

Educational Development And Prevailing Health Status In Bodoland Territorial Areas District (Btad), Assam

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Abstract

Education, being the means to acquire knowledge, influences healthy living and treatment seeking behaviour among people. It not only enhances one's behaviour towards self confidence, self awareness, decision making, but also have controls on maintaining good health. Education is also considered a key that allows an individual to function in modern society and to have choices about what sort of life they may lead (Schultz, 1962). There is a two way causal interrelationship between the education and health status of an individual (Ahmed, 2013). Education trains individuals to acquire, evaluate and use information in attaining healthy life. However, the level of educational attainment, its nature and degree varies socio-spatially and it results in variation of health status. This is no less significant in the state of Assam more particularly in the districts of BTAD. With these considerations, an attempt is made in this paper to analyse the socio-spatial variation of educational progress, prevailing diversity in health status and the impact of educational development on the prevailing health status. The data pertaining to the study have been gathered from both secondary and primary sources. The data so obtained have been analysed and presented through meaningful statistical and cartographic techniques.

Key words: Educational attainment, educational inequality, health status, BTAD.

Introduction

Education as a means of imparting knowledge to human society determines human behaviour towards achieving unwavering health status of an individual and also acts as an accelerating element of overall socio-economic development of an area. It leads to develop learned effectiveness that enables self direction towards habits, skills, resource and abilities to achieve a better life (Mirowsky and Ross, 2003). It provides scope to improve efficiency in health, changing lifestyle habits, time preference for health care, etc. The growth of educational attainment level

provides a platform for man's exposure to opportunity along with eradication of certain taboos and superstitions associated with social traditions and customs. It does not merely mean the eradication of illiteracy; rather it is the mitigation towards the negligence. In total it is the means or way to develop inherent capacities of an individual in the surrounding environment. The slow progress of educational development still leads to negligence towards health and prevalence of practicing certain age-old taboos for maintaining health condition. Apart from this, the prevalence of inequality in educational development in different

parts of the country including the state of Assam and more particularly in the districts of BTAD leads to prevalence of low health consciousness.

So far the literacy rate of the Bodoland Territorial Areas District (BTAD) of Assam is concerned, it is considerably lower (66.25 per cent) than the corresponding state average (72.19 per cent) and national average (72.98 per cent). It is even more discouraging among the females (58.89 per cent) as compared to males (73.39 per cent). Similarly, about 12.52 per cent of households in BTAD do not have any literate member within the family (2011 Census). With this perspective, an attempt is made in this paper to analyse the diverse pattern of educational development and its impact on prevailing health status in socio-economically varied BTAD region.

Objectives

The basic objectives behind this study are:

- (a) to analyse the pattern of educational development and prevailing health status in the study area on the basis of birth rate, death rate, infant mortality rate, under 5 mortality rate, life expectancy, etc in both spatial and social contexts; and
- (b) to examine the impact of education on the prevailing health status in the study area.

Data base and methodology

The data necessary for the study have been gathered from both primary and secondary sources. The secondary data relating to

literacy rate and educational attainment, etc. have been obtained from the different volumes of Census of India, 1971-2011. The primary data for the study have been collected through well-designed household survey schedule-cum-questionnaire through stratified random sampling technique. The sample villages have been selected in consideration of dominant population groups of the district. As many as 23 sample villages, 2 urban centers have been selected purposively to depict both rural and urban scenario of the health status among the major population groups in the study area. The data so collected through both secondary and primary sources have been analysed with the help of meaningful statistical techniques ranging from simple ratio to complex Principal Component Analysis to find out the level of educational development and its impact on the prevailing health status of the region.

Analysis and Discussion

Literacy Rate

The study of literacy rate is considered as one of the important parameters for assessing the overall change and development of human behaviour towards achieving a better health condition. However, the trend of literacy rate has witnessed marked variation during the last few decades at different parts of the region. The lack of consciousness towards the need of education, lack of availability of number of educational institutions in an around the villages, inequality in the distribution of educational institutions throughout the region, etc. leads to the wide spatio-temporal variation of literacy rate.

Spatio-Temporal Character of Literacy

Although the literacy rate increased from 19.54 per cent to 66.25 per cent during 1971-2011 in the BTAD region, it has always been considerably lower than the state average and national average throughout the 1971-2011 period (Table 1). So far literacy rate among the districts in the region as

per 1971 is concerned, it was considerably higher in Kokrajhar district and lower in Udalguri district. In the latter period, i.e. during 2001-2011, Baksa district (69.25 per cent) witnessed significantly higher rate of literacy, followed by Udalguri district (65.41 per cent). However, it is quite low in Chirang district (63.55 per cent) (Fig.1).

Table 1: Spatio-Temporal Pattern of Literacy Rate in BTAD in relation to Assam and India, 1971-2011

Districts	Literacy Rate (in Percentage)		
	1971*	2001	2011
Kokrajhar	20.87	52.77	65.22
Chirang	20.00	52.79	63.55
Baksa	20.00	59.58	69.25
Udalguri	17.59	56.40	65.41
BTAD	19.54	55.77	66.25
ASSAM	28.14	63.25	72.19
INDIA	34.45	64.83	72.98

*1971 Literacy Rate includes 0-6 Population (Based on recasting of 1971 data as per 2011 Census administrative boundaries).

Source: Census of India, Assam, Primary Census Abstract, 1971, 2001 and 2011.

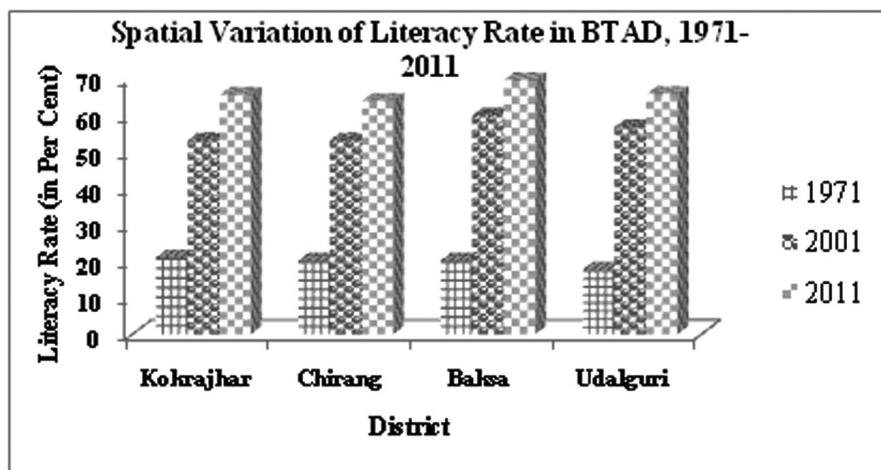


Fig.1 : Spatial Variation of Literacy Rate in BTAD, 1971-2011

Inter-Community Variation in Literacy

So far inter-community variation in literacy rate in BTAD region is concerned, among all the communities, Assamese community records the highest literacy rate (88.47 per cent), followed by Koch-Rajbongshi (81.36 per cent) and Bodo (81.07 per cent). The lowest rate of literacy is found among the tea tribes (57.48 per cent) and non-indigenous Muslims (57.53 per cent) of the region. Similarly, the highest male literacy is found among the Assamese community (93.79 per cent), followed by Koch-Rajbongshi (91.07 per cent) and Bodo (85.85 per cent) communities. However, it is quite interesting to note that Bodo community represents

the lowest male-female literacy difference (9.54) and thus reflects better social position of females in terms of literacy (Table 2). But in contrary to this, there exists marked gender gap among the Bengali community (22.86) as reflected by the sample data. It is further observed that the mixed communities living in the urban areas record a higher rate of literacy with considerably lower gender gap largely due to growing urbanism and agglomeration of all the services in an around the urban centres. Thus, the study reflects variation of literacy rate among the different communities and presents the dichotomy between the male and female and also rural-urban areas throughout the region.

Table 2: Inter-Community Variation of Literacy Rate in BTAD, 2013-2015

Population Group	Literacy Rate (in percentage)			Male-Female Differentials	Gender Disparity in Literacy
	Person	Male	Female		
Bodo	81.07	85.85	76.31	9.54	0.12
Indigenous Muslims	73.86	83.22	61.74	21.48	0.29
Non-Indigenous Muslims	57.53	63.96	50.36	13.60	0.24
Koch-Rajbongshi	81.36	91.07	70.47	20.60	0.25
Tea Tribes	57.48	67.38	47.21	20.17	0.35
Bengali Hindu	71.09	84.98	62.12	22.86	0.32
Non-Tribal Assamese	88.47	93.79	82.42	11.37	0.13
Nepali	70.21	76.42	63.78	12.64	0.18
Mixed Community (Urban Areas)	93.53	97.84	89.23	8.61	0.09

Source: Primary Survey, 2013-2015.

Educational Attainment Level

Education symbolizes the quality of human society and it is vitally important for balanced development of any region. The real progress in an area is reflected

by its educational attainment, because mere literacy rate could be a liability to the society. Education is the base of all the development and advancement of civilization aim at evolution of a better

man and development of mind (Sharma, 2003). Educational attainment makes an individual more effective, having intellectual skill and other effective traits. It enhances individual's power of exploration, judgment and reasoning capacity and practice of good habits. The higher level of educational attainment plays an important role in the adoption and practice of healthy habits and maintaining healthy lifestyle. Thus, the studies of educational attainment have a great significance to understand the prevailing social situation and its impact on the overall health status of a region.

Pattern of Educational Attainment: Socio-Spatial Variation

Although the literacy rate among the surveyed areas appears to be quite high, the picture however is quite discouraging in terms of educational attainment. It is observed that proportion of literates with educational level of graduation and above (6.30 per cent) including the technical graduates (0.51 per cent) is significantly

lower than the proportion of primary, high and HSLC/HS literates in the BTAD region (Table 3). There is, however, significant spatial variation of educational attainment level among the sample areas. It is found in this context that proportion of graduates and above is significantly higher in the urban centres (21.17 per cent) than the villages (4.30 per cent). In contrary to these, the technical/professional graduates are insignificant and are only 2 per cent in the urban sample areas and 0.31 per cent in the rural areas.

So far the district level variation of the education attainment levels is concerned, Kokrajhar district witnesses higher proportion of both general graduates and above population (9.70 per cent) and technical graduates (0.81 per cent) population. The higher educational attainment level both in respect of general graduates (1.90 per cent) and technical graduates (0.10 per cent) is found lowest within the Baksa district. The higher proportion of below HSLC educational level is found in respect of Baksa district (Table 3)

Table 3: Educational Attainments as Percentage of Literates in BTAD, 2013-2015

Districts	Below HSLC			HSLC/HS			General Graduates and above			Technical/Vocational Graduates		
	T	M	F	T	M	F	T	M	F	T	M	F
Kokrajhar	59.78	58.06	62.15	29.70	29.92	29.40	9.70	10.61	8.45	0.81	1.41	0
Chirang	70.52	66.73	74.55	20.42	23.08	17.79	8.44	9.61	6.98	0.62	0.58	0.67
Baksa	81.82	75.04	89.91	16.18	22.02	9.21	1.90	2.75	0.88	0.10	0.18	0
Udalguri	73.42	73.42	73.41	21.22	21.21	21.24	5.02	5.18	4.77	0.34	0.19	0.58
BTAD	70.86	68.37	74.13	22.32	24.03	20.13	6.30	6.98	5.37	0.51	0.62	0.37

Source: Primary Survey, 2013- 2015.

So far the intercommunity variation of educational attainment level is concerned, there is hardly any graduate in the indigenous Muslim dominated community villages due to the slow progress of modern education system and less accessibility of higher educational institution from the villages. Similarly, among the socio-economically backward Nepali community also, the higher educational attainment level, i.e. the proportion of graduates and above (0.27 Per cent) is very insignificant. Among the tea tribe community also the proportion of graduates is very nominal (0.64 Per cent). However, the Bodo, one of the dominant communities in BTAD, has comparatively higher proportion of educational attainment level. The 8.33 per cent of Bodo community people have an educational level of graduations and above qualification and only 0.51 per cent of it

have technical graduate population. It has been followed by the non-tribal Assamese community population, among which also the importance of graduates and above level of higher education is prevalent (5.23 per cent). It has also a minimal proportion of technical graduates (0.37 per cent). In contrary to these, among the Nepali, tea tribes, indigenous Muslims, non-indigenous Muslims and Koch-Rajbongshi communities, the higher proportion of people below the HSLC level as found indicates still lower educational progress among the communities (Table 4). Thus, the awareness towards the development of modern education system and its importance, economic backwardness, accessibility and unequal distribution of educational institutions are the major causes of low level of educational attainment in the entire BTAD region.

Table 4: Educational Attainments as Percentage of Literates at Community Level in BTAD, 2013-2015

Population Groups	Below HSLC			HSLC/HS			General Graduates and above			Technical/Vocational Graduates		
	T	M	F	T	M	F	T	M	F	T	M	F
BD	65.80	60.05	72.24	25.36	29.84	20.35	8.33	9.51	7.01	0.51	0.60	0.40
IM	83.87	97.18	88.72	16.13	2.82	11.28	0	0	0	0	0	0
NIM	83.03	81.72	84.89	14.28	14.72	13.67	2.68	3.55	1.44	0	0	0
R	80.06	80.11	80.00	17.56	16.89	18.49	2.37	3.00	1.51	0	0	0
TT	86.30	86.70	85.83	12.74	12.23	13.38	0.95	1.06	0.79	0	0	0
BH	79.04	75.86	83.54	19.70	22.41	15.85	1.26	1.72	0.61	0	0	0
NTA	65.42	57.99	74.09	28.97	33.33	23.89	5.23	7.99	2.02	0.37	0.69	0
N	87.88	82.09	95.06	11.84	17.41	4.94	0.27	0.50	0	0	0	0
MC	35.75	30.60	41.38	40.69	41.95	39.31	21.09	23.97	17.93	2.47	3.47	1.38

* BD- Bodo, IM-Indigenous Muslims, NIM-Non Indigenous Muslims, R-Koch-Rajbongshi, TT-Tea Tribes, BH-Bengali Hindu, NTA-Non-Tribal Assamese, N- Nepali, MC-Mixed Community (Urban Areas)

Source: Primary Survey, 2013- 2015.

Educational Development

In order to understand precisely the development of education in socio-spatial perspective, the level of educational development is found out with consideration of both positive and negative indicators of educational development. The development of education system in the region has been analysed on the basis of as many as ten indicators of educational patterns like percentage of literacy rate (X_1), male-female differential in literacy (X_2), rural-urban differential in literacy (X_3), percentage of literates with HSLC/HS (X_4), percentage of literates with Graduation and above (X_5), male-female differential in HSLC/HS (X_6), male-female differential in Graduation and above (X_7), literacy rate in below 20 years of age (X_8), male-female differential in literates below 20 years of age (X_9) and percentage of literates with HSLC and above in 22-35 age group (X_{10}).

The level of educational development in district level reflects distinct scenario as Udalguri (1.70) and Kokrajhar (1.30) districts possess positive level of educational development due to higher educational attainment level and low gender differential in it as compared to the rest of the districts of BTAD. In contrary to these, another two districts, i.e. Chirang (-1.57) and Baksa (-1.45) districts, indicates still negative educational development. So far the community level educational development is concerned, the mixed community dwelling in the urban areas has considerably higher level of educational development (10.48) as compared to the rest of the community villages.

Table 5: Educational Development Level in BTAD, 2013-2015

Population Groups	Composite Z-score Value
Bodo	4.15
Indigenous Muslims	-2.64
Non-Indigenous Muslims	-4.56
Koch-Rajbongshi	-0.82
Tea Tribes	-5.33
Bengali Hindu	-2.99
Non-Tribal Assamese	4.16
Nepali	-1.80
Mixed Community (Urban Areas)	10.48

Source: Calculated by Researcher, 2013-2015.

The negative level of educational development is prevalent throughout all the dominant communities excluding Non-Tribal Assamese (4.16) and Bodo (4.15) communities. However, the lowest level of educational development is found among Tea Tribes community (-5.33) and Non-Indigenous Muslim communities (-4.56) (Table 5). Hence, progress of education throughout all section of community is still not up to the mark in the districts of BTAD.

Spatial Variation in Health Status

Health and the provision of health care are an essential part of the quality of life because they directly affect one's daily activity and psychological as well as physical well-being (Kwon, 2003). Improvement in the standard of living and health status of population has remained one of the important objectives of human development throughout the world. The conditions of associated health

indicators like crude birth rate, death rate, child mortality rate, life expectancy rate, disability rate, etc. explain about the overall health status of people. Although the performance of these indicators is on the decline throughout the region, it still requires long process to need to attain stable health condition. Therefore, the studies of these variables have a great significance to understand the overall state of prevailing health scenario of the entire BTAD region. The nation has succeeded in bringing down the death rate throughout the country, but it has not been able to control the birth rate due to prevalence of early age marriage in most of the parts of the country along with the prevailing poverty and low literacy rate and preference of male child. The crude birth rate (CBR) is the total number of live births per 1,000 populations in a year and is an important indicator of fertility rate and population growth. It is closely interlinked with women health and higher the value of crude birth rate signifies lower overall health condition. So far the national level figure of CBR is concerned, throughout the country possesses very high CBR (20.8 per thousand) and in state level (22.0 per thousand) particularly in BTAD (28.86 per thousand) the figure is even higher than the national rate (SRS Bulletin, 2016). As a result of better implication of family planning measures and greater awareness towards the population growth due to larger educational advancement in urban areas than rural sample villages of the region, lower rate of CBR is found in urban areas than the rural counterparts. So far the spatial variability of CBR in district level, greater rate is revealed in Baksa district (26.10 per thousand) followed by Chirang district

(24.81 per thousand) which exceeds both the national average (5.3 in Baksa and 4.01 in Chirang) and state average CBR (4.1 in Baksa and 2.81 in Chirang) while Kokrajhar district (17.15) have lower CBR than both the national and state average and Udalguri district (21.54) have slightly higher CBR rate than the national average and lower CBR than the state average. Similarly, death or mortality rate also signifies the state of health condition and higher the rate of death lower will be the state of health condition in a region. In India the death rate is 6.5 while the state of Assam have slightly higher death rate (7.1) than it. However, in these respect the BTAD region still possesses very high death rate (10.44 per thousand). Although with the advancement of medical science and public health sector throughout the country, the rate of death has been declining abruptly from that of the pre independence period, but all the four districts of BTAD possess comparatively higher death rate than the state and national figure. The district level variation of death rate is found to be highest in Kokrajhar district (13.88 per thousand) and lowest in Baksa district (7.16 per thousand). The prevalence of high birth rate and comparatively low death rate in Chirang and Baksa district as compared to Kokrajhar and Udalguri district leads to high population growth rate.

The pattern of child mortality is one of the foremost indicators or measures to understand the state of health condition. The child mortality is the rate of incidence of death of child below the age of five. The trend of child mortality rate both in terms of infant mortality rate (IMR) and under-5 mortality rate (U5MR) show a slow decline in India as a whole. Infant Mortality Rate

is the number of deaths of children less than one year of age in a given year per 1000 live births in that year. Although IMR has declined from 129 during 1971 to 37 during 2015 in national level and from 139 during 1971 to 47 during 2015 in the state of Assam, the districts of BTAD still possess high IMR (50.26 per thousand) and it is long way to attain desirable level in the study region. The district level IMR is recorded as higher in Kokrajhar district (55.95 per thousand), followed by Udalguri district (50.20 per thousand), while comparatively

it is the lowest in Baksa district (46.24 per thousand) (Table 6).

The under-five mortality rate is the child death before reaching the age of five. It is expressed as a rate per 1,000 live births in 0-5 Age Groups. The rate of U5MR is recorded as a very high in the region (63.10 per thousand). The district level study reveals greater proportion of U5MR in Baksa district (65.69 per thousand), followed by Udalguri district (64.97 per thousand).

Table 6: Crude Birth Rate, Crude Death Rate, Infant Mortality Rate, Under 5 Mortality Rate and Disability Rate in BTAD, 2014-2015

District	CBR	CDR	IMR	U5MR	Average age at Death	Disability Rate
Kokrajhar	17.15	13.88	55.95	60.76	58.21	0.20
Chirang	24.81	7.91	49.08	55.04	58.13	0.59
Baksa	26.10	7.16	46.24	65.69	55.04	1.22
Udalguri	21.54	10.99	50.20	64.97	55.53	0.43
BTAD	28.86	10.44	50.26	63.10	56.84	0.56
Mean	21.57	10.43	51.06	61.16	57.85	0.55
SD	7.83	4.42	8.65	8.65	6.55	0.70
CV	36.29	42.40	16.94	14.14	11.32	128.11

Source: Primary Survey, 2014- 2015.

The average age of death is one of the important indicators to measure level of health status in a region as it explains average life expectancy or a person expected to live. The higher the average age of death indicates low infant and child mortality, an increase in ageing population, and high quality of healthcare delivery. In India, average age of death or life expectancy has increased significantly over the past century, reflecting the considerable fall in mortality

rates, initially from infectious diseases, maternal mortality and cardiovascular disease, etc. due to advancement in health care service sector throughout the country. However, despite development in health care sector in most parts of the country, average age at death is still very low in the country. The picture in the state of Assam and particularly in the districts of BTAD has been still quite discouraging. The average life expectancy or average age at death in

the BTAD region is still as low as 56.84 years, which is significantly lesser than the national average (66.90 as per 2011 Census). However, at district level the average age of death is found to be lowest in Udalguri district (54.94 years) among rest of the districts of BTAD (Table 7.8). Apart from it, the prevalence of disability also hinders health status of an area. Although the rate of disability in BTAD (0.56 per cent of total population) is lesser than national average (2.1 per cent as per 2011 Census),

its prevalence varies from one area to another. Thus, to understand overall health status of the region based on considered health indicators composite Z-score values are found out at district level in BTAD. As per the derived values, among all the four districts of BTAD, Chirang district (2.61) occupies comparatively better position, followed by Kokrajhar district (0.68), while Baksa (-2.23) and Udalguri (-1.06) districts have lower health status (Fig. 2).

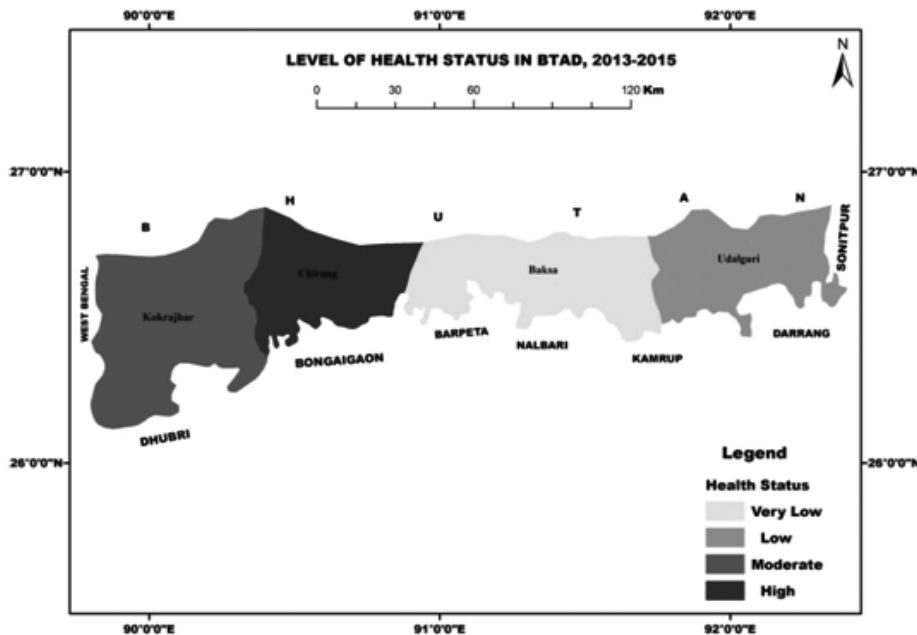


Fig. 2 : Level of Health Status in BTAD, 2013-2015

Inter-Community Variation in Health Status

The performance of associated health indicators like crude birth rate, death rate, child mortality rate, life expectancy rate,

disability rate, etc also varies at community level. CBR among all the communities, excluding Bengali Hindu (17.78) and non-tribal Assamese (19.76) community, have been still higher than the national

average birth rate (20.8), while indigenous Muslim, non-indigenous Muslim, tea tribes and Nepali communities have recorded significantly higher CBR than the state level birth rate (22) (Table 7). So far variation in CBR at community level is concerned, higher CBR prevails among non-indigenous Muslim community villages (35.39 per thousand) and indigenous Muslim (33.86 per thousand) villages, while as a result of considerable advancement in health care services and increased level of standard of living, lower CBR is recorded among mixed community inhabiting (11.22 per thousand) urban areas. Similarly, CDR is also one of the very important indicators of health status, and its declining rate signifies improvement in levels of health in a region, which also varies at community level. The CDR has still been significantly high among tea tribe communities (17.80 per thousand) due to prevalence of low health awareness and consciousness among them along with comparatively lesser health care accessibility. Apart from this, non-indigenous Muslim community and Bengali Hindu community also witness prevalence of high CDR. Thus, all the considered communities record a considerably higher CDR than the national average (6.5) and state average (7.1) death rate, except among non-tribal Assamese community (6.24), which is found to be one of the lowest (Table 7).

So far child mortality rate in respect of IMR is concerned, only the mixed community (32.43) dominated urban areas of BTAD region have better position, as the

IMR is considerably lower than the national average (37). However, the situation among the different communities is quite discouraging, as all the population groups experience higher IMR than the national and state averages (47), except that of non-tribal Assamese community (45.61). The highest level of IMR prevails among the tea tribe community (59.46) in the BTAD region as compared to all communities. Similarly, there exists inter-community variation in mortality rate among children under 5 years of age (U5MR). The data reveal that the tea tribe community records the highest U5MR (70.59 per thousand) and it is closely followed by the Bengali Hindu (70 per thousand) dominated villages. It is, however, found to be slightly low among the indigenous Muslims (68.29 per thousand), Nepali community (64 per thousand) and non-indigenous Muslim community (63.01 per thousand) (Table 7).

The higher age of death or greater life expectancy is recorded in urban areas inhabited by mixed communities (64.86 years), followed by non-indigenous Muslim (60.77 years), while lowest rate of life expectancy is found to be prevailing among tea tribe community (47.44 years). On the other hand, the rate of occurrence of disability is found to be more among indigenous Muslim community (2.15 per cent), followed by Nepali community (1.82 per cent) villages, while the lowest disability rate is recorded among tea tribe communities (0.16 per cent) and Koch-Rajbongshi community (0.23 per cent) villages (Table 7 and Fig. 3).

Table 7 : Community Level Variations in Crude Birth Rate, Crude Death Rate, Infant Mortality Rate, Under 5 Mortality Rate and Disability Rate in BTAD, 2013-2015

Population Group	CBR	CDR	IMR	U5MR	Average age at Death	Disability Rate	Composite Z-score Value
Bodo	20.14	8.48	50.00	59.63	58.98	0.36	2.81
Indigenous Muslims	33.86	7.67	56.60	68.29	57.42	2.15	-3.96
Non Indigenous Muslims	35.39	13.02	54.72	63.01	60.77	0.48	-1.52
Koch-Rajbongshi	20.31	10.75	54.54	60.27	56.62	0.23	1.13
Tea Tribes	23.95	17.80	59.46	70.59	47.44	0.16	-5.78
Bengali Hindu	17.78	12.31	53.85	70.00	53.64	0.50	-1.75
Non-Tribal Assamese	19.76	6.24	45.61	60.00	58.94	0.51	3.05
Nepali	26.67	10.26	51.85	64.00	55.27	1.82	-2.37
Mixed Community	11.22	10.65	32.43	55.32	64.86	0.28	7.66

Source: Primary Survey, 2013- 2015.

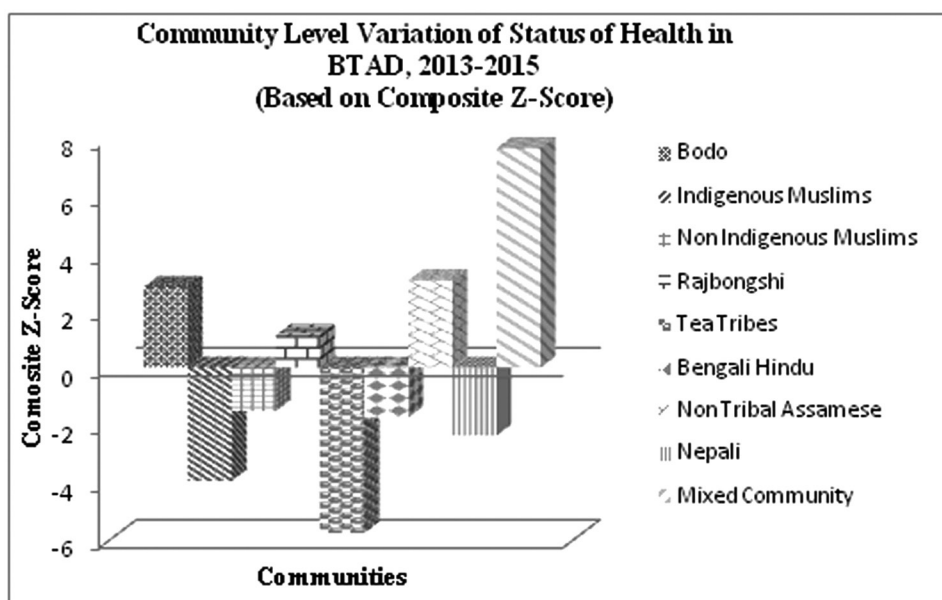


Fig. 3 : Community Level Variation of Status of Health in BTAD, 2013-2015 (Based on Composite Z-Score)

So far overall picture of prevailing health status among the different community villages and urban areas depending on various health indicators is concerned, it is still quite discouraging in the study region. As per the composite Z-score values, the tea tribe community (-5.78) witnesses the most discouraging position among all the different communities in the BTAD region (Table 7 and Fig. 3) followed by indigenous Muslim community (-3.96). However, the status of health is relatively better among non-tribal Assamese community (3.05) and Bodo community (2.81). In contrary to these, the urban areas inhabited by people of diverse communities and culture present a better health status among all the major communities inhabiting the BTAD region.

Educational Attainment and Health Status

Education being one of the positive indicators for measuring human development and its association with maintaining good health, it has great significance to understand overall prevailing health status in an area (Groot and Brink, 2006). As discussed earlier, educational attainment acts as an important determinant of health status and it modifies health care and treatment seeking behaviour of individuals. It is the fact that when higher educational attainment increases, it positively influences health character by way of lowering down CBR, CDR, IMR, U5MR, etc. The increasing consciousness towards health care practices due to acquired knowledge through educational attainment leads to increase in life expectancy (Asghar *et al.*, 2009). Thus, to understand the influence of educational attainment level on the overall

health status, correlation analysis is carried out between different health indicators and level of educational attainment. The prevalence of high rate of child birth is closely associated with educational level and there exists a strong negative relationship between CBR and educational attainment of HSLC and above level ($r = -0.72$) and it is significant at 0.05 probability level (Fig. 4). Thus, higher the level of educational attainment lower is the CBR in the region. However, the influence of education on CDR has weaker negative (-0.31) relation due to influence of other associated health and economic indicators and is only significant at 50 per cent probability level. Likewise, the prevalence of disability rate is also associated with educational progress.

So far the incidence of child mortality in terms of IMR and U5MR is concerned, the relationship study reflects a strong negative relationship between HSLC and above educational attainment level and IMR (-0.95) and U5MR (-0.75). The IMR and educational level of HSLC and above is significant at 0.01 probability levels, while U5MR and educational level of HSLC and above is significant at 0.02 probability levels.

Thus, increasing rate of higher educational attainment level leads to decline of below 1 year age of child death and below 5 years of age child death. In contrary to these, the average age at death or life expectancy rates tend to increase with increasing level of educational attainments, as there exists significant positive correlation between educational attainment level of HSLC and above and average age at death (+0.65). However, it is significant at only 10 per cent of probability level (Fig. 4).

Regression Line of Different indicators of Health Status on Level of Educational Attainment

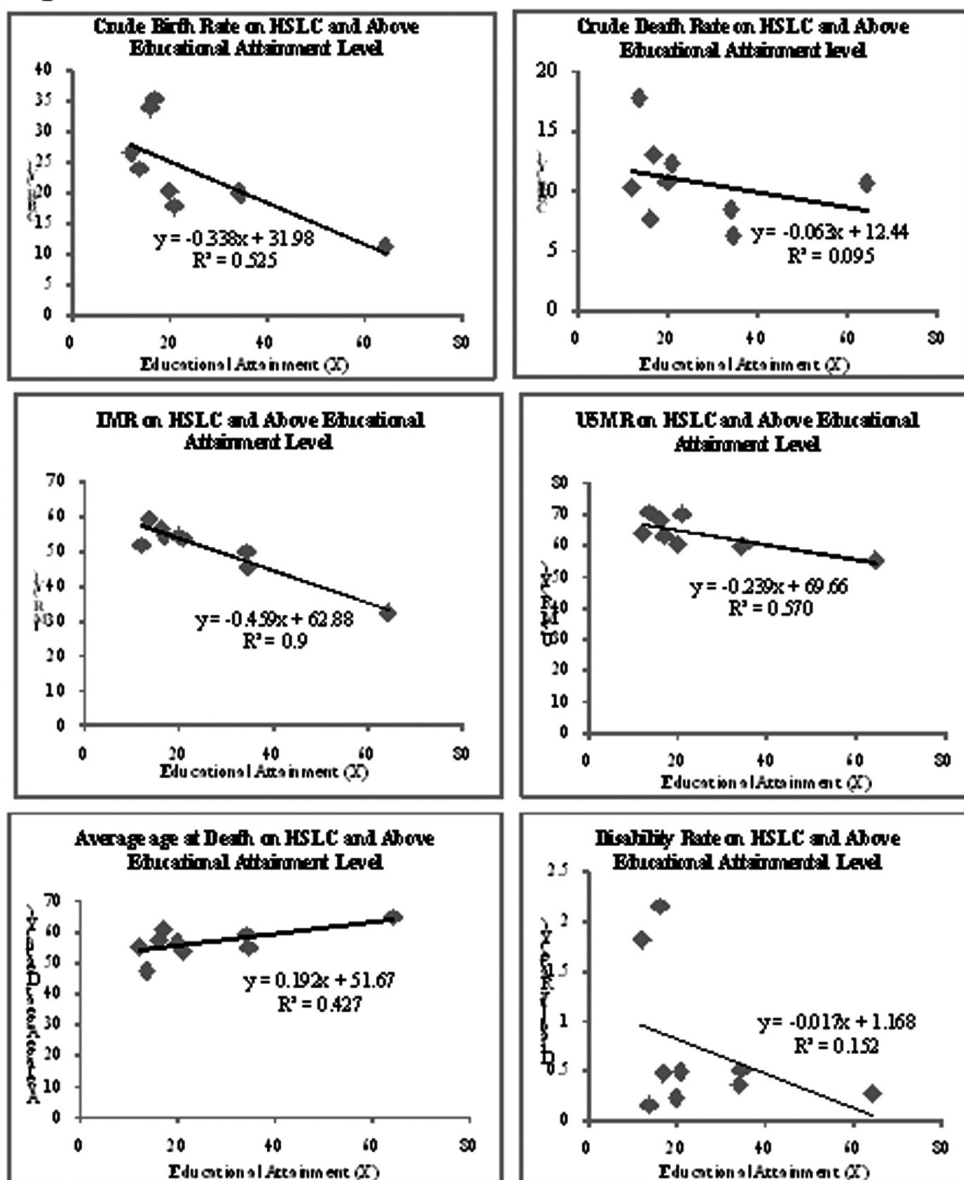


Fig. 4 : Regression Line of Different indicators of Health Status on Level of Educational

Educational Inequality and its Impact on Health Condition

Culture influences our perception and experience of health and illness in many ways and these perceptions and experiences change as culture changes (Loustaunau and Sobo 1997). As the prevailing educational development and its inequality being one of the most important determinants of health have a great impact on the overall status and

well-being of an area. As the educational development has found to vary from one community to another community, there exists marked diversity of health status in the region. Thus, the relationship study reveals a highly positive relationship between the educational development level and prevailing health status (+0.94) in the BTAD region among the different communities (Table 8).

Table 8 : Community Level Variation of Educational Development and Health Status in BTAD, 2013-2015

Population Groups	Educational Development Level (Composite Z-score Value)	Health Status (Composite Z-score Value)	Correlation
Bodo	4.15	2.81	+0.94
Indigenous Muslims	-2.64	-3.96	
Non-Indigenous Muslims	-4.56	-1.52	
Koch-Rajbongshi	-0.82	1.13	
Tea Tribes	-5.33	-5.78	
Bengali Hindu	-2.99	-1.75	
Non-Tribal Assamese	4.16	3.05	
Nepali	-1.80	-2.37	
Mixed Community (Urban Areas)	10.48	7.66	

Source: Primary Survey, 2013- 2015.

Conclusion

The foregoing discussion clearly reveals that the progress of education throughout all sections of people is still not up to the mark in the districts of BTAD. The prevalence of such a situation in the region also has great bearing on controlling the various health care management strategies and health status.

It has been found that the rates of infant mortality, under 5 mortality, disability and overall death rates are significantly higher in the region and all these have marked influence of educational development in the region. Thus, the educational development would certainly to go long way towards to attain the better health status in the region.

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