

AN ANALYSIS OF SOCIAL, DEMOGRAPHIC AND ENVIRONMENTAL FACTORS THAT IMPACT INFANT MORTALITY

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ABSTRACT

A live born child up to the completion of 365 days of life is called an infant. IMR has been defined as the no. of deaths of infant less than one year of age/1000 live births in a given year. The causes of infant mortality are firmly correlated to primary factors, as financial development, general everyday environments, social prosperity, and the nature of the climate, that influence the health of whole populations. This research was conducted using both quantitative as well as qualitative approach which depicts the consideration social factors, demographic factors and other environmental factors. All the responses were the given a numerical value based on survey design. The sheet was analyzed for frequencies and percentages with the help of descriptive analysis software of SPSS.

KEYWORDS: Infant, Mortality, Demographic, Primary, Birth, Quantitative.

1. INTRODUCTION

A sociologist studies various development indicators of health, education, economy and other sectors for proper understanding of nature and quality of growing population. Health situation of a society determines the nature of demographic dividend and thus shows direct bearing on quality of population and its contribution towards growth and development. The various health indicators include total fertility rate, mortality rate, crude birth rate, infant mortality rate, life expectancy; maternal mortality rate etc. these indicators being quantifiable in nature describes health of population in more tangible form. IMR are considered to be best indicators of health and well being of a given population. A live born child up to the completion of 365 days of life is called an infant. IMR has been defined as the no. of deaths of infant less than one year of age/1000 live births in a given year. According to George W. Barkely, 'Infants are defined in demography as an exact age group, namely Age zero who have not yet reached age one'. The IMR is the measure of risk of deaths between the birth of the baby and its first birthday. Infant mortality rate is characterized as the danger of a live-born child to bite the dust before its first birthday. Infant mortality rates reflect financial and social conditions for the health of moms and newborns, just as the viability of health frameworks. The causes of infant mortality are firmly correlated to primary factors, as financial development, general everyday environments, social prosperity, and the nature of the climate, that influence the health of whole populations. In modern world, a predominant factor in the decrease in infant mortality has been social and monetary advancement. Therefore, in a situation where the infant

mortality rate is declining, the social, monetary or segment determinants expect important jobs. In Nepal segment factors, past birth span and endurance of the former child prevailed as determinants of infant mortality, especially in country regions of Nepal. Millennium Development Goal 4 focuses on a 66% decrease in infant mortality continuously 2015. In Nepal it is declined by 42 % in the course of the most recent 15 years and is on target to accomplish Millennium Development Goal 4. Infant mortality was 46 for every 1000 live births during the time frame 2006–2010. The rate of infant mortality is an important indicator of nations' financial government assistance. Enormous decrease in infant mortality rate took place since 1900s. Notwithstanding this decrease, infant mortality rate (IMR) the likelihood, communicated as a rate for each 1,000 live births, of a child born in a predefined year passing on before arriving at the age of one – is still high particularly in less created nations. According to the information of Millennium Development Goals Indicators gathered by the United Nations, IMR in 2007 at world level is 47; this rate is 5 for created locales though 51 for the non-industrial nations (Millennium Development Goals Indicators 2009). Therefore, it is important to comprehend the determinants of infant mortality and information on these factors got extraordinary consideration by business analysts, demographers and biometricians.

2. LITERATURE REVIEW

Fagbeminiyi Fasina (2020) Neonatal death is frequently alluded to maternal confusions during pregnancy, and other exogenous components that exist around the hour of birth or not long after birth. The United Nations Sustainable Development Goals (UNSDG)- Goal 3, Targets 3.2 pointed toward finishing preventable deaths of newborns by requesting that all nations ought to decrease neonatal mortality to 12 for each 1000 live births by 2030. The goal of the investigation was to look at the connection between moms' financial and segment factors on neonatal deaths in Nigeria. The examination utilized quantitative information from the 2013 Nigeria Demographic and Health Surveys (NDHS). The information broke down comprised of 26,826 ladies matured 15–49 years who included alive or dead birth inside the 5 years going before the overview. STATA 12 PC programming was utilized to do information investigations. Information examinations were at univariate (recurrence conveyance), bivariate (chi-square) and because of the dichotomous idea of the result variable (i.e., regardless of whether a child was born alive or dead during the delivery; coded as (1, 0), a parallel calculated relapse was done to look at the connections between different socio-segment factors, antenatal facility participation and neonatal mortality in Nigeria. The outcomes, among others, uncovered that foundation elements of the ladies like age, district, home, instruction, and abundance status have a huge relationship with neonatal mortality ($P < 0.05$). The investigation additionally found that sufficient antenatal center participation assists with lessening neonatal deaths. The investigation prescribed that ladies ought to be urged to notice normal antenatal center visits during pregnancy and furthermore go for institutional delivery for conceivable decrease of youngsters and infant deaths in Nigeria.

Kamalesh Kumar Patel (2020) this investigation expected to evaluate the progressions in neonatal and infant mortality rates in Nigeria over the time frame 1990 to 2018 utilizing Nigerian Demographic and Health Survey (NDHS) information, and survey their socio-segment determinants utilizing information

from the latest overview led in 2018. The infant mortality rate was 87 for each 1000 live births in 1990, and this expanded to 100 for every 1000 live births in 2003 – an expansion of around 15% more than 13 years. Neonatal and infant mortality rates began to decrease consistently from that point and kept on doing as such until 2013. After 2013, neonatal ethical quality rose marginally continuously 2018. Data for 27,465 infants under 1 year old enough from the NDHS-2018 was dissected utilizing bivariate and multivariate examination and the Cox relative risk method. In 2018, infant deaths diminished as abundance expanded, and the occurrence of infant deaths was more noteworthy among those of Islam religion than among those of different religions. A negative affiliation was found between infant deaths and the size of a child upon entering the world. Infant mortality was higher in provincial than in urban regions, and was higher among male than female children. Both neonatal and infant death rates shifted by district and were discovered to be most noteworthy in the North West area and least in the South locale. An expanding pattern was seen in neonatal mortality in the 5-year time frame from 2013 to 2018. Strategy intercessions ought to be centered on the helpless classes, ladies with a birth time span than 2 years and those living in the North West area of the country.

Vishwakarma et al (2020) Infant and child mortality are considered as perhaps the main markers of social and economic improvement of the country. This paper plans to reveal insight into the pervasiveness of infant and under-five death rates with unique reference to differentials in SCs, STs, and non-SCs/STs populace in India. Also, to decide the components influencing child immunization and institutional delivery by various foundation qualities Data source and strategies The current investigation has utilized Census 2001 and 2011 for assessing the infant and under-five mortality. The National Family Health Survey (2015–16) has been utilized to evaluate the holes in institutional delivery and inclusion of child full immunization between SC, ST, and other caste populace and furthermore to survey the covariates of institutional delivery and full immunization. Results The investigation noticed the high infant mortality rate and under-5 mortality among Scheduled Caste and Scheduled Tribe, while it is a lot of lower among non-SC/ST populace in 2011 enumeration. The consequence of calculated relapse recommends that caste altogether affects admittance to institutional delivery and child immunization, adapted to other financial factors. All the castes are bound to access both institutional delivery and child immunization contrasted with booked clan populace. End The investigation result shows the persevering chronic frailty result among the SC/ST populace in India. There is need to zero in on this part of the populace to accomplish the manageable improvement objectives of child health and its center plan "Nobody gave up".

Ettamba Agborndip (2020) Updating the information base on the causes and examples of under-five mortality (U5M) is pivotal for the plan of appropriate intercessions to improve endurance of children under five. To evaluate the rate, causes, and age-explicit examples of U5M in Buea Health District, Cameroon a review partner study including 2000 haphazardly chose family units was directed. Live births enrolled between September 2004 and September 2009 was recorded. The under-five mortality rate (U5MR) was characterized by the quantity of deaths that happened at the latest 5 years old for each 1000 live births. Reasons for death were allocated utilizing the InterVA-4 programming. An aggregate of 2210 live births were recorded. There were 92 deaths, and the U5MR was 42 for each 1000 live births. The

mean age at death was months. The most continuous reasons for death were neonatal causes (37%), jungle fever (28%), and pneumonia (15%). Deaths during infancy represented 64.1% of U5M, with 43.5% neonatal (86% happening inside the initial 24 hours of life) and 20.7% postneonatal. The fundamental driver of death in infancy was birth asphyxia (37.5%), pneumonia (17.5%), inconveniences of rashness (10%), and intestinal sickness (10%). Child deaths represented 35.8% of U5M. Jungle fever, pneumonia, and diarrhoeal ailments represented most of child deaths. Practically 50% of U5M happened during the neonatal period. Upgrades in intrapartum care and the counteraction and compelling treatment of neonatal conditions, intestinal sickness, and pneumonia could impressively diminish U5M in Buea.

Meh, Catherine, (2017) the worldwide decrease in maternal mortality has not been knowledgeable about Cameroon. All things being equal, maternal mortality has expanded. With a dominatingly youthful populace, high maternal death may endure. It is obscure if the North and South, the most unmistakable pieces of Cameroon, vary on levels and determinants of maternal mortality. This investigation evaluated contrasts between the North and South of Cameroon on the levels and determinants of maternal mortality utilizing Cameroon Demographic and Health Surveys and multivariable calculated relapses. Age, equality and instruction were related with maternal mortality in Cameroon overall. Distance to office was just huge in the North while aggressive behavior at home and identity were related with maternal mortality in the South. Local contrasts in maternal mortality exist in Cameroon. The discoveries of this investigation feature the requirement for strategies to improve the socioeconomic and socio-social states of ladies in the North and South of Cameroon individually.

3. RESEARCH METHODOLOGY

This research was conducted using both quantitative as well as qualitative approach which depicts the consideration social factors, demographic factors and other environmental factors. For sampling process, 100 different respondents were chosen from each three districts, thus making total number of respondents to 300 that are taken for research study. The data for the study of different demographic trends was collected from different governmental institutions who work for the statistical analysis of the state. These institutions include family health surveys done with the help of population registration that are managed at the ground level. The interview method of data collection comprised of questions formed in a rational manner and were divided into four schedules. For the study of first objective demographic schedule, information collected on age-sex distribution, marital status, houses and sanitation and drinking water. All the responses were the given a numerical value based on survey design. The sheet was analyzed for frequencies and percentages with the help of descriptive analysis software of SPSS.

4. Objectives

1. To study the demographic profile of people of North Indian states with special reference to Jammu and Kashmir
2. To see the effect of environmental factors on infant mortality

5. DATA ANALYSIS

4.1 Demographic effect

As we have already discussed that data was collected by means of structured interview method, the variables used to find the impact of demographic factors on infant mortality rate age-sex distribution, marital status, occupation of husband, income and education level. The following table discusses the results on above considerations:

Table 1 Age-sex distribution

No. of Respondents	Age-sex distribution (Below 25)		Age-sex Distribution (25-30)		Age-sex Distribution (Above 35)	
	Male	Female	Male	Female	Male	Female
300	15	40	45	125	15	60

Table 1 depicts the age of male and female respondents among the total number of 300 respondents who were interviewed from district Srinagar, Baramulla and Budgam during the course of research. As we are already aware of the fact that male respondents were chosen in order to maintain balanced view regarding various social factors that were taken under study in this research. It was found that majority of the respondents were of the age group between 25-30 years age.

Table 2 Marital status of respondents

Marital status	Married		Unmarried	
	Male	Female	male	Female
Total no. of respondents	75	222	0	3
Percentage	100%	98%	0%	2%

Table 2 denotes the marital status of the respondents which reveals the fact that all the male respondents were remarried at the time of interview while in case of female respondents 98% of the women were found to be married and only 2% of the women were found to be unmarried.

The marriages were both of arranged and love nature while it was observed that around 60% of the respondents had arranged marriage which denotes less choice of marriage due to prevalence of traditional

and patriarchal type of society. All the male members were found to be married which denotes ample amount of choice of marriage for men while it gets slightly difficult for women to find a match for marriage at the right time.

Table 3 Economic status and occupation

Occupation of Husband	Percentage (%)	Economic Status	Percentage (%)
Agriculture	57	Upper middle class	60.33
Government Employee	18	Lower middle class	14.67
Business	15	Higher Social class	9
Other	10	Other	16
TOTAL	100		100

Table 3 describes the economic status of different respondents. It denotes the fact that 57% which means majority of the husbands worked in agriculture sector of the state. 60.33% of the respondents belonged to upper middle class strata of the society taken for study, 14.67% belonged to lower middle class and 9% of the respondents belonged to income group of the society.

4.2 Health care practices

Healthcare practices of mothers include the health practices followed by women during the period of pregnancy and post natal period. It includes information on immunization programs followed by women and children, routine visits to doctors, sanitation and breastfeeding.

Table 4 Immunization Status of children:

Districts	Fully Immunized	Partially Immunized	Unimmunized
SRINAGAR	99%	1%	0%
BARAMULLA	97%	2.9%	0.1%
BUDGAM	95%	4%	1%

Table 4 depicts the practice of immunization of children and it was found that 99% of the children received immunization completely in Srinagar and there was no unimmunized case found during the course of study. In district Baramulla, 97% of the children were immunized fully and 2.9% were immunized partially which may be attributed to lack of awareness among the people regarding the importance of vaccines to protect children from various diseases. Also 0.1% of the children were not immunized at first place. As far as district Budgam is concerned, 95% of the children received full immunization, 4% of the children received partial immunization and 1% of the children were not immunized at all. The reason for no immunization of children depicts the lack of awareness in remote areas of the district about the various immunization programs.

Table 5 Sanitation and Hygiene

Name of the District	Srinagar		Baramulla		Budgam	
	No of respondents (out of 100)	Percentage	No of respondents (out of 100)	Percentage	No of respondents (out of 100)	Percentage
Access to clean drinking water	100	100%	88	88%	80	80%
Access to toilet facilities	100	100%	80	80%	75	75%
Access to proper waste disposal	97	97%	78	78%	67	67%
Access to proper drainage facilities	90	90%	75	75%	58	58%
Access to personal washrooms	60	60%	45	45%	30	30%

Table 5 depicts the availability of different sanitation facilities to the people in these districts under study. The study depicts that Srinagar district has better access to toilet facilities than rest of the two districts. In

case of waste disposal by state run agencies, Srinagar is performing well. 90% of the people had access to drainage facilities and 60% has access to personal washrooms. District Baramulla shows access to toilet facilities by 75% with 58% of available drainage facilities. Budgam lacks behind with least percentage of population with all the accessibilities taken in consideration and needs more thrust upon health and sanitation by different government agencies. Only 30% of the respondents have shown access to personal washrooms. It further reveals the fact that 58% of the people in district Budgam have proper drainage system which may be due to lack of proper infrastructural implementation by government agencies.

Table 6 Findings on Family planning methods

Name of characteristics	Srinagar (%)	Baramulla (%)	Budgam (%)
No of positive responses on use of family planning methods	80	68	60
No. of respondents who used different contraceptives	96	76	68
No. of respondents who used sterilization to avoid pregnancy	67	55	40
No of respondent who preferred first child as male	68	65	61

Table 6 denotes the utilization of different contraceptives for adopting family planning procedure. It is found that majority of the respondents agree to the need of different contraception methods in order to avoid unwanted pregnancies which is very prominent after the birth of first child in most of the cases. Permanent male and female sterilization methods were adopted by the respondents to avoid planning further children as 55% of the respondents went for sterilization in order to avoid pregnancies of higher order. It could be found that 40% of the respondents from District Budgam used sterilization. It was also observed while interviewing that people living in these areas that most of the time it was female who would have to go for sterilization rather than male counterparts. The male preference has been found in these districts particularly first child as male as in district Srinagar with 68% of the respondents preferring male children as their first baby.

Table 6.7 Breastfeeding practices

	Srinagar	Baramulla	Budgam
Initiation of breastfeeding	70%	72%	69%
Full breastfeeding	58.5%	60%	60%
Partial breastfeeding	87%	85%	84%

Table 7 depicts the pattern of breastfeeding among the mothers living in three districts. At the time of child birth, the process of breast feeding was encouraged by the family members as a result of awareness created by various government agencies about the presence of “Colostrum” which is known to be the first complete nutrition for the baby after delivery of children. 58.5% of the children were found to be completely breastfed in Srinagar district while 60% of the children were fully breastfed in each district of Baramulla and Budgam.

6. CONCLUSION

It was found that majority of the respondents were of the age group between 25-30 years age. The marriages were both of arranged and love nature while it was observed that around 60% of the respondents had arranged marriage which denotes less choice of marriage due to prevalence of traditional and patriarchal type of society. The reason for no immunization of children depicts the lack of awareness in remote areas of the district about the various immunization programs. Sanitation is said to have immense effect on reduction of infant mortality rates. It was also observed while interviewing that people living in these areas that most of the time it was female who would have to go for sterilization rather than male counterparts. The male preference has been found in these districts particularly first child as male as in district Srinagar with 68% of the respondents preferring male children as their first baby.

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