DETERMINANTS OF WOMEN EMPOWERMENT IN BANGLADESH

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Abstract

Women empowerment is one of the most important factors to bring the women in to the development process with their full potentiality. In Bangladesh almost half of the population are women. There are many initiatives to empower women in Bangladeshi society and there is a gradual change evident in recent research. This study attempts to identify the recent status of women empowerment and its determinants using Bangladesh Demographic and Health Survey (2007) in order to provide better policy options regarding the issue. The data analysis suggest that despite the fact that almost all of the women under study are somewhat empowered but still 65.28% women are less empowered. Logistic regression analysis revealed that the rural women have higher chance to be empowered than the urban women and similar likelihood is relevant to the poorest women than the poorer women. The wives of the farmers have higher possibility of being empowered than the wives of husbands with other occupations. Astonishingly, the wives of uneducated partners have higher likelihood to be empowered than the wives of higher educated partners. The women having spousal age difference less than 6 years have higher likelihood of being empowered than their counterparts. The women having marital duration less than 5 years are more likely to be empowered than the women having marital duration of 5 years and more. The unemployed women are more empowered than the employed women which required further investigation. The research suggested some recommendations for further improvement of the women empowerment in Bangladesh.

Keywords: Women empowerment, logistic regression, Bangladesh demographic and health survey.

Introduction

Bangladesh is a country where the social status of women is very low. Socio-cultural environment of Bangladesh contains pervasive gender discrimination, so women face many obstacles to their development. Women are often considered to be financial burdens on their family, and from the time of birth, they receive less investment in their health, care and education. They are hardly recommended to appoint in economic behavior. The women have had only limited involvement in economic development issues of the 21st century in Bangladesh (Sebstad and Cohen, 2000). Around 50% of total populations of Bangladesh are women and their literacy rate is 53.4% which is much more than last 10 years (BBS, 2011). The poverty incidence of women headed household is much lower than men headed household. The average size of women headed household is 3.53 as against 4.52 for men and this result is highly influenced by male members living abroad making the women the head of household. If we exclude such cases the results would have been opposite (BBS, 2011).

The early marriage is a great problem here. But it is gradually decreasing as an impact of performance of laws, uplifting of women education, participation of women in socio-economic activities and technological improvement (Gender Statistics of Bangladesh, 2012). Women's mobility is greatly limited in Bangladesh. Around 29.1 % rural men support that women could go outside the village alone but it is 37.1 % for urban men; 27.6 % rural men support that women could go to health center or hospital but it is 42.6 % for urban men and 14.4% rural men support that women could go to both places but it is 24.8 % for urban men. The attitude that women can go outside in urban area is higher than the rural area (NIPORT *et al.*, 2009).

The rate of employment among women has increased noticeably. According to a study, among women, household earners increased from 12.9 % (BBS, 2005) to 15 % (BBS, 2010) and among them only 20 % women work for cash.

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The rural women of Bangladesh who are more educated than their partners is growing (Das *et al.*, 2008), and many women add significantly to their earnings of family and supply a source of money for their households through microfinance programs. About 20.6 million (mostly female) borrowers have been attached with microfinance programs in Bangladesh (Nazneen *et al.*, 2011). In the garment factories where more than 3 million women are working (International Monetary Fund, 2011) has been another main portion of the development of women empowerment in Bangladesh (Kabeer *et al.*, 2011). The decision-making power is often restricted for the women of Bangladesh. For instance, about 48 % of Bangladeshi women say that their husbands alone make decisions about their health, while 35 % say that their husbands alone make decisions regarding visits to family and friends (UNICEF, 2007). Only 48 % working women are able to spend their money on their own purpose that are work for cash but rest are dependent upon spouses or other family members to take joint decision (NIPORT *et al.*, 2004).

A lot of the things have changed today. The number of working women for cash has become high and they become more self-dependent than before. The contribution of women in employment is encouraging because most of the parents, the spouses and the in-laws of women realize that, if a woman earns she also can bear the pressure of the economy like a man. So they are engaged in different economic sectors. The women share in full time worker in permanent economic establishment has increased day by day. Bangladesh is in the list of medium human development index of Asia (Wikipedia, 2009). Bangladesh ranks 4 among 10 countries on the medium HDI. The HDI data of 2007 has changed to 0.543 from 2006 (it has increased +0.008). It is a positive sign for women and we can say that the women empowerment situation is highly increasing in Bangladesh. Women empowerment is a gradual process and time to time evaluation of the situation is required to mainstream the development programs towards maximum output. This research aims to evaluate the status of women empowerment and its determinants in Bangladesh using the nationally representative Demographic and Health Survey.

Materials and Methods

Data: This study is based on the Bangladesh Demographic and Health Survey (BDHS) 2007 (NIPORT *et al.*, 2009). This survey is the fifth in a series of national-level population and health surveys. The survey utilizes the women data of 2001 Bangladesh census. The data was collected over a five-month period from 24 March to 11 August, 2007. From BDHS (2007), 10,996 data were found for women. Here, those women were selected who have one marriage experience, among the age group 15 to 49 years. This selection is done because it may result very critical calculation to find out the women condition that have once, twice or more than twice marriage experiences. The missing information was rejected from the data set as they can create problems in the further analysis. Finally, the analysis was run with a sample of size 3586. Twelve independent variables were chosen to represent the dependent variable women empowerment: age of the respondents, their division, area of residence, religion, wealth index, marital duration with their last husband, partner's and respondent's occupation, partner's and respondent's education, number of boys and girls they had and the age difference between partners and respondents.

Here, women empowerment index is created by four measurements like mobility, decision making power, employment and if the respondent is the family head or not. Mobility is calculated with three points like ability to go to the relative's house, go to the medical center and go to the outside the house, and decision making is considered with five points like ability to make decision for household purchases for daily needs, about large purchases, about respondent's own medical treatment, about children's health care and about respondent's own income. These two measurements (mobility and decision making) along with the employment and household headship of the respondent are given hypothetical range (0 to 2) indicating a range 0 - 10 for the overall empowerment score. If the respondent scores zero after summing up her scores of abilities then she is considered as a not empowered person; if she scores more than zero but less or equal to 5 then she is considered as less empowered person; the high empowerment is considered when the score is more than 5 but less or equal to 10. As there is no non-empowered woman in the data, there are only two groups of women: less and high empowered considered in the analysis.

Methods:

Binary Logistic Regression Model: Let Y be a dichotomous dependent variable, say women empowerment taking values 0 and 1 and suppose that Y=1, if the woman is high empowered and Y=0, if the woman is less empowered. Also, let X be an independent variable. The form of the logistic regression (Cox, 1970) model is

$$P = p(Y = 1/X) = \frac{e^{\beta_0 + \beta_1 X}}{1 + e^{\beta_0 + \beta_1 X}}$$

And, $1 - P = p(Y = 0 \mid X) = \frac{1}{1 + e^{\beta_0 + \beta_1 X}}$

Then a transformation of P known as the logit transformation and is defined as

g(x)=logit P=log
$$\left[\frac{P}{1-P}\right] = \beta_0 + \beta_1 X$$

For more than one independent variable the model can be generalized as

$$g(x) = logit(P_i) = \beta_0 + \sum_{l=1}^{k} \beta_l X_{il}$$
 $l=1, 2, ..., k; and i=1, 2, ..., n.$

Results and Discussion

Among the surveyed women in the analysis 65.28 % were found to be less empowered and the rest (34.72 %) were highly empowered (Table 1). Most of the respondents were in 20 - 24 years old and the least were within 15 - 19 years group. In the 20 - 24 years age group, less empowered women were about 73 % and the high empowered women were about 27 %.

Table 1. Women empowerment by	different dem	mographic and a	socio-economic	characteristics,	Bangladesh,
2007.					

	Women empowerment (%)			
Background characteristics	Total	Less empowerment	High empowerment	
Age group (years) (p=0.0001)				
15 - 19	485	85.8	14.2	
20 - 24	736	73.1	26.9	
25 - 29	674	60.2	39.8	
30 - 34	542	51.1	48.9	
35 - 39	512	54.9	45.1	
40 - 44	357	60.8	39.2	
45 - 49	281	73.0	27.0	
Administrative Division (<i>p</i> =0.0001)				
Barishal	520	71.0	29.0	
Chittagong	652	64.9	35.1	
Dhaka	847	63.9	36.1	
Khulna	582	63.2	36.8	
Rajshahi	722	58.0	42.0	
Sylhet	273	83.9	16.1	
Area of residence $(p=0.0001)$				
Urban	1299	61.5	38.5	
Rural	2288	67.4	32.6	
Marital duration (years) (p=0.0001)				
Less than 5	719	84.1	15.9	
5 - 9	697	68.9	31.1	
10 - 14	588	59.4	40.6	
15 - 19	546	48.5	51.1	
20 - 24	436	56.2	43.8	
25 - 30	300	61.3	38.7	
More than 30	310	70.3	29.7	
Partner's occupation (<i>p</i> =0.0001)				

	Women empowerment (%)			
Background characteristics	Total	Less empowerment	High empowerment	
Land owner	30	86.7	13.3	
Farmer	639	72.3	27.7	
Agricultural worker	219	67.9	32.4	
Fisherman	64	73.4	26.6	
Poultry and cattle raising	7	57.1	42.9	
Home-based manufacturing	2	100.0	0.0	
Rickshaw puller and construction worker	572	57.0	43.0	
Factory worker	266	59.0	41.0	
Semi-skilled labor	624	61.9	38.1	
Domestic servant	2	100.0	0.0	
Professional worker	222	54.5	45.5	
Big businessman	207	75.4	24.6	
Small businessman	614	69.1	30.9	
Unemployed/student	68	76.5	23.5	
Retired	10	80.0	20.0	
Others	32	53.1	46.9	
Don't know	9	22.2	77.8	
Respondent's occupation (p=0.0001)				
Unemployed	2535	80.9	19.1	
Farmer	29	62.1	37.9	
Agricultural Worker	27	37.0	63.0	
Fisherman	2	50.0	50.0	
Poultry, cattle raising	420	27.1	72.9	
Home-based manufacturing	127	33.9	66.1	
Driver and construction work	60	23.3	76.7	
Domestic servant	54	24.1	75.9	
Factory worker	67	31.3	68.7	
Semi-skilled labor	144	22.9	77.1	
Professional worker	57	7.0	93.0	
Large business	2	0.0	100.0	
Small business	60	30.0	70.0	
Others	1	0.0	100.0	
Fotal	3586	65.28	34.72	

Note: Rows sum to 100% and p-value is observed from chi-square test.

A good number of respondents were from Dhaka and the smallest number was from Sylhet. For Dhaka, less empowered women were about 64% and the high empowered women were about 36% and for Sylhet, the percentage of less empowered women (83.9%) was about 5 times higher compared to the high empowered women (16.1%). Among the urban women, 61.5% were less empowered and 38.5% were high empowered and among the rural women, the percentage of less empowered women was almost double compared to high empowered women (32.6%). A large amount of the respondents were belonged to the marital duration less than 5 years and least was belonged to the duration 25 - 30 years. Having marital duration less than 5 years, the percentage of less empowered women was about 5 times more than the high empowered women (15.9%) and in the class of 25 - 30 years, less empowered women were about 61.3% and the high empowered women were about 38.7%.

Among the wives of farmers, less empowered women were about 72.3% and high empowered were about 27.7%. Among the wives of semi-skilled labor, the percentage of less empowered women was about 1.6 times of the high empowered women (38.1%) and among the wives of small businessmen, the percentage of less empowered women was about 2.2 times of the high empowered women (30.9%). Most of the respondents were unemployed (70.69%). Among the unemployed women, the percentage of less empowered women was about 4 times of the high empowered women (19.1%).

Women empowerment in Bangladesh

Regression analysis: The determinants of the women empowerment (less empowerment = 0, high empowerment =1) was explored using binary logistic regression techniques. The binary regression analysis explains that all the women belong to different age groups, except the group 20 - 24 years, have significantly less chance to be empowered than the women belong to 15 - 19 years. The women from Dhaka and Sylhet have significantly low possibility and women from Chittagong have significantly high possibility to be empowered than Barisal women. So we can say that, the women from Chittagong have about 2.12 times higher chance to be empowered than the women from Barisal. The rural women have 1.558 times higher chance to be empowered than the urban women. The wives of service holders and businessmen and the unemployed and others categories have a significant decrease in women empowerment than the wives of farmers. So the women who were the wives of farmers have (1/0.42) i.e., 2.38 times higher chance to be empowered and who were the wives of unemployed and others occupied partners have (1/0.72) i.e., 1.38 times higher chance to be empowered than the wives of service holders and businessmen partners and the wives of unemployed and others occupied partners, respectively. The poorest women have (1/0.764) i.e., 1.31 times higher chance to be empowered than the poorer women. These types of chances or possibilities of empowerment among rural, poorest and wives of farmers may be occurring due to their involvement towards family solvency. In this situation both husbands and wives may engage in domestic and field works together. Especially, the better halves of farmers would like to help their husbands in their farms and in the lands near their houses for extra income. Moreover, the wives of farmers rear poultry and dairy animals in their house to fulfill household needs and also try to save money for their children's schooling, health expenditures and try to fill up their nutritional requirements and little wishes (Nazneen et al., 2011).

The wives of higher educated partners have a significant reduction in the women empowerment. So we can say that, the women who were the wives of uneducated partners have (1/0.762) i.e., 1.3 times higher chance to be empowered than the women who were the wives of higher educated partners. Normally earning capacity of an uneducated person was lower than higher educated ones. A developing country like Bangladesh, more or less every male earning members of a family still believe that the female members especially their wives should not go outside to earn. The women should only concern about the household chores and children's nourishment. Actually they feel insecure to let the women go outside to work and in some cases the male members want to maintain the religious views like Muslim believes in 'purdah' system (Chamie, 1981). High earners think their earning is enough to secure the economic status and wives don't need to earn. So the wives of uneducated partners become more empowered than the wives of high educated partners.

The women belonging to the age spousal difference group 6 to 10 years and 11 to 15 years have significant decreases in women empowerment. The women having the age difference less than 6 years from their partners have (1/0.654)i.e., 1.53 times higher chance to be empowered and have (1/0.824) i.e., 1.2 times higher chance to be empowered than the age difference group 6 to 10 years and 11 to 15 years from their partners. Less age difference (between husbands and wives) is an important factor to make better understanding between husband and wife (Islam *et al.*, 2010). Without mental equality a woman can't enjoy the freedom to be empowered herself. If the difference was higher like 6 and more years, husband may want to control the wife's decision and mobility as he was more adult than his wife. So the probability of being empowered of a woman tends to decrease. The unemployed women were (1/0.076) i.e., 13.2 times more empowered than the employed women. This result may corroborate with the fact that unemployed women need to come out to support their family which in turn help scoring high in mobility component of the empowerment index. The same mobility factor may also apply for the groups with marital duration less than 5 years having significant higher likelihood of women empowerment. Further disaggregated analysis is needed in this respect.

Women empowerment in Bangladesh seems to be in the right track but still many things to do to convert the less empowered to high empowered. This may be done in many ways. The determinants identified in this analysis will guide in this process. One important recommendation from this research would be to suggest disaggregated (component wise) analysis of women empowerment and devise policy options accordingly. This will enhance the gender development process and which will allow targeting different vulnerable groups. Despite many important findings this research has its limitations too. This paper is a part of study which covered both intimate partner violence (IPV) and women empowerment (WE) where only the BDHS 2007 was eligible to offer both in its questionnaire. This research also explored the relationship between the two (IPV and WE) and found no direct relationship, hence not reported in this article.

Independent variables	β	Odds ratio
Intercept [§]	3.800	44.706
Age (r:15 - 19years)		
20 - 24	-0.435	0.647
25 - 29	-1.055***	0.348
30 - 34	-1.203****	0.300
35 - 39	-1.219***	0.295
40 - 44	-0.931***	0.394
45 - 49	-0.591***	0.554
Administrative Division (r: Barisal)		
Chittagong	0.751***	2.119
Dhaka	-0.264**	0.768
Khulna	-0.078	0.925
Rajshahi	-0.155	0.857
Sylhet	-0.262*	0.770
Area of residence (r: Urban)		
Rural	0.443^{***}	1.558
Partner's occupation (r: Farmer)		
Service and Business	-0.867***	0.420
Unemployed and others	-0.328**	0.720
Partner's Education (r: Uneducated)		
Primary	0.004	1.004
Secondary	-0.025	0.976
Higher	-0.272*	0.762
Age difference (r:<6 years)		
6 - 10	-0.425**	0.654
11 - 15	-0.194*	0.824
More than 15	-0.152	0.859
Respondent's occupation (r: Unemployed)		
Employed	-2.583****	0.076
Marital duration ($r:< 5$ years)		
5 - 9	-0.639**	0.528
10 - 19	-0.532***	0.588
More than 19	-0.077***	0.460
Wealth Index (r: poorest)		
Poorer	-0.269^{*}	0.764
Middle	0.086	1.090
Rich	-0.169	0.844

 Table 2. Binary logistic regression estimates of the effects of different socio-economic and demographic characteristics on women empowerment.

Note: Level of significance: ***p<0.01, **p<0.05; *p<0.10; *r denotes the reference group*; [§]Odds;

References

Bangladesh Bureau of Statistics (BBS). 2005. Statistical Year Book of Bangladesh 1999. Dhaka, Bangladesh.
Bangladesh Bureau of Statistics (BBS). 2010. Statistical Year Book of Bangladesh 1999. Dhaka, Bangladesh.
Bangladesh Bureau of Statistics (BBS). 2011. Statistical Year Book of Bangladesh 2010. Dhaka, Bangladesh.
Chamie J. 1981. Religion & Fertility: Arab Christian- Muslim Differentials. Melbourne: Cambridge University Press.150p.

Cox D R. 1970. The Analysis of Binary data. Methuen, London.

Das M, Amin S and Gupta M D. 2008. Whispers to voices: Gender and social transformation in Bangladesh. Bangladesh Development Series Paper No-22. Washington, DC: World Bank.

- Gender Statistics of Bangladesh. 2012. Bangladesh Bureau of Statistics and Informatics Division, Ministry of Planning. Government of the People's Republic of Bangladesh, Dhaka.
- International Monetary Fund. 2011. Bangladesh: Staff report for the Article IV consultation. IMF Country Report No. -11/314.Washington, DC.
- Islam M A, Padmadas S S and Smith P W F. 2010. Understanding family planning communication between husbands and wives: a multilevel analysis of wives' responses from the Bangladesh DHS. Genus. 66(1):1-15.
- Kabeer N, Mahmud S and Tasneem S. 2011. Does paid work provide a pathway to women's empowerment? Empirical findings from Bangladesh. IDS Working Paper-375. London: Institute of Development Studies.
- Nazneen S, Hossain N and Sultan M. 2011. National discourses on women's empowerment in Bangladesh: Continuities and change. IDS Working Paper No 368. Brighton, UK: Institute of Development Studies.
- NIPORT, Mitra and Associates and ORC Macro. 2004. Bangladesh Demographic and Health Survey 2001. National Institute of Population Research and Training (NIPORT), Mitra and Associates and ORC Macro, Calverton, MD.
- NIPORT, Mitra and Associates and ORC Macro. 2009. Bangladesh Demographic and Health Survey 2007. National Institute of Population Research and training (NIPORT), Mitra and Associates and ORC Macro, Calverton, MD.
- Sebstad J and Cohen M. 2000. Microfinance, Risk Management and Poverty, AIMS Paper. Management Systems International, Washington, D.C.
- UNICEF. 2007. State of the World's Children: The Double Dividend of Gender Equality.
- Wikipedia. 2009. List of Countries by Human Development Index. Available at: https://en.m.wikipedia.org/wiki/List_of_countries_by_Human_Development_Index_ (2009). Accessed at 10.40 A.M. on 29.01.2017.