

Prevention of Meconium Staining of Amniotic fluid using Coconut Water Based on Culture: A Qualitative Study

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ABSTRACT

Background: Meconium staining of amniotic fluid is a meconium mixed with amniotic fluid. Incidence varies from 14% -29% to occur in all races/ethnicities, white, black, and yellow complexion. Pregnant women in Indonesia using coconut water to prevent meconium staining of amniotic.

Aim: To explore the culture of pregnant women preventing meconium staining of amniotic using coconut water.

Method: Qualitative research with a case study approach in the City of Palangka Raya, Central Kalimantan Indonesia. Data collection techniques with in-depth interviews using a structured guide based on the framework of thinking three cultural forms of Honigman, namely values, activities, and objects. Participants consisted of pregnant women, post-partum mothers, parents, traditional leaders, and village midwives—data analysis using thematic.

Results: Meconium staining of amniotic can prevent by consuming coconut water during pregnancy. Based on three forms of culture as follows: a. a value, pregnancy believes to be a critical period having the risk of turbidity of the amniotic fluid, so it needs to be purified or prevented with coconut water. b. As a form of activity, coconut water is taken regularly three times a week, starting at seven months of pregnancy until delivery. c. Objects, coconut whose skin is green, can still be scraped off.

Conclusions: Meconium staining of amniotic can prevent by consuming coconut water regularly in the third trimester of pregnancy.

Keywords: Meconium staining of amniotic; Coconut water

INTRODUCTION

Meconium staining of amniotic is amniotic fluid mixed with meconium¹. Incidence varies by around 14% -29% in all races/ethnicities, white, black, and yellow complexion. Meconium staining of amniotic has been proven to have a significant adverse effect and even causes a newborn mortality rate of up to 35% in developing countries³. As many as 60% of pregnant women in Central Kalimantan Province in Indonesia have a culture of preventing meconium staining of amniotic using coconut water. The orientation of health services in learning is very possible⁴. Based on several studies, coconut water has proven effective in overcoming risk factors for murky amniotic fluid such as hypertension, heart disease, diabetes, and impaired fluid balance^{5, 6,7,8,9,10,11,12}

The culture of pregnant women prevents murky amniotic fluid using coconut water. It is explored based on the framework of thought from Hoenigman, which divides cultural form into three themes, namely (a) value is something abstract in the minds of cultural adherents. (b) activities, which are patterned, continuous, and observable activities. (c) the matter is the most concrete form of culture, physical. The three types of culture form a constant entity. The value of forming someone in behavior then influences someone to produce work¹³.

Research question how the habit of pregnant women is preventing meconium staining of amniotic from using coconut water based on three forms of culture. This study explores the practices of pregnant women to avoid Meconium staining of amniotic using coconut water based on three types of culture.

METHOD

The qualitative research design was a case study exploration in Palangka Raya City, Central Kalimantan, Indonesia. Data collection techniques using in-depth interviews based on structured guidance. Interview guide based on three forms of culture as follows. a. Values consist of the cost of women and pregnancy, the importance of coconut water and meconium staining of amniotic, and efficacy beliefs. b. Activities, consisting of how to get coconuts, the volume and frequency of drinking coconut water, how to consume, and restrictions. c. Thing; Coconut fruit used,

Participants consisted of pregnant women (IH), postpartum mothers (IN), parents (OT), traditional leaders (TA), and village midwives (BK). A research permits this study from the Health Research Ethics Commission of the Faculty of Nursing Airlangga University and Ethical Approval Number 1755-KEPK.

Data analysis uses thematic methods, namely identifying, analyzing, and reporting data with patterns or themes of 3 cultural forms, namely ideas, behaviors, and things¹⁴.

RESULTS

In general, participants were happy to share their experiences. The results of the analysis of interviews based on the themes and sub-themes 3 of cultural manifestations are values, activities, and objects as follows (Table 1).

Score/value extracted from the community is the values of women and pregnancy, the importance of young coconut water and murky amniotic water, and the belief in

the efficacy of young coconut water". The position of women is very high, called the fortune door in the household.. the period of pregnancy in the human life cycle includes a critical period that needs to be protected. Young coconut water is holy water or the special life-giving water of God because it located in the middle of the fruit on a tall tree ... young coconut water can clean the amniotic water to prevent meconium staining of amniotic water.. Experience proves that it is useful and efficient. "

Activities of pregnant women in terms of experience preventing meconium staining of amniotic by consuming young coconut water for the following"-I usually drink young coconut water two days or 3-4 times a week ... every drink

as much as one young coconut, only the water how to drink young coconut water, put coconut water first in a glass and drink it, drink it slowly, no haste, may not drink directly from the coconut fruit. Start consuming young coconut water during seven months of pregnancy until delivery or in the third trimester".

The object used to carry out this culture is young coconut with specific characteristics ".. the coconut that by used is young coconut whose skin is green because it symbolizes freshness and good life for plants, like leaves if green means healthy. Coconut water that usually consumes is coconut water whose flesh can still scrape off.

Table 1. Quoted Results Based on Analysis of Themes and Cultural Sub-Themes

Themes/Sub-themes	Participant	Result
1. Value: a. Female	TA	"... the position of women is very high, called a fortune door of the house ..."
b. Pregnancy	TA	"... Pregnancy includes a critical period of the risk of Meconium staining of amniotic, which needs to be protected ..."
c. Coconut water	TA	"... holy water from God that can cleanse all the impurities ..."
	BK	"... special water or water of life because it located in the middle of the fruit and a tall tree ..."
d. Meconium staining of amniotic	TA	"... Meconium staining of amniotic means pregnant women do not practice the holy water ..."
efficacy beliefs	TA	"... efficacious, according to cultural customs ..."
	BK,	"... efficacious based on experience ..."
	OT, IH, IN	"... I experienced it myself, and indeed the amniotic water is clean .
2. Activity: How to get coconuts	TA	"... coconuts are picked by the family or bought ..."
	BK	"... the family climbs or buys ..."
	IN, IH	"... I usually buy. ..."
b. Volume, frequency	TA, BK, IN	"... 1 piece ... 3-4 times a week ..."
	IH	"... 1 glass, ... 3 times a week ..."
Method and taboo	BK, IH	"... start consuming seven months of gestational age until giving birth ... don't drink coconut water directly from the fruit, but put it into the glass slowly ... Drunk coconut water doesn't use any other mixture, without sugar, ice cubes, or anything else."
3. Thing: a. Fruit traits	TA, BK, IH	"... the skin is green, ... the flesh can still scrape off ..."

DISCUSSION

Value is positive, valued, nurtured, exalted, and respected¹⁵. Values emphasize the boundaries between good and bad, between holy and dirty.¹⁶ Pregnant women consume young coconut water to prevent meconium staining of amniotic from fulfilling positive and ethical values. Pregnant women need to protect from the risk of staining of the amniotic fluid with holy water; this fulfills the characteristics of the manifestation of cultural values that are valued, nurtured, and spiritual nature. Young coconut water is special water given by God; it fulfills the characteristics of the manifestation of cultural values that is glorified and respected. According to Suparlan (2003) state that culture can use as a guide to community life, which is believed to be accurate by the community and utilizes the environment and its contents to meet the needs of his life. Cultural values strengthen when they are following the religious beliefs of their owners¹⁶. The people of Central Kalimantan believe that this habit is good and serves as a guide for the maintenance of pregnancy, utilizing coconuts that grow in the community. This cultural value comes from the Hindu Kaharingan belief, which is the initial belief of the people of Central Kalimantan. That is by the criteria of cultural values according to Suparlan¹⁶.

According to the WHO behavior theory "Thought and Feeling" in Notoatmodjo (2012), that a person's health behavior is determined by thought and feeling (TF) in the form of knowledge, beliefs, attitudes and values beliefs; personal reference (PR)

That is essential people as references or examples; Resources (R), namely resources available in the community; and Culture (C), which is a habit/culture that becomes a lifestyle (way of life)¹⁷. Pregnant women in Central Kalimantan consume coconut water regularly in murky trimesters (TF). Pregnant women also have examples of role models to given and their sisters who do the same thing pregnant compilation (PR); available coconuts are widely available without season (R). and has become a unique clothing in Central Kalimantan (C) society. Activities or pregnant women taking young coconut water meet the requirements of the theory of "Thinking and Feeling." Based on the results of this study, cultural objects, namely young coconuts, include the criteria of natural objects considered to have essential values in history and culture. Following the requirements of Law Republic Indonesia number 5, 1992, part b is a natural object that supposes having vital values in history, science, and culture¹⁸. Young coconut fruit has essential importance because it is holy water that can help all that is dirty. Young coconut fruit has historical value and heritage because of

the early religion of the people of Central Kalimantan. The habit of eating young coconut water is now becoming a culture in society.

CONCLUSION

Meconium staining of amniotic can prevent by consuming young coconut water regularly in the third trimester of pregnancy. Based on three forms of culture consisting of a kind of value, that belief to be a critical period of pregnancy has the risk of turbidity of the amniotic fluid, so it needs to be purified or prevented with young coconut water. The form of activity is young coconut water taken regularly three times a week, starting at seven months of pregnancy until delivery. The object is a young coconut whose skin is green, and the flesh can still crap off.

Acknowledgements: This research support by the Faculty of Public Health, Airlangga University, Surabaya Indonesia.

REFERENCES

1. Chandrharan, E., Mitchell S (2018) Meconium-stained amniotic fluid. *Obstetrics, Gynaecology And Reproductive Medicine*:1-5.
2. Balchin, I., Whittaker, J.C., Lamont, R.F., Steer, P.J (2011) Maternal and Fetal Characteristics Associated With Meconium-Stained Amniotic Fluid. *Obstetrics & Gynecology*, 117(4):828-835.
3. Anwar, Z., Butt, T.K., Anjum, F., Kazi. M.Y (2011) Mortality in MeconiumAspiration Syndrome in hospitalized babies. *J Coll Physicians Surg Pak*, 21(11):695–9
4. Rokni, L., Park, S.H., Avci, T (2019). Improving Medical Tourism Services through Human Behaviour and Cultural Competence. *Iran J Public Health*, 48(11):pp.1988-1996.
5. Shubhashree, M.N., Venkateshwarlu, G., Doddamani, S,H (2014) Therapeutic and Nutritional Values of Narikelodaka (Tender Coconut Water) – A Review. *Research Journal of Pharmacognmistry*, 6(4):195-201.
6. Fahriza, T (2014) PengaruhTerapi Herbal Air KelapaMudaTerhadapPenurunanTekananDarahPadaPenderitaHipertensi Di DesaTambahrejoKecamatan Bandar KabupatenBatang. *Karyallmiah S.1 IlmuKeperawatan*.
7. Nwangwa, E.K., Aloamaka, C.P (2011) Regenerative Effects of Coconut Water and Coconut Milk on the Pancreatic β -Cells and Cyto Architecture in Alloxan Induced Diabetic Wistar Albino Rats. *American Journal of Tropical Medicine & Public Health*, 1(3):137-146
8. Salil, G., Nevin, K.G., Rajamohan, T (2010) Arginine rich coconut kernel protein modulates diabetes in alloxan treated rats. *Chemico-Biol Interact*, 1:107-111.
9. Preetha, P.P., Devi, V.G., Rajamohan T (2012) Hypoglycemic and antioxidant potential of coconut water in experimental diabetes. *Food Funct.*,1(3):753–757
10. Susilo, E.A (2015) Pengaruh Konsumsi Air Kelapa Muda Terhadap Waktu Reaksi Setelah Melakukan Interval Training. *Jurnal Kesehatan Olahraga*, 03(03):94-8.
11. Effiong, G.S., Ebong, P.E., Eyong, E.U., Uwah, A.J., Ekong, U.E (2010) Amelioration of chloramphenicol induced toxicity in rats by coconut water. *J ApplSc Res*, 6(4):331-335
12. Prades, A (2012) Coconut water use, compositionband properties: a review, *Fruit J.*, 67:87-107
13. Maulina, R (2019). IndungPadaWaditraKacapi. *Visualita*.7(2):45-59
14. Braun, V., Clarke, V (2008) Using Thematic Analysis in Psychology. *Qualitative Research in Psychology*, 3:77-107.
15. Ambroise, 1993. PendidikanNilai.PT. Khalista; Surabaya.
16. Suparlan, P(2003). Bhinnekatunggalika: keanekaragamansukubangsaataukebudayaan. *JurnalAntropologi Indonesia*, 72(1):27-37.
17. Notoatmodjo (2012) Promosi Kesehatan dan Perilaku Kesehatan. Jakarta: Rineka Cipta.
18. UU RI Nomor 5 (1992). Benda CagarBudaya. Menteri/Sekretaris NegaraRepublik. Jakarta. Indonesia. Lembaran Negara Republik Indonesia No. 27.