Pre-Lacteal Feeding Practices Of Doctors And Nurses In A State And Teaching Hospital In Western Nigeria: A Cause For Concern

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Citation

Abstract
Background: Pre-lacteal feeding of healthy new born babies by the health workers in the neonatal and post-natal wards of many non-baby friendly hospitals is a common practice. A study of these pre-lacteal feeding practices may generate information on the nature and the extent of these practices in the main non-baby friendly hospitals and provide ideas on the necessary adjustment in feeding practices.

Aim: To determine the prelacteal feeding practices of Nigerian doctors and nurses in charge of the newborns and their mothers at the 2 major non baby friendly hospitals in a state capital.

Materials and Methods: The doctors and nurses in charge of the newly delivered mothers and their babies at 2 Nigerian hospitals were interviewed by means of a pre-tested questionnaire regarding their usual practice concerning the giving of prelacteal feeds. Information such as the departments and assigned wards of duty of the respondents, the reasons why they give prelacteal feeds to the newborn babies and the details of the types and timing of feeds were obtained.

Results: Sixty two respondents (30 doctors and 32 nurses) were studied. All the respondents identified mothers own breast milk as the best food for the newborn. However, 60 (96.8%) respondents (29 doctors and 31 nurses) routinely prescribed prelacteal feeds for healthy babies whose mothers were considered to have delay in lactation. The prelacteal feeds prescribed by 29 doctors were infant formula 15(51.7%), glucose drinks 11(37.9%) and plain water 3 (10.3%) respectively. Also infant formula 16 (51.6%), glucose drinks 13(41.9%) and plain water 2(6.5%) were prescribed by the 31 nurses respectively. Twenty-one (35.0%) of the total 60 subjects giving prelacteal feeds usually advised giving prelacteal feeds within the first 2 hours of delivery.

Conclusion: Pre-lacteal feeding is a common practice among the health workers studied. It should be discouraged by the means of educational seminars and update courses.

INTRODUCTION
The UNICEF/WHO baby friendly hospital initiative program is based on the recognition that breast feeding activities in the hospital are important to the success of later breastfeeding. In spite of the official acceptance of the Baby Friendly Hospital Initiative (BFHI) policy and practices by the Nigerian ministry of health, many hospitals in the land are yet to adopt and implement the 10 steps to successful breastfeeding. Such hospitals may encourage the prelacteal use of breast milk substitutes, such as infant formula, glucose drinks and water.

The zeal and the enthusiasm demonstrated by the UNICEF/WHO and many stakeholders at the inception of the BFHI led to the expectations that the principles and the practice of the initiative would spread from the designated to non-designated hospitals and health units. This study was conducted to determine to which extent the BFHI practices had influenced the early feeding of newborn in the 2 non-designated major hospitals in the Osun state capital. The State Specialist Hospital and the Ladoke Akintola University Teaching Hospital in which this study was conducted are both situated in Osogbo, the capital of a Western Nigeria
state. Both hospitals are specialist and referral hospitals.
None of the two hospitals has so far being designated baby
friendly by the UNICEF and WHO.

SUBJECTS AND METHODS
The subjects were the 62 doctors and nurses in the newborn
and postnatal wards of the State Specialist Hospital, and the
Ladoke Akintola University Teaching hospital, Osogbo, who
responded to the questionnaire. All the subjects were
interviewed to obtain information regarding their practices
on prelacteal feeding of the newborn between the 1st and 31st
of August 2006. Information elicited with the questionnaire
included the designation and assigned wards of duty of the
respondents, the details of the types of feeds, the times of
feeding and the reasons for prescribing the feeds. The
doctors and nurses in the newborn unit were classified as
paediatric and those in the post natal unit were classified as
obstetric. The data obtained was analyzed and presented as
simple descriptive statistics.

RESULTS
POPULATION OF DOCTORS AND NURSES
STUDIED.
Thirty (75%) of the total 40 doctors working at the neonatal
and post-natal wards of the State Specialist Hospital and the
Ladoke Akintola University Teaching hospital were studied.
The 30 doctors consisted of 15(50%) doctors each from the
obstetric and paediatric departments. The fifteen doctors
from the obstetric department were 6(40%) consultant and
9(60%) resident cadres. Also, 6(40%) consultants and
9(60%) residents were studied at the paediatric unit. Of the
total 52 nurses working in both establishment 32 (61.5%)
responded. The 32 nurses were ranked, 10 (31.3%) chief
nursing officers, 10 (31.3%) senior nursing sisters and
12 (.37.4%) nursing officers and they consisted of 15(46.9%)
paediatric and 17(53.1%) obstetric nurses. Thus, the total
number of health workers studied was 62.

BREAST FEEDING PRACTICES
Breast milk was declared to be the best food for the newborn
by all respondents. In addition exclusive breast feeding
practice was accepted to be the best feeding practice for all
the newborn when practicable by all the health workers
studied. However, prelacteal feeding practices were adopted,
when the mothers’ lactation was considered to be delayed.

PRACTICE AND INDICATIONS FOR

PRELACTEAL FEEDING
Sixty (96.8%) respondents of the total 62 respondents gave
prelacteal feeds because of delayed maternal lactation. This
60 consisted of 29 doctors and 31 nurses. Thus one each of
paediatric doctors and nurses did not prescribe prelacteal
feeds. Prevention of hypoglycemia was the stated
background purpose for giving prelacteal feeds. An
additional reason offered by one (6.7%) of the 15 obstetric
doctors for giving prelacteal glucose drinks was for the
prevention of neonatal jaundice. Also, another 1(6.7%) of
the obstetric doctors prescribes plain water prior to lactation
in order to prevent dehydration. Of the 17 nurses attached to
the obstetric unit 16(94.1%) practiced the administration of
prelacteal feeds for delayed lactation and prevention of
hypoglycemia. One (6.25%) of the nurses also prescribed
prelacteal glucose fluids in order to prevent and treat
neonatal jaundice.

TYPE OF PRELACTEAL FEEDS AND MODE OF
ADMINISTRATION
Feeding of the new born babies by cup and spoon was the
practice by all the health workers who prescribed prelacteal
feeds. Infant formula was the most common prelacteal feed
administered to newborn babies by the paediatric nurses and
doctors. Eleven (73.3%) of the 15 paediatric doctors and
10(58.8%) of the 17 nurses gave this feed. On the other hand
glucose water was the most common feed given by the
obstetric doctors and nurses-9(60.0%) of the 15 doctors and
8(47.1%) of 17 nurses. The details of the kinds of prelacteal
feeds given by the health workers are shown in Table 1

TIME OF ADMINISTRATION OF PRELACTEAL
FEEDS POST DELIVERY
The time for commencement of prelacteal feed varied a lot
among the health workers. Most of the health workers
administered prelacteal feeds within 0-2 hours of delivery
especially to crying inconsolable babies. Of the total 15
paediatricians and 15 obstetricians studied 5 (33.3%) doctors
from each unit gave prelacteal feeds within 2 hours of
delivery. While among the 15 paediatric and 17 obstetric
nurses 5(33.3%) and 7 (41.2%) respectively of the nurses in
the 2 units gave prelacteal feeds within 2 hours of delivery.
On the other hand for 3 (20.0%) paediatric doctors and 4
(23.5%) obstetric nurses, gave no specific time as to the time
of administration of feeds. The details showing the prelacteal
feeding periods of the new born babies are shown in Table 2.
PAEDIATRIC SPECIALTY AND INFANT FEEDING TRAINING.

None of the nurses had paediatric specialist training post basic qualification. Also, majority of the nurses have not undergone a course on infant feeding since they started working on the neonatal and post-natal wards. None of the obstetric doctors had received special training on infant feeding since their basic qualifications. On the other hand, all the paediatricians had received training in infant feeding by virtue of their training/rotation through the neonatology posting. Most of the obstetricians 14 (93.3%) and paediatricians 12 (80%) were desirous to attend an update course on infant feeding so as to upgrade their knowledge. Similarly 13 (86.7%) of the paediatric and 11 (64.7%) of the obstetric nurses respectively responded that they felt the need to undergo a training update on neonatal feeding.

![Figure 1](Image)

**Table 1: Type of pre-lacteal feeds**

<table>
<thead>
<tr>
<th>Types of Pre-lacteal Feeds</th>
<th>Doctors</th>
<th>Nurses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant formula</td>
<td>11</td>
<td>10</td>
</tr>
<tr>
<td>Glucose water</td>
<td>2</td>
<td>15</td>
</tr>
<tr>
<td>Plain water</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td>No substitute (None)</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>32</td>
</tr>
</tbody>
</table>

![Figure 2](Image)

**Table 2: Time of administration of pre-lacteal feeds post delivery**

<table>
<thead>
<tr>
<th>Number of hours post delivery</th>
<th>Doctors</th>
<th>Nurses</th>
<th>Total</th>
<th>Doctors</th>
<th>Nurses</th>
<th>Total</th>
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<tbody>
<tr>
<td>&lt;2</td>
<td>5</td>
<td>5</td>
<td>10</td>
<td>5</td>
<td>6</td>
<td>11</td>
</tr>
<tr>
<td>&gt;2-4</td>
<td>3</td>
<td>2</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>&gt;4-6</td>
<td>1</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>&gt;6-8</td>
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<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;8-10</td>
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<td>0</td>
<td>0</td>
<td>0</td>
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<td>0</td>
</tr>
<tr>
<td>&gt;10-12</td>
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<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>&gt;12-24</td>
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<td>3</td>
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</tr>
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<td>&gt;24-48</td>
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<td>0</td>
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<td>5</td>
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</tr>
<tr>
<td>Total</td>
<td>15</td>
<td>15</td>
<td>30</td>
<td>15</td>
<td>17</td>
<td>32</td>
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</tbody>
</table>

DISCUSSION

The present study has shown that the pre-lacteal feeding of healthy newborn babies is a common practice among health workers in these 2 major hospitals. The prevalence of use of pre-lacteal feeds in the present study is unacceptably high, since it is the routinely prescribed mode of feed management of babies whose mothers commence lactating from shortly after birth to as long as 48 hours post delivery. One aspect of the serious concern which this situation invites will be appreciated when we consider the leadership position of both hospitals. While one is a teaching hospital the other is the apical hospital of the whole state. They therefore train and influence other health workers, yet their example in this respect is unworthy of emulation.

Our findings suggest a need to educate the health workers in order to dissuade them from these harmful practices and to motivate them to adopt, implement and promote the UNICEF/WHO breast feeding initiative activities.1,3 The other aspect of the concern relates to the finding that doctors in the newborn unit, also, in spite of their training prescribe prelacteal feeds. This is an unexpected finding and it is more likely to be due to a lack of whole hearted belief in the BFHI than to ignorance.

The issues regarding the disparities in perceived indications for prelacteal feeds and the use of breast milk substitutes such as plain water and glucose water for feeding has been documented by previous studies.1, 3, 4 The variance in post delivery feeding time and the different types of prelacteal feeds all point to a basic need perceived by the respondents that they need an update information on neonatal care. Babies delivered in the communities outside hospitals and with no access to paediatricians are at a greater potential risk of receiving prelacteal feeds. On the other hand babies delivered in the hospital who have feeding problems are usually referred to paediatricians.

Previous studies on pre-lacteal feeding have paid little attention to the varying time interval between onset of maternal lactation and delivery.1, 3, 4, 5 A previous study conducted in Nigeria has shown that the risk of developing hypoglycemia in babies on exclusive breastfeeding in the first 6 hours was minimal but yet, existed.6 Routine early prelacteal feeds 2-6 hours post delivery as observed in the present study may therefore seem unjustified, and could be a disadvantage by delaying lactation.

In conclusion our findings suggest that Nigerian health workers need to be educated about right infant feeding practices. Previous studies have shown that education of mid-wives and doctors in charge of nursing mothers reduced the chances of prelacteal feeding and formula supplementation.3, 7 Adoption of the baby friendly policies in all our hospitals will reduce the practice of prelacteal feeding. All non-baby friendly hospitals can ensure that all the doctors and nurses who work in their postnatal and...
neonatal wards receive a verbal briefing on their hospitals’ neonatal feeding policy, which should be based on the BFHI steps which should also be written up and conspicuously displayed on the wards. The media houses can assist in effecting the needed change by playing the role of disseminating correct feeding information to the target population. The government on its part can provide facilities for workshops and update courses as well as issue out directives to hospital managements on the feeding practices it wishes to promote.

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