



BRIEF ORIGINAL ARTICLE

Traditional beliefs in the management and prevention of neonatal jaundice in Ado-Ekiti, Nigeria



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KEYWORDS

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Abstract

Aim: Traditional beliefs about neonatal jaundice persist in Sub-Saharan Africa, and because those beliefs might worsen the outcomes of the disease by delaying care or by treating it at home with unproven remedies; our study sought to identify the traditional beliefs of antenatal mothers regarding the management and prevention of neonatal jaundice in rural areas of Ekiti State, Southwestern Nigeria.

Methods: The study employed a descriptive cross-sectional design. A total of 190 women who attended two primary health care centers in Ekiti State were recruited for the study from April 1 to May 31, 2017, by convenience sampling through the antenatal clinic register. Data was collected by the use of an adapted self-administered, structured questionnaire.

Results: Of the women selected, 56% had at least one child before. 36% of all the respondents would use pawpaw extract to treat neonatal jaundice, 30% would use sunlight, 26% would use antibiotics, 16% would use over the counter drugs, and 5% would use phototherapy. With regards of preventive measures, 48% indicated that neonatal jaundice can be prevented by breast feeding, 11% by drinking herbal concoctions by both mother and baby, 26% by giving glucose water to the baby and 12% of respondents by avoidance of cold water when pregnant.

Conclusion: Our study showed that traditional beliefs regarding the management and prevention of neonatal jaundice are prevalent in Ado Ekiti, Nigeria.

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PALABRAS CLAVE

Ictericia neonatal;
Madres;
Percepción;
Hierbas medicinales

Creencias tradicionales en el manejo y prevención de la ictericia neonatal en Ado-Ekiti (Nigeria)

Resumen

Objetivo: Siguen persistiendo las creencias tradicionales acerca de la ictericia neonatal en el África subsahariana y, dado que dichas creencias pueden empeorar los resultados de la enfermedad, al demorar los cuidados o al tratar la situación en casa con remedios infundados, el objetivo de nuestro estudio fue identificar dichas creencias tradicionales de las mujeres embarazadas en cuanto al manejo y prevención de la ictericia neonatal en las zonas rurales del estado de Ekiti, en el sudoeste de Nigeria.

Métodos: El diseño del estudio fue descriptivo y transversal. Se reunió para el estudio a un total de 190 mujeres que acudieron a 2 centros de atención primaria en el estado de Ekiti desde el 1 de abril hasta el 31 de mayo de 2017, mediante muestreo de conveniencia, a través del registro de la clínica prenatal. Los datos se recopilaron utilizando un cuestionario autoadministrado y estructurado adaptado.

Resultados: De las mujeres seleccionadas, el 56% había tenido al menos un hijo previamente. El 36% de todas las respondedoras utilizarían extracto de papaya para tratar la ictericia neonatal, el 30% usaría la luz solar, el 26% utilizaría antibióticos, el 16% utilizaría fármacos sin receta y el 5% usaría fototerapia. Con respecto a las medidas preventivas, el 48% indicó que la ictericia neonatal puede prevenirse mediante la lactancia, el 11% afirmó que la madre y el bebé debían beber brebajes de hierbas, el 26% reportó que el bebé debía beber agua con glucosa y el 12% de las respondedoras manifestó que había que evitar beber agua fría durante el embarazo.

Conclusión: Nuestro estudio reflejó que las creencias tradicionales relativas al manejo y prevención de la ictericia neonatal son prevalentes en Ado Ekiti (Nigeria).

What the known about the topic?

Traditional beliefs about neonatal jaundice continue to exist in Sub-Saharan Africa.

What the study adds

Antenatal mothers in rural Southwestern Nigeria have traditional beliefs regarding the causes and treatment of neonatal jaundice, do not know preventive measures and continue to practice traditional remedies. These results call for the nursing professionals to enforce maternal education during prenatal care visits.

severe complications associated with neonatal jaundice, it is important that timely and appropriate interventions be given; however, traditional beliefs about the disease persist in African countries.³

Severe neonatal jaundice may result in permanent neurologic dysfunction known as chronic bilirubin encephalopathy or kernicterus.⁵ Some of the factors associated with complications are lack of knowledge about neonatal jaundice and late presentation to the hospital for care. The delay in seeking care is underpinned by several factors, including late or failed recognition of jaundice and poor perception of its severity by mothers.⁴ In addition, delay in seeking medical care for the newborn can be related to myths about healthcare and preference for unorthodox treatment practices.⁶

This study was designed to assess the traditional beliefs and practices regarding the recognition and management of neonatal jaundice by antenatal mothers in selected primary health care centers in Ado-Ekiti, Ekiti State, Nigeria.

Introduction

In Nigeria, neonatal jaundice is a leading cause of preventable brain damage in infants and the most frequent cause of readmission for special care in the first week of life.^{1,2} Globally, the incidence of neonatal jaundice continues to increase with about 1.1 million babies developing it annually, of which a substantial proportion reside in Sub-Saharan Africa.³

The Pediatrics Association of Nigeria ranks neonatal jaundice as a priority cause of neonatal morbidity.⁴ Due to the

Methods

The study employed a descriptive cross-sectional design and was carried out at the Comprehensive Healthcare Center, Okehinmi and at the Primary Healthcare Center, Odo-Ado; both in Ado-Ekiti, Ekiti State, Nigeria. These sites were selected because of their location in the interior of Ado-Ekiti, serving people in the grassroots. The total patient inflow in the two facilities ranges from 700 to 1000 prenatal

Table 1 Respondents knowledge of neonatal jaundice.

Item	Frequency (N= 190)	Percentage (%)
<i>Do you think neonatal jaundice is harmful?</i>		
Yes	120	63.2
No	12	6.3
Not sure	58	30.5
<i>Neonatal jaundice that occurs within 24 h of birth is</i>		
Normal	37	19.5
Abnormal	75	39.5
Don't know	78	41.0
<i>Where do you check for the presence of jaundice?</i>		
Skin	60	31.6
Eyes	90	47.3
Palms and soles	10	5.3
Urine	30	15.8
<i>What complications of neonatal jaundice do you know of?</i>		
Brain damage	49	25.8
Mental retardation	29	15.2
Death	87	45.8
Deafness	19	10.1
Don't know	6	3.1

visits per month, and they are staffed by community health extension nurses.

The target population were antenatal mothers who were recruited for the study by voluntary response sampling through the clinic register. The sampling frame was clinic attendance at the antenatal clinic between April 1 and May 31, 2017, and 190 participants were enrolled. A structured questionnaire, self-completed by the respondents was used to obtain data; the questionnaire consisted of three sections: assessing demographics, knowledge about neonatal jaundice and preventive and management practices respectively. Data was analyzed using IBM SPSS® version 20 and results were presented using descriptive statistics.

Ethical approval was obtained from the Primary Health Coordinator of Ado-Ekiti Local Government Area, and verbal informed consent was obtained from the respondents before the start of the study.

Results

190 respondents completed the questionnaire, the majority (91.2%) were married, 56% were multiparous, 44% were nulliparous. 56% of them were employed.

Table 1 summarizes the results of the maternal knowledge of neonatal jaundice. Only 39.5% of the mothers knew that jaundice occurring within 24 h was abnormal. Regarding body sites used to assess jaundice; 31.6% reported skin, 5.3% reported palm and soles and 47.3% reported eyes.

When asked about causes of neonatal jaundice; herbal concoction, breastfeeding, prematurity and infection were listed as causes of the disease by 15%, 15%, 6% and 35% of respondents respectively. 26% did not know any cause of jaundice and 3% did not answer this question.

Regarding management of neonatal jaundice, 60% of all the participants stated that they would take their children to

a hospital if signs of neonatal jaundice were observed, while 16% would give over the counter medications. Regarding other commonly used practices to treat neonatal jaundice, 36% stated that feeding the child pawpaw extract was effective, 30% would use sunlight, 26% would use antibiotics, 16% would use over the counter drugs, and 5% would use phototherapy as an ambulatory intervention.

The following practices were thought to prevent neonatal jaundice: 48% will increase breastfeeding, 11% will use herbal medicine, 26% will feed the baby glucose water and 12% will avoid cold water during pregnancy. 3% of the participants did not answer this question.

There was limited knowledge of treatment options for neonatal jaundice, 21% chose phototherapy, 21% exchange blood transfusion, 10.5% herbal concoction, whereas the majority (47.5%), did not know any treatment option for the disease.

Of those participants with knowledge about neonatal jaundice, the majority received information from health care workers.

Discussion

In our study we found that there was insufficient knowledge about the causes of neonatal jaundice among the antenatal mothers who responded the questionnaire; for example, only 35% of the participants correctly selected infection as a major contributor, while 26% did not know any cause of jaundice. This was in keeping with a study conducted at the University of Benin Teaching Hospital² and a similar study in Iran that showed that mothers had insufficient knowledge about causes, treatment and complications of neonatal jaundice.⁷

Of those participants with knowledge about neonatal jaundice, the majority received information from health

care workers. This is similar to a Ghanaian study,⁸ where most of the respondents received information about neonatal jaundice from health care workers, supporting the important role they play in patient education and disease awareness.

Regarding health seeking behavior, 60% of them would take their child to a hospital, while 16% will give over the counter medications. This is in contrast to a study in Southwestern Nigeria showing that 5.3% had a previous experience with neonatal jaundice and 50% resorted to managing the condition with over-the-counter drugs while the other half did not give treatment at all.⁹

It was observed that knowledge about treatment options for neonatal jaundice was suboptimal. Despite the fact that 21% of the respondents highlighted phototherapy and exchange blood transfusion as methods of treatment, 47.5% were not able to identify any method of treatment. Many mothers had traditional beliefs about the treatment as a significant number believed that feeding the baby pawpaw extract and giving glucose water can cure jaundice.

Our study has many limitations: we used a non-validated tool and for many questions, the participants could only choose one answer. Furthermore, we did not use randomization to select the antenatal mothers, selecting them by their willingness to participate in the study and by their literacy, which might have biased the results toward more educated women. In addition, we did not have a control group of non-pregnant responders to assess baseline knowledge about neonatal jaundice in the community.

In rural Ado-Ekiti state, antenatal mothers continue to believe in myths and misconceptions about the pathophysiology of neonatal jaundice and have poor knowledge about preventive and treatment measures. Most of the information regarding neonatal jaundice is given by community health extension nurses, emphasizing their important role in patient education.

Competing interest

Authors declare that no competing interests exist.

Author contribution

All of the authors contributed to the research design, write up and analysis.

Conflict of interest

The authors declare that they have no conflict of interest regarding this research.

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