

Child Care Hygiene Practices of Women Migrating From Rural to Urban Areas of Bangladesh

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Abstract

Children's hygiene is very important for better health but there is a paucity of studies in this area. This questionnaire study examined the child care hygiene practices of mothers of young children. A total of 354 women from slum areas of Dhaka city, Bangladesh, who migrated from rural to urban areas were selected for this study. The mean score on hygiene practice was 6.21 of 10 items (SD = 2.113). Low (score = 3) and high hygiene practice (score = 7-10) were practiced by 12.4% and 45.8% of participants, respectively. Multivariate regression analysis indicated that independent variables explained 39.9% of variance in hygiene practices. Eight variables have significant effect: participant's education (0.108; $P < .05$), time spent since marriage to first birth (0.030; $P < .05$), number of children (-0.105 ; $P < .05$), number of antenatal visits (0.319; $P < .001$), microcredit status (0.214; $P < .001$), breastfeeding (0.224; $P < .001$), husband's monthly income (0.146; $P < .001$), and household economic status (-0.0114 ; $P < .05$). The overall hygiene practice indicates the necessity of awareness building initiatives.

Keywords

hygiene practice, migrating women, determinants, Dhaka city, Bangladesh

Introduction

There is little doubt that inadequate hygiene practices increases the risk of infection. Infectious diseases prior to the introduction of antibiotics were the single highest cause of mortality in the general population.¹ With the introduction of antibiotics, improvements in sanitation, and the promotion of effective hygiene practices in the home, the fatal infectious diseases have been eradicated. However, little is known about hygiene practices in the home or norms of cleanliness today, and virtually no information is available on the social, demographic, or lifestyle factors influencing hygiene practices.² The definition and importance of hygiene has been shifting over

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the past century and still it is less clearly defined as an ideal. The medicine of antiquity paid great attention to general health maintenance through regulation of diet, exercise, hygiene, and lifestyle.³ Hippocrates, for example, wrote of the need to observe peoples' habits, indulgences, water supplies, and the environment in which they lived, in order to understand their diseases. Hygiene had a central role in this broad environmental approach, as did diet, exercise, and exposure to fresh air. A current dictionary definition of hygiene still reflects the focus on health principles, practices, and sanitary science.

Inadequate food hygiene is considered to be one of the major contributors to diarrhea. Evidence indicates that up to 70% of diarrheal episodes in developing countries are food borne.⁴ Specific to Bangladesh, weaning food given to children contains substantial amounts of bacteria.⁵ Unclean utensils were also considered as a source of food contamination.⁴ For children's practices, eating food that had been placed on the floor is associated with persistent diarrhea in Myanmar,⁶ whereas the cleanliness of kitchen floor was significantly associated with the prevalence of diarrhea among children in Nicaragua.⁷ Soil-transmitted helminth also leads to infections, including diarrhea. Study has suggested that strategies should focus on mass treatment integration, environmental sanitation, personal hygiene, and health education to control soil-transmitted helminth.⁸ The burden of diarrhea morbidity lies largely in the developing world where water and living conditions remain poor and hence interventions are needed to improve hygiene behaviors⁹ because hygiene interventions specifically were reported to reduce diarrhea morbidity by nearly half.¹⁰ The World Bank has declared the promotion of improved hygiene to be the third most productive method for preventing diarrhea-related morbidities.¹¹

Evidence indicates that child care practice is not an isolated phenomenon, rather it varies by culture. Engle¹² maintains that the variations among families within one culture may be greater than those between cultures; in addition, economic conditions, governmental policies, the ecological environment, and women's status can influence care practices and resources for care. Care practices cannot occur without resources to provide the care. Focusing on care practices without a concern for resources may lead to the unfortunate result of blaming the mother for inadequate care, rather than recognizing a lack of resources.¹³

Despite the importance of child care hygiene practices and the World Health Organization outline on basic principles for the preparation of safe food for infants and young children,¹⁴ there is paucity of studies regarding hygiene practice in the Bangladeshi context. This study was an attempt to identify the factors affecting hygiene practice for the children at home.

Method

Participants

This study was carried out with cross-sectional survey technique. The target population consisted of 354 women aged 15 to 49 years at 5 slum areas of Dhaka city who migrated from rural areas. The selection criteria were (a) married women and (b) women having at least 1 living child aged 1 to 5 years. We excluded unmarried women and women who had living children older than 5 years. The selection of women who had living children within 5 years of age was based on the understanding that accurate information would come from the recent practice rather than past practice and recent information would reduce the recall bias that may come through past practice. The studied slums included Korail Bastee in Gulshan, Barkat Miah's Slum in Mohammadpur, Sikderbari Bastee in Uttara, Bank Colony Bastee in Shyampur, and Aam Bagan Bastee in Farmgate. Women from these slums were chosen because microcredit programs were introduced in these slums.

Procedure

This study was carried out with a pilot-tested semistructured questionnaire. The questionnaire was developed both in Bengali and English language. The semistructured questionnaire had both open-ended and close-ended questions. At first, a pretest was performed by interviewing 5 potential participants. Finally, with the insights of pretest, the questionnaire was prepared to get the required information from the participants. The questionnaire included different sections, such as socioeconomic, breastfeeding, and hygiene practices. Sample population was selected by multistage procedure. At the first stage, we randomly selected one slum from each part of Dhaka (north, south, east, and west). At the second stage, we used systematic random sampling to each of the selected slums to identify the study participants. The systematic sampling consists of selecting every sampling unit of the population with an equal interval after random selection of the first sampling unit.¹⁵ In the current study, we selected households with the interval of 5 households after the selection of first household. Five trained female interviewers collected data from one eligible woman (above mentioned) of every selected household; however, interviewers could not collect data from around 20 households since there were no eligible women in those households. Interviews were carried out at participants' homes. All the participants provided informed consent to the study and each interview lasted for around 20 minutes. The data collection was carried out in April 2010.

Measurements

Measurement of hygiene practice. The dependent variable used in the current study was hygiene practice for the children at home. We used a 10-item scale to measure hygiene practice (presented in Table 1). The items were selected based on the literature.¹⁶⁻¹⁹ We assumed that the items used in the current study would play a vital role in predicting infant health as the scale incorporated different important aspects of children's hygiene, including mother's cleanliness, covering of baby's food and tools to provide food, cleanliness of toys and other necessary materials used by a baby, and sanitation facilities, all of which are considered to have a great impact on child health. Each of the item had 2 points, that is, *yes* = 1 and *no* = 0. The participants were asked to tick on either yes or no response for each of the items. The scale score was obtained by summing up the total score of 10 items. Cronbach's α for hygiene practice was .76, which indicated the strong intercorrelation among the items and suggested using them as a single combined score of hygiene practice.

Measurement of explanatory variables. Twelve variables were used as independent variables in this study. These included participants age (measured in completed years), years of schooling (measured in completed years), women's working status (measured as dichotomous, ie, *not working* = 0 and *working* = 1), husband's years of schooling (measured in completed years), family economic status (measured through summing up the score of each of 10 household items, coded as *yes* = 1 and *no* = 0, such as radio/cassette player, active television, wall clock, motor cycle, bicycle, rickshaw/rickshaw van, steel/wood cupboard, cot, and mobile phone), exposure to television (number of hours the participants were exposed to television per day), age at marriage (measured in completed years), time spent since marriage to first live birth (measured in completed years), number of children (measured by number of children respondent gave birth to), number of antenatal visits (measured by number of times participants visited the health care provider during the last pregnancy), and women's microcredit status (measured as a dichotomous variable, ie, *no* = 0 and *yes* = 1).

One of the independent variables, that is, breastfeeding practice was measured with 10 scale items (presented in Table 1). This was a 2-point scale where the yes response of each item was

Table 1. Percentage Distribution of Items of child care Hygiene and breastfeeding practices

Scale Items	n	Percentage
Hygiene practice		
1. Whether food is covered	340	96.0
2. Whether baby bottle covered	293	82.8
3. Whether floor is clear or absence of feces	269	76.0
4. Whether garbage is far way from household	255	72.0
5. Whether child uses clean diapers/underclothes	223	63.0
6. Whether there are sanitation facilities	201	56.8
7. Whether water is purified	85	24.0
8. Whether mother remains clean	302	85.3
9. Whether toys are clean	130	36.7
10. whether the areas where the child plays are clean	92	26.0
Mean	6.21	
Standard deviation	2.11	
Cronbach's α	.76	
Breastfeeding		
1. Whether initiate breastfeeding immediately after birth	335	94.6
2. Whether 0-6 months baby is exclusively breastfed	330	93.2
3. Within 6-9 whether continued breastfeeding	311	87.9
4. Within 6-9 months, gradually introduce variety of complementary foods including animal food	284	80.2
5. Within 6-9 months, fed complementary foods 2-3 times a day and snacks	259	73.1
6. Within 9-12 months, continued breastfeeding	288	81.4
7. Within 9-12 months, increased amount, variety and frequency of complementary foods	244	68.9
8. During 12-24 months, continued breastfeeding	267	75.4
9. Within 12-24 months, continued to give a variety of foods and gradually complete transition to family diet	228	64.4
10. Within 12-24 months, fed complementary foods 3-4 times a day + snacks	326	92.1
Mean	8.19	
SD	1.76	
Cronbach's α	.74	

coded as 1 whereas no response of each item was coded as 0. The responses of 10 items were added together to get scale score. Mean breastfeeding score was 8.19 (SD=1.76). The majority of the respondents practiced high level (48.0%) of breastfeeding for their children. It appeared that 45.0% of respondent practiced medium level of breastfeeding for their children whereas only 7.0% of respondents practiced low level of breastfeeding for their children. Cronbach's α of the scale items was greater than .74.

Data Preparation and Analysis

After the completion of editing and coding, collected data were entered into a computer. Subsequently, the rearranging of data, collapsing of data, scaling of variables, recoding, and necessary merging of the categories with negligible frequency were also conducted to prepare

data for the final analysis. The statistical analyses were conducted in 3 stages to address the study objective. First, descriptive statistics were used for each of the items that examined hygiene practice (frequency and percentages of each item are presented in Table 1). In addition, the descriptive analysis of all the independent variables (already mentioned). In the second stage, correlations were calculated for the dependent variable by independent variables (presented in Table 2). In the final stage, multiple regression analyses were carried out for examining the factors affecting hygiene practice. All the independent variables used in the bivariate analysis were used in the multivariate analysis. In this regard, linear regression technique was used as dependent and independent variables had interval level of measurement. The results of multivariate analysis are presented in the form of B , standard error β , t value, and R^2 change (presented in Table 3). It should be noted that before conducting multivariate regression analysis, multicollinearity was diagnosed with zero order correlation. As no correlation coefficients reached 0.70 or near to this level, all the independent variables were decidedly entered into regression analysis. The overall analysis was carried out using SPSS (Statistical Package for Social Sciences), version 11.5.

Results

Participants' Characteristics

On average, the participants were 26.80 years ($SD = 6.279$) old (not shown). About half of the participants (48.6%) had no education. Of the participants with formal education, 36.1%, 13.9%, and 1.4%, respectively had 1 to 5 years, 6 to 10 years, and ≥ 10 years of schooling. The majority of the participants married at < 18 years (69.2%). The mean age at marriage was 15.71 years ($SD = 2.942$). The majority of the participants became pregnant within 2 and more years of marriage (60.5%). On average, the participants had 2.37 ($SD = 1.264$) living children. The number of living children ranged from 0 to 9 where the majority of the participants (61.6%) had ≤ 2 children. More than one third of the participants had no exposure to television; however, on average, the participants had 1.75 hours ($SD = 2.288$) of daily exposure to television. The majority of the participants had no antenatal care visit, whereas 22.9% and 20.9%, respectively, had 1 to 2 visits and ≥ 3 visits. On average, the participants received antenatal care 1.55 times ($SD = 2.647$). More than half of the participants (55.4%) received microcredit, whereas the remaining did not receive any microcredit. On average, the items score of breastfeeding practices was 8.19 out of 10 ($SD = 1.756$). More than one third of the women's husbands (37.9%) had no formal education whereas 20.2%, 28.2%, and 3.7%, respectively, had 1 to 5 years, 6 to 10 years, and ≥ 10 years of schooling. Husbands' monthly income ranged from 1000 to 20 000 BDT (Bangladeshi taka), whereas the mean income was 5450.28 BDT ($SD = 2937.095$). On average, the household items score was 4.39 out of 10 ($SD = 1.416$).

Descriptive Analysis of Hygiene Practices

Table 1 presents the hygiene practices for the children by mothers. The mean score on hygiene practice was 6.21 out of 10 items ($SD = 2.11$). Low hygiene practice (score ≤ 3 out of 10), medium hygiene practice (score 4-6 out of 10), and high hygiene practice (score 7-10 out of 10) were, respectively, found in 12.4%, 41.8%, and 45.8% of the participants. There were notable differences in itemwise hygiene practices. Almost universally (96.0%), respondents mentioned that they covered the food of the children. However, in case of bottle covering, the percentage reduced to 82.8%. In terms of water purification, cleanliness of toys and the area where the child

Table 2. Correlation Matrix Among Dependent and Independent Variables^a

	RAGE	REDU	AMAR	TSMF	NOCH	ETEL	NANV	MIST	BFED	HEDU	HINC	HUST
REDU	-0.175 ^{***}											
AMAR	0.030	0.085										
TSMF	0.260 ^{***}	0.013	-0.167 ^{**}									
WPAR	0.368 ^{***}	-0.112 [*]	-0.038	-0.059								
ETEL	0.030	0.065	0.163 ^{***}	-0.040	0.021							
NANV	-0.039	0.270 ^{***}	0.068	-0.037	-0.125 [*]	0.082						
MIST	0.043	0.170 ^{**}	-0.047	0.069	0.027	-0.014	0.051					
BFED	0.052	0.085	-0.021	0.014	-0.010	-0.108 [*]	0.039	0.227 ^{***}				
HEDU	-0.057	0.526 ^{***}	0.051	-0.023	-0.060	-0.045	0.232 ^{***}	0.225 ^{***}	0.133 [*]			
HINC	0.049	0.311 ^{***}	0.075	-0.019	-0.020	0.142 ^{**}	0.261 ^{***}	0.104	0.069	0.304 ^{***}		
HUST	0.124 [*]	0.212 ^{***}	0.122 [*]	0.027	0.018	0.311 ^{***}	0.229 ^{***}	0.158 ^{**}	0.001	0.241 ^{***}	0.378 ^{***}	
HYPT	0.058	0.301 ^{***}	0.024	0.122 [*]	-0.135 [*]	-0.099	0.396 ^{***}	0.320 ^{***}	0.329 ^{***}	0.301 ^{***}	0.274 ^{***}	0.077

Abbreviations: RAGE, respondent's age at present; REDU, respondents' years of schooling; AMAR, respondents' age at marriage; TSMF, time spent since marriage and first birth; WPAR, women's parity; ETEL, exposure to television; NANV, number of antenatal visits; MIST, microcredit status; BFED, breastfeeding; HEDU, husband's years of schooling; HINC, husband's monthly income; HUST, household status; HYPT, hygiene practice.

^a P values are as follows: * $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3. Multiple Regression Analysis of Hygiene Practices^a

Predictors	Unstandardized Coefficients		Standardized Coefficients	t	95% Confidence Interval for B	
	B	SE			Lower Bound	Upper Bound
Constant	1.702*	0.745		2.284	0.236	3.167
RAGE	0.032	0.017	0.096	1.952	0.000	0.065
REDU	0.073*	0.035	0.108	2.066	0.003	0.143
AMAR	0.022	0.032	0.030	0.684	-0.040	0.084
TSMF	0.076*	0.037	0.092	2.024	0.002	0.150
WPAR	-0.175*	0.078	-0.105	-2.249	-0.328	-0.022
ETEL	-0.082	0.042	-0.089	-1.951	-0.165	0.001
NANV	0.254***	0.036	0.319	7.012	0.183	0.325
MIST	0.909***	0.190	0.214	4.783	0.535	1.283
BFED	0.269***	0.053	0.224	5.099	0.165	0.373
HEDU	0.037	0.028	0.070	1.349	-0.017	0.092
HINC	0.000**	0.000	0.146	3.035	0.000	0.000
HUST	-0.170*	0.074	-0.114	-2.304	-0.314	-0.025
Multiple R	.632					
R ²	.399					

Abbreviations: SE, standard error; RAGE, respondent's age at present; REDU, respondents' years of schooling; AMAR, respondents' age at marriage; TSMF, time spent since marriage and first birth; WPAR, women's parity; ETEL, exposure to television; NANV, number of antenatal visits; MIST, microcredit status; BFED, breastfeeding; HEDU, husband's years of schooling; HINC, husband's monthly income; HUST, household status.

aP values are as follows: * $P < .05$; ** $P < .01$; *** $P < .001$.

plays was, respectively, mentioned by 24.0%, 36.7%, and 26.0% of the respondents. The hygiene practices regarding "whether floor is clear or absence of feces," "whether garbage is far way from household," "whether child uses clean diapers/underclothes," "whether there are sanitation facilities," and "whether mother remains clean," were positively answered, respectively, 76.0%, 72.0%, 63.0%, 56.8%, and 85.3% of respondents.

Inferential Analysis of Hygiene Practices

The hygiene practice was correlated with several variables (Table 2). Although participants' age did not, participants' education had positive relation with hygiene practice ($r = 0.301$, $P < .001$). Such positive relation suggested that the higher the number of years of schooling, the higher the level of hygiene practice. The positive relationship also appeared with time spent since marriage to first birth ($r = 0.122$, $P < .05$), number of antenatal care visits ($r = 0.396$, $P < .001$), microcredit status ($r = 0.320$, $P < .001$), breastfeeding practices ($r = 0.329$, $P < .001$), husband's years of schooling ($r = 0.301$, $P < .001$), and husband's monthly income ($r = 0.274$, $P < .001$). Women's parity had correlation with hygiene practice ($r = -0.135$, $P < .05$), which suggested that higher the number of children, the lower the hygiene practice. Participants' age at marriage, exposure to television, and household status were not significant at $P < .05$.

The multivariate regression analysis indicated that independent variable explained 39.9% of variance in hygiene practices (Table 3). Eight variables appeared to have effect on hygiene practices. The explained variables were participants education ($\beta = 0.108$, $P < .05$), time spent since

marriage to first birth ($\beta = 0.030$, $P < .05$), women's parity ($\beta = -0.105$, $P < .05$), number of antenatal visits ($\beta = 0.319$, $P < .001$), microcredit status ($\beta = 0.214$, $P < .001$), breastfeeding ($\beta = 0.224$, $P < .001$), husband's monthly income ($\beta = 0.146$, $P < .001$), and household economic status ($\beta = -0.0114$, $P < .05$). Although household economic status did not appear significant at bivariate analysis, it appeared significant at multivariate analysis when effect of other independent variables were removed. Husband's education appeared significant at bivariate analysis but not at multivariate analysis when other variables were controlled.

Discussion

In the current study, majority of the respondents practiced medium level of hygiene for the children followed by high and low level of hygiene practice for the children. Specifically, the findings of this study revealed that there were notable differences in itemwise hygiene practices. The most common aspect of hygiene practice was covering food of the baby. It is expected because most of the mothers consider food as the main source of child development and hence they are more interested in maintaining hygiene with food. However, findings further suggest that some aspects of hygiene practice were unexpectedly lower. For example, sanitation facilities for the children, purification of water, cleanliness of toys, and cleanliness of the areas where children are likely to play, which clearly indicate that mothers are not the comprehensive in their child care hygiene practice.

The higher the number of years of schooling, the higher the hygiene practice among mothers. Contrary to it, another study found that the lower maternal education was associated with higher hygiene practices.² Findings of the current study is expected because educated women are more likely to understand causes of childhood illness/diseases, how to ensure better health of the children, and practice better health behavior.

The longer the time spent since marriage to first birth, the higher the hygiene practice among mother for the children. It is expected that women taking longer time for first child are more likely to be educated and working women; as a result, they can seek support from external sources, including baby health professionals, along with in-family tradition of child care. On the other hand, shorter time spent since marriage to first birth comes with different traditional practices that are a hindrance to hygiene practice for the children because these women have lower understanding on better health care for both mother and children. Because of no or low access to modern goods and opportunities and the lack of modern ways of child rearing, including maintenance of appropriate hygiene, mothers get less time to prepare themselves for good child care hygiene practices.

Women with higher parity had lower hygiene practice for the children. It is likely that women with higher parity have more years of experience in child rearing, higher exposure to child care, and are capable of understanding the better practices from their own experiences. The opposite finding may be because women with higher parity have to distribute time to all the children, which reduces time given to a specific child, including the newborn. Consequently, such women may not be able to practice optimum hygiene for the children, even if they know how to maintain it. Another reason may be that women with higher parity are more likely to have lower educational attainment, be mainly housewives, and have lower level of knowledge on modern lifestyles. Hence, these women may not appropriately understand ways to maintain optimum hygiene for the children.

Husband's higher monthly income had positive impact on mother's child care hygiene practice. It should be mentioned that higher monthly income indicated higher status of women in the family as well as in society. It also ensures, to some extent, higher level of education, freedom of choice, freedom of movement, and freedom of speech. All these synergistically work in favor of women's decision making in the family setting, including health matters. However, the negative impact of wealth status with the current sample may be partly because most of the women in

slum areas came from disadvantaged socioeconomic conditions, especially from rural areas, primarily for their survival. In addition, their no/lower education status may not change their overall attitude toward child care hygiene practice, even with high socioeconomic status, especially in slum areas where the overall environment is not hygienic.

The greater the number of antenatal care visits, the higher the women's tendency to practice better hygiene. Women who use antenatal care services are more likely to have better knowledge on maternal as well as child health care. Moreover, women's antenatal visits gave them opportunities to learn about disease causation. As a result, women with higher number of visits during pregnancy period are more aware of the health care needs for the children. However, this study could not identify whether women received any counseling on children's hygiene practices during antenatal care. Further studies may be undertaken on how to incorporate children's hygiene practices during the antenatal care visits.

Women receiving microcredit had higher tendency to practice child care hygiene. A study revealed that outcomes of microcredit have a compounded impact on the end outcome of poverty reduction programs.²⁰ It is a matter of fact that poverty leads to, and aggravates, physical living conditions, poor sanitation, hygiene, and insufficient nutrition. Perhaps microfinance helps in health through increasing child care hygiene practices in that with increased family income, women are likely to provide better environment for the children, including child care hygiene practice.

Women who initiate breastfeeding on due time, breastfeed the children exclusively up to 6 months, introduce complementary foods on the due time, continue breastfeeding up to 24 months, and gradually complete the transition to normal family diet to the children within 24 months are the women who understand better how to protect children from infectious diseases. As expected, this study revealed that better breastfeeding practices were positively associated with higher child care hygiene practice. This indicates that hygiene practices must be emphasized in the breastfeeding programs. Although postnatal care normally includes issues related to breastfeeding as an area of providing counseling, children hygiene practices may also be incorporated in postnatal care services.

Limitations

This study has several limitations that need to be considered in generalizing the findings of this study. First, as we used a scale for hygiene practices based on the available literature¹⁶⁻¹⁹ and as it was not already a developed scale, it needs to be further tested so as to ensure its replicability. Besides, further investigation should be carried out considering the validity of women's child care hygiene practices, as we expect that there might be some issues that need to be included in the scale to comprehensively measure women's child care hygiene practices. In this regard, qualitative exploratory study among women and medical professional experts on child care hygiene practices may be an important tool to identify multidimensional items and practices related to child care hygiene from a holistic point of view. Second, the measurement of breastfeeding scale was based on the available literature rather than previously developed scale.²¹ This too requires further test for its replicability. Third, interviewers were students who might have limited knowledge on socioeconomic conditions of slums areas; thus, interviewers' adjustment to the participants and different perspectives on hygiene practices might have an indirect effect on the data, although they were trained to deal with the participants properly.

Conclusion and Recommendations

We investigated mothers' child care hygiene practices. The findings of this study revealed that slum-dwelling women are aware and practice hygiene for the children especially in the home

context. However, variations were also found in this study suggesting that women with differing socioeconomic characteristics may practice hygiene for the children to a different level. We identified variations in women's hygiene practice in terms of participants' education, time spent since marriage to first birth, women's parity, number of antenatal visits, microcredit status, breastfeeding, husband's monthly income, and household economic status. Based on the findings of this study, we suggest considering the following issues to increase home-level child care hygiene practice.

First, the overall the hygiene practice was moderate, which indicates the necessity of further awareness-building initiatives. In this regard, community-based awareness raising programs can be initiated so that women and the whole community are well informed about all possible ways to maintain children's hygiene at home. Further studies are required to identify all the possible ways of maintaining hygiene for the children. Second, women's education appeared to have positive association with hygiene practice. It suggests that initiative should be taken to promote hygiene practice in school curriculum so that students, especially female students, can learn how to practice hygiene for the young child. In addition, health education in food and personal hygiene may be initiated for mothers although it was not found significant in an earlier study.²² In another study, however, it improved hygiene practice among food handlers.²³ However, since there are many factors beyond women's control, including limited access to facilities, little control over the timing of their marriage and first pregnancy, and little access to the finances necessary to pay for antenatal care (ie, some women may well realize the benefits of antenatal care, but simply be unable to afford it), measure should not limit to only educating women about hygiene; rather efforts should be made to provide access to resources and facilities that may enable women have a realistic chance of implementing hygiene. Finally, as this study indicated, breastfeeding practices had positive association with hygiene practice. Breastfeeding practices should also be encouraged along with hygiene practice so that women can understand the child care practices to a greater extent.

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