

Artikel Asli/Original Articles

Knowledge and Attitude of Neonatal Jaundice – Orang Asli Perspective (Pengetahuan dan Sikap Terhadap Jaundis Neonatal – Perspektif Orang Asli)

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ABSTRACT

The incidence of neonatal jaundice among aborigines is increasing with the morbidity and mortality among this group are well recognized. This study aimed to assess the knowledge and attitude status on neonatal jaundice among Orang Asli in Sepang, Selangor. Cross-sectional study was conducted within two weeks in Kampung Orang Asli in Sg. Pelek, Sepang, Selangor. A simple random sample of adults aged 18 years and above was selected. Data were collected by an interviewed structured questionnaire. Overall, out of 152 residents, 67% were aware about neonatal jaundice. Majority of them were female (72%), married (78.4%) and respondents who have children (86%). Among those who were aware, almost 68% have good knowledge, in which 70% recognized jaundice by yellow discoloration on the body. High pitched crying (12.7%) and not feeding (10.8%) were among symptoms they knew. Almost 50% of the respondents believed neonatal jaundice may cause mental retardation. As for management of neonatal jaundice at home, majority of them (47%) will expose the baby under the sun, 7.8% will take herbal medication whereas 2% will continue with breast feeding. Almost eighty percent of the respondents will send their jaundiced baby to the hospital immediately, whereas 23% prefer management by nurse at home. Although majority of respondents in Kg. Orang Asli Sg. Pelek have good knowledge & good attitude on neonatal jaundice, some mothers are still likely to resort to self-treatment with potentially harmful therapies.

Keywords: Knowledge; attitude; neonatal jaundice; aborigines; mortality

ABSTRAK

Insiden kejadian jaundis neonatal di kalangan peribumi semakin meningkat dan ini meningkatkan lagi kejadian morbiditi dan mortaliti di kalangan mereka. Kajian ini dilakukan bertujuan untuk mengenalpasti status pengetahuan dan sikap terhadap jaundis neonatal di kalangan Orang Asli di Sepang, Selangor. Kajian secara "cross-sectional" telah dilakukan dalam masa dua minggu di Kampung Orang Asli Sg. Pelek, Sepang, Selangor. Semua penduduk yang berumur 18 tahun dan ke atas telah dipilih secara rawak mudah. Data didapati melalui temuduga menggunakan kertas soal selidik yang berstruktur. Secara keseluruhannya, dari sejumlah 152 penduduk, 67% sedar tentang jaundis neonatal. Kebanyakannya adalah wanita (72%), berkahwin (78.4%) dan responden yang mempunyai anak (86%). Di kalangan mereka yang sedar, hampir 68% mempunyai pengetahuan yang bagus, di mana 70% mengenali jaundis melalui badan yang berwarna kuning. Tangisan yang nyaring (12.7%) dan tidak berselera untuk makan (10.8%) juga di antara simptom yang mereka tahu. Hampir 50% dari responden percaya bahawa jaundis neonatal boleh menyebabkan kerencatan mental. Kebanyakan responden (47%) akan mendedahkan bayi jaundis di bawah sinaran matahari, 7.8% akan mengambil ubatan herba, manakala 2% akan meneruskan penyusuan susu ibu sebagai pengurusan jaundis neonatal di rumah. Hampir lapan puluh peratus dari responden akan segera membawa bayi mereka yang mengalami jaundis ke hospital, manakala 23% lebih selesa diuruskan oleh jururawat yang berkunjung ke rumah. Walaupun kebanyakan responden di Kg. Orang Asli Sg. Pelek mempunyai pengetahuan dan sikap yang bagus terhadap jaundis neonatal, masih lagi terdapat ibu-ibu yang mengamalkan rawatan sendiri yang boleh membahayakan.

Kata kunci: Pengetahuan; sikap; jaundis neonatal; Orang Asli; tahap kematian

INTRODUCTION

Neonatal jaundice is a condition characterized by the yellow discoloration of the skin and sclera of the newborn infants (Boo et al. 2011). Jaundice is apparent clinically when the level of bilirubin in the serum rises above 85 mmol/l (5 mg/dl). An elevated serum bilirubin can result in kernicterus, a complication with high morbidity and

mortality, with severe hearing impairment and mental retardation (MOH 2015).

The incidence of neonatal jaundice among aborigines, who are also known as Orang Asli, is recently increasing, in which 51% was indicated for admission due to neonatal jaundice in 2003 (Kandasamy & Somasundaram 2007). Although it was less than 2% of the population, they made

up of 4.2% of the neonatal admission to the Neonatal Unit in Temerloh.

Despite neonatal jaundice as being one of the most common problems in Malaysia, a study that was done in Negeri Sembilan revealed there is still a wide gap of knowledge existing among Malaysian mothers on care of neonatal jaundice (Boo et al. 2011).

Hence, a study was done among Orang Asli in Kampung Orang Asli, Sg. Pelek, Sepang to identify the knowledge and attitude status on neonatal jaundice among Orang Asli so that a plan to increase the awareness among the population could be formulated.

METHODOLOGY

A cross-sectional study was carried out within two weeks in Kampung Orang Asli, Sg. Pelek, Selangor. The population are mostly from the Mahmeri ethnic and currently most of them are working in private and government sectors. They are easily access to health facilities and school. A simple random sample of adults aged 18 years and above was selected. They are considered residents if they have been residing in the village for at least 3 months. The exclusion criteria include non-aboriginals, mute and/or visually challenged, or have hearing impairments and mental disorders. Respondents who refused to participate in the survey or were not there during the survey for about twice will be considered as non-respondents.

A letter of approval was obtained from Jabatan Kebajikan Orang Asli (JAKOA) before commencement of the study, while permission to conduct the study was obtained from Tok Batin. Individual informed consent was obtained verbally from the respondents after the purpose of the survey was explained to them.

Data was collected through an interviewed using a structured and pretested questionnaire, which consisting of sixteen questions (Khalesi & Rakhshani 2008). Data was categorized through median scoring before being analyzed using by Fisher Exact Test and Chi-square test. The level of significance was set at $p < 0.05$ and confidence level at 95%.

RESULTS

Out of one hundred fifty two adults who were selected from Kg Orang Asli, Sg Pelek, Sepang, Selangor, 102 respondents (67%) were aware about neonatal jaundice. Table 1 shows majority of respondents who aware on neonatal jaundice were at the age of 31-40 years (30.4%), female (72%), had secondary education (47%), married (78.4%) and have children (86%). Among those who were aware on neonatal jaundice, 67.6% have good knowledge.

Table 2 shows majority of the respondents (70.6%) recognized jaundice by yellow discoloration on the body.

TABLE 1. Socio-demographic characteristics of respondents who were aware on neonatal jaundice

Status	No.	%
Age		
15-20	6	5.9
21-30	19	18.6
31-40	31	30.4
41-50	26	25.5
51-60	20	19.6
Gender		
Male	29	28.0
Female	73	72.0
Level of education		
No formal education	6	6.0
Primary	44	43.0
Secondary	48	47.0
Tertiary	4	4.0
Marital status		
Single	11	10.8
Widow/Divorce	11	10.8
Married	80	78.4
Children status		
With children	88	86.0
Without children	14	14.0
Total	102	100.0

Only 23.5% did not have any knowledge on recognizing jaundice in neonates. As for places to look for yellow discoloration, majority (46.3%) will look at the eyes and 45.5% on the skin.

Sixty two percent of the respondents did not know the symptoms of jaundice and 60.3% did not know the cause. However, high pitched crying (12.7%) and not feeding (10.8%) were among symptoms they knew. Regarding causes of neonatal jaundice, 17.9% perceived herbal ingestion during antenatal period as the cause, followed by dirty blood (3.8%), infection (3.8%), natural (3.8%), cold drink consumption (2.6%), less breastfeeding (2.6%) and premature baby (2.6%). Almost 50% of the respondents believe neonatal jaundice may cause mental retardation.

Although 39.2% of respondents did not know what to do if their babies are having jaundice, but majority of them (47%) will expose the baby under the sun. Eight percent of the respondents will take herbal medication, whereas 2% will continue with breast feeding for the management of jaundice at home.

Table 3 shows almost seventy-five percent of the respondents will send their jaundiced baby to the hospital immediately, whereas 25.5% prefers to wait and see the baby's condition.

Among the reasons of respondents not sending their jaundiced baby to the hospital were transportation barrier (30.8%), prefers management at home by the nurse (23%), using herbal medication (15.4%), high management cost (15.4%) and hospital is far from home (15.4%) (Table 4).

TABLE 2. Items of knowledge on neonatal jaundice

Knowledge Items	No. (n = 102)	%
Recognizing jaundice		
Yellow discoloration on the body	72	70.6
Others	6	5.9
Don't know	24	23.5
Area for yellow discoloration (n = 121) – answered more than one		
Eyes	56	46.3
Foot	3	2.5
Palm	5	4.1
Skin	55	45.4
Others	2	1.7
Symptoms of jaundice		
Eyes move down	1	1.0
Fit	4	3.9
High pitched crying	13	12.7
Not feeding	11	10.8
Don't know	64	62.8
Others	9	8.8
Causes of jaundice (n = 78)		
Cold drink consumption	2	2.6
Dirty blood	3	3.8
Diseased baby	1	1.3
Herbal ingestion during antenatal	14	17.9
Infection	3	3.8
Less breast feeding	2	2.6
Natural	3	3.8
Post-date delivery	1	1.3
Premature baby	2	2.6
Don't know	47	60.3
Effect of jaundice		
Mental retardation	49	48.0
Don't know	50	49.0
Others	3	3.0
Action on jaundice		
Bathe with herbal water	1	1.0
Breast feeding	2	2.0
Expose baby under the sun	48	47.0
Goat's milk feeding	1	1.0
Herbal medication	8	7.8
Medicine consumption	1	1.0
Wake the baby up every 2 hours	1	1.0
Don't know	40	39.2

TABLE 3. Urgency of sending neonatal jaundice baby to the hospital

Urgency status	No.	%
Immediately	76	74.5
Wait & see	19	25.5
Total	95	100

TABLE 4. Reasons for not sending neonatal jaundice baby to hospital

Reasons	No.	%
High management cost	2	15.4
Hospital is far from home	2	15.4
Prefers manage by nurse at home	3	23.0
Transportation barrier	4	30.8
Using herbal medication at home	2	15.4
Total	13	100

Majority of respondents have good knowledge (67.6%) & good attitude (74.5%). Sixty eight percent of respondents with good knowledge also have good attitude towards management of neonatal jaundice. However, statistically there is no association between knowledge and attitude on neonatal jaundice among Orang Asli population ($p > 0.05$) (Table 5).

TABLE 5. Association between knowledge and attitude towards neonatal jaundice

Knowledge status	Attitude status		X^2 , p value
	Good (%)	Poor (%)	
Good	52 (68.4)	17 (65.4)	1.082, 0.775
Poor	24 (21.6)	9 (24.6)	
Total	76 (100)	26 (100)	

DISCUSSION

Prior studies have shown that 85.9% of respondents in Nigeria (Egube et al. 2013) and 93.8% of mothers in Negeri Sembilan (Boo et al. 2011) were aware on neonatal jaundice. This is inconsistent with our study, where only 67% of Orang Asli were aware on the matter. In this study, among those who were aware, 86% of mothers with children and this finding is supported by previous study done by Boo stated that those who were aware are mothers with children (70%) than nulliparous mothers. It shows that other than health promotion or health education, experience also plays important role, where mothers with past history of neonatal jaundice have better awareness compared to those who only received health information.

A study done by US National Assessment of Adult Literacy shows that health knowledge varies directly with level of education and age level (US NAAL 2008). Only one percent of respondents with less than a high school certificate and 30% with bachelor's degree or higher were health proficient. Meanwhile, the level of knowledge for those over 65-years age decreased dramatically, where only 6% have good health knowledge. Those finding were well explained of our similar findings, where elderly and those with less education have lower health knowledge in neonatal jaundice.

In terms of neonatal jaundice symptoms, 71% in our finding and similarly 77% in Nigeria (Egube et al. 2013)

have defined neonatal jaundice as yellow discoloration on the body. However, almost 56% of respondents in a study done also in Nigeria (Ezeaka et al. 2014), recognised the effect of neonatal jaundice as poor feeding, irritability, abnormal cry, abnormal body stretching or abnormal eye movement. Whereas, a study done by Ng & Chong (2014) shows only 22% mothers were able to identify all the symptoms, similar as our findings (37%). While a high percentage of mothers could define neonatal jaundice correctly, inability to recognise the physical symptoms of neonatal jaundice is quite worrisome and disseminating this education is a greatest challenge.

Exposure to sunlight is a popular home management for neonatal jaundice where 83.1% of the mothers in Negeri Sembilan (Boo et al. 2011) and 47% in our respondents did the same management. However the urgency feel to bring their child to the hospital (74.5%) is consistent with studies done in Nigeria and Iran, which show similar result with 100% and 87.2% respectively, where mothers would have preference over showing their children to the doctors (Ogunfowora & Daniel 2006; Khalesi & Rakhshani 2008). This attitude will bring to an early detection and prompt treatment of the disease with phototherapy or exchange blood transfusion in the hospital (MOH 2015).

Language barrier might be the limitation of this study, since none of the interviewer was able to speak their native language. However, majority of them could understand and speak in Malay. Tok Batin and villagers who were well-versed in Malay were very helpful as volunteer interpreters.

CONCLUSION

Majority of respondents in Kampung Orang Asli Sg Pelek have good knowledge & good attitude on neonatal jaundice. However, some mothers, including those who have prior experience with a jaundiced infant, are still likely to resort to self-treatment with potentially harmful therapies. The survey results indicate the need for the increased accessibility and intensity of the educational activities in neonatal jaundice especially in Orang Asli, either one-to-one counselling by the doctor or antenatal talks on neonatal jaundice by health professionals. Further interventional study or qualitative study should be carried out for the village population, following the intervention activities.

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