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REPRODUCTIVE HEALTH OF THE TAI-AITON WOMEN OF ASSAM, INDIA

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Abstract

Reproductive Health characterizes the absolute health condition of a population and mainly implies the women's health, right and empowerment. After the International Conference on Population and Development (ICPD) in Cairo (1994), women and child health acquired a major momentum, where it was advocated that every participant country should accomplish allied programmes for Reproductive Health. Reproductive health was defined in ICPD as "the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes" (ICPD Programme of Action, paragraph 7.2). As per WHO's data, 5,36,000 women died in 2005 due to the complications of pregnancy and childbirth and further to 400 deaths per 1,00,000 live births. According to the MMR Bulletin, 2011-2013, Office of the Registrar General and Census Commissioner, India, maternal deaths (300) were higher in Assam and lowest in Kerala (46) among the Indian states. Health statistics on infant and child mortality rates pointed to low health levels among Tribals (Ramana, 2015). The Tai-Aitons are a recognizable scheduled tribe of Assam having their own distinctive culture and tradition. They have been recognized as Scheduled Tribes (Hills) and are listed as Man-Tai Speaking people by the Government of Assam. No specific data about the total population of the Tai-Aitons are available. Though data are not accessible, but various studies exhibit that population of Tai-Aitons is very less, which may indicate a sign to their reproductive health. However, the study on reproductive health status of the tribes of India in general and North-East India is very limited. Moreover, extensive study on the reproductive health status of the Tai-Aiton community has not been made yet. Data is collected from two development blocks of Karbi-Anglong district and one development block of Golaghat district (total 210 households) based on the data of Man-Tai Speaking National Council, Assam, Population Cum Education Census (2006). The data related to this study are collected from August 2019 to October 2019. In order to analyze the reproductive health status of the sample population, 'Reproductive Health Index' is computed based on a set of reproductive health indicators. Therefore, it is expected that this study will explore the reproductive health status of the Tai-Aitons and its correlates.

Keywords: Reproductive Health, Women, Tai-Aiton, Tribe, Assam.

I. INTRODUCTION

Reproductive Health is a crucial part of general health and a central feature of human development. Both male and female are affected by reproductive health which includes conception to delivery as well as from their teen age to elder age. It also includes accomplishment and conservation of a good health and also restraint and care of ill-health. (WHO,2006). According to WHO, "Over one-third of all healthy life lost in women is due to reproductive health problems, compared to 12% for men". Health statistics on infant and child mortality rates pointed to low health levels among Tribals (Ramana,2015). This study aims to analyze the reproductive health status of Tai-Aiton women using a standard set of reproductive health indicators, viz. birth interval, infant and child mortality

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experience, ante-natal care coverage, post-natal care coverage, contraceptive prevalence and institutional delivery.

This study tries to examine the status of reproductive health of Tai-Aiton women with the help of a computed 'Reproductive Health Index' and to make the Reproductive Health Index of the community purposeful, an attempt at formulating Reproductive Health Index for women of Assam has been made on the basis of data from NFHS-4,Assam,2015-2016.

II. LITERATURE REVIEW

Lewis (1987) advocated a study on 15 year old teenagers from the School of Medicine in Wellington. He studied the awareness and reproductive practice of 15 year old teenagers. In his study, it was found that sixteen percent of women were not used the modern family planning method and also found that the awareness regarding reproductive issues were low among the respondents.

The Population, Nutrition and Health Report which was published by UNESCO Regional Office for Education in Asia and the Pacific in 2018 shows in developing countries children are easily get affected by malnourishment which results child deaths. In developing countries, many pregnant and lactating mothers are especially get affected by malnourishment, anemia and mostly die in childbirth. Most of the women have suffered from endemic goiter which is caused by an insufficiency of iodine in the diet and these complications mostly found in the areas of Africa, Asia and Latin America.

Chatterjee (1993) in his study made an attempt to identify the health status of Tribal females in three areas,i.e., woodland based, desertification areas and contaminated areas of Bihar, Orissa and West Bengal. In his research study, it was found that the prevalence of ill-health among the women were found to be highest in contaminated areas and it was lowest in forest based areas. So, this study revealed that the occupation pattern was related to the health of the Tribal women.

Latha (2007) in her research study entitled "Reproductive Health Status of Rural Women in Cuddalor District" has found out the health status of the rural women in Cuddalore District, Tamilnadu. Her study comprises 300 sample women. In her study, she discusses the reproductive health status of rural women households by considering some independent variables like age at marriage, total number of abortions, marital years, health care practices followed during their pregnancy period. To find out the reproductive health status, he has to apply Multiple Linear Regression Model. In her research, she has found out that the reproductive health status of the sample women is affected to the range of 82% by the explanatory variables and also found out that among all the significant variables, the expenditure on institutional births and investment on medicine because of drugs are more influencing factors on reproductive health status of women of Cuddalore district, Tamilnadu. She has also found out a significant association between reproductive health complicatins and health care delivery system for each village. By considering the

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problem of reproductive health status, she provides some reliable advices regarding the problem.

In their research study, Konthoujam et al. (2017) entitled "Reproductive Health in North-Eastern states of India" have discussed about the reproductive health of women in all the North-Eastern Region of India. In their study, it is found out those rural women in all the North-Eastern Region of India state a comparatively weak status in most of the areas of reproductive health condition relatively to those women who live in urban areas. In their study, it is observed that the percentage of deliveries in health facility with the aid of skilled health assistance among the women is highest in Sikkim, followed by Mizoram maintaining 94.7% and 80.1% respectively and in case of Nagaland, it is low with compared to other states of North-East India. In their study, it is also seen that one important indicator of reproductive health, i.e., the knowledge of HIV/AIDS among women in North-Eastern region of India found to be highest in Mizoram, i.e., 66.4 percent and Manipur,i.e.,40.7 percent, followed by Tripura,i.e.,28 percent and Sikkim,i.e.,25.5%. It is also found out that disease complications knowledge is lowest in Assam, i.e., 9.4 percent, Nagaland, i.e., 12.2 percent, Meghalaya, i.e., 13.3% percent and Arunachal Pradesh, i.e., 16 percent which indicates that women in many parts of the North-East state of India are less familiar about this kind of disease. So, considering these problems in their research, they suggest some reliable advices to improve the reproductive health status of women in North-East region of India.

III.METHODOLOGY

To deal with the objective of the study, an appraising and explanatory method is adopted for the study. The study is based on both primary and secondary data sources. The secondary data have been collected from different Government reports and other research organizations which deal with reproductive health.

In this study, primary data are collected from the respondents by employing a well-structured interview schedule during 2014-18. In this study, the primary data have been compiled from a sample of 210 households, following a multistage sampling technique (both random and purposive) for drawing the samples.

Majority of the Tai-Aitons are found in Golaghat and Karbi-Anglong districts of Assam. Among three sub-divisions of Karbi-Anglong district, viz., Diphu Sadar sub-division, Bokajan Civil sub-division and Hamren Civil sub-division, Bokajan Civil sub-division is chosen for the survey. Again among four sub-divisions, viz., Golaghat, Bokakhat, Dhansiri and Merapani; Dhansiri sub-division is selected as sample sub-division. Two blocks, i.e., Bokajan Development Block and Nilip Development Block under Bokajan Civil sub-division are choosen for the survey and Sarupathar Development Block is selected as sample block under Dhansiri sub-division.

There are total six Tai-Aiton living villages in Bokajan Development Block and Nilip Development Block of Karbi-Anglong district and all these six villages are selected. In Golaghat district, there are three Tai-Aiton living villages under Sarupathar Development

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Block and all the three are selected for data collection. Lastly, 60% of households from each sample Tai-Aiton villages are selected as sample households for the primary survey and total 210 households are selected as sample households for the study.

Analytical Tools of the Study

 In order to analyze the reproductive health status of the sample population. 'Reproductive Health Index' is computed based on a set of reproductive health indicators (Live Birth Ever Experienced, Birth Interval, Infant Mortality Experience, Ante-natal care coverage, Post-natal care coverage, Use of contraception, Institutional Delivery) using Principal Component Analysis (PCA) method. As the different parameters of reproductive health have different significance and influence, weighted measurement is required to construct the reproductive health index. The weights for different parameters of reproductive health have been taken from the roted component matrix obtained from the Principal Component Analysis. As per definition, being a multivariate statistical technique, Principal Component Analysis is applied to get a set of variables containing smaller number of dimensions from a large number of variables. In the first step, all selected variables were re-coded into dichotomous or binary forms, i.e.,1=Yes and 0=No. In the second step, to assess the internal reliability of the variables Cronbach's alpha coefficient (α =0.762) is computed. "Unidimensionality is an important assumption in a number of areas of psychometric and has implications for statistics like internal consistency relibility (eg. Cronbach's alpha will be maximized when all items are measuring the same construct" (Web site). So, to apply the method of Principal Component Analysis (PCA), all the selected variables are made unidimensional (inverse value of the variable Infant Mortality experience is taken).

IV. DISCUSSION

1.1 Conceptual highlight of the explanatory variables in the present study:

According to World Health Organization, there are 17 indicators which cover the main issues of reproductive health and perform the agreement among international organizations of the crucial indicators for international correlation, worldwide observing and check-out to the international forums.

- (i) Live Birth: In 1950, the term "live birth" was created by World Health Organization which is chiefly used for public health and statistical reasons. In simple words, live birth means birth of a child alive. According to World Health Organization, live birth is the full ejection or eradication from mother's womb,i.e., result of conception, such a partition which shows any clue of life or breaths regardless the period of pregnancy.
- (ii) Birth Interval: Birth interval is an important determinant of reproductive health which refers to the time gap between two successive births. When the birth interval is short, deaths of children under the age of one is high (Gondotra et al., 1982). Short birth interval increases the chances of reproductive problems and maternal death. Having an additional child is considered healthier for the mother and the child if the couple waits at least 2 years after previous birth for conception but not more than 5 years (USAID Report).

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(iii) Infant and Child Mortality: Maternal and infant are correlated. Children born to mother's age group 30-39 years are more likely to die during the period of infancy than those who are born in mother's main child bearing age (20-29 years).

- (iv) Ante-Natal Care: Ante-natal care is that care which is provided to the women during her time of pregnancy. Generally, ante-natal care is supplied by nurse, doctors, Auxiliary Nurse Midwife (ANM), and also any other health professionals. This care mainly starts from conception and continue during pregnancy time (Park, 2011). During pregnancy the mother should go to ante-natal check-up during the first 2 trimester, i.e., once a month, and again twice a month, and then forth, once in a week is also necessary. In case of Ante-Natal Care, the whole time period of pregnancy (during 9 months),i.e., 3 visits are classified as follows-
 - 1st visit includes 20 weeks or as soon as the pregnancy of the women is detected.
 - 2nd visit includes 32 weeks.
 - 3rd visit includes 36 weeks.

And finally at least one home visit should be made.

- (v) Post-Natal Care: Post-Natal care is that care which is given to the mother and also to the new born immediately after the birth or for the first six weeks of life. Post-Natal Care can be divided into two areas, such as:
 - · Care of the Mother
 - · Care of the New Born

Objectives related to Post-Natal care are discussed as below:

- To administer precautionary measures in the time of complications which is related to post natal period.
- To acquire optimum health, implementing care to the mother.
- To examine the adequacy of breast feeding.
- To provide family planning services.
- To implement basic health education to mother or to the family.
- (vi) Contraceptive Prevalence: Contraception is an important donating factor in fertility conversion and also the exploratory determinants of fertility concept (Davis & Blake, 1956 & Bongaarts, 1978). Contraceptive prevalence means the percentage of women, currently using or whose sexual partner is using at least one modern method of contraception. Usually, it is reported for married or in-union women whose age is between 15 to 49 years.
- (vii) Institutional Delivery: Institutional deliveries indicate those facilities of maternal health care like hospitals, trained health professionals etc. for a pregnant woman who

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gives birth to child. Institutional deliveries can reduce delivery complications, maternal and neo-natal mortality.

1.2 Correlation among Indicators of Reproductive Health

A correlation matrix has been constructed to understand the relationship among the indicators of reproductive health. Only the statistically significant correlations are discussed here.

The correlation matrix for indicators of reproductive health is presented in table 1.1:

Table: 1.1: Correlation Coefficient among Indicators of Reproductive Health

	Birth Interval	Infant and Child Mortality Experience	ANC Care	PNC Care	Contraceptive Usage	Institutional Delivery	Live Birth Ever Experienced
Birth Interval	1						
Infant and Child Mortality	110	1					
Experience	110	l					
ANC Care	.150 [*]	163 [*]	1				
PNC Care	.117	.006	.465**	1			
Contraceptive Usage	.139*	171*	.857**	.431**	1		
Institutional Delivery	.120	208**	.705**	.301**	.615**	1	
Live Birth Ever Experienced	.341**	.067	.325**	.247**	.350**	.254**	1

^{*}Significant at 5 percent level of confidence; ** Significant at 1 percent level of confidence

Ante-Natal check-up and experience of child loss has a negative correlation(r=-0.15). It means that experience of child loss is higher for less antenatal check-ups. Child loss also shows a negative correlation with usage of family planning method. According to World Health Organization, family planning method can hamper untimely and closely dispersed pregnancies and births. There is negative relationship between child loss and institutional delivery(r=-0.32). To deduct risk and problems that may occur in death to mothers and child, institutional delivery is necessary which may play a life saving equipment (Dixit et al., 2016). A positive correlation is observed between antenatal care and postnatal care (r=0.45), which means that the women who received Ante-Natal Care check-ups are about 4 times; those women are more likely to go for Post-Natal Care check-ups. Ante-Natal Care check-up is positively correlated with family planning method(r=0.84). The mothers who have received four or more ante-natal care, their use of modern family planning methods is high. This is three times higher than those who have not (Teka et al.,2018). Ante-Natal Care check also shows a positive correlation with institutional delivery(r=0.77) which means that the women who visited Ante-Natal Care check-ups are more likely to go for institutional delivery compared to those without Ante-Natal Care check-ups. There is a positive correlation between post-natal care and family planning method usage(r=0.41) which means that providing a Postnatal Family Planning mediation

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package which is constructed to enhanced existing antenatal care and postpartum care which will result in an increase in modern family planning method(Tran et al., 2018). Post-Natal Care also shows a positive correlation with institutional delivery (r=0.32). This is due to the women who prefer institutional delivery will be more likely to go for postnatal care than the women who had delivery at home. Here, a positive correlation is observed between family planning and institutional delivery(r=0.69). Mothers who give birth in a health institution and receive the information of family planning and also the modern methods of family planning, then it increases the use of family planning methods by two times more (Rajan et al., 2016). There is a positive correlation between live birth and birth interval(r=0.341). As per recommendations of WHO and other international organizations. to prevent infant and under five mortality and also to strengthen the parental health, it is required to waiting at least 2-3 years between conceptions. Again a positive correlation is observed between live birth and Ante-Natal Care check-ups(r=0.325). Ante-natal care is a significant care during pregnancy which may provide a positive delivery experience and enhanced parental and survival of child (Raj & Raj 2004). Live birth ever experienced and post natal care has also a positive correlation (r=0.247). Use of modern family planning methods can affect the maternal health. Other things being constant, when use of modern family planning methods increase, it may reduces the unwanted births and also to reduce maternal deaths, still births and infant and child mortality (Khan et al., 1986). Here, it is found that there is a positive correlation between live birth and the use of family planning method. There is also a positive correlation between the indicators of reproductive health, viz., live birth and institutional delivery(r=0.254).

V. RESULT ANALYSIS

1.3 Indicators of Reproductive Health Status

(i) Live Birth Experience

Born of a child that shows signs of life. Product of conception, that born after 22 or more weeks of gestation and whose birth weight greater than 500 grams and length 25 cm. The following table 4.2 shows live birth ever experienced by the respondents (at present age):

Table: 1.2: Live Birth Ever Experienced by the Present Age of the Respondents

Present Age	Number of Live Births	Number of Respondents	Average Number of Live Births Ever Experienced
15-19	1	1	1
20-24	6	6	1
25-29	8	6	1.33
30-34	42	31	1.35
35-39	58	39	1.49
40-49	230	127	1.81
15-49	345	210	1.64
A	verage Live Birth ever Bo	orn	1.64

Source: Field Survey

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Table 1.2 shows that by their present age the number of live births ever born to the respondents. From the table, it is observed that the total number of live births ever born is 345 children to 210 sample women of the reproductive age group 15-49. However, during this age group, the average number of live births ever born to each woman is 1.64 which is lower than the Assam as a whole, i.e., 2.2(NFHS-4) and also lower than that among the schedule tribe population of Assam,i.e.,2.61(District Level Household and Facility Survey-3(2007-08).

(ii) Birth Interval

Birth interval is another important indicator of reproductive health status. From various studies, it is found that short birth interval adversely affect the health of the woman and also the child health. The interval should be 2 years but not more than 5 years. In the present study, the mean birth interval is estimated to be 40.18 months,i.e., more than 2 years and less than 5 years, which indicates a good sign for the reproductive health of the mother of the community.

(iii) Infant and Child Mortality Experience

Table 1.3 depicts that among the surveyed population 8.1 percent of couples have experienced one or more infant and child deaths which is below the age of 5 years whereas remaining 91.90 percent have not experienced any such deaths. 16 couples have experienced 1 death and 1 couple has experienced 2 deaths of their infant and children below 5 years of age. The table 1.3 shows the couples by infant and child mortality experience.

Table: 1.3: Distribution of Couples by Experiencing Infant and Child Mortality Experience

Number of children died within age 5	Number of Couples	Percentage	Total Mortality Experience
0	193	91.90	0
1	16	7.62	16
2	1	0.48	2
Total	210	100.0	18

Source: Field Survey

Again, from table 1.4, it is observed that 5.56 percent of deaths have taken place on the first day of birth. Majority of deaths (50 percent) have taken place during the post-neonatal period (i.e.,29th to 365th day). Within 2nd day to 7 day and 8th day to 28th day, the percentage of infant deaths is 11.11 percent and 22.22 percent of deaths have taken place during 1 year to 5 years. The table 1.4 shows the dead child according to age at death.

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Table 1.4: Distribution of Child According to the Age at Death

Age at the time of death	Number of death	Percentage
1 st Day	1	5.56
2 nd Day to 7 th Day	2	11.11
8th Day to 28th Day	2	11.11
29th Day to 365th Day	9	50
1 Year to 5 Years	4	22.22
Total	18	100.0

Source: Field Survey

(iv) Ante-Natal and Post-Natal Care Coverage

Among 210 sample respondents, more than half,i.e., 53.17 percent of women have covering full ante-natal care and only 19.52 percent have covering post natal care services.

(v) Miscarriage Experience

From table 1.5, it is revealed that 12.86 percent of couples have experienced miscarriages. Highest proportion, i.e., 11.90 percent has experienced one miscarriage whereas 0.96 percent have experienced two miscarriages. The following table 1.5 shows the couples experiencing miscarriage:

Table 1.5: Distribution of Couples by Experiencing Miscarriage Experience

Number of Miscarriage	Number of Couples	Percentage	Total Miscarriages
0	183	87.14	0
1	25	11.90	25
2	2	0.96	4
Total	210	100.0	29

Source: Field Survey

Again, from the table 1.6, it is found that 29 miscarriages occurred to the sample respondents of the universe. When mother's age within 15-19, 4 miscarriages have taken place which is 1st order. It is also found that 8 miscarriages at 1st order, 3 miscarriages at 2nd order and 1 miscarriage at 3rd order have taken place in the age group 20 to 24 years. During 25 to 29 years, 2 miscarriages at 1st order and 6 miscarriages at 2nd order have occurred and during 30+ age group, 2 miscarriages at 1st order and 3 miscarriages at 2nd order have been observed from the survey. It is seen that highest proportion (55.17 percent) of 1st order miscarriage has taken place. This is shown in the following table 1.6:

Table 1.6: Distribution of miscarriages by Mother's Age and Conception Orders

Mother's Age (in years)	Con	Conception Orders		
mother 3 Age (iii years)	1st	2nd	3rd	
15 to 19	4			4
20 to 24	8	3	1	12

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25 to 29	2	6		8
30 and Above	2	3		5
Total	16	12	1	29

Source: Field Survey

(vi) Infertility Experience

Infertility is "a disease of the reproductive system defined by the failure to achieve a clinical pregnancy after 12 months or more of regular unprotected sexual intercourse"...(WHO-ICMART glossary). Table 1.7 describes the respondents by infertility experience. Among 210 surveyed households 15 respondents are found to be infertile and remaining 195 respondent women are not. The following table 1.7 shows the respondent women by infertility experience.

Table: 1.7: Distribution of Couples by Facing Infertility Problem

Number of Infertile Woman per Household	Number of Respondents	Percentage
0	195	92.86
1	15	7.14
Total	210	100.0

Source: Field Survey

1.4 Comparative Profile Regarding Indicators of Reproductive Health Status Between Tai-Aiton Population of Assam with Schedule Tribe Population at National Level and State Level

About 8.6 percent of the tribal population constitutes total population of India. There is some inequalities between tribals and non-tribals of India regarding the socio-economic and demographic indicators which may also manifest the tangential diminish and abused situation of tribals (Mohanty,2002) and this backward condition of tribals are apparent from their health and human development indicators which are still below the national average and this is a global problem. Ministry of Tribal Affairs, Government of India, 2018, has revealed that an international review on Tribal health, where it is stated that in case of tribals social effect and health are poor which is analyzed on indicators than other population of bulk of the countries. The following table 1.8 shows a brief picture regarding indicators of reproductive health status between sample population, ST population of Assam and ST population of India.

Table: 1.8: Indicators of reproductive health status of the Sample population, ST population of Assam and ST population of India

Indicators	Tai-Aiton Population*	ST Population (India)**	ST Population (Assam)*#
Fertility	1.64	2.5	2.14
Birth Interval	40.18	NF#	28.6
Infant and child Mortality Rate	52.17	74	59.3
ANC Coverage	53.81***	81.8##,15###	56.1***,17.9###
PNC Coverage	19.52	37	31.4

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Institutional Delivery	43.31	68.0	78.2
Contraceptive Prevalence	40	41	32.0

^{*}Field Survey (Sample size=210);**Tribal Health of India, MoHFW, Government of India, 2018; *#=NFHS-4, Assam.

#=Not Found;*** At Least One ANC; ##=At Least One ANC; ###=Full ANC

The table 1.8 shows that the fertility rate of Tai-Aiton population of Assam is less than the ST population at both state and national level whereas infant and child mortality rate of Tai-Aitons are also less than the infant and child mortality rate of ST population at state and national level which is a good sign for Tai-Aitons of Assam. However, coverage of Ante-Natal Care and Post Natal Care, institutional delivery and usage of contraceptives rates are also far below the state and national level. In case of birth interval, it is higher in the community than Assam's ST population.

1.5 Reproductive Health Status

1.5.1 The Reproductive Health Index

Due to its multidisciplinary perception, it is difficult to define the reproductive health status .So, for a comprehensive understanding of the reproductive health status of sample women, which is based on the above discussed indicators; a Reproductive Health Index (RHI) has been computed by using Principal Component Analysis (PCA) method. Here, weighted measurement is required to construct the reproductive health index because the different parameters of reproductive health have different significance and influence. Therefore, to construct the Reproductive Health Index for the community, the extracted weights for different parameters of reproductive health have been taken from the roted component matrix obtained from the Principal Component Analysis. In the present study, the mean value of the Reproductive Health Index of the Tai-Aitons is found to be 1.334.

Table 1.9: Indicators of Reproductive Health Index and their assigned scores

Indicators	Scores
Live Birth ever Experienced	Having 1or 2 child=1
	Having no children and Having more than 2 child=0
Infant and Child Mortality Experience	Experience of child loss= 1
	Non-experience of child loss= 0
Antenatal Care Coverage	Receipt of Antenatal Care (Any type)=1
	Non-receipt of antenatal care= 0
Postnatal Care Coverage	Receipt of Postnatal care (Any type)= 1
	Non-receipt of postnatal care= 0
Contraceptive Prevalence	Ever use of contraceptives= 1
	Never use of contraceptives= 0
Institutional Delivery	Having Institutional Delivery= 1
	Not having Institutional Delivery= 0
Birth Interval	Birth Interval of 24 months and more=1
	Birth Interval of less than 24 months=0
Reproductive Health Index	.00 to 2.79 (Score Range)

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The reproductive health status of women is good when the value of index is high (Raj & Raj, 2004). For better clarity, based on the value of the index, the sample women are grouped under three broad categories of Reproductive Health Status, viz., Low Reproductive Health Index, Medium Reproductive Health Index and High Reproductive Health Index. The following table shows the distribution of respondents by categories of Reproductive Health Index:

Table 1.10: Distribution of Respondents by Categories of Reproductive Health Index (RHI)

Categories of RHI	Score Range	Number of Respondents	Percentage
Low RHI	0 to below 1	91	43.33
Medium RHI	1 to below 2	40	19.05
High RHI	2 and above	79	37.62
Total		210	100.0

Source: Field Survey

The table 1.10 depicts that among 210 sample women, majority of women (43.33 percent) belongs to low Reproductive Health Index category, followed by 37.62 percent of women have High Reproductive Health Index and a less proportion, i.e., only 19.05 percent belong to Medium Reproductive Health Index category in the present study.

By following the same procedure, a Reproductive Health Index for women of Assam is constructed to make the Reproductive Health Index of the community meaningful. The index value of Assam is found to be 1.0152 which is slightly lower than the community Reproductive Health Index value which may indicate a better reproductive health status of the studied community

Thus, it is found out that the Reproductive Health Status of Tai-Aiton women is not similar to the state level, rather it is better than the state level.

Table 1.11: Information Regarding Reproductive Health Indicators of Assam

Particulars	Value
Birth Rate	22.0 births per 1000 population
Birth Interval	28.3 (Percentage of births of birth order 3 or more,NFHS-4,2015-16)
Infant and Child Mortality Experience	48 (Deaths of children before the age of one year per 1,000 live births, NFHS-4,2015-16)
Ante-Natal Care Coverage	18.1(Percentage who had full antenatal care)*
Post-Natal Care Coverage	57.7 (Percentage of women with a post-natal check-up within two days of births,NFHS-4,2015-16)
Institutional Delivery	70.6 (Percentage of births delivered in a health facility, NFHS-4,2015-16)
Contraceptive Usage	27.3(Any modern spacing method)**

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*Full antenatal care includes having received at least four antenatal care visits, having at least one TT injection, and having taken IFA tablets or syrup for 100 or more days

**Includes pill, IUD/ppiud, injectables, male condom,f emale condom and lactational amenorrhoea method(LAM)

Source: National Family Health Survey-4, 2015-2016.

VI. CONCLUSION

The present study has been concerned to find out the status of reproductive health of women of Tai-Aiton community of Assam, India and also to make an attempt to find out the comparatative analysis with the state level with the help of a Reproductive Health Index. The index value of Assam is slightly lower than the community Reproductive Health Index value which may indicate a better reproductive health status of the studied community. The present study reveals that the reproductive health status of women of a community mostly depends on some correlates. Reproductive Health Status and Reproductive Health Care Services are correlated.

The reproductive health is an essential part of general health which is also an indicator of development of a society. Therefore, for maintaining the balance or further improvement of the reproductive health of women of the community, it is required to improve the girl's education in the studied area basically in tribal areas. It is also mandatory to implement the policies which may upgrade the women's health.

Conflict of Interest

The author confirms that there is no conflict of interest to declare for this publication.

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References

- Chatterjee (1991): "Improving women's health in India", World Bank, Sout Asia country Department II, Washington D.C.
- 2) Latha, S. (2007): "Reproductive Health Status of Rural Women in Cuddalore District". Annamalai University. Tamil Nadu.
- 3) Lewis, H. (1987): "Young Women's Reproductive Health Survey" *Newzealand Medical Journal*.100(829).
- 4) Mahanta, A.J. (2011): "The Determinants of Health and Hygiene of the Tribes of Assam: A Study of the Mishings". Ph.D Theses. Department of Economics. Dibrugarh University. Assam.
- 5) Raj P. & Raj A. (2004): "Caste Variations in Reproductive Health Status of Women: A Study of Three Eastern States". *Sociological Bulletin*. Vol.53. No.3. Sep.-Dec.pp.326-346. Indian Sociological Society.

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DOI: 10.5281/zenodo.10612581

- 6) Ramana, D. (2015): "Reproductive Health Status Issues and Concerns of Tribal Women". Ph.D. Thesis. Centre for Extension Studies & Centre for Women's Studies. Sri Venkateswara University. Andhra Pradesh. India.
- 7) USAID. Healthy Timing and Spacing of Pregnancy: HTSP Messages. http://www.esdproj.org/site/PageServer Retrieved 13.05.2008
- 8) World Health Organization, 2006, Reproducive Health Indicators: guidelines for their generation, interpretation and analysis fo global monitoring. ISBN 924156315X.
- 9) National Family Health Survey-3 (NFHS, 2015-16)
- 10) http://statistics.laerd.com/spss-tutorials/multiple-regression-using-spss-statistics.php