
**The Effect of Traditional Herbs Medicine “Galohgor” on
Uterus Involution and Milk Production of Rats (*Rattus Sp.*)
Made in Sukajadi Village, Tamansari Subdistrict, Bogor, Indonesia*).**

Katrin Roosita¹⁾, Clara M. Kusharto¹⁾, Nastiti Kusumorini²⁾, Wasmen Manalu²⁾.

¹⁾ Lecturer of Community Nutrition and Family Resources Dept., Agricultural College, Bogor Agricultural Univ.

²⁾ Lecturer of Veterinary College, Bogor Agricultural Univ.

Abstract

The aims of the study is to investigate the effect of Jamu Postpartum on uterus involution and milk production after giving birth. The specific objectives are to study the effect of Jamu Postpartum on uterus involution and milk production on rats.

The Jamu was made from 57 kinds of material. All materials were obtained from the surrounding areas of Sukajadi village. The material can be grow wildly or cultivated by local farmers. The nutrient content of jamu was analyzed by Pajar (2002), it consisted of protein 12,06 % (w/w), fat 3,66 % (w/w), magnesium 0,1335 ppm, iron 68,5 ppm, zinc 76,3 ppm. The qualitative analysis of jamu showed that it also contained alkaloid, flavanoid, phenol, and triterpene .

Thirty-three (33) postpartum dams (female rats) were randomly selected on three groups i.e. 1. the lactation without jamu supplementation as control, 2. the lactation with jamu supplementation, and 3. the non-lactation without Jamu as reference group. Thereafter, the control group and “jamu” given groups were divided into five groups by day of lactation (3th, 5th, 7th, 14th, 21th and each groups consist of 3 dams), the reference group also contain 3 dams. Each dams was kept in different cages, at room temperature 22-23^oC, and with 12 hours light-dark cycle. They were fed ad libitum on a commercial rat chow and water .

Dose of “jamu” was given as recommended traditionally for nursing mothers at Sukajadi village. The “jamu” was given to the dams as much as 0.370 g/kg b.b by force feeding started from first to seven days of postpartum (day of lactation). The milk production and uterus weight were collected from the dams and the non-lactation dams on 3th, 5th, 7th, 14th, and 21th of lactation period.

Statistically the uterus involution of jamu-given dams groups were significantly faster than a control groups. The milk production of jamu-given dams groups were significantly higher than control groups on 7th day of lactation.

Keywords: Herbs Medicine, “Galohgor”, Uterus Involution, Milk Production

Background

The empirical study showed that Jamu “Galohgor” (made of from 56 kinds of Plant Medicine) potentially recovered a health status of

postpartum mothers and increase breast milk production. It is commonly consumed by more than seventy percent (70%) postpartum mothers in Sukajadi Village,

Tamansari Sub district, Bogor, Indonesia.

The nutrients content of *Jamu Galohgor* was identified by Pajar (2002), i.e. protein 12,06 % (w/w), fat 3,66 % (w/w), magnesium 0,1335 ppm, iron 68,5 ppm, and zinc 76,3 ppm. And contain bioactive compound, such as alkaloid, flavanoid, phenol, and triterpene. The nutrients and bioactive compound may influenced reproductive organ, such as uterus involution and increase milk production of postpartum mothers.

Objectives

The aims of this study are to observe the effect of *Jamu Galohgor* on uterus involution and milk production of Rat (*Rattus Sp.*).

Method

Thirty-three postpartum dams were allocated randomly on three different groups, 1) lactation without jamu (control), 2) lactation with jamu supplementation, and 3) non-lactation without jamu supplementation as (reference group). The lactation control groups and "jamu" supplementation groups were divided into five groups (according to day of lactation): 3rd, 5th, 7th, 14th, and 21st of lactation period (each group contained 3 dams). respectively. The reference group also contain 3 dams. Each dams was kept in different cages, at room temperature 22-23^oC, and with 12h light-dark cycle. They were fed *ad libitum* on a commercial rat chow and water. Dose of "jamu" 0.370 g/kg body weights by force-feeding started from first to seven days of postpartum (day of lactation). The milk production and uterus weight were collected from the dams on 3,5,7,14 and 21 of lactation period and non-lactation dams.

Result

The uterus involution of jamu-given dams groups were significantly ($p < 0,05$) faster than control groups. The photograph (Graph 1) showed the process of uterus involution on lactation with jamu supplementation dams groups on 3 (P3), 5 (P5) and 7 (P7) lactation day. Djukri (1984): uterus involution included thining the endometrium and myometrium. Graph 2 showed the uterus performance on 21st day lactation. The uterus performance of jamu supplementation dams groups at that time had already recovered and start for a new reproduction cycle. In contrast the control groups had not ready because the regenerating cell had not finished yet. The milk production of of jamu supplementation dams groups were significantly higher than control groups on 7-day of lactation ($p < 0.05$). The peak of milk production of jamu supplementation dams groups lactation is reached earlier than control groups (Graph 3).

Conclusion

The Effect of jamu Galohgor on Uterus Involution and Milk Production might be from Its bioactive compound and nutrient content.

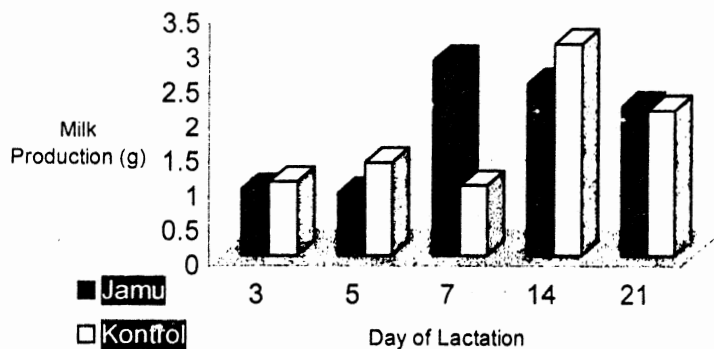
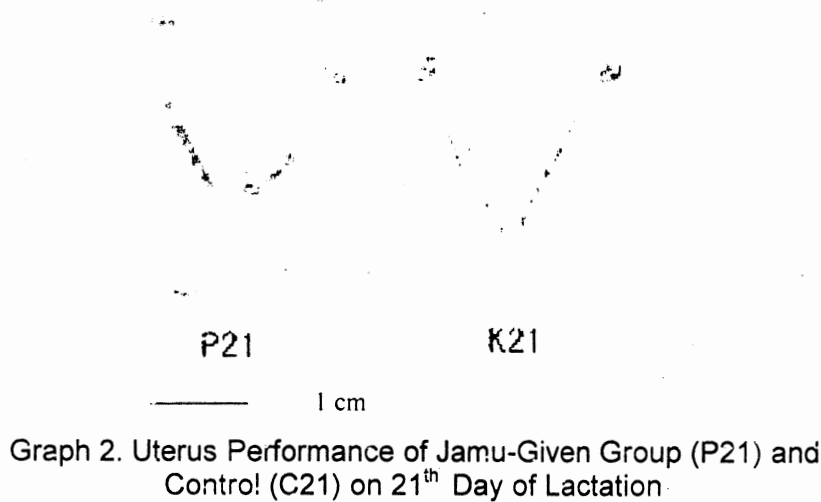
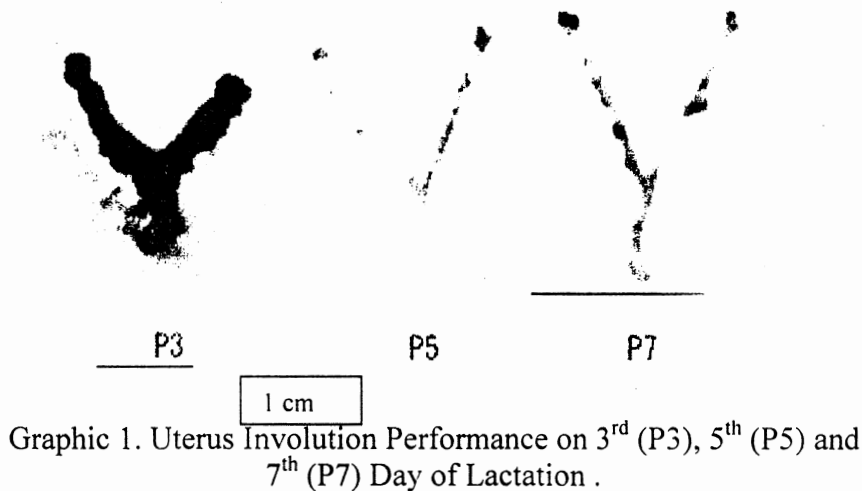
Recommendation

Need further investigation on the specific bioactive compound which giving effect on Uterus Involution and Milk Production and toxicity test.

Acknowledgement

Our sincere thanks to Prof. Ryutaro Ohtsuka and Ms. Makiko Sekiyama for their support and help. And special thank is refered to the Japan Society for Promotion Scientist (JSPS) for the opportunity given to the

first and second researcher to follow the scientist exchange program.



Graphic 3. Milk production (gram) of Jamu supplementation and control dams groups

Selected Reference

- Green, J.H. 1985. Basic Clinical Physiology. Third Edition. Oxford University Press. New York, Toronto.
- Team of Protocol Directive Screening of Pharmacodynamic Activity (Tim Penyusun Protokol Penapisan Terarah Aktivitas Farmakodinamika). 1993. Screening, Pharmacology, Phytochemistry Test, and Clinical Test (Penapisan, Farmakologi, Pengujian Fitokimia dan Pengujian Klinik). Yayasan Pengembangan Obat Bahan Alam Phyto Medica, Jakarta.
- Pajar. 2001. Nutrients Content and Bio-active Components of Traditional "Jamu" for Pregnant and Nursing Mothers (Home-made Jamu From Sukajadi Village, Sub District Tamansari, Bogor, West-Java). Abstract of Paper Seminar of Undergraduated Student in Department of Community Nutrition and Family Resources, Agriculture Fac. , Bogor Agricultural University (IPB). Bogor.