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INVESTIGATING THE CAUSES OF INFANT MORTALITY IN WESTERN IRAN, A SYSTEMATIC REVIEW

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Abstract:

The infant mortality signifies the death of the individual in the first 4 weeks of birth, and it is considered as an important indicator of growth and development. The purpose of this study is to investigate the causes of infant mortality in Western Iran over the past five years. Present research is a systematic review study. In order to achieve the conducted researches on available information banks like Indian journals, pub med, SID, Google scholar, Irandoc, Iranmedex, Magiran and Web of Knowledge, we used key words such as Mortality, infants, neonatal, Ilam, Kermanshah, Hamadan, Lorestan and west of Iran, collect and analyze data. The most commonly used method for conducting studies was descriptive. The results of this study showed that, although the mortality rate of children has decreased significantly in recent years in Iran, it still differs from the child mortality index in developed countries. Therefore, increased care during pregnancy, provision of appropriate therapies for the preservation of premature infants, and increased awareness of the symptoms of illnesses, especially respiratory disorders, are necessary in order to reduce the mortality of children.

Key Words: *Infant Mortality, Western Iran, Systematic Review.*

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INTRODUCTION:

The infant mortality signifies the death of the individual in the first 4 weeks of birth, and it is considered as an important indicator of growth and development [1, 2]. More than 9 million infants die annually, with 98% of these deaths occurring in third world countries and about 6 million in infancy [3]. Iran is located in the West Asia region; based on statistics, 27 infants out of 1000 births die annually, putting the countries of this region in medium infant death position in the world [4]. The reason for choosing this indicator as a development index is the impact of various social and economic factors on its reduction or increase. The late embryo and early neonatal periods are a period of life that shows the highest mortality rate compared to other age-stages [5]. Preventing perinatal deaths is more difficult than infant deaths. Inadequate prenatal care, poor nutritional status of the mother and her social-economic status increase perinatal deaths [6, 7]. Overall, half of the causes of death in infancy are due to low birth weight, premature birth defects, respiratory problems, congenital malformations and infections [8, 9]. About 30% of all premature infants die due to mucous membrane disease or its complications, such as pneumothorax, interstitial emphysema and intracerebral hemorrhage [10]. About 2-3 percent of all children born have a birth defect. Babies with birth defects may be premature or semen. These abnormalities, which generally affect the defense system and other vital organs, can lead to serious and prolonged injuries. The present study examines the causes of infant mortality in Western Iran over the past 5 years.

MATERIALS AND METHODS:

Present research is a systematic review study. In order to achieve the conducted researches in available information banks like science direct, Magiran, Iranmedex, Indian journals, Google scholar, SID, Web of Knowledge and PubMed using key words such as Mortality, infants, neonatal, Ilam, Kermanshah, Hamadan, Lorestan and west of Iran, we found different paper in both English and Persian language. We extracted and studied data after classifying the collected studies and selecting the relevant papers.

Body text

Randomized Controlled Trials (RCTs):

In such studies, the target community includes patients or individuals with specific, mostly unusual, age, weight, height and BMI. Subjects are randomly divided and studied in two groups of case and control [11, 12].

Descriptive Study:

In such studies, required data were collected through pre-designed questionnaires, researched constructors, or standards with convincing confidence criteria [13]. The majority of studied reviewed in the present research have used this method at different times.

DISCUSSION:

Neonatal death is an important health indicator that has a direct impact on infant mortality in children under the age of five [14]. Neonatal period is referred to the first 28 days of life [15]. One of the government's commitments under the Millennium Development Goals (MDGs) is to reduce the mortality rate for children under the age of 5 by two-thirds from 1990 by 2015 [16]. Despite considerable decrease in the mortality of children under the age of under 5 years, the infant mortality rate has not changed much in recent decades. Although the use of effective interventions such as vaccination and oral health fluid has generated the expectation for this phenomenon to emerge, this rate has not changed much recently [17]. The present study examines the causes of infant mortality in Western Iran over the past 5 years. The results of Mardani et al study (2013), which was conducted to determine the frequency of macrosomia and its causes among babies born in Khorramabad, showed that out of 500 neonates, 59 newborns had macrosomia, a relatively high prevalence which could be associated with several factors, such as age, weight, and history of diabetes mellitus in mothers [18]. Based on the findings of Hemmati et al study (2003), which was conducted to determine the factors affecting infant mortality in Kermanshah, 451 infants were hospitalized and there were 156 reports of infant death out of a total number of 6400 births, with the main causes being malaise, premature mortality and complications [19]. Another major cause of mortality has been attributed to accidents and accidents; consequently, it is recommended to design intervention and training programs, for both parents and children, in order to prevent incidents as much as possible and enhance the awareness of parents [20]. The results showed that in terms of mortality, infants born in Tehran, Gilan, Semnan and Isfahan provinces enjoy more optimal conditions in comparison to those born in Sistan and Baluchistan, Hormozgan, Khuzestan, and Lorestan [21]. In addition, relative to cesarean delivery at 38 and 39 weeks of gestation, termination of pregnancy in the 37th week of pregnancy is associated with an increased risk of neonatal mortality and further complications, including respiratory problems [22]. In other studies, the highest rates of death in children between the

ages of 1-59 months turned out to be between the ages of 1-12 months [23]. According to the findings of another intervention study, which was conducted to reduce malnutrition in the three provinces, severe and moderate LBW and short height decreased significantly in Ilam, Borazjan and Bardsir after the intervention [24]? Seperdoust et al research (2015) introduced Human Development Index an effective factor in the mortality and morbidity of under-five children in Iran [25]. Khazaie et al research (2003) has reported the infant mortality rate to be 16.7 out of 1000 births in Ilam [26].

CONCLUSION:

The results of this study showed that, although the mortality rate of children has decreased significantly in recent years in Iran, it still differs from the child mortality index in developed countries. Therefore, increased care during pregnancy, provision of appropriate therapies for the preservation of premature infants, and increased awareness of the symptoms of illnesses, especially respiratory disorders, are necessary in order to reduce the mortality of children.

REFERENCES:

1. Faraji R, Zarkesh M, Ghanbari A, Farajzadeh-Vajari Z. The causes of mortality and the risk factors in infants, according to the International Coding of Diseases. J of Uni Med Sci Gilan. 2005; 21(84): 42-6.
2. Mohamadi J, Darabi M, Havasian MR. Investigating the Causes of Infant Mortality in Imam-Khomeini and Mustafa-Khomeini Hospitals, Ilam, 2012 To 2016. Indo Am. J. P. Sci. 2017; 4(06): 1431-37.
3. Mohamadi J, Motaghi M, panahi J, Havasian MR, Delpisheh A, Azizian M, Pakzad I. Anti-fungal resistance in candida isolated from oral and diaper rash candidiasis in neonates. Bioinformation. 2014; 10(11): 667-70.
4. Habibollahi A. System of Recording Birth and Death of Neonates. 1st ed. Tehran: Ministry of Health, Treatment and Medical Education, Health Advisory Office, 2006.
5. Behnampoor M, Havasian MR, Sargolzaei N, Mahmoodi Z, Salarzaei M, Mohamadi J. Investigating the Mortality Causes of 1-59 Months Babies of Village from 2012 to 2015, Zahedan, Iran. Indo Am J P Sci. 2017; 4(05): 1079-84.
6. Andersson T, Hogberg U, Bergstrom S. Community-based prevention of perinatal deaths: lessons from nineteenth-century Sweden. International journal of epidemiology. 2000; 29(3): 542-8.
7. Weiner R, Ronsmans C, Dorman E, Jilo H, Muhoro A, Shulman C. Labour complications remain the most important risk factors for perinatal mortality in rural Kenya. Bulletin of the World Health Organization. 2003; 81(8): 561-66.
8. Yasmin S, Osyin D, Paul E, Costello A. Neonatal mortality of low birth weight infant in Bangladesh. J Bull World Health Organ. 2001; 97(7): 608-145.
9. Behrman R, Shiono P. Neonatal risk factors: In: Fanaroff A, Mortin R, Neonatal prenatal medicine. Vol 1, 7th ed. London: Mosby, 2002.
10. Kliegman RM. Fetal and Neonatal Medicine. Nelson essentials of pediatrics. 2002.
11. Mohamadi J, Panahi J, Alborzi, A, Pakzad I, Pourabas B, Rezai Z, Havasian MR. Anti-tuberculosis drugs sensitivity of BCG pasture strain isolated from lymphadenitis of children after vaccination by BCG vaccine. International Journal of Advanced Biotechnology and Research. 2017; 8(2): 828-34.
12. Somi MH, Fatahi E, Panahi J, Havasian MR, Judaki A. Data from a randomized and controlled trial of LCarnitine prescription for the treatment for Non- Alcoholic Fatty Liver Disease. Bioinformation. 2014; 10(9): 575-79.
13. Havasian MR, Panahi J, Ruzegar MA. Ilam Lipid and Glucose Study: A cross-sectional epidemiologic study. Nova Journal of Medical and Biological Sciences. 2014; 2(5): 1-6.
14. Nayeri F, Amini E, Yazdi ZO, Naieri AD. Evaluation of the cause and predisposing factors in neonatal mortality by using international coding diseases version 10 in Valiasr Hospital. Iranian Journal of Pediatrics. 2007; 17(Suppl 1): 21-6.
15. Barbara JS. Jaundice and hyperbilirubinemia in the newborn Kern ictus. Richard Behram R, Robert M.Kleigman, Hal.BJenson, eds. Nelson Text Book of Pediatrics 17th ed. Sunders, 2004.
16. Panahi J, Havasian MR, Roozegar MA. Knowledge of physical education teachers' toward tooth avulsion in Tehran, Iran. J Oral Health Oral Epidemiol. 2014; 3(2): 66-71.
17. Moss W, Darmstadt GL, Marsh DR, Black RE, Santosham M. Research priorities for the reduction of perinatal and neonatal morbidity and mortality in developing country communities. Journal of Perinatology. 2002; 22(6): 484-95.
18. Mardani M, Kazemi KH, Mohsenzadeh A, Ebrahimzade F. Investigation of Frequency and Risk Factors of Macrosomia in Infants of Asali Hospital of Khoramabad City. Iranian Journal of Epidemiology. 2013; 8(4): 47-53.
19. Hemmati M, Gheini S. Neonatal mortality rate prevalence in Motazedi hospital of Kermanshah (2002-2003). Journal of Kermanshah University of Medical Sciences. 2006; 10(2): 130-37.

20. Izadi N, Shetabi H, Bakhtiari S, Janat AM, Parabi M, Ahmadi K. The Rate and Causes of Infant Mortality in the Hospitals of Kermanshah Province DuringU 2011-2014. Journal of Zanjan Uni Med Scie. 2016; 15(2): 130-38.
21. Farhadian M, Mahjub H, Sadri GH, Aliabadi M. Ranking Health Status of Children in Iran's provinces and Assessing its Relation with Socio-Economic indicators. Hakim Research Journal. 2010; 13(2): 108- 114.
22. Tavoli Z, Taee N, Safari M, Haji-Mohammad R, Rastad H. Gestational Age and Neonatal Morbidity at the End of Term Pregnancy in Cesarean Delivery. Iran Journal of Nursing. 2013; 26(84): 44-52.
23. Tajedini F, Ehdaievand F, Farsar A. Epidemiological Features of Children Mortality in the area Covered by Shahid-Beheshti University of Medical Sciences in 2012. Journal of Clinical Nursing and Midwifery. 2014; 3(1): 62-71.
24. Malek AH, Sheykh AR, Kimigar SM, Siasi F, Abdollahi Z, Jazayeri A, Keyghobadi K, Ghaffarpoor M, Noroozi F, Kalantari N, Minaei M. Multi-Disciplinary Interventional Model for Reducing Malnutrition among Children in Iran. Hakim Research Journal. 2003; 6(1): 1-7.
25. Seperdoust H, Ebrahiminasab S. Human development index and under five years children mortality rate in Iran. Journal of the Iranian Institute for Health Sciences Research. 2015; 14(2): 137-44.
26. Varkuhi A, Mohsenzadeh A, Mohsenzadeh N. investigating the characteristics of dead babies in NICU Hospital of Shahid Madani, 2002. J of Chid Dis Iran. 2002; 13(1): 1-7.