Retrospective Cohort Study on Primary School Dropout Children of Chitwan & Nawalparasi Districts of Nepal

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Strictly as per the compliance and regulations of:

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Abstract - The formal education in Nepal starts from pre-primary level to higher secondary level. The primary level consists of grades I to V. Any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school is considered as primary school dropout. Objectives of the study are to find out the primary school completion rate and causes of dropout in primary schools of Chitwan and Nawalparasi district of Nepal. A retrospective cohort study was conducted in fifteen schools in each district during the period of June / July, 2010. In grade I, the maximum dropout rate was found to be 16.49% in the year 2008. For the girls, the highest dropout rate (9.96%) was observed in grade I and least dropout rate (3.94%) observed in grade V for the year 2009. From the cohort study, only 48.99% of primary school children enrolled in grade I have completed the primary education in five successive years. To prevent dropout from primary school, only free education and free text book distribution are not sufficient. Parents must be made aware about the important of education and they are to be motivated for sending their children to schools. When parents are active in the educational process, it is more likely that their children will stay in school. The community participation in primary level education may be enhanced in enrolment and preventing dropout.

Keywords : Education, completion, cohort, enrolled.

I. Introduction

Nepal is a heterogeneous country in terms of topography, climate and culture. It has 28.1 million populations and consists of 102 social groups and 92 languages1. Farming is the main occupation for nearly 80% of Nepal's population. Nepal still suffers with illiteracy. The literacy rate is only 53.4%2. Nepal is one of the ten countries with least female literacy rate (42.4%) in the world. The formal education in Nepal is a five-tier system, started from pre-primary level continued through primary level grade I to V, lower secondary level grade VI to VIII, secondary level grade IX and X and higher secondary level grade XI and XII. There are 31,655 primary schools in Nepal3. Vast majority of schools are government school. The of private schools are also on the rise currently. Most of the private schools are concentrated in urban cities and district head quarters. Over the last couple of decades Nepal has made remarkable progress in achieving the access to education.

Any student who leaves school for any reason before graduation or completion of a program of studies without transferring to another elementary or secondary school is considered as primary school dropout. According to the Department of Education of Nepal in 2009, there is 9.9% drop out in grade I. In grades II, III, IV, and V, dropout rates are 4.4%, 4.6%, 3.9%, and 7.4%, respectively. Grade repetition rate is also high in the primary grades, which is about 26.5% in grade I, and below 10% in the remaining grades II to V in 20093. At present about 93.7% of primary school age children are enrolled in school and 45.4% of the children enrolled in primary levels leave schools without completing grade V.

School dropout is a complex social problem for which there is no simple solution. It needs attention on every problem4. Many educators and others who are concerned with the dropout problem are advocating policies, which involve a broad range of institutions and agencies. Increasingly, it is being recognized that the issues of drop out and its prevention cannot be separated from issues affecting our total economic and social structure. These issues include poverty, unemployment, gender and caste discrimination, child abuse, drug abuse in the family, and many other factors, which are associated with it. A substantial portion of Nepali children between the ages of 5 and 14 are involved in various forms of child labor, such as bonded labor, carpet industries and child prostitution.5

II. Materials and Methods

A retrospective cohort study was conducted in fifteen schools in each study districts during the period of June / July, 2010 to study the primary completion rate and causes of primary school dropout. The district is divided into thirteen Ilakas. One government school from each Ilaka and two private schools are randomly selected from each district. School dropout children are identified from school register, consultation with class

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teachers and finally with the families. The pre-designed questionnaire was used for interview method to collect information about dropout children. The collected data were entered in SPSS software program and analysis was done.

III. Results

The total dropout rate is not consistent with year, grade and sex. The highest dropout rate (13.63%) was found in the year 2005 followed by 10.70% in the year 2007. For grade I, the maximum dropout rate (16.49%) was found in the year 2008 and least (10.00%) in the year 2009. For the girls, the highest dropout rate (21.43%) was observed in grade III in the year 2005 and least dropout rate (3.94%) observed in grade V in the year 2009. There is not significant different in boys and girls dropout of primary school children in 2009 as p value is more than 0.05. (Table no. 1).

Table1: Dropout rates by year, grade and sex from school record.

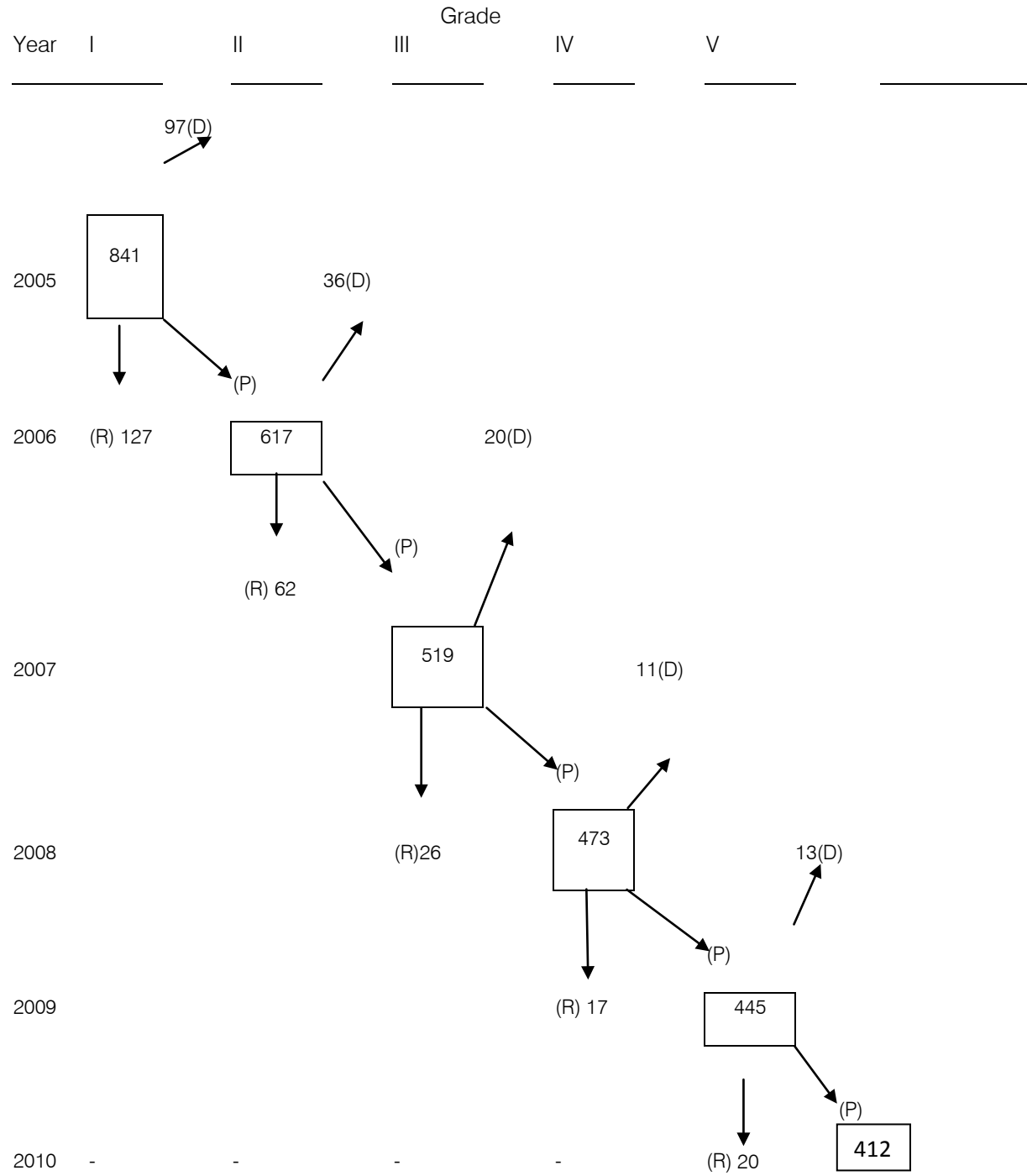| Year	Student	Grade					Total
		I	II	III	IV	V	
2005	Girls	17.65	9.86	21.43	10.83	7.61	13.27
	Boys	13.95	14.46	15.58	11.93	14.77	14.00
	Total	15.79	12.34	18.63	11.35	11.67	13.63
2006	Girls	20.69	5.88	16.05	5.56	8.24	10.76
	Boys	12.77	7.37	12.66	6.32	8.70	9.45
	Total	16.02	6.67	14.34	5.91	8.47	10.10
2007	Girls	10.34	12.64	9.78	11.54	10.64	11.42
	Boys	11.61	13.40	12.20	15.36	7.84	10.02
	Total	11.06	13.04	10.92	13.33	9.18	10.70
2008	Girls	18.07	6.76	9.09	7.45	8.86	9.77
	Boys	15.24	10.00	8.60	7.84	9.86	10.42
	Total	16.49	8.62	8.87	7.65	9.25	10.16
2009	Girls	9.98	7.32	5.70	4.54	3.94	6.19
	Boys	10.0	8.46	6.07	4.53	5.66	6.83
	Total	10.0	7.86	5.88	4.53	4.80	6.51
$\chi^2 = 1.63$, at 4d.f. and p= 0.80176							

The dropout rate for girl (17.65%) was higher than boys (13.95%) and total dropout rate was 15.79% in grade I for the year 2005. The cumulative dropout rates were 26.32%, 39.18%, 44.44% and 49.12% for grade I-II, I-III, I-IV and I-V respectively. (Table no. 2).

Table 2 : Year wise cumulative dropout of different grade.

Student	Grade				
	I (2005)	I-II (2006)	I-III (2007)	I-IV (2008)	I-V (2009)
Girls	17.65	29.41	41.18	45.88	54.12
Boys	13.95	23.26	37.21	43.02	44.19
Total	15.79	26.32	39.18	44.44	49.12

The attendance record for five years from 2005 to 2009 was available only in nineteen schools in study districts. A total of 841 children enrolled in grade I for the year 2005, 97 children dropped out from grade I, 127 repeated and 617 were promoted to grade II for the next year 2006. Out of total 617 children promoted to grade II in the year 2006, 36 dropped out, 62 repeated and 519 were promoted to the grade III for the year 2007. In grade III, 20 children dropped out, 26 repeated and 473 were promoted to grade IV. In the year 2008, among 473 children promoted to grade IV, 11 dropped out, 17 repeated and 445 were promoted to grade V for the year 2009. Only 445 children reached in the grade V in five successive years among them 412 children completed the primary education. The primary education completion rate was 48.99 percent in five consecutive years. Figure no. 1 provides the details of the cohort analysis of primary school children in both study districts.

Figure 1 : Cohort analysis of total enrolled children from 2005 to 2010 in both study districts.

Grade

| Year | I | II | III | IV | V | |

97(D)

2005   841

2006   (R) 127   617   (P)   36(D)

(R) 62   (P)   20(D)

2007   519   11(D)

2008   (R)26   (P)   473   13(D)

2009   (R) 17   (P)   445

(P)

2010   -   -   -   -   (R) 20   412

Note : P=Promoted, D=Dropout, R= Repeater.

IV. Discussion

Everyone has the right to education without distinction of any kind, such as race, color, sex, language, political or other opinion, national or social origin, property, birth or other status6. The dropout phenomenon not only wastes educational resources but also leads to a host of social and economic consequences. The various researchers found that once children are drop out from primary school, they rarely return to school again for formal education. They also rarely become the skilled labor, which in turn limits their earnings to subsistence-level income. Thus, a vicious

cycle of economic and social poverty is perpetuated from one generation to the next. The National Plan of Action has outlined as per recommendation of the Dakar Forum for the year 2015 for complete, free and compulsory primary education of good quality expanding for the most vulnerable and disadvantaged children and ensuring that all children, particularly girls, children in difficult circumstances & children belonging to ethnic minorities7.

Education is a long time investment. It requires lot of patients and many years for getting returns. The families from poor socio-economic status cannot afford these long waiting and In the present study, more boys (57%) was enrolled in private school than government school (43%) where parents have to pay admission, monthly and exam fees where as these are free in the government school. It showed the gender bias. The sons were more preferred to enroll in private school where children get individual care. The boy's dropout rate (6.83%) was slightly higher than girl's (6.19%) for the year 2009, but this difference was not significant. The present study revealed highest dropout rate (10.00%) in grade I and least (4.53%) in grade IV. The dropout rates for grade II, III and V were 7.86%, 5.88% and 4.80% respectively for the year 2009. These dropout rates were higher with national dropout rates, which were 9.9%, 4.4%, 4.6%, 3.9% and 7.4% respectively for grade I to V3. This differences may be due to different methods were used for calculation of dropout rates.

The cumulative dropout rates were 15.78%, 26.32%, 39.18%, 44.44% and 49.12% for grade I, I-II, I-III, I-IV and I-V respectively. These observed cumulative dropout rates were quite low when compared to the results of Longitudinal study on system indicators, cohort and trend analysis, of 2007 where these rates were 27.6%, 42.8%, 49.7% and 56.2% for grade I, I-II, I-III and I-IV respectively.8

A cohort, all students enrolled in grade I for an academic year, will follow up till they do not complete grade V. For this method, long duration of time is required to follow up for repeaters, which is not feasible for the present study. A retrospective cohort analysis was conducted for five years only and students who dropped out and repeaters were not followed up in present study. The new students who got enrolled in other grade in later were not taken into account. After the five successive study years for a cohort of 481 children enrolled in grade I for the year 2005 only 48.99% of children have completed grade V in the year 2009. This finding was slightly higher than the national completion rate for the year 2007/08 where it was 45%3. There are different methods for computation of primary cycle completion rate. Therefore the primary completion rate may be different from result of other studies.

The maximum (10.00%) primary school dropout rate was observed in grade I with gradual decrease with increase in grade. There is significant difference in primary school dropout with grades. This result is consistent with the various other studies of CERID and Karki, which too report the highest dropout rate in grade I. Most of the dropout (94%) was observed in government schools. This may be due to some fraudulent inflating of initial enrollment because Department of Education assigns teacher according to number of student enrolled. The main causes of primary school drop out are economic strains and lack of awareness regarding the importance of education in the parents. In one of the study, it was observed that the main causes of dropout were found to be family poverty, household chores, and irregularity in attendance. While, over 45% of the dropouts were found engaged in household chores and only 14% of the dropouts between the age group 6-15 were found to be engaged in wage labor9. The present study revealed that 38.5% of dropout school children are due to household work. Most of these children will look after their young siblings when their parents go for work. This result is almost similar to the result of an inquiry into the causes of primary school dropouts in rural Nepal where it was 13%10. 42.2% drop out was due to lack of awareness regarding the importance of education of their parent. This figure was higher than the finding of Sharma where it was 18%12. This difference may be due to different study area.

V. Conclusion

Education is the basic requirement for human development and survival of the society. It is necessary and a universal feature of society by which every generation transmits social heritage to the next generation. The most of the dropout occur in grade 1 of primary school level. Therefore, sustained efforts are needed to attract the children to school and retain them until they complete their education. The government of Nepal has made free primary education and free books distribution for all primary school children. There is also some scholarship program for all Dalit, socially untouchable, children and fifty percent of primary school girl children. In spite of that a high dropout rate in grade I was observed in the current study. It shows that the making free education and free book distribution are not sufficient to catch up all the school age children to continue in primary school. To prevent dropout of primary school children, community must be made aware & motivated regarding the importance of education specially the parents. When parents are active in the educational process, it is more likely that their children will stay in school. The community participation

in primary level education may be enhanced in enrolment and preventing dropout.

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