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Parental Migration and Mental Health Status of the Left- behind Children

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Abstract

This study aimed to investigate the factors associated with the mental health status of children left behind. The study employed a cross-sectional quantitative design based on data collected from 560 children from both migrant and non-migrant households using multistage sampling techniques. The Goodman's Strengths and Difficulties Questionnaire (SDQ) was applied to assess their mental health, which was analyzed through univariate, bivariate, and multivariate methods. About 8 percent of the children exhibited poor psychological well-being, with a higher prevalence among those from the migrant households (11%) compared to the non-migrant households (5%). The logistic regression models indicated that the children of the migrant parents were 2.3 to 2.7 times more likely to have abnormal behavior compared to those of the non-migrant parents. Similarly, the Dalit caste/ethnic group children were 3.4 times more likely to exhibit abnormal behavior as opposed to the Janajati ethnic group children, while children cared for by someone other than their mother were 8 times more likely to have abnormal behavior. The children's abnormal mental health status was statistically linked to parental migration (p<0.01). Mental health variations were observed across various factors, with a majority of the affected children associated with caste/ethnicity, caregivers, and household support. This suggests that there is an urgent need for establishing psychosocial counseling services in schools, particularly targeting the left-behind children from the Dalit caste/ethnic group, those under the care of someone other than their mothers, and those provided with additional household support.

Keywords: abnormal behavior, caregiver, left-behind children, mental health status, parental migration

Introduction

Migration has a multi-faceted impact on individuals, families, societies, economies, and cultures, both in the origin and the destination. It also has an

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impact on the physical, mental, and emotional health and well-being of the migrants themselves, of the people at the place of origin (left behind), and those of the destination (Carballo, et., al., 1998).

According to the World Migration Report (2022), the number of international migrants was estimated to be almost 281 million (135 females & 146 males) or 3.6 percent of the world's population globally in 2020, with nearly two-thirds being labour migrants. The number of international migrants was 272 million in 2019, constituting 3.5 percent of the world's population. Parental labour migration is a common phenomenon in South and Southeast Asian and Eastern European countries, causing many children to be left-behind (Cebotari, Mazzucato& Siegel, 2016; Xie, 2019).

Most of the past research on international migration has focused on the impact of migration on the health of the migrants themselves (Jatrana et al, 2005). With the growing complexities and diversity of migration patterns, families are becoming more transnational in nature. However, little is known about the multidimensional impact of migration on the left-behind family members, including children. Fewer studies that examined the health and well-being of the left-behind children have found that parental migration has both positive and negative impacts on the leftbehind children, and the gender of the migrant parents may affect their children's social behaviour and health status differently.

Some studies have found that the left-behinds benefit from increases in family income spent on improved nutrition, housing, access to health care, and schooling (Hadi, 1999; Jones &Kittisuksathit, 2003). A study by Lin (2016) even found that the health status of the left-behind children is better than that of the non- left behinds. Nevertheless, Parrenas (2008) stressed that despite the economic benefits generated by labor migration, parental absence might lead directly to decreased care, stimulation, and supervision. Likewise, Fellmeth et al. (2018) found a positive relationship between parental migration and health conditions like depression, anxiety, suicidal ideation, and conduct disorder in left-behind children. Furthermore, much of the other literature shows the negative impacts of parental migration on children's physical (Shen et al., 2009; Adhikari et al., 2012) and mental health/psychological well-being (Ainsworth, 1998; Hugo, 2003; Gao et al., 2010).

In the context of Nepal, Adhikari et al., (2014) found that maternal migration has a negative impact on the mental health of both younger and older children, Particularly on their cognitive development. Mother's migration before the child's age of 12 months reduces cognitive development by 0.3 SD at age 2 (Yue et al., 2020). A strong reason for this is that dietary food has a good impact on the health and development of children. Children whose parents migrate have lower consumption of dietary food than those who stay with their parents and care for them (Modugu et al., 2022). The absence of any of the parents, especially mother's, migration creates more 'displacement, disruptions and changes in caregiving arrangements' (SMC, 2005). The children of migrant mothers are found to feel lonely, angry, and worried (SMC, 2005). Similarly, another study found that children from a household with migrant mothers have higher odds of experiencing illness than those from other households (Adhikari et al., 2012). Parental migration was associated with a higher risk of sedentary life, internet addiction, and use of tobacco and narcotics in boys, and more likely to consume an excessive sweet beverage, alcoholism, and engage more on television if they happen to be girls (Sharma et al., 2021). A study by Zhao et al. (2018) found that parental migration caused children's emotional distress, such as loneliness, sadness, and frustration.

Therefore, most of the literature in this field of study suggests that, considering the children's better physical as well as mental health, it is better for parents, more importantly mothers, to be with the children. The present study is focused on parental migration and its effects on the mental health status of the left-behind children.

Methodology

This section provides an in-depth discussion of the research design, emphasizing the key aspects such as sample size determination and the sampling techniques employed in the study. It also outlines the research tools utilized for data collection as and the strategies employed for data management and analysis.

Study Design and Sample Size

The study was conducted in Nawalparasi and Gulami districts in October-November 2021. A cross-sectional quantitative design was used 560 child respondents aged 10-16 years representing both migrant (internal and international, n = 280) and non-migrant (n = 280) households took part in the study.

Sampling Techniques

The multistage sampling technique was used in this study. In the first stage, the top five districts with the highest internal and international migration rates taken from the census data were listed. Two of the listed districts (Gulmi and Nawalparasi), each from internal and international migration households, were selected randomly. The non-migrant households were selected from these two sampled districts.

At the second stage, the villages/wards were identified, and of the third stage, eligible households and the target children were identified. Only one target child was identified and selected from each household, and the quotas ensured approximately equal numbers of girls and boys as well as an equal number of



migrant and non-migrant households. This study also employed a flexible-quota sampling design to recruit the households with a child aged 10 to 16 years. A Sixmonth period was used to identify the impact of parental migration on the mental health of the left-behind children.

Research Tool

Using a set of pre-determind interview guideline interview was conducted with a responsible adult in each of the selected households. To assess the mental health of the target child Goodman's (2010) SDQ was used as a tool.

Data Management and Analysis

The collected data were cleaned and entered into the statistical software CSPro and exported to SPSS for analysis. Univariate, bivariate, and multivariate analyses were performed in the course of analysis.

Results

This section concentrates on the general background characteristics of the children, including their mental health status about parental migration and caregiver attributes. Furthermore, using logistic regression it analyzed the children's abnormal behavior in consideration of the parental migration status, caregiver characteristics, and their own attributes.

Background Characteristics of the Children

In this study, altogether, 560 respondents were involved. Half of them were associated with from migrant households, and the rest were from non-migrant households. Of the migrant households, nearly three-quarters (74%) belonged to the international migration category, and the rest of the belonged to the internal migrant category. Similarly, 89 percent of the children respondents' fathers were migrants; the respondents whose mothers were migrants numbered 4 percent; and those whose fathers and mothers both were migrants numbered 7 percent. More than half of the children (52%) were 14 to 16 years. Of the total children, almost three in five (57%) were female (see Table 1).

About two-thirds of the children had a the basic level of education, and onethird of them had the secondary level of education. Nearly 90 percent of the children reported that they were involved in household chores. About 16 percent of the them expressed that, in addition to household chores, they had other supports for households. More than half (53%) of the children reported that they had experienced sickness in the last six months. Of the total students, most were from Janajati (43%) and Brahmin/Chhetri (42%) households, whereas 15 percent of them were from the Dalit category. About 90 percent of the respondents were the Hindus.

Nearly half (48%) of the children had 5-6 members in their families, whereas 18 percent of them had more than 6 members. More than four-fifths of the children (83%) were cared for by their mothers. Similarly, more than half of the primary caregivers (56%) belonged to the age group 35 -44 years and 30 percent of them

were below the age of 35. The children's mental health statuses were analyzed using the total strength and difficulty scores. This study found that 80 percent of the children had healthy psychological well-being (normal), while 12.0 percent of them were at the borderline. It is notable that eight percent of the children had poor psychological well-being (i.e., 8.4% scored abnormally in the total difficulties score). The respondent characteristics are displayed in detail in Table 1.

Table 1

Socio-demographic characterist		Ν	%
Migration status of nevents	Non-Migrant	280	50.0
Migration status of parents	Migrant	280	50.0
Type of migration	International migrant	206	73.6
Type of migration	Internal migrant	74	26.4
	Father migrant	248	88.6
Migrant parent	Mother migrant	11	3.9
	Both parent migrant	21	7.5
Ago group	10-13 years	270	48.2
Age group	14-16 years	290	51.8
Sex of the child	Male	240	42.9
Sex of the child	Female	320	57.1
Education level of children	Basic	358	63.9
Education level of children	Secondary	202	36.1
Household chores	No	66	11.8
Household chores	Yes	494	88.2
Other support for household	No	470	83.9
	Yes	90	16.1
Sick in the last six months	No	265	47.3
	Yes	295	52.7
	Janajati	242	43.2
Caste/ethnicity	Brahmin/Chhetri	235	42.0
	Dalit	83	14.8
Policion	Non-Hindu	51	9.1
Religion	Hindu	509	90.9
	3-4	189	33.8
Family size	5-6	271	48.4
	More than 6	100	17.9
Caregiver of the child	Mother	467	83.4
Calegiver of the child	Other	93	16.6
	Less than 35	167	29.8
Age group of caregivers	35-44	316	56.4
	45 years and above	77	13.8
	Normal (0-15)	446	79.6
Total difficulty scores	Borderline (16-18) 67		12.0
	Abnormal (19-40)	47	8.4
Total		560	100.0

Background Characteristics of the Children

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Mental Health Status of the Children by their Parental Migration, Children and Caregiver Characteristics

To assess the spectrum of the children's mental health status, parental migration, caregiver characteristics and their own characteristics were considered. For a meaningful and precise analysis, we categorized the mental health status of the children into two - normal/borderline and abnormal. The detailed figures can be seen in Table 2.

It is worth noting that about 95 percent of the students from non-migrant households had a normal/borderline mental health status, while 5 percent were found abnormal. Similarly, 89 percent of the respondents from the migrant households were of a normal/borderline status, and 11 percent were abnormal. This study found the migration status and the mental health of the left-behind children had a statistical association. Most of the children with an abnormal mental health status belonged to the migrant households (11%) as opposed to the non-migrant households (5%). The abnormal mental health status of the children was statistically associated with parental migration (p<0.01).

Mental health status varies due to many other characteristics such as the type of migration, support for the household, caste/ethnicity, and person who cares for the child. A significantly higher (p<0.05) percentage (18%) of children of parents who migrated internally had an abnormal health status as opposed to the children whose parents migrated internationally. This study found that higher percentages of children who supported the household (14%) as opposed to those who did not (7%) have abnormal mental health.

The majority of the abnormal children were associated with the Dalit caste/ethnic group (17%) in contrast with the Brahmin/Chhetri (8%) and Janajati caste/ethnic groups (7%). There was an association between caste/ethnicity and the mental health status of the children which was also found statistically highly significant (p<0.01).

Most of the children who were cared for by those other than their mothers (24%) were associated with an abnormal mental health status as contrasted with those who were cared for by their mothers (5%). There was an association between the caregivers of the children and their mental health status. This result was also statistically highly significant (p<0.001).

The abnormal mental health status was also from with a relatively higher age group of the children, having experienced sickness in the last 6 months, involvement in household chores, belonging to larger families, and having an older caregiver compared to their counterparts.

Table 2

Mental Health Status of the Children Parental Migration, Their Own and Caregivers' Characteristics

Characteristics of Parents, Children, and Caregivers	Mental Health Status					
Chinaren, ana Calegivers	Normal/Borderline		Abnormal		Total	
	N	%	N	%	N	%
Parental Migration Status **						
Non-migrant	265	94.6	15	5.4	280	100.0
Migrant	248	88.6	32	11.4	280	100.0
Type of migration *						
International migrant	187	90.8	19	9.2	206	100.0
Internal migrant	61	82.4	13	17.6	74	100.0
Age group of children						
10-13 years	250	92.6	20	7.4	270	100.0
14-16 years	263	90.7	27	9.3	290	100.0
Sex of the children						
Male	220	91.7	20	8.3	240	100.0
Female	293	91.6	27	8.4	320	100.0
Education level of children	200	0110		011	020	10010
Basic	328	91.6	30	8.4	358	100.0
Secondary	185	91.6	17	8.4	202	100.0
Involved in household chores	100	01.0	11	0.1	202	100.0
No	61	92.4	5	7.6	66	100.0
Yes	452	91.5	42	8.5	494	100.0
Performed additional support		01.0	12	0.0	101	100.0
for household *						
No	436	92.8	34	7.2	470	100.0
Yes	77	85.6	13	14.4	90	100.0
Sick in the last six months		00.0	10	1-11	50	100.0
No	244	92.1	21	7.9	265	100.0
Yes	269	91.2	26	8.8	205	100.0
Caste/ethnicity **	200	51.2	20	0.0	233	100.0
Janajati	227	93.8	15	6.2	242	100.0
Brahmin/Chhetri	217	92.3	13	0.2 7.7	235	100.0
Dalit	69	83.1	10	16.9	83	100.0
Religion	05	05.1	14	10.5	05	100.0
Non-Hindu	47	92.2	4	7.8	51	100.0
Hindu	466	91.6	43	7.8 8.4	509	100.0
Family size	400	91.0	45	0.4	509	100.0
3-4	175	92.6	14	7.4	189	100.0
3-4 5-6	175 251	92.6 92.6	14 20	7.4 7.4		100.0
More than 6			20 13		271	
Caregiver of children ***	87	87.0	10	13.0	100	100.0
	440	04.0	25	F 4	407	100 (
Mother	442	94.6 76.2	25	5.4	467	100.0
Other	71	76.3	22	23.7	93	100.0
Age group of caregivers	150	02.4	11	<u> </u>	107	100.0
Less than 34	156	93.4	11	6.6	167	100.0
35-44	291	92.1	25	7.9	316	100.0
35 and above	66	85.7	11	14.3	77	100.0
Total	513	91.6	47	8.4	560	100.0

Note. *** Significant in chi-square test at p<0.001; **=p<0.01 and *=p<0.05

Abnormal Behavior of the Children by Parental Migration Status, Children and Caregiver Characteristics

A logistic regression analysis was applied to measure the strength of the association between the various factors and the probabilities of having abnormal behavior in the children. As can be seen from Table 3, variables such as migration status of parents, age, sex, educational level, household chores, additional support for households, sickness in the last six months, religion, family size, caregiver of the children, and age of the caregiver were considered to examine the likelihood of the abnormal behavior of the children. Two models were run separately in the logistic regression analysis. In the first model, only one main independent variable, parental migration status, was considered to examine the strength of the parental migration status and the abnormal behavior of the left-behind children. The result indicates that the children of the migrant parents were 2.3 times more likely (cOR=2.28; 95%CI= 1.21-4.31) to have abnormal behavior the children of non-migrant parents.

Model II presents the final results after adding the other variables. Even after the inclusion of the other variables in Model II, the parental migration status remained statistically significant (aOR=2.69; 95%CI= 1.338-5.447). The age group of the children was not statistically significant for the abnormal behavior of the children though the female children were 15 percent more likely (aOR=1.15; 95%CI= .576-2.302) to have abnormal behavior than the male counterparts. The children having secondary level of education were found 35 percent less likely [(1-aOR)*100]) to have abnormal behavior than those who had the basic level of education only. Similarly, the children doing household chores were found 25 percent less likely (aOR=.75;95%CI=.225- 2.243) to have abnormal behavior than those not doing household chores. However, these variables were not statistically significant.

The children who had other support for the household were 61 percent less likely (aOR=.39; 95%CI= .178- .876) to have abnormal behavior than those who did not have other supports for the household. The association between the other supports for households and having abnormal behavior of the children was also found to be statistically significant (p<0.05).

The children who felt sick in the last six months were found 20 percent more likely (aOR=1.20;95%CI= .613- 2.368) to have abnormal behavior than those who did not feel sick. The children from the Dalit caste/ethnicity were found 3.4 times more likely (aOR=3.43;95%CI=1.423- 8.25), and the Brahmin/Chhetri children were found 50 percent more likely (aOR=1.49;95%CI= .673- 3.295) to have abnormal behavior than those children who were from the Janajati caste/ethnic group. The

association between caste/ethnicity and abnormal behavior in the children was also found to be statistically highly significant.

The association between the children's caregiver and their abnormal behavior was found to be statistically highly significant (p<0.001). The children who were cared for by other members were found 8 times more likely (aOR=7.87;95%CI= 3.692- 16.774) to have abnormal behavior than those who were cared for by their mothers.

The age group of the caregiver and the abnormal behavior of the children were not statistically significant, but the children who were cared by a higher age group caregiver (45 years and above) were found 2.5 times more likely (aOR=2.47;95%CI= .880- .6918) to have abnormal behavior than those who were cared by a person under 35 years of age. However, the effect is not statistically significant.

It can be concluded that of the different variables, the parents' migration status and the children's abnormal behavior were associated and statistically highly significant (p<0.01) in both of the logistic regression models. In the first model, which did not control the other variables, parental migration status was solely observed as statistically highly significant for the abnormal behavior of the leftbehind children. Its significance remained higher even including different variables in the second model, which can be observed in Table 3

Table 3

Adjusted Odd Ratio (cOR) and 95% Confidence Interval (CI) for Having Abnormal Behavior of Children by Parental Migration Status, Children and Caregiver Characteristics

Predicators	Model I			Model II		
	aOR	aOR 95% CI		aOR	95% CI	
		Lower	Higher		Lower	Higher
Migration status **						
Non-migrant (ref.)	1.00			1.00		
Migrant	2.28*	1.21	4.31	2.69**	1.338	5.447
Age group						
10-13 years(ref.)				1.00		
14-16 years				0.99	.420	2.328
Sex of the child						
Male(ref.)				1.00		
Female				1.15	.576	2.302
Education level of children						
Basic(ref.)				1.00		
Secondary				0.65	.268	1.576
Involved in household chores						
No(ref.)				1.00		
Yes				0.76	.255	2.243

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Performed additionalsupport				
for household *		1.00		
No(ref.)		1.00		
Yes		0.39*	.178	.867
Sick in the last six months				
No(ref.)		1.00		
Yes		1.20	.613	2.368
Caste/Ethnicity **				
Janajati(ref.)		1.00		
Brahmin/Chhetri		1.49	.673	3.295
Dalit		3.43**	1.423	8.255
Religion				
Non-Hindu(ref.)		1.00		
Hindu		1.27	.391	4.150
Family size				
3-4(ref.)		1.00		
5-6		0.97	.444	2.109
More than 6		1.49	.595	3.760
Caregiver of child ***				
Mother(ref.)		1.00		
Other		7.87***	3.692	16.774
Age group of caregivers				
Less than 34(ref.)		1.00		
35-44		2.28	.962	5.427
45 years and above		2.47	.880	6.918
Constant	0.057***	2.11	.020***	0.010
-2 Log likelihood	315.9		.020 267.08	
Cox & Snell R Square	.012		095	
Cox & Shen K Square	.012		000	

Note. *** p<0.001; **=p>0.01 and *=p<0.05

Discussion

The phenomenon of internal and international migration is complex. It has multidimensional effects on the well-being of people and is in increasing trends. Yet, about two-thirds of the international migrants were labor migrants in 2020 (IoM, 2022).

This study investigated the factors associated with parental migration and the mental health status of the left-behind children. Some other studies (Kunwar, 2022; Antia et al., 2020, Fellmeth et al., 2018) like this one, have shown that parental labor migration is also a common phenomenon. It indicates that the children of the migrant parents were 2.3 times more likely to have abnormal behavior than the children of the non-migrant parents, which is also consistent with the study of Fellmeth et al. (2018) where they indicated the positive relationship between parental migration and mental health condition of the left behind children. Adhikari et al. (2012) indicated a negative impact of maternal migration on the mental health of both younger and older children. Similarly, another study by SMC

(2005) found that the children of migrant mothers felt more lonely, angry, and worried than the children who were with their mothers. Similarly, the study by Zao et al.(2018) indicates that parental migration was a cause of children's emotional distress. This study also found that the children cared for by other members were found 8 times more likely to have abnormal behavior than those cared for by their own mothers. Children have a close connection with their parents, especially their mother, and easily shared both bad and good feeling, but in the absence of parents, especially their mother, they may not vent their feeling, and it may ultimately lead to abnormal behavior. A study by Fu et al.(2017) indicates that worst physical health and injury among children are associated with migrated parents compared. In this study, the migrant mothers' children who felt sick in the last six months were found 20 percent more likely to have abnormal behavior than those who did not feel sick. This also indicates that being without parents, especially mother, during sickness is especially sensitive. Therefore, in the absence of parental care, there is a chance of poor physical health, eventually leading to abnormal behavior in children.

Although the result of this study was not statistically significant, children who conducted household chores were found to be less likely to have abnormal behavior than their counterparts. Engaging oneself in household chores offers regular physical activities and it is good for maintaining optimal physical and mental health. However, study by Luck & Gibby (2021) has found that there is a negative association between housework time and mental health symptoms, which is also consistent with this study. The relevant literature suggests that a higher level of education is associated with a better mental health status. A study by Niemeyer et al. (2019) found that depressive symptoms were more prevalent for persons with a low educational level. This study also found that children with relatively higher educational levels were less likely to have abnormal behavior than their counterparts.

Conclusion

The mental health statuses of the children in this study were measured on the basis of the strength and difficulty questionnaire (SDQ), and it was found that about 8 percent of the children had poor psychological well-being. It was noted that 5 percent of the students from non-migrant households and 11 percent from migrant households were abnormal. The study found that parental migration and the mental health of the left-behind children have a statistical association, though one's mental health status varies along with many other characteristics. Most of the children with some kind of abnormal mental health status belonged to the Dalit caste or ethnic group (17%). Next, those cared for by someone other than mothers (24%) were also found statistically highly significant in this regard. The study also

found that children who engaged in household chores were less likely to have abnormal behaviour than their counterparts.

The logistic regression analysis indicates that the children of the migrant parents were 2.3 times more likely (aOR=2.28; 95%CI= 1.21-4.31) to have abnormal behavior than those of the non-migrant parents. The children who felt sick in the last six months were found 20 % more likely to have abnormal behavior than those who did not feel sick. Similarly, the children from the Dalit caste/ethnicity were found 3.4 times more likely to have abnormal behavior than those who were from the Janajati caste/ethnic group. Likewise, the children who were cared for by members other than their mothers were found 8 times more likely to have abnormal behavior than those who were cared for by their mothers. Then it can be concluded that among the various factors associated with the mental health status of the children, parental migration status, caste/ethnicity, the status of the caregiver, and their sickness in them last within six months were observed statistically highly significant for their abnormal behavior. This further implies that being with parents, rather than being left-behind, contributes largely to the mental well-being of school-age children.

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