EPH - International Journal of Medical and Health Science
ISSN (Online): 2456-6063
Volume 01 Issue 04 December 2015

DOI: https://doi.org/10.53555/eijmhs.v1i4.103

# MATERNAL EDUCATION, HYGIENIC PRACTICES AND CHILDREN'S HEALTH STATUS

**Syadani Riyad Fatema[1*], Mr. Humayun Kabir[2]**
*[*1]Lecturer Department of Bangladesh and Liberation War Studies Noakhali Science and Technology University (NSTU) [2]PhD Student, School of Health, University of New England,Assistant Professor in Sociology, University of Dhaka, Bangladesh Email: humayun_sociology03@du.ac.bd Mobile: +61424483240 Present Address: Room No. E-213, Wright College, University of New England, Armidale, NSW, Australia.*

***Corresponding Author:-***
*Email: riya.syadani.fatema@gmail.com Mobile: +88-01881500232*

## Abstract:-
*This empirical study was conducted to show how mother's educational level and personal hygienic practices influence their children's health status. For this, 135 mothers who have admitted their children in the Comilla Medical College Hospital (one of the government medical college hospitals in Bangladesh) for treatment purpose were selected purposively for face to face interview. The study reveals that there are significant correlations among maternal education level, hygienic practices and children's health status. Quantitative data were analyzed through using SPSS (version 17). Bivariate analysis showed that mother's educational level, family income and hygienic practices have greater influence on children's health status.*

**Key words**: *Maternal education, Hygienic practices, Child health, Diseases*

## INTRODUCTION:-

Mothers are the builder of the nations. Because they cultivate sound health (both physical and mental health), well education and virtuous character in children. However, if mothers remain illiterate, diseased and live with prejudices then the future generation (i.e. children) would be affected in the same way.

Although both mother and father are similarly important for the smooth mental and physical development of children, mother's qualities usually considered as strong intervening variables with regard to children's socio-psychological, intellectual and physical development. Because mothers are the prime time givers to child in the developing countries like Bangladesh. In this country, fathers largely remain busy with the outer jobs (due to the patriarchal nature of the society) for earning money and mothers especially in the rural areas are bounded within the household activities where child care is one of the principal duties. Therefore, it is quite natural that sociointellectual and psycho-physical development as well as overall health status of a child will depend largely on the maternal qualities including mother's education, personality, work status, hygienic practices and so on. A number of studies have validated this proposition empirically. Clelan and Ginneken (1988) showed that maternal education has a significant influence on infant and child mortality (Clelan and Ginneken, 1988:1356). If the mother are well educated then the infant mortality rate decreases in the developing countries. Similar study was conducted by Pillai et al. (2003) revealed that educated parents do not bring their children to the hospital when illness is mild because educated mothers were found succeeded in resolving these trivial disseises on their own (Pillai et. Al, 2003:787-788). In addition, Amin et al. (2010) conducted a research on 'socioeconomic factors differentiating maternal and child health-seeking behaviour in rural Bangladesh: A cross-sectional analysis' where they indicated that mothers with high wealth status are more likely to use modern health care facilities for their children compared to that of the poor mothers (Amin et al., 2010:1). Today in all over the world mothers are engaging with paid work. Therefore, the amount of time usually spent before with children relating to child caring are going to be lesser day by day.

It is evident from the study of Seo et al. (2005) where they showed that child care is negatively associated with mother's employment in the rural low-income families (Seo et al., 2005:107). They proposed that government should subsidize the material products necessary for the child care and thus load from mothers will be reduced. Likewise, Brooks-Gunn (2002) explored that maternal employment is negatively associated with the development of children's cognitive level in the earlier stage of life (Brooks-Gunn, 2002:1052). It is also to mention here that mothers are very commonly seen to play multiple roles in the family. They play the double role by working outside and also maintaining the family. That is why, Mercer (2004) appropriately argued that women are generally found to play multiple roles (i.e. as a wife, mother, employee and so forth) in the family life which eventually might a bad impact on children's smooth growth (Mercer, 2004: 231). These multiple roles sometimes may depress the mothers which eventually affect the children deleteriously. For example, Petterson and Albers (2001) studied on 'effects of poverty and maternal depression on early child development' where they explored that maternal depression driven by poverty has deleterious impact on the mental and physical growth of children (Petterson and Albers, 2001:1809). Boys and girls also got depressed by maternal factor of depression. Laslty, Ware (1984) claimed that we have to be aware on cultural variations (such as heavy manual labors of the mothers) along with the mother's economic status and educational level in measuring the health status of the children (Ware, 1984: 2010-211). The above research did not focus on the correlations between mother's educational level and personal hygienic practices with child care. Therefore, the present study put emphasize on how mother's education and hygienic practices influence the health status of the children. The unique matter of this current research is that the mothers whose babies are currently admitted to the hospital due to affected by various diseases were considered for interview.

### Objectives of the Study

The broader objective of this study is to explore how maternal educational status and hygienic practices influence children health status. The specific objectives are as follows:

**1)** To identify the demographic characteristics of the sample mothers.
**2)** To find the correlation between family income and health seeking behavior among the respondents.
**3)** To observe the maternal status of hygienic practices at home.
**4)** To explore the common diseases among the children who are admitted to the hospital.

### Hypothesis

**1.**The less the educationallevel amongthe mothers, the more the children are in healthrisks.
**2.**The more the hygienicpractices among the mothers, the less the children are affected bydiseases.
**3.** Family income has the influence on the children'streatment.

### Methodology

This empirical study conducted from 11 June to 13 July 2015. A total number 135 mothers, of the diseased children who are admitted to the Comilla Medical College Hospital, were selected purposively for face to face interview. The interview was conducted through using a structured questionnaire. The questionnaire was written in English and later it was filled up by the researcher by asking the respondents instantly. Collected data were analyzed using SPSS software (version 17).

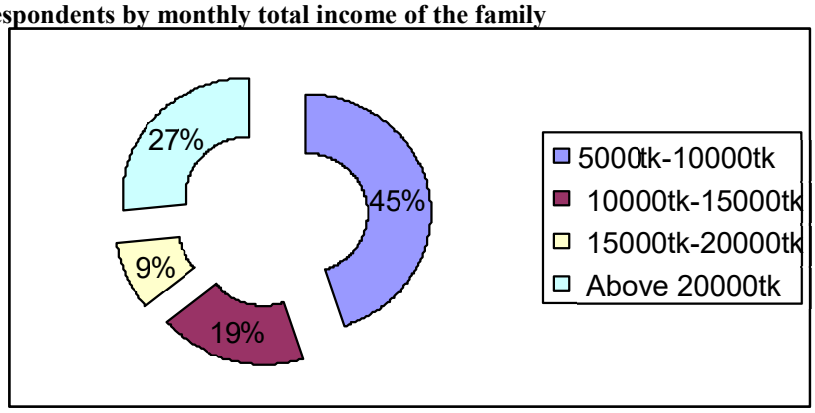
**Results:-**

**Demographic characteristics of the respondents**

| Characteristics | Number | Percent |
|---|---|---|
| **Age** | | |
| 15-24 | 38 | 28 |
| 25-34 | 23 | 17 |
| 35-44 | 47 | 35 |
| Above 45 | 27 | 20 |
| **Total** | **135** | **100** |
| **Education Status** | | |
| Primary | 16 | 12 |
| Secondary | 36 | 27 |
| Graduate | 12 | 9 |
| Post Graduate | 11 | 8 |
| Illiterate | 60 | 44 |
| **Total** | **135** | **100** |
| **Occupation** | | |
| Housewife | 74 | 55 |
| Teaching | 12 | 9 |
| Government service holder | 23 | 17 |
| Non-government service holder | 16 | 12 |
| Small business | 10 | 7 |
| **Total** | **135** | **100** |

From the table above, it is clearly evident that 28%, 17%, and 35% of the respondents belong to the age group 15-24 year, 25-34 year, and 35-44 years respectively. Moreover, 20% of them are found above 45 years old. In terms of educational status, 12% of the respondents have completed primary level of education, 27% of the respondents have finished secondary level of education, and only 9%, 8% of the respondents have done graduation and post-graduation correspondingly. Majority of respondents (44%) are found to be illiterate. Furthermore, it is clearly evident that 55% of the respondents are housewives, 17% of the respondents are government service holder, 12% of the respondents are in non-government sector, 7% of them are involved in small business and 9% of them are found to be engaged in teaching.

**Distribution of the respondents by monthly total income of the family**




From the figure above, it is apparent that majority of the respondents' (45%) monthly family income is taka 5000-10000. 19% of the respondents' total family income is taka 10000-15000 and 9%, 27% of the respondents' total family income is taka 15000-20000 and more than taka 20000 respectively.

**Mother's hygienic practices (in %)**

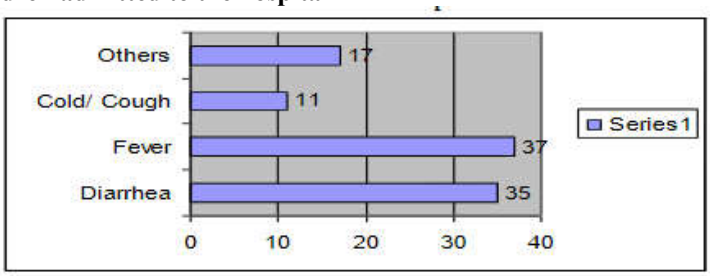
From the above, it is obvious that only 27% of the respondents do hygienic practices relating to child health care and overwhelming majority of them (73%) do not follow hygienic health care practice for their children. 23%, 11%, 16%, and 8% of the respondents wash hands with soap before eating, use tissue in the toilet, wash hands with soap after toilet, and wash hands before preparing food respectively. The percentages of not using showed in the above table is alarming and which can affect child health severely. Furthermore, 45% of the respondents do not wash plates using soap or other liquid while majority of the respondents use soap or liquid for washing plates.

**Mother's hygienic practices (in %)**

| Items of hygienic practices | Yes | No | Total |
|---|---|---|---|
| Hygienic practices in terms of child health care | 27 | 73 | **100** |
| Washing hands with soap before eating food | 23 | 77 | **100** |
| Practices of using tissue in the toilet | 11 | 89 | **100** |
| Washing hands with soap after going to the toilet | 16 | 84 | **100** |
| Washing hands before preparing food | 8 | 92 | **100** |
| Washing plates with soap or liquid | 55 | 45 | **100** |

**Children's health status**

**Diseases for what the children admitted to the hospital**




From the figure above, it is apparent that 35% of the respondents have admitted their children in the hospital for the treatment of diarrhea, 37% for fever, 11% for cold/cough and 17% of the respondents have admitted their children for other diseases.

| For how many days the children are admitted in the hospital | Number | Percent |
|---|---|---|
| 1-2 days | 18 | 13 |
| 3-4 days | 12 | 9 |
| | 31 | 23 |
| 7 days or more | 74 | 55 |
| **Total** | **135** | **100** |
| **Common diseases found among the children during last six months** | | |
| Fever | 34 | 25 |
| Cough/cold | 25 | 19 |
| Pneumonia | 15 | 11 |
| Diarrhea | 61 | 45 |
| **Total** | **135** | **100** |

The table shows that bulk (55%) of the children are admitted to the hospital for 7 days or more. Besides, 13%, 9%, and 23% of the children are admitted to the hospital for 1-2 days, 3-4 days, and 5-6 days respectively. On the other hand, diarrhea is prominent among 45% of the children among the diseases that affected the children during the last six months. Moreover, 25%, 19%, and 11% of the children were affected by fever, cough/cold, and pneumonia accordingly during the last six months of time.

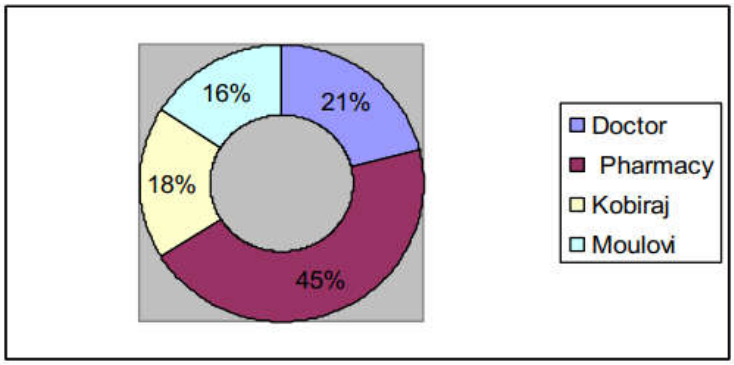
**Maternal factor's affecting childcare**

| Factor's affecting childcare | Yes | No | Sometimes | Total |
|---|---|---|---|---|
| Ability to provide primary health treatment to child | 13 | 65 | 22 | **100** |
| Believing in traditional health care practices | 53 | 8 | 39 | **100** |
| Capacity to teach children about hygienic practices | 23 | 65 | 12 | **100** |

The table above discloses that 13% of the respondents can give primary treatment to their children while 65% of the mothers are not able to do that. However, 22% of them can provide this service to some extent. It is also evident that 53% of the respondents trust on traditional health care practices although 8% of them do not believe so. Albeit, 39% of the respondents sometimes trust on local health care practices. Additionally, the table reveals that 23% of the respondents have the capacity to teach their children about hygienic methods of health care, however, 12% of the respondents confided

that they sometimes found themselves able in teaching so. On the other hand, overwhelming majority of respondents (65%) do not have capacity to teach their children about hygienic practice.

**Distribution of the respondents by where do they usually go for consultation in case of their children's sickness.**




From the figure above, it is evident that 21% of the respondents visit doctors if their children get sick or diseased. On the other hand, 45%, 18%, and 16% of the respondents go to pharmacy, *Kobiraj,* and *Moulovi* respectively for the treatment of their children.

**Bivariate analysis of the results**

All the quantitative findings are presented using bivariate technique. In case of bivariate analysis cross tables are formed using SPSS and the statistical relations between variables are tested by using a number of appropriate measures of association.

**Mother's hygienic practices and children's frequency of getting diseased**

Summary table of Chi-square and Cramer's V on children's getting diseases vs maternal hygienic practices

| **Maternal hygienic practices** | **Children's getting diseased** |
|---|---|
| | Chi-square and Cramer's V |
| Practices of using tissue in the toilet | $\chi^2 = 35.562$*** df= 2 |
| Washing hands with soap after going to the toilet | V=.544*** |
| Washing hands before preparing food | $\chi^2 = 43.251$** df= 4 |
| Washing plates with soap or liquid | $\chi^2 = 63.871$*** df= 2 |

***** p=0.001 ** p=0.01 * p=0.05**

Almost all of the items of maternal hygienic practices appear to be significantly associated with children's getting diseased. It is seen that maternal hygienic practices include practices of using tissue in the toilet, washing hands with soap after going to the toilet, washing hands before preparing food, and washing plates with soap or liquid are closely associated with the independent variable children's getting diseased and there is strong association between them.

**Mother's educational level and health status of the children**

Summary table of Chi-square and Cramer's V on the mother's educational status on child's health status

| **Health status of the children** | **Educational level** |
|---|---|
| | Chi-square and Cramer's V |
| Ability to provide primary health treatment to child | $\chi^2 = 56.356$*** df= 2 |
| Believing in traditional health care practices | V=.356*** |
| Teaching children about hygienic practices | $\chi^2 = 23.546$** df= 4 |
| Usual consultation in case of children's sickness | $\chi^2 = 56.325$*** df= 2 |
| Hygienic practices of the children | V=.245*** |

***** p=0.001 ** p=0.01 * p=0.05**

t is evident from the above table that almost all of the items of health status of the children appear to be significantly associated with mother's educational level. Table gives chi-square ($\chi 2$) and V values, shows that almost all of the items regarding health status of the children (ability to provide primary health treatment to child, believing in traditional health care practices, teaching children about hygienic practices, usual consultation in case of children's sickness, and hygienic practices of the children) are closely associated with mother's educational level.

**Income of the family and children's health care facilities**

Summary table of Chi-square and Cramer's V on the income of the family on child's health care facilities

| **Children's health care facilities** | **Income of the family** |
|---|---|
| | Chi-square and Cramer's V |
| Mother's hygienic practices in terms of child health care | $\chi^2 = 41.235$*** df= 2 |
| Usual consultation in case of children's sickness | V=.456*** |
| Believing in traditional health care practices | $\chi^2 = 34.568$** df= 4 |

***** p=0.001 ** p=0.01 * p=0.05**

From the table above, it shows that income of the family has a great influence in almost all the items of children's health care facilities. Mother's hygienic practices in terms of child health care, usual consultation in case of children's sickness, and believing in traditional health care practices are closely associated with the income of the family.

**Discussion and Conclusion**

This research was conducted to show whether education level of the mothers influence their hygienic practices and also to investigate maternal factors affecting child health status. The study revealed that majority of respondents (44%) are illiterate whose children got admitted to the hospital diseased by diarrhea, fever, and cold/cough (35%, 37%, and 11% respectively). Moreover, diarrhea is prominent among 45% of the children among the diseases that affected the children during the last six months. We can easily understand that these diseases could be protected by precautious measurement. For example, hygienic practices could protect the children from these kind of virus affected diseases. However, it is frustrating that overwhelming majority of them (73%) do not follow hygienic health care practice for their children. Furthermore, 77%, 89%, 84%, and 92% of the respondents do not 'wash hands with soap before eating', 'use tissue in the toilet', 'wash hands with soap after toilet', and 'wash hands before preparing food' respectively. This is why, majority of the children are affected by the diseases which are directly related to hygienic practices.

The illiterate status of the mothers are also directly related to the capacity of giving primary health treatment and believing in traditional health care system. Unfortunately, 65% of the mothers are not able to provide primary health treatment almost 92% of the respondents trust on traditional health care practices which can be life threatening for the children. In addition, the study found that only 21% of the respondents visit doctors if their children get sick or diseased. On the other hand, 45%, 18%, and 16% of the respondents go to pharmacy, *Kobiraj,* and *Moulovi* respectively for the treatment of their children. At this point it can be argued that the respondents (being illiterate and less educated) were not aware of hygienic practices, primary treatment, and about where to bring for better treatment. Similar findings were revealed from the studies conducted by Clelan and Ginneken (1988), and Pillai et al. (2003) where they showed if the mothers are educated the child mortality rate decreased as well as children get the privilege of getting primary health treatment at home.

Now, questions might arise about why studied mothers do not lead their lives hygienically as well as why they do not go to the specialized doctors for consulting. The answer is very simple. It is their poverty that do not allow them to go to the doctors and to lead hygienic life style. Because, specialized doctors mostly give some blood tests or other relevant tests. These poor people (it was evident that 45% of the respondents' monthly family income is taka 5000-10000) are unable to manage money necessary for the required test and for the doctor's visit even. That is why, they prefer to go to the *kobiraj* or *Moulovi* or at best to the pharmacists. They only go to the doctors to hospitals if the conditions of the children got severe. This kind of activity very often become risky as well as life threatening for the child health. On other hand, the cost of hygienic materials such as soap, liquid, toilet tissue, and so on might not be managed by the respondents. It is one kind of fashion to uses these frequently under the circumstances where majority of the rural poor people of Bangladesh live hand to mouth. Therefore, they along with other family members are in constant danger of being diseased and poor socio-economic conditions are liable for this. This finding of this study was supported by the study conducted by Amin et al. (2010). They showed that mothers with high wealth status usually use modern health care facilities for their children compared (Amin et al., 2010:1). It means health care system in Bangladesh is facilitated by the economic status of the respondents. We would like to conclude by saying that health care is the basic right for the all sections of people. Therefore, government should take some practical initiatives for making health care system cheap and available for the disadvantaged and poor people of the country. Media can play a great role to create consciousness among the rural and uneducated people on how they might lead a hygienic life. Government also can provide the facility of subsidy on the hygienic related materials.

**REFERENCES**


[1]. Amin, R., Shah, NM. And Becker, S. (2010). Socio-economic factors differentiating maternal and child health-seeking behavior in rural Bangladesh: A cross-sectional analysis. *International Journal for Equity in Health,* 9(9): 1-11.

[2]. Brooks-Gunn, J., Han, W. and Waldfogel, J. (2002). Maternal employment and child cognitive outcomes in the first three years of life: The NICHD study of early child care. *Child Development,* 73(4): 1052-1072.

[3]. Cleland, JC. And Ginneken, JKV. (1988). maternal education and child survival in developing countries: the search for pathways of influence. *Social Science and Medicine,* 27(12): 1357-1368.

[4]. Mercer, RT. (2004). Becoming a mother versus maternal role attainment. *Journal of Nursing Scholarship,* 36(3): 226-232.
[5]. Petterson, SM. and Albers, AB. (2001). Effects of poverty and maternal depression on early child development. *Child Development,* 72(6):1794-1813.
[6]. Pillaia, RK. Williamsb, SV. Glickc, HA. Polskyd, D.,Berline, JA. And Lowef, RA. (2003). Factors affecting decisions to seek treatment for sick children in Kerala, India. *Social Science and Medicine,* 57:783-790.
[7]. Seo, J., Stafford, K. and Seiling, SB. (2005). Mothers' share of child care in rural lowincome families. *Consumer Interests Annual,* 51: 107-120.
[8]. Ware, H. (1984). Effects of maternal education, women's roles, and child care on child mortality. *Population and Development Review,* 10:191-214.