

The relationship between traditional postnatal care (TPC) and sociodemographic of postnatal mothers in Kota Kinabalu, Sabah, Malaysia



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ABSTRACT

Background: Traditional Postnatal Care (TPC) is derived from traditional medicines as health practices. The approaches of knowledge and beliefs incorporating plant and manual techniques are applied singularly or in combination to prevent illnesses and maintain well-being. TPC is used widely among the postnatal mother as a self-care for the healing process, both physically and mentally. As part of the nursing management in a community health setting, understanding the different health and wellness approaches and their benefits is part of the early knowledge and skills when delivering care to postnatal mothers. This study aimed to assess the relationship between TPC and sociodemographic data of postnatal mothers in selected study settings to understand more about the types of common TPC practiced within the study setting.

Methods: Participants were among the postnatal mothers within one week after delivery and selected purposely based on inclusion criteria. A cross-sectional survey from November 2021 to February 2022 with 178 postnatal mothers completed the distributed questionnaires. The researcher used SPSS version 28.0 to analyse the data.

Results: The result showed that the educational background ($p=0.001$, $p<0.05$) and household income per month ($p=0.001$, $p<0.05$) demonstrated a significant effect concerning postnatal mothers practising and non-practising TPC.

Conclusion: This study identified the significant variables of sociodemographic, namely household income and education level. This study's result is the starting point for the researcher to begin a broader analysis of this title.

Keywords: Practitioner, Well-being, Multiracial, Alternative approach.

Cite This Article: Sator, P., Pang, N.T.P., Balang, R.A.V., Saimon, R., Jeffree, M.S.B., Arsat, N. 2023. The relationship between traditional postnatal care (TPC) and sociodemographic of postnatal mothers in Kota Kinabalu, Sabah, Malaysia. *Bali Medical Journal* 12(3): 2392-2396. DOI: 10.15562/bmj.v12i3.4616

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Received: 2023-05-30

Accepted: 2023-07-22

Published: 2023-08-16

INTRODUCTION

Malaysia is a multiracial country with Malay, Chinese, and Indian constituting the majority population. Sabah has various ethnicities, primarily Kadazan/ Dusun/ Rungus/ Murut (KDRM), followed by Bajau, Brunei, and other indigenous, Malay, Chinese and Indian communities. This study focused on postpartum care practices, which vary according to each tradition. In addition to modern care for postnatal mothers, traditional approaches are still practiced in some places. As a public health nurse, it is necessary to know and understand the choice of type of self-care after childbirth among new mothers. This knowledge is to increase the nurse's skills to deliver appropriate nursing care; understanding each nation's culture, practices, and beliefs is very important

so that more effective care for mothers after childbirth achieves the needs and objectives of care. Sociodemographic data needs to be studied and known by nurses better to understand the condition and needs of postnatal mothers. This study examined sociodemographic data on its relationship to TPC practice. It may impact adherence by influencing an individual's ability to acquire knowledge, communicate effectively with their healthcare providers, and obtain adequate social support.¹

There are many known practiced TPC among postnatal mothers, but the most common TPC methods are hot compress, herbal baths, body wrap, body steaming, and whole-body massage.² Herbal remedies are another popular in most cultures. It is known now to relieve muscle

and body aches and prevent retained placenta.³ Other than that, heat therapy is known for its benefit of removing toxic substances from the woman's body through her sweat.² Another common practice for postnatal mothers is postnatal body massage. Postnatal massage may help to redistribute water within the body and encourage the draining and circulation of excess fluids due to labor.⁴ It also improved breast milk production by increasing the circulation and necessary hormones to make it happen. Besides, body massage regulates the body's hormones and may elevate one's mood simultaneously, which can help decrease stress contributing to these anxious and depressed feelings. Body massage can help the mother to get their body ready for deep, restorative sleep. There are many techniques on how

postnatal body massage has been done depending on the culture's beliefs and practices. One approach is a deep tissue massage, usually performed in the Malay culture. Deep tissue massage is a more forceful technique that releases tension deep in the muscles and connective tissues.⁵ The masseur can either start from the foot, progressing upward or from the head, then slowly massaging downward. The main principle is that the massage strokes are usually towards the heart.

For Sabah local community, the most common TPC used among the KDRM is by consuming a rice wine known as *lihing*. This rice wine has been processed and a mild amount mixed with the chicken soup to be served to the postnatal mother. It is believed to help improve blood circulation, prevent wind, and restore the mother's health.

Since TPC has become one of the alternative approaches to maintaining health and wellness among postnatal mothers, this study aims to assess the relationship between the TPC practice and sociodemographic data among the postnatal mother in selected study settings. This data can show the sociodemographic part related to TPC practice within this study setting. Depending on the profile of the people or sociodemographic characteristics, they can better understand.⁶

It is necessary for nurses, especially those working in health clinics, to understand the way of postnatal care among postnatal mothers under their consideration. Lack of knowledge can be a barrier to proper care of postnatal mothers. With the diversity of races, backgrounds, cultures, customs, taboos and current practices in postpartum care, this study used the information to improve services in postpartum maternal care. Additionally, this study may enhance the nurse's knowledge and skills on TPC, including its sources, methods, and cost-effectiveness. The diversity of ethnicities, cultures and practices by the older generation on TPC has proven that postnatal mothers are comfortable with it.⁷

This study aimed to examine the relationship between traditional postnatal care (TPC) and sociodemographic of postnatal mothers in this study setting. Nurses need to understand the relationship

between the TPC and sociodemographic data because of the postnatal community's diversity of backgrounds, cultures and beliefs. This information might ease and help deliver the appropriate nursing care and management for postnatal mothers. Moreover, understanding the common TPC practice in this study setting can enhance the nurse's skills to achieve the goals set to serve better for postnatal mothers. With this study, measures to improve the quality of services for mothers after childbirth can be taken. Regarding education, knowing the person's background in sociodemographic data can be emphasised and understanding TPC can be included in the nursing curriculum as early exposure to future nurses.

METHODS

Study design

This study was conducted using a quantitative, cross-sectional study approach. The study was conducted in five selected health clinics in the Kota Kinabalu area: Pekan Health Clinic, Inanam Health Clinic, Likas Health Clinic, Manggatal Health Clinic and Telipok Health Clinic. These selected health clinics are under the management of the Kota Kinabalu Health District. The populations of these health clinics vary. Manggatal Health Clinic has a significant population with about 150 deliveries per month. The distance also differs from the Kota Kinabalu city centre. Telipok health clinic is the furthest, about 30 kilometres from Kota Kinabalu city centre.

Sample of research

The study samples were from all postnatal mothers who attended the five selected health clinics. The sample size was determined by calculation using the G-Power calculator⁸ and based on inclusion criteria for this study which are all postnatal mothers with Malaysian citizenship of all ethnicities delivered a full-term baby (at least 36 weeks and above for the period of gestation), delivered by spontaneous vaginal delivery (SVD) and able to understand Malay or English language. 178 postnatal mothers participated in this study. This data was obtained within the first week of the mother's delivery.

Instruments and procedures

A modified questionnaire consisting of sociodemographic data⁹ and options and practice of TPC¹⁰⁻¹⁶ was used for data collection. Based on inclusion criteria, the selected participants explained the study before obtaining the consent form and continued to fill out the self-administered questionnaire.

Data analysis

All of the data were input and analysed using SPSS version 28. Data from the study on the relationship between the TPC and sociodemographic in postnatal mothers were analysed using Chi-Square (χ^2) P-Values. The data were analysed with a significance level ($p = 0.05$).

RESULT

The majority of the participants are mothers with gravida 1 to 4 ($n = 150$, 84.3%), parity 1 to 4 ($n = 156$, 88.6%), and ages ranging from 22 to 30 ($n = 88$, 49.4%). Bajau ethnicity ($n = 69$, 38.8%), Muslim ($n = 147$, 82.6%) and education level of secondary school ($n = 105$, 59.0%). Most of the participants' occupations were as a housewife ($n = 125$, 70.2%), and their husband occupation was as full-time employers ($n = 110$, 61.8%). Household income was reported within the range of RM1001-RM2000 per month ($n = 93$, 52.2%).

Based on the demographic data in **Table 1** for 178 postnatal mothers, most results showed no significant relationship between the demographic data and the practice of TPC for postnatal mothers. Except for the educational level (95% CI: 0.000-0.017) and monthly household income (95% CI: 0.004-0.052).

DISCUSSION

The importance of the discussion of this study is to highlight the study's findings. For the sociodemographic characteristics, this study reported that educational level and monthly household income showed a significant relationship for the postnatal mothers to practice TPC during the first week of the postnatal period. In this study, from 178 participants, household income was reported within the range of RM1001-RM2000 per month ($n = 93$,

52.2%). This result demonstrated that postnatal mothers with low household income might be preferred to practice TPC during their postnatal period. Since TPC resources or methods are accessible easier and cheaper, most of the TPC can

even be prepared by the postnatal mothers themselves. Many forms are discovered for traditional postnatal care; most are affordable, available, and easy to use or prepare⁷. For example, herbs such as ginger and turmeric are easy to get, prepare and

consume. People use ginger for boiling and drinking; other than that, ginger is also utilized as a bath herb.¹⁷ The efficacy of this herbal medicine to facilitate breast milk, when viewed from the ingredients used, include: turmeric contains chemical

Table 1. Analysis of sociodemographic factors (n = 178)

| Variables | Practice TPC n (%) | Non-Practice TPC n (%) | 95% CI | χ^2 | p-value |
|------------------------------------|-----------------------|---------------------------|-------------|----------|---------|
| Age | | | | | |
| 15–21 | 10 (52.6) | 9(47.4) | 0.305-0.448 | 0.810 | 0.368 |
| 22–30 | 34 (38.6) | 54 (61.4) | | | |
| 31-40 | 22 (33.3) | 44 (66.7) | | | |
| 41 and above | 3 (60.0) | 2 (40.0) | | | |
| Religion | | | | | |
| Muslim | 60 (40.8) | 87(59.2) | 0.109-0.217 | 2.075 | 0.150 |
| Christian | 9 (31.0) | 20 (69.0) | | | |
| Buddhist | 0 (0) | 1(100) | | | |
| Others | 0 (0) | 1 (100) | | | |
| Ethnicity | | | | | |
| KDRM | 19 (42.2) | 26 (57.8) | 0.399-0.545 | 0.460 | 0.545 |
| Bajau | 23 (33.3) | 46 (66.7) | | | |
| Brunei | 2 (40.0) | 3 (60.0) | | | |
| Malay | 2 (28.6) | 5 (71.4) | | | |
| Chines | 1 (33.3) | 2 (66.7) | | | |
| Others | 22 (44.9) | 27 (55.1) | | | |
| Mother occupations | | | | | |
| Full-time employer | 11 (26.8) | 30 (73.2) | 0.052-0.139 | 3.488 | 0.620 |
| Part-time employer | 2 (40.0) | 3 (60.0) | | | |
| Self-employer | 1 (16.7) | 5 (83.3) | | | |
| Housewife | 54 (38.4) | 71 (56.8) | | | |
| Education | | | | | |
| None | 5 (71.4) | 2 (28.6) | 0.000-0.017 | 9.374 | <0.001* |
| Primary School | 12 (54.5) | 10 (45.5) | | | |
| Secondary School | 41(39.0) | 64 (61.0) | | | |
| Certificate | 1 (50.0) | 1 (50.0) | | | |
| Diploma | 8 (29.6) | 19 (70.4) | | | |
| Bachelor | 2 (18.2) | 9 (81.8) | | | |
| Master | 0 (0) | 4 (100) | | | |
| Gravida | | | | | |
| 1-4 | 57 (38.0) | 93 (62.0) | 0.305-0.448 | 1.180 | 0.277 |
| 5-8 | 9 (36.0) | 16 (64.0) | | | |
| 9-12 | 3 (100) | 0 (0) | | | |
| Parity | | | | | |
| 1-4 | 59 (37.8) | 97 (62.2) | 0.204-0.335 | 1.559 | 0.212 |
| 5-8 times | 9 (47.4) | 10 (52.6) | | | |
| 9-12 times | 1 (100) | 0 (0) | | | |
| Households income per month | | | | | |
| Less than RM1000 | 12 (57.1) | 9 (42.9) | | | |
| RM1001-RM2000 | 35 (37.6) | 58 (62.4) | 0.004-0.052 | 4.909 | <0.001* |
| RM2001-RM3000 | 17 (42.5) | 23 (57.5) | | | |
| RM3001-RM4000 | 2 (18.2) | 9 (81.8) | | | |
| RM4001-RM5000 | 1 (16.7) | 5 (83.3) | | | |
| More than RM5000 | 1 (16.7) | 5 (83.3) | | | |
| Husband Occupation | | | | | |
| Full-time employment | 42 (38.2) | 68 (61.8) | 0.629-0.764 | 0.121 | 0.728 |
| Part-time employment | 6 (42.9) | 8 (57.1) | | | |
| Self-employed | 18 (36.0) | 32 (64.0) | | | |
| Unemployed | 3 (38.8) | 1 (25.0) | | | |

*p -value < 0.05

compounds called curcuminoids.¹⁸

And for the TPC methods such as body massages and body steaming, their mother, in-laws, or next of kin can prepare for the postnatal mother to use. Team baths and massages can create a relaxation response, increase metabolic processes, improve lymphatic tissue function, accelerate muscle healing and relaxation, and reduce muscle tension and stress.¹⁹ These methods can be done at home only, and no need for them to go out to bring their newborn baby with a demanding health condition. This finding was similar to the study done in Perak Malaysia, which showed that traditional postnatal care used during the postpartum period is high among Malay women with low household monthly incomes.²⁰

This current result showed that most participants had a formal education from secondary school. Of 178 participants, 105 had attended secondary school ($n = 105, 59.0\%$). From this result, the middle class of education for postnatal mothers preferred to practice TPC. Again since it is easy to get and cheaper, the postnatal mother obeys their mother-in-law or older next of kin since they may share their experiences. A person's level of education shows an understanding of things that matter to them. This result was supported by a study that found the ability to make a decision had a significant association with the utilization of postpartum care.²¹ Additionally, it is related to the decision-making for their health and wellness condition, as reported in this study; knowledge becomes how a new mother might negotiate caregiving authority.²² Moreover, ancient wisdom is developing, integrating and adapting new methods.²³

As a recommendation from the result of this study, several things can be taken into account as improvements in overall health services for postnatal mothers, their families and the surrounding community. That is, by holding social and formal meetings and discussions, for example, dialogue sessions between health nurses and the local community related to the care of mothers after childbirth, including TPC. This is to strengthen the existing relationship and to understand deeply how this TPC is run and what are the benefits of this TPC that cause the community to

practice it from generation to generation. With this observation and collaboration, appropriate action can be taken as an alternative approach to the care of postpartum mothers by providing proper knowledge and advice to postpartum mothers who may be interested in the TPC.

From this study's findings, there are two significant variables for the postnatal mothers to choose for TPC practising during their first week of the postnatal period. This study outcome can be heightened by selecting a larger sample size and study setting. More results can be examined with various diversity of cultures, beliefs and practices in the current study setting. In addition, sample size inclusion can be revised by looking into more than during the first postnatal week. It can be extended to 4 to 6 weeks postnatally to obtain more desired data. With these preliminary findings, broader data can be analysed to understand more about this study. They can be used as a remedy to improve the nursing care delivery for postnatal mothers. Other than that, the current practice guidelines can be revised for better care choices for the postnatal mother regarding their health and wellness during the postnatal period.

CONCLUSION

The postnatal period is crucial for newly delivered mothers to gain health and wellness. Many harmful incidents are happening to postnatal mothers that need to be addressed, for example, cases like maternal death due to improper handling of postnatal mothers and postnatal depression, in which symptoms were not detected early. Other than modern medical management, the traditional methods on how to care for the postnatal mothers is also important to study since there are various and diverse cultures and beliefs within the community that have still been practised. At the same time, knowing the sociodemographic data of postnatal mothers is also important to see which part is likely to influence the selection of TPC. This study examines the relationship between TPC and sociodemographic of postnatal mothers in Kota Kinabalu, Sabah, Malaysia. From this study's

findings, the researcher identified the significant variables of sociodemographic: household income and education level. This study's result is the starting point for the researcher to begin a broader analysis of this title.

ACKNOWLEDGEMENTS

The researchers would like to express gratitude to the Dean of Faculty of Medicine and Health Sciences, UMS, Professor Dr. Mohammad Saffree Bin Jeffree for the great support on this study. Dr. Norkiah Arsat, Head of Department (Nursing) Faculty of Medicine and Health Sciences, UMS who has helped in this study as well. And to all staff from the selected health clinics in the Kota Kinabalu area for assisting in this study.

ETHICAL STATEMENT

The researcher obtained the ethics approval for this study from the Medical Research Ethics Committee, Ministry of Health [NMRR-21-405-59032 (IIR)] and the Universiti Malaysia Sarawak Research and Ethics Committee [FME/21/73]. The selected participants were explained and consented to participate in this study. The authors considered ethical concerns when gathering data and ensured that the information obtained from the participants was only utilized for research purposes.

AUTHOR CONTRIBUTION

PS responsible for concepts of the study, design of the study, definition of intellectual content, literature search, data acquisition, data analysis, statistical analysis, manuscript preparation, and manuscript editing. NTPP was doing the data analysis, statistical analysis, manuscript editing, and manuscript review. RAVB and RS assisted in the design of the study, data analysis, and manuscript review. MSBJ and NA are guarantors of the study.

FUNDING

This study received funding source from Geran Penyelidikan Bidang Keutamaan (SPBK) Fasa 1/2021 (SBK0480-2021) Under Universiti Malaysia Sabah.

CONFLICT OF INTEREST

The authors have no known competing financial interests or personal relationships that could have affected the work presented by the paper.

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