Abstract

Background: Neonatal care is an essential care dependent on team work and plays a great role in children’s survival and development. Effective ante natal care, safe delivery and care in the first week of neonate baby are crucial for neonatal mortality and morbidity. The purpose of the study is to identify neonatal care practices and beliefs, their harmful and beneficial characteristics among the RMG working mothers of below five years children.

Materials and methods: A descriptive type of cross sectional study was conducted on the knowledge on Neonatal care among the Ready Made Garments (RMG) working mothers. In this study a total of 120 mothers were selected by Global Specialist Garments limited-1 (GSGL-1) at Sadarghat, Chittagong from June to July, 2014. Data were collected by using structured questionnaire through face to face interview and were then compiled, processed and analyzed by SPSS-version 20.

Results: The age range of the respondents was in between 18-39 years. In this study we found that 41.67% mothers had single child while about 10% mothers had 4 or more children. Among the mothers 80% had knowledge about benefits of breastfeeding and 78.33% had given colostrums to their babies. A total 55 mothers initiate breastfeeding within an hour and 91.67% heard about exclusive breastfeeding. About 66.67% respondents delivered the last child at home among them 75% conducted by untrained Dai. Only 58.33% had knowledge about proper care of the umbilical cord.

Conclusion: In this study most of the mothers did not complete their secondary education and had a lack of knowledge on neonatal care practice. More over working mothers unable to give enough time for neonatal care. National policy and planning for maternity leave should be followed in our RMG factories to minimize the problem.

Key words

Neonatal care; Colostrums; Exclusive breastfeeding; Immunization.

Introduction

Neonatal care is the care of a new born baby during first 28 days of life and it plays an important role in children’s survival and development. Adequate and proper knowledge on neonatal care of the mothers can ensure the reduction of Neonatal death. Static rate of decline in neonatal mortality rate is one of the major obstacles in achieving MDG 4 especially in developing countries. Nationwide intervention targeting safe mother and neonatal care have not yielded the desire impact. With impressive progress made in recent years, Bangladesh is one of few developing countries on track to achieve Millennium Development Goal 4 to reduce child mortality. Between 2004 and 2007 child mortality has fallen from 88 per 1,000 live births to 65 per 1,000 live births. Despite many advances, the neonatal mortality in Bangladesh is still high and lies at 21, accounting for more than half of all under-five deaths and more than two thirds of infant deaths. An estimated 120,000 newborns die every year in Bangladesh. Moreover, a malnourished mother is very likely to give birth to a low birth weight baby, a major underlying cause of death for newborns. Bangladesh has one of the world’s highest rates of adolescent motherhood, based on the proportion of women under the age of 20 giving birth every year. 28% of adolescent women (Age 15-19) are already mothers with at least one child and another 5% is pregnant.
The major newborn killer is infection (52%) followed by birth asphyxia or unable to breath at birth (21%) and low birth weight with pre-term deliveries. It should be remembered that low birth weight in most cases is preventable and good ante natal care, treatment for anemia and nutritional supplementation can help to reduce incidence of low birth weight in developing countries. Most neonatal deaths can be avoided through simple, affordable interventions, especially in areas with weak health systems and high rates of neonatal mortality. Outreach and family community care, health education to improve home-care practices, recognition of danger signs, generation of demand for skilled care, and increased health-seeking behaviour can lead to significant reductions in neonatal mortality. Families often ignore very simple healthy practices or do not accept them because it is against tradition or common belief. Similarly most people are not able to recognize when it is necessary to seek care for the mother or the baby. The knowledge of caregivers plays a crucial role in avoiding the unnecessary maternal and newborn death. There is a great need for better understanding of essential newborn care practices such as clean and safe delivery, drying and wrapping for thermal protection, early initiation of exclusive breastfeeding, tactile stimulation and resuscitation, care of eyes, skin and cord for infection prevention.

The Ready Made Garments (RMG) opened up a new door of economic development for Bangladesh and female are the major workforce of these industries. Female workers in Bangladesh tend to have very low level of education as they dropout from school early to help and support their families. Although Bangladesh has made significant progress with regards to neonatal care over the past few decades, there is still a large gap between the statistics of Bangladesh and the other countries of the region. This is largely due to a coalition of factors such as lack of awareness on proper neonatal care, cultural barriers, ignorance on the part of the mothers and illiteracy leading to lack of penetration of health education amongst the RMG working mothers.

The low status of women, poor quality and low uptake of health services are some of the reasons for this situation. Because most births occur at home without skilled attendants, there is a high death rate of children under one month. Almost 80 per cent of neonates do not receive post natal care from a trained health care provider within six days of birth. The first week of life is the most critical time for a newborn; three in four newborn deaths occur within the first week, almost 50 per cent of them within 24 hours, often at home and with no contact with the formal healthcare system. In particular, research has shown that the majority of neonatal mortality is caused by infection, asphyxia at birth, hypothermia, and low birth weight. More than 4 million newborns die each year around the world, and most of these deaths occur in poorer countries.

Developing strategies about domiciliary newborn-care practices and care-seeking for illness including behaviour change communications, to prevent neo natal deaths. Working and house wives mothers had highest risk of having hypothermic babies may be due to their relatively housebound situation and thereby poor exposure to awareness. The aim of our study was to explore and raise awareness on Neonatal Care among the RMG working mothers of infants. We believe that our study which was carried out among the RMG working mothers will explore all the aspects of the critical issue at hand. However, this study itself is not enough to assess the present situation as it was carried out in a small context with minimum resources, but it enhances to conduct a larger study in this regard nationally.

Materials and methods
It was a descriptive type of cross sectional study conducted during June-July 2014 in the selected Garment factory, Global Specialized Garments Limited, Sadarghat, Chittagong. The study covered 730 female workers of reproductive age group in the factory. Purposive sampling technique was applied and 120 respondents mother of under 5 years children were selected aged (18-39 years) who agreed to participate in the study. Regarding ethical issue the purpose of the study was mentioned to the respondents precisely and verbal consent was taken. A pretested questionnaire was designed to collect data. Mothers of infants working in the factory were interviewed about practice on neonatal care. Basic demographic, socio-economic status and available health facilities were also considered. The possible factors causing non compliance with the breastfeeding were also noted. The relevant data were collected by face to face interview with the prepared questionnaire. Data were analyzed with SPSS-Version 20.
Inclusion criteria
i) Mothers working in RMG sector
ii) Mothers having at least 1 child with an age less than 5 years.

Exclusion criteria
i) Mothers working in other sectors of job
ii) Mothers having children more than 5 years of age
iii) Mothers not consenting for the participation.

Results
A total of 120 mothers working in RMG factory aged between 18-39 years were included in this study, majority 37.5% (45) were within 26-33 years age group and 6.67% were belongs to age 36 years and above. Among the respondents 70.83% belongs to Muslim religion and 60% (72 mothers) had average in monthly income. In this study we found that 65.83% (79 respondents) lived in nuclear families and 41.67% (50 mothers) had only single child while about 10 % (12mothers) had 4 or more children.

In this study we found that 42.50% (51 mothers) of respondents had education status below SSC followed by 35.83% (43 mothers) had up to primary level, 2.50% ( 3 mothers) had SSC, 16.67% (20 mothers) illiterate were illiterate and 2.50% (3 mothers) had education above SSC.

Place of last delivery: Regarding place of last deliver, 80 (66.67%0 mentioned that they delivered at home, 27 mothers at NGO clinics, 3 at Private Clinic and 8.33% (10) delivered at Government Hospital (Fig 1).

In this study it was revealed that 45.83% of respondents start breastfeeding just after birth within hour, 37.50% after few hours (less than 1 day) and 16.67% after few days of birth (Fig 2). Regarding trend of colostrums feeding to the newborn it was documented that 78.33% (94 mothers) has given colostrums to their newborn and 21.67% (26 mothers) did not. 21.67% (Mothers) respondents did not gave colostrums to their babies and among them reasons were 38 % (10 mothers) thought that colostrums is harmful to the baby, 31% (8 mothers) due to traditional practice, 23% (6 mothers) replied that their babies could not suck properly and only two mothers mentioned unavailability (Fig 3).

Fig 5 : Knowledge about keeping newborn warm

A total of 120 mothers working in RMG factory aged between 18-39 years were included in this study, majority 37.5% (45) were within 26-33 years age group and 6.67% were belongs to age 36 years and above. Among the respondents 70.83% belongs to Muslim religion and 60% (72 mothers) had average in monthly income. In this study we found that 65.83% (79 respondents) lived in nuclear families and 41.67% (50 mothers) had only single child while about 10 % (12mothers) had 4 or more children.

In this study we found that 42.50% (51 mothers) of respondents had education status below SSC followed by 35.83% (43 mothers) had up to primary level, 2.50% ( 3 mothers) had SSC, 16.67% (20 mothers) illiterate were illiterate and 2.50% (3 mothers) had education above SSC.

Place of last delivery: Regarding place of last deliver, 80 (66.67%0 mentioned that they delivered at home, 27 mothers at NGO clinics, 3 at Private Clinic and 8.33% (10) delivered at Government Hospital (Fig 1).

In this study it was revealed that 45.83% of respondents start breastfeeding just after birth within hour, 37.50% after few hours (less than 1 day) and 16.67% after few days of birth (Fig 2). Regarding trend of colostrums feeding to the newborn it was documented that 78.33% (94 mothers) has given colostrums to their newborn and 21.67% (26 mothers) did not. 21.67% (Mothers) respondents did not gave colostrums to their babies and among them reasons were 38 % (10 mothers) thought that colostrums is harmful to the baby, 31% (8 mothers) due to traditional practice, 23% (6 mothers) replied that their babies could not suck properly and only two mothers mentioned unavailability (Fig 3).
Respondents were also interviewed about the awareness and knowledge on cord care. Only 58.33% (70 mothers) had the right knowledge on cord care. Among the respondents 70 (58.33%) mentioned leave it as such, 20 (16.67%) applied mustered oil, 16 (13.33%) applied antibiotic cream, 12(10%) applied antiseptic solution and only 2(1.67%) mothers applied ash (Fig 4). Regarding keeping the new born warm 89(74.17%) respondents mothers mentioned about warm clothes, 25(20.83%) preferred keeping their baby close to her body with warm clothes and only 6 (5.0%) mentioned about Kangaroo method (Fig 5). In this study we also found that practice of the timing of first bath of the new born 20(16.67%) replied on Day 1, 27 (22.50%) Day 2, 63(52.50%) on Day 3, 7(5.83%) on Day 4 and 3(2.50%) on Day 5. The study result also showed that majority, accounting 108 (90 %) had an idea on EPI program and its benefits.

Discussion

A total of 120 mothers were surveyed. The age range of the respondents was in between 18-39 years, majority 70.83% belongs to Muslim religion, 42.50% had education below SSC and 60% found with average monthly income. In this study we found that 65.83% respondents lived in nuclear families and 41.67% mothers had only single child while about 10% mothers had 4 or more children.

Among the mothers 80% had knowledge about benefits of breastfeeding and 78.33% had givencolostrums to their babies. A total 55 mothers initiate breastfeeding within an hour and 91.67% heard about exclusive breastfeeding. About 66.67% respondents delivered the last child at home among them 75% conducted by untrained Dai. Only 58.33% (70) had knowledge about proper care of the umbilical cord mentioned leave it as such, 20 (16.67%) applied mustered oil, 16 (13.33%) applied antibiotic cream, 12 (10%) applied antiseptic solution and only 2 (1.67%) mothers applied ash. About 91.67% (110 mothers) had knowledge on exclusive breastfeeding and among them 72.73% respondents mentioned Health personal as source of knowledge. Keeping the new born warm 89(74.17%) respondents mothers mentioned about warm clothes, 25(20.83%) preferred keeping their baby close to her body with warm clothes and only 6 (5.0%) mentioned about Kangaroo method and in this study we found that practice of the timing of first bath of the new born 20(16.67%) replied on Day 1, 27 (22.50%) day 2, 63(52.50%) on Day 3, 7(5.83%) on day 4 and 3(2.50%) on Day 5 similar to another study findings13,14.

The study result also showed that majority, accounting 108 (90 %) had an idea on EPI program and its benefits. Most of the mothers did not complete their secondary education and had a lack of knowledge on neonatal care practice. Raising level of education, health facilities and health education with hands on training may improve existing situation of our country.

Limitations

We could not get findings related to working mothers in sectors other than RMG. More over sample size was small and duration of study was short.

Contribution of authors

PKM - Conception, design, acquisition of data, drafting and final approval.
JDS - Analysis, interpretation of data, critical revision and final approval.
MAK - Acquisition of data, analysis, drafting and final approval.

Acknowledgement

We would like to express our heartfelt thanks to all study participants and GSGL-1 Workers Union for providing the opportunity to conduct this study. We are also indebted to Prof. Dr. Pravat Chandra Barua, Honorable VC, USTC for his kind suggestion in designing the study.
Conclusion
Practice and beliefs of Neonatal care of the RMG working mothers is very important factor for physical health of their children. Poor Neonatal Care is a serious public health problem and has been a burden for the Health Services sector in Bangladesh. Throughout our study, we found many new avenues which can be improved in order to achieve better Neonatal Care. Health education, awareness should be created by effective training program proper warming and should be educated on practices such as the kangaroo care or skin-to-skin care. Appropriate knowledge of mothers and high EPI coverage can reduce the Neonatal mortality and morbidity in Bangladesh.

Disclosure
All authors declare no competing interest.

References
2. Neonatal deaths account for 57% are all under-five deaths. Bangladesh Demographic Health Survey 2007.