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The Effect of Consumption Ajwa Dates (Phoenix Dactylifera L.) on the Duration of the First Stage of Labor

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ABSTRACT

Background: Parturition is the process of expelling the products of conception that begins with the first stage of the process. The length of the first stage can be influenced by nutritional factors. Islam is a religion that also provides a solution by consuming Ajwa dates. Therefore, the researcher wants to write a scientific paper on "The Effect of Consumption Ajwa Dates to the First Stage of Labor".
Content: Consumption of Ajwa dates during early delivery may shorten the duration of first stage labor in pregnant women.
Conclusion: Ajwa dates (*Phoenix dactylifera L.*) have an indirect effect on uterine contractions as if increased of prostaglandin when we eat7 or 100 grams of Ajwa dates (based on Rasulullah's hadits) so the duration of the first-stage of labor in pregnant women who consume Ajwa dates is shorter than in pregnant women who do not consume them.

Keywords: Phoeniceae; Islam; Pregnant Women; Parturition

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Introduction

Labor or parturition is a process of expelling living products of conception from the uterus through the vagina to the outside world.(1) Normal labor is divided into four stages, namely the first stage, second stage, third stage, and fourth stage.(1) First stage Labor begins from the occurrence of uterine contractions and cervical dilatation until it reaches complete dilatation (10 cm). In this phase, adequate contractions (power) are needed to initiate labor. Weakening of uterine contractions or inadequate contractions is the cause of non-smooth labor.(2)

Based on this, the risk of Maternal Mortality Rate (MMR) can continue to increase if not addressed. According to Meiwita Budhiharsana, Chair of the Scientific Committee of the International Conference on Indonesia Family Planning and Reproductive Health (ICIFPRH), in *Info Singkat Puslit BKD,* until 2019 Indonesia's MMR is still high, at 305 per 100,000 live births.(3) The risk of prolonged labor or slow labor progress is the cause of death. mother.(3)

Clinical trials have been carried out by Nasiri M, et al in their 2019 article saying that the effects of dates on different pregnancy outcomes include labor pain, cervical dilation, duration of pregnancy, duration of various stages of labor (stage I, stage II, stage III, stage IV).), the rate of bleeding after delivery, and others.(4)

Based on the above background, the researcher wants to write a scientific paper in the form of a literature review on "The Effect of Giving Ajwa Dates to the First Stage of Labor".

Ajwa Dates

The biological name of the date comes from the fruit: phoenix (Greek) which means red or purple fruit and "dactylifera" which means "like a finger" because the fruit clusters are like human fingers.(5) Dates that grow in Saudi Arabia and are famous from the words of the Prophet Muhammad which reads: "Whoever eats 7 Ajwa dates between two sandy soils of Medina in the morning, the poison will not harm until the evening." (Sahih Muslim No. 3813).(6) The nutritional content of dates depends on the variety of dates and their water content. Generally contain the following substances sugar (a mixture of glucose, sucrose, and fructose), protein, fat, fiber, vitamins A, B1, B2, B3, potassium, calcium, iron, chlorine, copper, magnesium, sulfur, phosphorus, and some enzymes.(7)

Table 1. Research Result

Comparison of the Duration of the First-Stage of Labor Based on the Type of Dates Consumed

No.	Author	Type of dates	Phase	Duration	Desc.

1.	Resti	Ajwa	Latent & Active	11,35 hour (681 min)	Primipara
2.	Nuguelis Razali, et al	Ajwa	Latent Active	7,42 hour (445,5 min) 3,56 hour (213,5 min)	Primipara
3.	O. Al-kuran, et al	Ajwa	Latent Active	8,5 hour (510 min) 3,85 hour (231 min)	Primipara & Nulipara
4.	Alireza Bagherzadeh Karimi, et al	Ajwa	Latent & Active	Ajwa dates reduce the duration of the active phase significantly.	Systematic Review Method
5.	Morteza Nasiri, et al	Ajwa	Latent & Active	Consumption of dates by pregnant women can significantly reduce the duration of the first stage of labor.	Systematic Review Method
6.	Andriani, Rezah	Tunisia	Active	3,85 hour (231,1 min)	Primipara & Multipara
7.	Firdausi, Nadya	Sukkari	Active	2,43 hour (145,8 min)	Multipara
8.	Ruri Yuni Astari, Dzikri Yupita Dewi	Sekkeri/ Sukkari	Latent & Active	9,56 hour (573,6 min) 5,21 hour (312,6 min)	Primipara Multipara
9.	Izzaddinn E. Ahmed, et al	Rotana	Active	3,22 hour (193,635 min)	Primipara & Multipara
10.	Kordi, Masoumeh Meybodi, et al	Mazafati Bam	Active	5,48 hour (329,00 min)	Nulipara

One study revealed that by consuming dates before delivery, besides being filling, is also useful for making uterine contractions more regular, making it easier for the birth process in labor, and reducing postpartum hemorrhage.[8] Carbohydrates as these reinforcers are sugars that are absorbed and used by the body's cells shortly after consumption. Dates also contain saturated fatty acids and unsaturated fatty acids. Fatty acids in addition to producing energy also help provide prostaglandins. Fatty acids can help store energy and strengthen the uterine muscles. Dates also contain hormones that can stretch the uterus before the birth of the baby.[8]

Nowadays, there is a growing interest in the oral intake of natural ingredients, such as fruits during pregnancy and childbirth to improve the quality of life of both the mother and the fetus. So it is important

to consider the potential of fruits in reducing complications during pregnancy, the progress of labor, and after delivery, especially fruits recommended by the teachings of the Islamic religion rahmatan lil'alamin,

such as dates, especially Ajwa dates (Phoenix dactylifera L.) as fruit that is highly recommended and liked by the Prophet.[6]

Based on this study, it was revealed that pregnant women who were members of the date-consuming group had adequate uterine contractions and a shorter duration of the first stage compared to pregnant women who did not consume dates at all. This applies to all types of parity, whether primiparous, multipara, or nulliparous.[4,9–17]

Two of the ten journals revealed that consuming dates, both Ajwa dates (Phoenix dactylifera L.) and rotana dates could improve the quality of uterine contractions at the time of delivery, in other words, the group of date consumers tended to experience adequate uterine contractions.[9,16]

In addition, five of these journals examined the effect of Ajwa dates on the duration of the first stage of labor and reported that the average duration of the first stage of labor among consumers of Ajwa dates was significantly shorter than those who did not consume Ajwa dates at all.(4,9–12) However, there are many limitations in these studies which can increase the risk of bias in the research results. As it is not known for certain the number of dates that must be given in order to have a positive impact, the optimal length of time for giving dates, and the attention given to the intervention group tends to be more than the other participants.[4,10–12]

In a similar study, but using different variables, namely using other types of dates (Tunisia dates, Sukari dates, rotana dates, and Mazafati bam dates) by looking at their effect on the duration of the first stage of labor, it was found that these dates also provide a positive impact on labor progress. Five out of ten journals revealed that the duration of the first stage in participants who consumed dates shortened or became shorter than those who did not consume dates.[13–17]

The results of this study are in line with the benefits of the content of dates, especially Ajwa dates (Phoenix dactylifera L.) which are rich in substances that can be useful in the process of progress of labor, such as high carbohydrate/sugar content as an energy source for the mother, high content of fatty acids quite important in the synthesis of prostaglandins during labor, and the content of dates which resemble the hormone oxytocin which can stimulate contractions in the uterine muscles.[6,7]

Conclusion

Ajwa dates are one of the fruits that are highly recommended by Islam for consumption and have long been known by the public. Ajwa dates also contain content that is rich in benefits, one of which is useful in the progress of labor, in this case, the duration of the first stage of labor. Ajwa dates (Phoenix

dactylifera L.) have an indirect effect on uterine contractions, namely by influencing oxytocin receptors and prostaglandin synthesis, so that they can stimulate and increase myometrial contractions. In addition the duration of the first stage in the group of pregnant women who were given Ajwa dates (Phoenix dactylifera L.) could be shorter, so the delivery process could be smoother. Thus, giving Ajwa dates to pregnant women also has a positive effect on medical practice, such as the occurrence of normal and easy childbirth without using any intervention.

Suggestions for further research, namely by increasing the number of samples and measuring uterine contractions and the duration of the first stage of labor objectively. In addition, it is also recommended to conduct research using appropriate methods related to sample control (uniformity of gestational age of the participating mothers, control of diet/food recall 24 hours, number of patient parity, number of dates given) to reduce bias, as well as research more about the effect of Ajwa dates on the levels of prostaglandins and oxytocin levels of pregnant women before delivery by taking into account other labor factors.

Conflict of Interest

No potential conflict of interest relevant to this article was reported

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