Chapter-1

FACTORS INFLUENCING INFANT AND CHILD MORTALITY

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INTRODUCTION

In nations characterized by low and middle incomes, the likelihood of childhood mortality is closely linked to the socio-economic status of the parents or the household in which the child is born [1]. This study examines the available evidence regarding the extent of socio-economic inequalities in childhood mortality within these income brackets. It delves into potential factors that contribute to these disparities and identifies areas where intervention may be effective.

In affluent nations, the correlation between child mortality and socio-economic elements may be less evident, potentially influenced by the lower rates of child mortality. In contrast, developing countries experience a notable number of childhood deaths, likely stemming from inadequate public health measures and limited access to healthcare resources.

Comprehensive data indicates that the risk of morbidity and mortality is directly impacted by 14 intermediate or proximate determinants. These determinants encompass factors such as maternal education, availability of sanitation facilities, access to safe drinking water, and maternal and child healthcare services. Recognizing and addressing these determinants is crucial for formulating effective strategies to reduce childhood mortality in such regions [2].

The association between child mortality and socio-economic factors may manifest a comparatively weaker link in developed nations, potentially attributable to the lower prevalence of child mortality in these regions. Conversely, in developing countries, a substantial proportion of childhood fatalities occur, likely stemming from insufficient public health measures and limited access to healthcare facilities [3].

Thorough documentation underscores that the risk of morbidity and mortality is directly shaped by 14 intermediate or proximate determinants. These determinants encompass factors such as maternal education, availability of sanitation facilities, access to safe drinking water, and maternal and child healthcare services. Recent research

findings indicate a decline in both infant and child mortality rates, with maternal education and higher birth order independently contributing to this reduction.

Conversely, variables such as father education, fetal loss, or land ownership do not exhibit a discernible impact on child mortality. Another study explores characteristics such as the mother's age at the child's birth, birth order, previous child loss, and the mother's residence. Understanding and addressing these determinants is essential for formulating effective strategies to further reduce childhood mortality in these regions.

RESEARCH QUESTION

1. Did socioeconomic and demographic factors show a correlation with infant and child mortality?

RESEARCH OBJECTIVE

2. To examine the diverse trends in infant and child mortality in relation to socioeconomic, demographic, and health-related attributes.

RESEARCH METHODOLOGY

The research employed a descriptive cross-sectional design and utilized purposive sampling to examine the socio-economic and demographic factors influencing families who had experienced the loss of a child in the Umreth block of District Anand, Gujarat. The study aimed to comprehend the characteristics and circumstances surrounding these families. Participants in the study were the family members of the deceased children, and data collection was carried out through a structured questionnaire.

This questionnaire served as the primary tool for data collection, facilitating the systematic gathering of relevant information for a comprehensive analysis of the socio-economic and demographic aspects affecting these families. The selection of Umreth block as the study location was deliberate, aiming to provide insights into the specific regional context, ensuring that the findings were contextually relevant

and could potentially contribute to targeted interventions for the well-being of such families.

RESULTS AND DISCUSSION

The analysis of the data revealed notable patterns in the context of infant and child mortality. The data highlighted that a substantial majority of childhood mortality occurred during the neonatal period (70%) and the post-neonatal period (26%). Further examination focused on caste and age of the deceased child indicated that the highest number of deaths occurred in the "other backward caste" across all three age groups of children.

The importance of place of residence demonstrated that neonatal, post-neonatal, and child mortality rates were significantly higher in rural areas compared to urban areas. The birth interval emerged as a crucial factor influencing mortality, with shorter intervals associated with higher mortality levels. The age of the mother at the time of the child's birth revealed that mortality levels were higher for mothers under 20 years of age. The impact of sanitation facilities on mortality indicated that households with hygienic toilets had considerably lower mortality levels compared to those without such facilities.

CONCLUSION

The analysis of the data indicates a noteworthy distinction in the factors influencing neonatal mortality compared to post-neonatal and childhood mortality. Significantly, neonatal mortality is heavily influenced by endogenous factors, whereas mortality risk during the post-neonatal and childhood periods is predominantly impacted by exogenous factors.

It is important to note that, despite the implementation of diverse health interventions, the negative impact of maternal education, identified as an exogenous factor, continues to play a substantial role in influencing infant and child mortality, regardless of the child's age. These observations highlight the enduring challenges in lowering infant and child mortality rates, underscoring the necessity for targeted strategies that address both endogenous and exogenous determinants to

enhance overall child well-being.

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