

Genjer Extract As An Alternative Preventing Constipation In Pregnancy

Rusmiati¹, Titin Eka Sugiadini²

^{1,2}Abdi Nusantara College of Health Sciences

Email. Rusmiatiriza123@gmail.com

ABSTRACT

Background : Constipation is a problem that is always disturbing in pregnant women, in general trimester pregnant women 3. Constipation is a difficult condition or unable to defecate, hard stool, a sense of defecation is not complete (there is a sense of wanting to defecate but unable to remove it) accompanied by complaints of the stomach feeling full and bloating. If this problem is left alone it will have an impact on the process of childbirth and childbirth.

Objectives : The purpose of this study can be seen the effect of giving genjer extract as an alternative to prevent constipation during pregnancy at PMB Rusmiati Karang Tengah Tarumajaya

Research Methods : This research design uses the quasi-experimental study method with pretest-posttest with control group design with a total of 32 respondents. The technique used in this study is a saturated sample.

Results : The results of the study were found that after consuming the genjer extract of pregnant women who experience constipation into non-constipation it is shown in the occurrence of chapters for 2 weeks in pregnant women to normal.

Conclusion : There is an effectiveness of the effect of providing genjer extract consumption as an alternative to prevent constipation during pregnancy.

Keywords: Pregnancy, Genjer Extract and Constipation

INTRODUCTION

Pregnancy is defined as fertilization or union of spermatozoa and ovum then followed by nidation or implantation. Growth and development of the intra uterine fetus starts from conception and ends until the onset of labor (Prawirohardjo, 2010).

Pregnant women need adequate nutrition for themselves and their babies. Pregnant women who experience nutritional deficiencies will cause abnormalities in the fetus they contain. Overnourished pregnant women are also not good for growth. her baby (Istiany, 2013).

In Indonesia, more than 2.5 million people have complaints of frequent constipation, so that the prevalence reaches around 2%. Constipation is estimated to cause 2.5 million sufferers to visit the doctor each year. About 4-30% of cases of constipation suffered by pregnant women, it turns out that pregnant women complain of difficulty having a bowel movement. In pregnancy 10-40% of pregnant women have experienced constipation. 29.6% of pregnant women experience constipation in the first trimester, 19% in the second trimester, and 21.8% in the third trimester (Sulistiyowati, 2016)

Constipation is a condition characterized by changes in the consistency of stools that become hard, large in size, decrease in frequency or difficulty defecating. Constipation is often characterized by symptoms of anxiety when defecating because of pain during defecation. Constipation can cause severe stress for sufferers due to discomfort if not

Genjer Extract As An Alternative Preventing Constipation In Pregnancy

treated immediately hemorrhoids can occur (Ardhiyanti Y, 2017). Pregnancy is the result of the conception of the sperm and egg. In the process, the sperm travels to meet the egg (ovum). Of the approximately 20-40 million sperm released, only a few survive and succeed and make it to the egg cell. Of that amount, only 1 sperm can fertilize an egg. Pregnancy is defined as fertilization or union of spermatozoa and ovum followed by nidation or implantation. If calculated from the time of fertilization until the birth of the baby, a normal pregnancy will take place within 40 weeks or 10 months or 9 months according to the international calendar (Walyani, 2015).

Constipation is a disorder in pregnancy that attacks the digestive system. Women who experienced constipation before pregnancy may find this condition to be more problematic when they become pregnant. This is also a common nutritional problem in pregnancy. Constipation causes a feeling of bloating and fullness and loss of appetite. (Kurnia and Devi Tri, 2017).

Constipation or constipation is a condition in which the secretion of the rest of the body's nutritional metabolism in the form of feces becomes hard and causes difficulty during defecation (Irianti, 2014). According to Sulistiyowati (2016), constipation is caused by decreased intestinal motility so that it takes a long time to absorb intestinal fluids due to pressure from the enlarged uterus.

Complaints that often arise in pregnant women related to elimination are constipation and frequent urination. Constipation occurs due to the influence of the hormone progesterone which has a relaxing effect on smooth muscles, one of which is the intestinal muscle. Constipation can occur mechanically caused by decreased movement of pregnant women, to overcome constipation it is recommended to increase movement, eat lots of fibrous foods (vegetables and fruits) (Walyani, 2017).

In pregnant women, food residue that cannot be digested by the digestive tract will enter the large intestine (colon) as an incompressible and wet mass. Here, the excess water in the leftovers is absorbed by the body. Then, the mass moves to the rectum (rectum), which normally encourages peristalsis of the large intestine. Excretion of feces normally occurs once or twice every 24 hours. Constipation can occur mechanically due to decreased movement of pregnant women to treat constipation (Walyani, 2017).

In addition, intestinal pressure by the enlarged fetus also causes increased constipation. Preventive measures that can be taken are to eat high-fiber foods and drink lots of water, especially when the stomach is empty. Drinking warm water when the stomach is empty can stimulate intestinal peristalsis. If the mother has experienced urge, then immediately defecate so that constipation does not occur. (Walyani, 2017).

Therefore, efforts that need attention are for mothers to understand the importance of consuming Fe Tablets properly to minimize the incidence of constipation due to wrong consumption methods. Errors in the method of consumption occur because the administration of Fe Tablets is not accompanied by an explanation regarding the correct way to consume Fe Tablets. The wrong way to consume Fe Tablets in pregnant women is in the form of wrong timing of Fe Tablet consumption which should be consumed every day but due to nausea and vomiting, Fe Tablets are only consumed once every two or three days.

Not only calcium, but it turns out that genjer for pregnant women also has other good content in the form of phosphorus. When combined with calcium, phosphorus is a substance that is good for bone health. In every 100 grams of genjer there are about 33 mg of phosphorus.

Pregnant women often experience digestive problems. This is because the growing baby in the womb will press on the mother's stomach so that digestion can be disrupted. Genjer vegetables for pregnant women contain a lot of fiber which is good for dealing with various types of digestive problems for pregnant women so that digestion can return smoothly. Not only that, genjer can be used to treat constipation

RESEARCH METHODS

The research design used a quasi-experimental study with a pretest-posttest with control group design.

The number of population and samples in this study amounted to 32 pregnant women, the sampling technique *wassaturated sample*.The method in this research isuivariate analysis using frequency distribution and bivariate analysis and T test using statistical calculations.

RESEARCH RESULT

Table 1. Distribution of Respondent Characteristics

Variables		F(n = 32)	%
Age	21-24	8	25
	25-28	14	43.75
	29-33	6	18.75
	34-41	4	12.50
Profession	Private	7	21.88
	IRT	16	50.00
	Businessman	9	28,13

Source: Premier Data for 2022

Based on table 5.1 above, it can be seen that there are 8 people aged 21-24 years or as much as (25%). Mothers aged 25-28 years were 14 people (43.75%), aged 29-33 years were 6 people (18.75%) and aged 34-41 years were 4 people (12.50%). Based on table 5.1 it can also be seen that the work is 16 IRT people (50.00%), 7 private people (21.88%) and 9 entrepreneurs (28.13%) at PMB Rusmiati, Tarumajaya District, Bekasi Regency.

Table 2. Distribution of constipation during pregnancy in the intervention group and the control group at PMB Rusmiati before consuming Extra Genjer

Category	Intervention Method	%	Control Method	%	Total
	N : 16 people		N : 16 people		32 people
Constipation	8	50	7	43.75	
No Constipation	8	50	9	56,25	
Total	16 People	100 %	16 people	100%	32/100 %

Source: Premier Data 2022

Genjer Extract As An Alternative Preventing Constipation In Pregnancy

Based on Table 5.2, there were 16 respondents in the intervention group with constipation category results, namely 8 people (50%), and 8 people (50%) not constipated and in the control group, 16 respondents with constipation category results, namely 7 people (43.75%), and 9 people (56.25%) did not have constipation after consuming extra genjer at PMB Rusmiati.

Table 3. Distribution of constipation during pregnancy in the intervention group and the control group at PMB Rusmiati after consuming extra Genjer

Category	Intervention Method	%	Control Method	%	Total
	N : 16 people		N : 16 people		32 people
Constipation	3	18.75	5	31.25	
No Constipation	13	81.25	11	68.75	
Total	16 People	100%	16 people	100%	32/100%

Source: Premier Data 2022

Based on Table 5.3, in the intervention group of 16 respondents with the results of the constipation category, there were 3 people (18.75%), and 13 people (81.25%) were not constipated and in the control group of 16 respondents with the results of the constipation category, namely as many as 5 people (31.25%), and 11 people (68.75%) did not have constipation after consuming extra genjer at PMB Rusmiati.

Table 4 Normality Test

Method	N	Average SD±	P-value	Conclusion
Intervention	16	10.50 1.21±	0.291	Normal
Control	16	13.18 1.55±	0.306	Normal

Source: Primary Data, 2022

Based on Table 5.4, the average result in the intervention group after being given extra genjer for constipation was 10.50 with a standard deviation of 1.21 while in the non-intervention group (control) the average constipation was obtained, namely 13.18 with a standard deviation 1.55.

Table 5. Hypothesis Test Results
t-Test: Two-Sample Assuming Equal Variances

	<i>CONTROL</i>	<i>INTERVENTION</i>
Means	10.5	11.31
Variances	26,93333333	0.348380952
Observations	16	16
Pooled Variance	20.74791667	
Hypothesized Mean Difference	0	

Df	30	<- DF / DEGREES OF FREEDOM
t Stats	-1.668807408	<- COUNTABLE T VALUE
P(T<=t) one-tailed	0.05278035	P VALUE IF IN SPSS
t Critical one-tail	1.697260887	T TABLE VALUES
P(T<=t) two-tailed	0.105560699	P VALUE IF IN SPSS
t Critical two-tail	2.042272456	T TABLE VALUES

IF THE P VALUE IS LESS THAN 0.05 THEN THE HYPOTHESIS IS SIGNIFICANT

Table 5.6 presents the results of the paired t-test conducted in the control group. The results obtained were the mean pre test of 10.75 and the post test of 10.50 so that the mean difference was 0.25 (10.75-10.50) and Pvalue = 0.306 ($P > \alpha$) so it was concluded that there was no significant difference in constipation during pregnancy at PMB Rusmiati in the control group. In the experimental group, the results obtained were the mean pre test of 12.18 and the mean post test of 13.18 so it can be concluded that the mean difference is 1 (13.39 - 112.81) and Pvalue = 0.291 ($P < \alpha$), so it can be concluded that there is an effective genjer extract as an alternative to preventing constipation during pregnancy in the PMB Rusmiati experimental group

DISCUSSION

1. Age

The results showed that of the 32 respondents, most of them were between the ages of 21-24 years, totaling 8 people or as much (25%). Mothers aged 25-28 years were 14 people (43.75%), aged 29-33 years were 6 people (18.75%) and aged 34-41 years were 4 people (12.50%). You can also see the work, namely 16 IRT people (50.00%), 7 private people (21.88%) and 9 entrepreneurs (28.13%) at PMB Rusmiati, Tarumajaya District, Bekasi Regency

According to Nursalam (2018)A person's ability can be measured by age, the more mature the age, the more able to think and work. Age affects a person's comprehension and mindset. The older a person is, the more his comprehension and mindset will develop so that the knowledge obtained will improve. (Budiman & Riyanto, 2013).

2. Profession

The results showed that the majority of the 32 respondents worked as IRT, namely 16 people (50%), private 7 people (21.88%) and entrepreneurs 9 people (28.13%) at PMB Rusmiati, Tarumajaya District, Bekasi Regency.

The work environment can make a person gain experience and knowledge both directly and indirectly, therefore work is one of the factors that influence knowledge. The threat posed by anemia to the fetus is the risk of intrauterine death, the risk of abortion, low birth weight, the risk of congenital defects, increased risk of infection in the baby to perinatal death, or low infant intelligence (Pratami, 2016).

3. Univariate analysis

From the results of the study in the intervention group of 16 respondents with the results of the constipation category, namely as many as 8 people (50%), and not constipated, 8 people (50%) and in the control group, of 16 respondents with the

Genjer Extract As An Alternative Preventing Constipation In Pregnancy

results of the constipation category, namely as many as 7 people (43.75%), and 9 people (56.25%) did not have constipation after consuming extra genjer at PMB Rusmiati. This shows that there is extra effectiveness in preventing constipation in pregnant women at PMB Rusmiati.

Constipation occurs due to increased production of progesterone which causes smooth muscle tone to decrease, including in the digestive system, so that the digestive system becomes slow. Decreased smooth muscle motility can cause increased absorption of water in the large intestine so that the stool becomes hard. In addition, constipation occurs due to the mother's lack of activity, low fluid and fiber intake can also be a factor in constipation (Irianti, 2014).

In accordance with research conducted by Mu'alimah in (2019) regularity in consuming Fe tablets and lack of fluid intake is closely related to the incidence of constipation in pregnant women. So the results of the study showed that the average result in the intervention group after being given extra genjer for constipation was 0.563 with a standard deviation of 1.21 while in the non-intervention group (control) the average constipation was obtained, namely 1.50 with a standard deviation of 1.55. This indicates that the effect of consuming genjer extract in pregnant women can prevent constipation.

4. Bivariate Analysis

From the results of the study it was found that the intervention group of 16 respondents with the results of the constipation category were as many as 3 people (18.75%), and 13 people (81.25%) were not constipated and in the control group of 16 respondents with the results of the constipation category, namely as many as 5 people (31.25%), and 11 people (68.75%) did not have constipation after consuming extra genjer at PMB Rusmiati. The average result in the intervention group after being given extra genjer for constipation was 0.563 with a standard deviation of 1.21, while in the non-intervention group (control) the average constipation was 1.50 with a standard deviation of 1.55. Based on these results it can be concluded that there is an effect of extra genjer consumption on reducing levels of constipation in pregnant women.

Pregnant women often experience digestive problems. This is because the growing baby in the womb will press on the mother's stomach so that digestion can be disrupted. Genjer vegetables for pregnant women contain a lot of fiber which is good for dealing with various types of digestive problems for pregnant women so that digestion can return smoothly. Genjer is also known as a type of vegetable that can be used to increase appetite.

CONCLUSION

Based on the results of research on genjer extract as an alternative to preventing constipation during pregnancy at PMB Rusmiati in 2022 it can be concluded that:

In the experimental group, the results obtained were the mean pre test of 12.18 and the mean post test of 13.18 so it can be concluded that the mean difference is 1 (13.39 - 12.18) and Pvalue = 0.291 ($P < \alpha$), so it can be concluded that there is effectiveness the effect of consuming genjer extract as an alternative to preventing constipation during pregnancy

Genjer extract has many benefits for pregnant women because it has a lot of fiber content which is good for dealing with various types of digestive problems for pregnant women so that digestion can return smoothly and can be used to treat constipation and

constipation in pregnant women, it can be proven in this study that after consuming genjer extract, mothers no longer experience constipation .

There were differences in the levels of defecation in pregnant women before and after consuming genjer extract, the results showed that after consuming genjer extract, pregnant women who experienced constipation became constipated, this was shown in the occurrence of defecation for 2 weeks in pregnant women to become normal.

BIBLIOGRAPHY

Astria, Willy.2017.Kejadian Anemia pada Ibu Hamil Ditinjau dari Paritas dan Usia.*Jurnal Ilmu Kesehatan*.

Ardhiyanti Yulrina., 2017, *Hubungan Konsumsi Buah Pepaya dengan Kejadian Konstipasi pada Ibu Hamil di Puskesmas Rumbai Pesisir Pekanbaru*, Jurnal Martenit and Neonatal

Astutik, Y.R.2018. *Anemia dalam Kehamilan*.Kediri . Pustaka Abadi

AuthorScientific.(2018).<https://hamil.co.id/nutrisi-ibu-hamil/makanan-sehat/genjer-bagi-ibu-hamil>Redaksi Hamil.co.id.

Depkes RI. (2010). Riset Kesehatan Dasar (Riskesdas). Diperoleh tanggal 18 Februari 2014 dari <http://www.litbang.depkes.go.id>

Dinas Kesehatan Provinsi Kalimantan Selatan. (2018). Summary for Policymakers. In Intergovernmental Panel on Climate Change (Ed.), *Climate Change 2013 - The Physical Science Basis* (pp. 1–30). Cambridge University Press. <https://doi.org/10.1017/CBO9781107415324.004>

Hartiningtiyaswati, S.,Anggraini, Y. (2014). *Asuhan Kehamilan Berbasis bukti*. Jakarta: Sagungceto

Harsono T. (2013). *Permasalahan kehamilan yang sering terjadi*.Jakarta: Platinum

Hanim Busyra., 2019, *Analisis Penyebab Konstipasi pada Ibu Hamil di Wilayah Puskesmas Payung Sekaki Pekanbaru*, Health Care: Jurnal Kesehatan

Istiany, Ari dan Ruslianti. (2013). *Gizi Terapan*. PT Remaja Rosdakarya. Bandung.

Irianti, B., Halida, E.M., Huhita, F.,Prabandari, F., Yulita, N., Yulianti, N.

Jacob, A. M., Asadatun, A., & Rachmawati, R. (2010). Karakteristik mikroskopis dan komponen bioaktif tanaman genjer (*Limnocharis flava*) dari Situ Gede Bogor. *Jurnal Sumberdaya Perairan*, 4(2), 1–8. <https://doi.org/10.1558/jsrnc.v4il.24>

Kennedy CM, Turcea AM, Rao SSC, Nygaard IE. Constipation in pregnancy: prevalence, symptoms, and risk factors. *Obstetrics & Gynecology* 2007; 110: 1351

Manuaba, Ida Ayu Chandranita, dkk. 2013. *Ilmu Kebidanan Penyakit Kandungan dan KB*. Jakarta : EGC.

Prawirohardjo, Sarwono. 2013. *Ilmu Kebidanan*. Jakarta : PT Bina Pustaka.

Susanti, H. (2015). *Studi Etnobotani Sayuran Lokal Khas Rawa Di Pasar Martapura*

Sulistiyowati, dkk., 2016, *Upaya Penanganan Konstipasi pada Ibu Hamil Tri-mester III di Puskesmas Grogol Sukarjo*, Diploma thesis, Universitas Mu-hammadiyah Surakarta.

Sembiring., 2017, *Konstipasi pada Kehamilan*, Jurnal Ilmu Kedokteran 9.

Syam AF, Alwi I, SetiatiS, Mansjoer A, Ranita R. *Penyakit-penyakit pada kehamilan :peran*

Genjer Extract As An Alternative Preventing Constipation In Pregnancy

Seorang internis. Jakarta: Pusat Penerbitan Ilmu Penyakit Dalam FK UI.

Trottier M, Erebara A, Bozzo P. Treating constipation during pregnancy. *Can Fam Physician* 2012; 58(8): 836-8

Walyani, Elisabeth Siwi., 2017, *Asuhan Kebidanan pada kehamilan*, Yogyakarta: Pustaka Barupess.