論文の要旨 (Summary)

Ethnicity and Fertility: Micro Level Household Survey of Two Ethnic Communities of Nepal

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Ed1401

July 2004

The present study was carried out in two ethnic communities of Nepal, namely, Bahun/Chettri, major ethnic group of Indo-Aryan descent, and Tamang, an important minor ethnic group of Tibeto-Mongoloid origin. The data were collected through questionnaire and interview techniques during fieldwork carried out by present author. The objective of this thesis is to tackle the issue of fertility behavior within different ethnic communities of rural Nepal. A comparative study of fertility based on ethnicity and demography within different communities in Nepal, could prove to be a valuable addition to the existing literature on Nepalese village society.

Summary of Thesis

The introductory chapter presents a general background of ethnicity and fertility along with reviews of relevant theories and researches on the subject. The key relevant theories presented in this chapter are: proximate determinant theory, demand theory, socio-economic theory, and wealth flow theory. The present chapter also includes the research hypotheses along with the originality and significance of the study.

By utilizing the data obtained from the field study, the second chapter explores the socio-economic backgrounds of the two ethnic groups in the study area. The Bahun/Chettri, whose settlement was adjacent to the local growth centre, enjoyed better access to schools, healthcare facilities, and

infrastructure compared to their Tamang counterparts. In addition to electrification, the Bahun/Chettri community had access to tap water, telephone service, and all weather roads. Even though the literacy rate was higher than the national average in both communities, the Bahun/Chettri faired better in this category. Despite the fact that a gender disparity in educational opportunity was evident in both communities, more Bahun/Chettri women were enrolled in higher education than their Tamang counterparts.

The income disparity between these communities reflected the disparity in education. On average, the Bahun/Chettri generate twice as large income as that of the Tamang. Furthermore, the gender disparity in income was more prominent in the former community. Agriculture is the primary source of income in the study areas and a majority of the women in these communities were engaged solely in agriculture and animal husbandry. The Bahun/Chettri women did not engage in agricultural labor for wages, whereas, it was the principal source of income for women of the Tamang community. The study also revealed that the Tamang were more likely than the Bahun/Chettri to own small businesses, such as operating petit shops.

Based on our survey data, which took into account such variables as literacy and income, we can conclude that the Bahun/Chettri respondents were better off on all socio-economic indicators. It is interesting to note that the Tamang households of our study area had a superior socio-economic status compared to those of surrounding areas as reported by other scholars. Compared to the national level, the gender disparity in socio-economic conditions was relatively small. However, such a disparity was still prominent in both study areas.

The third chapter of this paper conducts a qualitative study of the various determining factors of fertility and is divided into three sections: proximate determinants of fertility, mortality and fertility, and socio-economic aspects of fertility.

In examining proximate determinants, special attention has been given to the breastfeeding pattern, age at marriage, and family planning. Since family planning is an instrumental proximate determinant of fertility, it has been studied as thoroughly as possible in terms of Knowledge, Attitude and Practice (KAP) of contraception.

Family planning programs have had a significant impact in the region and the knowledge of contraceptives is prevalent in both communities. However, the use of contraceptive is higher in the Bahun/Chettri population. Spousal communication in the matters of family planning was also more evident among the Bahun/Chettri than their Tamang counterparts. A positive attitude towards practicing contraceptives was general amongst the younger cohorts in the study area.

Our study revealed that marriage is almost universal in the study area and the mean age at marriage for the Bahun/Chettri population is higher than their Tamang counterparts. More recently, an increase in the age at marriage among the younger generation of both communities has been observed. Breastfeeding is also universal in the study area, although, the Tamang mothers were inclined to terminate breastfeeding earlier in order to perform agricultural and other labor tasks.

The second section of this chapter analyzes the effect of mortality, namely infant/child mortality on fertility in the study area. The child loss experience by mothers is defined as the mortality variable for the present study. The effect of such an experience by the mothers in the two ethnic communities is analyzed, and the difference between the new and old generation of mothers is investigated as well. In order to understand the underlying issues behind mortality, the reproductive health status and the condition of post and pre natal care of babies are also examined.

Due to the improvement in reproductive health and post-natal care in recent years, there has been significant decrease in the number of mothers who have experienced child loss. An increase in the incidence of delivery in healthcare facilities and regular check-up of newborns has also been observed

in the area. Immunization of newborns is also universal in the study area, resulting in the decrease in infant/child mortality.

The final section of chapter three discusses the social, cultural, and religious values of children. Special consideration is placed on the cost of educating children and the degree of preference for a male child in the two ethnic communities. The chapter also takes into account how the value of children has shifted over time. The latter part of the chapter covers the status of women and their autonomy. In particular, the household and reproductive decision making dynamic is analyzed.

Our study indicates that due to the substantial increase in the cost of education, the economic value of children has declined in the study area. This is especially true in the Bahun/Chettri community, where monetary investments in the education of children is three times more than that of the Tamang community. Consequently, the ideal number of children has declined in both communities, but the trend is much more noticeable in the Bahun/Chettri community. This leads us to believe that a "demographic transition" is taking place with accordance with Caldwell's "wealth flow theory". Though the economic value of children has declined, parents from both communities consider children to be very valuable as insurance during their old ages. This idea was more prominent among the Tamang population than in the Bahun/Chettri community.

The decrease in an ideal number of children among new generation mothers may also stem from the empowerment of women in the study area. From the standpoint of educational attainment and decision-making power, the Bahun/Chettri women were found to be more empowered than the Tamang women. Despite the fact that most of the crucial decisions were made by the husbands in both communities, the Bahun/Chettri women were more vocal in reproductive decisions than the Tamang women. While inter-spousal cooperation and communication existed in the Bahun/Chettri community, the husbands of the Tamang community tended to make decisions on reproductive matters without discussion with their wives.

While the third chapter focused on a qualitative analysis, the fourth chapter carries out a quantitative analysis of the determinant factors of fertility. Various fertility models are developed and analyzed utilizing multiple regression and correlation coefficients. The results of these statistical tests are presented in the chapter. The Children Ever Born (CEB) outcome variable has been taken as the proxy for fertility. CEB can be interpreted as all live births given by women age 15 and over. Proximate variables (Age, Age Square, Age at marriage, Family Planning and Breastfeeding), and socio-economic variables (Literacy, Occupation, Income, Child loss Experience) are treated as independent variables for the quantitative analyses.

One of the first statistical tests performed was the t test, which was employed to detect which ethnic group had experienced the higher number of CEB. The test revealed that Tamang mothers had a higher number of CEB than their Bahun/Chettri counterparts. From there, bivariate analyses (Chi Square test and bivariate correlation) were employed to see which variables had significant impact on determining CEB in the region. These tests established family planning as the most important proximate factor of fertility in the present study area. The bivariate analysis also made it clear the age at marriage is also one of the crucial proximate determinants of fertility. In addition, literacy and child loss experience were found to play a major role in determining the number of CEB with a higher level of statistical significance. The occupational status of mothers showed an inverse relationship with the number of children ever born, however, this result was significant only at the 10 percent level. Breastfeeding pattern, on the other hand, did not exhibit any particular relationship with fertility in the current study. The reason behind this is that both communities practiced prolonged breastfeeding and there was little variance in breastfeeding period between them. Similarly, the income of mothers did not play a significant role in determining the fertility behavior. The multivariate regression analyses confirmed the results obtained from bivariate analyses

The purpose of our study was not only to study factors of fertility, but also to analyze whether these variables affected the outcome variable differently between these two ethnic communities. To this end, we added ethnicity dummy slopes to the multiple regression models. We were able to draw a number of conclusions on the impact of the proximate and social factors on CEB in these two different ethnic groups. First of all, the impact of literacy on fertility differs between the two ethnic groups. Literacy had an inverse relationship with fertility in the Tamang community with a relatively high degree of statistical significance. However, literacy was not found to have a significant impact on the Bahun/Chettri community. Secondly, the relationship between age at marriage, an important proximate determinant, and CEB also had a varying effect according to the ethnicity. While this variable had a clear inverse relationship with the CEB in the Bahun/Chettri village, its impact on the Tamang community was negligible. Thirdly, though the beta value differed, the child loss experience by the mothers had an identical effect on the number of CEB in both communities. Finally, a joint F test was performed to see whether the total effect of coefficient differed in these communities when determining CEB. The F test rejected the homogeneity, implying that the coefficients of the proximate and socio-economic variables had acted differently between the two ethnic communities.

Conclusion

The final chapter summarizes the issues in the paper, draws conclusions, and discusses potential policy implications of the study. Our quantitative and qualitative analyses clearly demonstrated that ethnicity played a significant role in the fertility differentials between the two communities. Exploring why ethnicity was such a significant factor became a most important question to answer. Is the higher CEB of the Tamang community attributed entirely to the ethnic factor? Are there inherent social and economic differences like -

disparity in access to various healthcare and educational access between Bahun/Chettri and Tamang population – that can explain the difference?

A lack of previous research on the ethnic differentials of fertility behavior in Nepal made it difficult to compare our results. However, it is interesting to note that the conclusion drawn by Fricke (1994) on Tamang fertility conflicts with our findings. Fricke had concluded that the Tamang in the hilly region of Nepal tend to have fewer children even in an environment without any modern means of contraception (natural fertility rate). This suggests that the fertility behavior of a particular ethnic group can differ based on the socio-economic settings.

As our study has clearly demonstrated, the Bahun/Chettri community enjoyed much better access to health and educational facilities than their Tamang counterparts. However, this disparity has lessened recently. The decrease in disparity is due mainly to an expansion of healthcare services like "door to door" family planning and immunization. The improvement in healthcare services available to the Tamang community has led to lower child/infant mortality rates. Although the significance of ethnic differences in fertility still persists in the study area, the intensity of this significance will weaken over time. This finding agrees with the developmentalist view of fertility, which states that fertility decline can only be achieved through an overall economic and social development.

The present research studied the issue of fertility behavior and explored its root causes within two ethnic groups of Nepal; however, any generalizations made from the results of this research must take our relatively small sample size into account. Further studies encompassing different parts of the county are required in order to make a more accurate assessment on the relationship between ethnicity and fertility in Nepal.

One generalization that was derived from our study was the strong relationship between literacy and fertility within the Tamang community. The study concluded that the effect of literacy on fertility was more significant in the Tamang community than the Bahun/Chettri. Exploring the rationale

behind this asymmetrical effect of literacy on ethnicity is an important aspect of future study. Similarly, the disparate effect of age at marriage between the two ethnic communities is yet another important issue that requires further analysis. A final issue that should be studied thoroughly in a future study is the role of income in determining the outcome of CEB.

Of these potential future studies, perhaps the most important issue for future research is the household model of fertility. Thus far, we have only analyzed fertility at the individual level, i.e. the behavior of mother. However, it can be argued that in developing countries, the fertility behavior is related to the household decision, rather than a personal one. A study of the household model of fertility would encompass the relationship between overall household income and fertility and could also include the education level of the husband in the fertility model.