

CHAPTER: 05

ANALYSIS OF THE MAGNITUDE OF DIFFERENT CAUSES OF INFANT DEATH AT KUTCH DISTRICT, GUJARAT

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INTRODUCTION

The well-being of today's children is integral to the future citizenship of a nation, emphasizing the crucial need for ensuring their good health. The development of a country is significantly influenced by the health of its children, particularly during the first six years of life, a period critical for mental, physical, and social development. Infants and children under the age of five are particularly susceptible to malnutrition, mortality, and preventable diseases. Although there has been a decline in mortality rates, including infant and under-five mortality, in many states, there still exist regions where these rates remain high [1].

In India, disparities in child health are evident across various aspects. Significant variations exist among states and socio-economic groups concerning health outcomes, accessibility to health services, and the utilization of these services. The discrepancies in health outcomes are attributed not only to differences in service utilization but also to the uneven progress of economic and social development. Moreover, disparities arise from variations in the distribution of developmental benefits and the inadequacies within the public health care systems that hinder the delivery of fair and equitable health services [2].

The health and overall welfare of children are shaped by various factors that can significantly affect early childhood development. Unfavorable experiences in early life can have enduring effects throughout an individual's life, perpetuating disparities and leading to adverse consequences for both personal health and societal well-being. The widely acknowledged capacity to shape future outcomes through early intervention has led to numerous policy initiatives, programs, and interventions centered around the early years. This has resulted in a diverse and extensive body of evidence supporting the importance of early interventions in promoting child health and well-being [3].

Evaluating the infant mortality status involves considering key socio-economic factors like household income, female education, access to health services, and participation in immunization programs. Some discussions underscore how demographic aspects influence infant

mortality and briefly touch upon various socio-economic factors contributing to high infant mortality rates. These factors encompass immediate considerations like maternal healthcare during the antenatal period, care during childbirth, as well as preventive and remedial postnatal care. Additionally, maternal factors such as age at marriage, age at first childbirth, parity, birth intervals, and factors at the household and community levels are acknowledged as crucial contributors to infant mortality [4].

RESEARCH QUESTIONS

1. What were the levels of infant mortality based on the background characteristics of infants in Kutch district, Gujarat?
2. What were the various causes responsible for infant mortality in Kutch district, Gujarat?

RESEARCH OBJECTIVES

1. To comprehend the rates of infant mortality based on the background characteristics of infants in Kutch district, Gujarat.
2. To grasp the various factors leading to infant mortality in Kutch district, Gujarat.

RESEARCH METHODOLOGY

The research employed a descriptive cross-sectional design, focusing on infants, to examine the levels of infant mortality based on their background characteristics and factors contributing to the increase in infant deaths. The study encompassed 10 blocks within Kutch district, Gujarat, with a total population of 2,092,371. The duration of the study spanned three months, from February 5 to May 5, 2018.

Data collection involved compiling information in Microsoft Excel, and the subsequent analysis was predominantly conducted using Microsoft Excel. Various analytical methods, including frequency tables, cross-tabulation, and graphical representation, were applied in Microsoft Excel to derive insights from the collected data.

The type of data collected primarily involved secondary sources, specifically Child Death Review reports and Infant death reports from the District Program Management Unit (DPMU) of Kutch district. The sample size for the study consisted of 1,442 reported deaths of children under the age of five in Kutch District from April 2017 to March 2018. All 847 children who had died during the infancy period were included in the study analysis.

RESULTS & DISCUSSION

In Kutch district, approximately 70% of infant deaths occurred within the neonatal period, with 77% of them happening within the first 6 days. Notably, nearly 43% of infants in the early neonatal period passed away within the first day. Males contributed 54% to infant mortality, while females accounted for 46%. Regarding the place of birth and death, 40% of infants were born in private facilities, 56% in public facilities, 3% at home, and 1% on the way. Mortality rates were 35% in private facilities, 29% in public facilities, 31% before reaching public facilities, and 5% on the way. Male infants predominantly died in private (57%) and public (55%) facilities, while 48% died at home. Female infants experienced deaths in private (43%) and public (45%) facilities, with 48% at home and 36% on the way. More than half (53%) of infants had a normal birth weight, 35% weighed less than 2500gms, 8% had less than 1500gms, and 4% had an extremely low birth weight. In public facilities, 47% of infant deaths were due to other reasons, 22% to birth asphyxia, while at home, 62% were due to other reasons, 13% to birth asphyxia, and 10% to pneumonia. On the way, 60% of deaths were due to other reasons, 13% to birth asphyxia, and 11% to pneumonia, with congenital deformity contributing to 4% of deaths.

CONCLUSION

The study highlights that preventing numerous neonatal deaths relies on adherence to established procedures and protocols, such as HBNC and NBCC, coupled with positive and supportive supervision, and effective communication across all levels—block, district, and state. Delivering satisfactory services to pregnant women is contingent on consistent planning and program initiation, necessitating ongoing

monitoring and supervision. This oversight should extend from the grassroots level to the highest administrative echelons to identify gaps promptly and implement corrective measures through well-planned and decisive actions. Simply initiating programs once is insufficient to achieve the goals and objectives of any program; sustained efforts through continuous monitoring and supervision are imperative.

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