnatal period is very poor when compared to book picture. This requires some interventions to improve the rate of involution or uterus.

Present findings showed that the maximum of S - FD immediately after delivery was 22 cm and the minimum of it was 13 cm so its average was 16.81 cm. In the studied population, the first day that S - FD became zero, it was 11 days after delivery and the average daily decrease of S - FD was 0.8 cm

Modern research has gathered evidence that the Prophetic reference on the Black Cumin seeds ability to cure the very disease is not an exaggeration. *Nigella sativa* seed may be useful in the treatment of Sub involution

2. Review of Literature

Literature review related to involution of uterus

Sangestani Gita and Bashirian Saeed They have done the descriptive study in order to find out the normal pattern of the uterine in primiparous women and find out the prevalence reasons of uterine sub involution in selected hospitals at Kanyakumari district in Tamil nadu. The sampling method was presented in these study was convenient sampling. The selected 60 samples were grouped into 30 experimental and 30 control groups. Then they used centimetre ribbon to identify the fundal height. Finally they had concluded present findings showed that the maximum S - FD immediately after delivery was 22 cm and the minimum of it is 13 cm so its average was 16.81 cm. In the studied population, the first day that the S - FD becomes zero, it was 11 day after delivery and the average daily decrease only S - FD was 0.8 cm and not 1.25 like in the book picture.

Literature review related to black cumin

Pandey and Raghuvanshi (1992) P&R conducted drug trial to assess the Effect of herbal feed additives on performance parameter of ruminance and especially on dairy goat on 60 cows and 10 buffaloes which were divided randomly into 5 groups with equal number in each group including cows and buffaloes, out of those 5 group, 4 group were experimental and one served as control. Experimental groups were separately dosed with PEPLANTA powder, REPLANTA liquid uterotone liquid and cleansing drench containing ergot immediately after parturition and observations recorded. The cows and buffaloes treated with REPLANTA powder and REPLANTA liquid came yearly in first heat after calving and reproductive cycle was found to be more regularized as compared to other drugs tested. REPLANTA treated animals come to heat second time also. Paul et al., (1995), evaluated the efficacy of Replanta treatment on placental expulsion, lochial cessation, uterine involution and post partum oestrus in Murrah buffaloes. In all, 92 % of buffaloes of Replanta treated group expelled their foetal membranes with in a mean

duration of 6.30 \pm 0.51 hours as compared to 84% buffaloes of control group within 7.38 \pm 0.64 hour of parturition. Significantly earlier ($p < 0.05$) cessation of lochial and uterine involution was observed in Replanta treated group than the untreated controlled group of buffaloes. 88% buffaloes of Replanta treated group expressed 1st post partum report and opinion, 2011: 3: (10) oestrus with a mean duration of 78.23 \pm 3.50 days as compared to 80% of control group within 87.00 \pm 4.92 days post partum

Objectives

- 1) To assess the degree of fundal height among post natal mothers.
- 2) To prepare and administer black cumin water to post natal mothers.
- 3) To assess the effectiveness of black cumin water in experimental group.
- 4) To compare the involution of uterus in experimental group and control Group

In post test

Hypothesis

H1 – There is significant increasing in involution of uterus in experimental group after intervention

H2 – There is significant difference of uterine involution between experimental and control group after intervention.

Research design

Two group pre test post test, which is quasi experimental in nature, is adopted for conducting the study.

Group	Pre test	Intervention	Post test
Experimental Group	X1	X	X2
Control Group	Y1	-	Y2

Variables

- **Independent variable:** Black cumin water
- **Dependent variable:** Level of uterine involution among post natal mothers.
- **Attribute variable:** Age, sex, cultural background of mothers.

Research Setting

- **Site;** Primary health centers in Coimbatore was chosen to conduct the study

- **Setting;** Irugur & Vagarampalayam.

Population and Sampling

Population

- **Target population:** Postnatal multi Para mother from 25 to 35 years of age
- **Accessible population:** Postnatal multi Para mothers who are delivering the baby in PHC

Sample

Postnatal multi Para mothers who are delivering the baby in Irugur & Vagarayampalayam PHC

Sample Size

30 samples were selected to conduct the study fifteen samples were in the experimental groups and fifteen samples were in the in control group.

Sampling Technique

Convenient sampling technique was adopted for this study

Sampling Criteria

Inclusion criteria

- Multi Para mothers
- Age is limited between 25 - 35 yrs.

Exclusion criteria

- Multi Para mothers with L. S. C. S
- Any Complications during labour
- Multi Para mothers with P. S

Development of the Tool

Tool I: Demographic profile of the postnatal multi Para mothers.

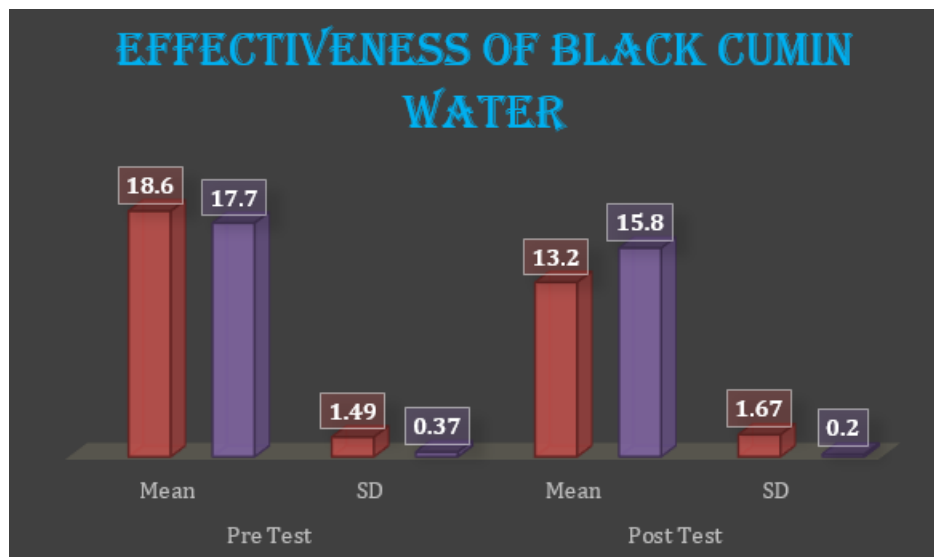
Tool II: To Assess the Fundal height with inch tape.

Inferential statistics

Paired 't' test – to find out the significance of difference between pre and post test scores.

3. Result

S. No	Group	Pre Test		Post Test		calculated 't' value	T value
		Mean	SD	Mean	SD		
1	Experimental Group	18.6	1.49	13.2	1.67	10.38*	2.31
2	Control Group	17.7	0.37	15.8	0.2	0.52	



The study concluded that black cumin water was effective in involution of uterus. The pre test mean value of experimental group is 18.6 and the post test Fundal mean value is 13.2 likewise in the control group the pretest mean value is 17.7 and the post test mean value is measured about 15.8. This shows that highly significant in experimental group with the calculated t value of 10.88*

4. Recommendations

- This study can be followed up for longer period to find out the long term effect of black cumin water in involution of uterus.
- A comprehensive study can be conducted in two types of different home remedies for the same problem.
- Similarly this study can be done for large samples.

5. Conclusion

The study highlights that most of the postnatal mothers not in taking Black cumin water for the treatment of involution and if they have given demonstration About Black cumin water their awareness would improve, so that the mothers will practice intake of black cumin water regularly and which will be helpful on reduction of involution of uterus also it has anti cancer properties and many other health benefits the mother will have. This study review showed that black cumin water was most effective method for increment of uterine involution

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