International Journal of Innovative Research in Medical Science (IJIRMS)
Volume 03 Issue 01 January 2018, ISSN No. - 2455-8737
Available online at - www.ijirms.in

Open Access Journal | Research Article | DOI: 10.23958/ijirms/vol03-i01/16

Under 5 Children Mortality in Sudan: Situation Analysis

Selwa Y Abdeldafie

Nurrsing Department /College of Applied Medical Sciences University of Hafr Albatin KSA
Email - *drselwa71@gmail.com*

Abstract:

Sudan like other developing countries suffers a high mortality rate among under 5 children. Although there is an steady minimal reduction of this rate among Sudanese children but it is still high even after implementing many policies and interventions by the federal government.

The aim of this work is to analyze the situation of under 5children mortality in Sudan in term of trend, causes of death, policies and interventions under taken to reduce this risk. Methods :the Sudan annual statistical report of 2015 was reviewed, it revealed that : the trend of under 5children mortality in Sudan is 70.10 as of 2015 and this is the lowest value while the highest one is 178.40 in the year 1960.There are a lot of policies under taken by the government to reduce this risk like : diarrhea community treatment , antenatal corticosteroids , postnatal care and IMCI implementation and the essential interventions which are implemented include :exclusive breastfeeding, skilled birth attendance, postnatal care, early initiation of breastfeeding , access to improved drinking- water sources, pneumonia care-seeking and pneumonia antibiotics.

Keywords: ***under 5 mortality, children, Sudan.***

Introduction

Under 5 mortality is defined as the risk of death among children before completing 5years of age, it is found to be very high in WHO (world health organization)African region (76.5 per 1000 live births) so it is 8 times higher than of WHO European region.[1] Child health is regarded as an important growing issue globally, essential interventions were designed and if they are properly implemented they will reduce the mortality and morbidity rates among the target age group of children.[2] Under 5 mortality is the probability of dying between the age of one day to 60months of life ,it indicates not only the under 5 child health but also mothers and societies health.[3]

Causes of under 5 mortality include: child spacing, maternal age and level education, traditional and cultural practices, vaccination coverage and economic factors in most countries.[4]

Methodology

Design: This is a review article in which Sudan Annual Statistical Report was reviewed for under 5 mortality trend, causes policies and interventions.

Variable under study: Sudan Annual Statistical Report was reviewed in term of trend. Causes of death among under 5 children, policies decided by the government and interventions undertaken by the government to reduce the mortality rate among under 5 children in Sudan.

Tool: Structured data sheet was prepared by the author for the purpose of the study. It consists of four sections, section one: Trend, section two: Causes of death, section three: Policies and section four: Interventions under taken to reduce this risk.

Data presentation: Data was presented in figures and frequency tables.

Ethical considerations and approval: Issues include plagiarism; misconduction and falsification of data are absolutely considered by the author.

Results

Table 1: Trend in under-5 mortality and neonatal mortality among Sudanese children1990-2015

Year	Under 5 mortality	Neonatal mortality
1990	128	41
2000	106	36
2010	80	32
2015	70	30

There is an steady minimal declining in both under5 mortality rate and neonatal mortality rate among Sudanese children but they need more effort by government, stake holders, health professionals, communities and families.

DOI: 10.23958/ijirms/vol03-i01/16

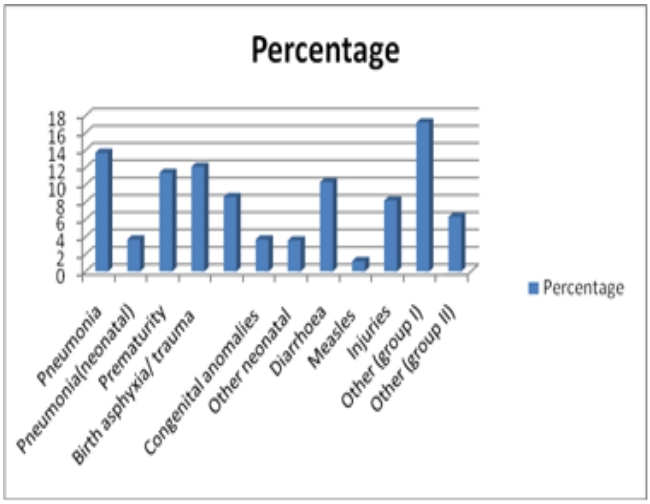

Fig 1: Causes of death among under 5 children among Sudanese children:

Other (group I) of causes remains the highest cause of death among under 5 Sudanese children while measles is the least cause.

Table 2: Policies decided by the government to reduce the mortality rate among under5 Sudanese children

Policy	Status of implementation
Diarrhoea community treatment (use of community-based health providers)	Yes
Maternity protection	No
Kangaroo mother care	No
Antenatal corticosteroids	Yes
Postnatal care	Yes
Low osmolar oral rehydration salts and zinc	Yes
Community treatment of pneumonia	No
Discharge mother and baby only 24 hours after childbirth	No
Neonatal resuscitation	Yes
IMCI implementation	Yes

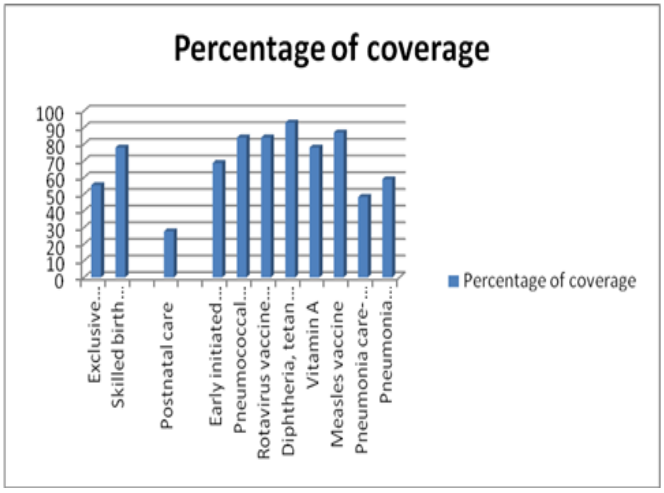

Fig 2: Coverage of essential interventions across the continuum of care (%):

This figure revealed that measles vaccine coverage is 87% so it has lowest rate among causes of death. Also the DPT vaccine coverage is 93%.

Discussion

Under 5 mortality remains as a threat in developing countries as well as Sudan. Causes of under 5 children death include: Prematurity , pneumonia and Other (group I) with a percentage of 11.4 %, 13.7% and 17.2 % respectively while the lowest percentage attained for measles(1.2%) and neonatal pneumonia (3.7%) this result reflects the highest percentage of vaccine coverage for these diseases , This agreed to some extent with the findings of a Chinese study which found that Prematurity/low birth weight and congenital heart disease are top causes of death among Chinese children. Also this Chinese study differs from our study in that: Chinese under 5 mortality has fluctuating style trend, it was decreasing till 2003and 2004 when it started to increase then started again in 2005 to develop the decreasing trend.[5] On the other hand in the current study the Sudanese under 5 mortality had a decreasing trend through the years from 1990 to the time of conducting this review. Another study conducted in Tanzania revealed different causes of under 5 Tanzanian children like: low maternal education , young maternal age which indicates low experiences in infant health in comparison with old mothers, short birth intervals and high parity[6] A study done in Kenya showed that there is an increase of this rate among children who were born in home compared with those born in hospitals ,other causes are: non-improved sources of drinking water ,duration of breast feeding, family size and age of the mother at the child birth.[4]

Un like Sudan in Nigeria the main causes of under 5 mortality were found to be: malaria, complications of birth and delivery and measles according to.[7] In Zambia the apparent causes of death among under 5 children are malaria, malnutrition, pneumonia and diarrhea which can be prevented through home management of diarrhea, accessibility to improved drinking water sources and vaccination.[4]

Ethiopian research showed a significant relationship of under 5 mortality with birth interval, family size, birth type, breastfeeding status, source of drinking water, mother education, mother income, area of residence, and father education.[8] Haiti children died possibly due to Acute lower respiratory infection, diarrhea and enteric disease, and early neonatal conditions such as tetanus and preterm birth this is reported by.[9] In Eastern Mediterranean Region the reduction of neonatal mortality is less than reduction of under 5 mortality due to prematurity , intra-partum complications ,neonatal sepsis and congenital anomalies.[10]

DOI: 10.23958/ijirms/vol03-i01/16

Numerous interventions are undertaken by global and regional initiatives to reduce under5 mortality rate like : the United Nations Secretary-General's "Global strategy for women's and children's health", "Global action plan for prevention and control of pneumonia and diarrhoea.[1] Sudan government like other governments put a lot of policies and under takes very vital interventions to reduce this mortality among under 5 children such policies and interventions include: Diarrhoea community treatment (use of community-based health providers), Antenatal corticosteroids, post natal care, Low osmolar oral rehydration salts and zinc, Neonatal resuscitation and IMCI implementation. Implemented interventions are: Exclusive breastfeeding 55.4%, Skilled birth attendance78%, Early initiation of breastfeeding 68.7%, Rota virus vaccine (last) 84%, Pneumococcal conjugate vaccine (PCV3) 84%, Measles vaccine 87% and access to improved drinking-water 68% such interventions were recommended by[11] who reported that the most action by which optimum children growth and development is assured is to start breast feeding in the first hour and to continue it exclusively so protection from respiratory infections and diarrhea will be assured.

Conclusion

Based on this review the author concluded that in spite of steadily reduction of under 5 mortality rate but still it needs a lot of efforts by the government, stakeholders community and families so a considerable coverage rate of interventions is needed to meet the needs of under5 children and to promote their health.

Recommendations

The author recommend that: Health education program to pregnant ladies in the antenatal period about: Healthy living environment and accessibility to improved drinking water sources should be conducted. Early initiation of breast feeding, exclusive breast feeding and continuation of breast feeding with complementary feeding should be encouraged. Encouragement of health facilities delivery and avoidance of large size families also contribute in reducing this risk.

Acknowledgement:

I would like to thank my family for their continuous support and encouragement.

References

[1] 10. http://www.emro.who.int/child-adolescent-health/child-health/child-health.html
[2] Z S Lassi et al.: Essential interventions for child health, Reproductive Health 2014, 11(Suppl 1):S4 available at: http://www.reproductive-health-journal.com/content/11/S1/S4
[3] M R Wambugu: determinants of under-5 mortality in Kenya during upsurge and declining trends period Master thesis 2014 available at : http://psri.uonbi.ac.ke/sites/default/files/chss/psri/psri/Mwangi%20Reuben%20Wambugu_Research%20Project%202014_0.pdf
[4] A K Kapungwe: Quality of child health care and under-five mortality in Zambia:A case study of two districts In Luapula Province , Demographic Research Vol.12 Article 12, Pages 301-322 Published 20 May 2005
[5] W Zhang, etal : Mortality Rate for Children under 5 Years of Age in Zhejiang Province, China from 1997 to 2012 PLOS ONE 2014 available at: http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0127770
[6] A S Susuman and H F : Under-5 Mortality in Tanzania: A Demographic Scenario, Iranian J Publ Health, Vol. 41, No.12, Dec 2012, pp.8-18
[7] I N Abu , etal : The Prevalence and Determinants of Under-Five Mortality in Benue State, Nigeria SAGE Open 2015
[8] S Gebretsadik and E Gabreyohannes: Determinants of Under-Five Mortality in High Mortality Regions of Ethiopia: An Analysis of the 2011 Ethiopia Demographic and Health Survey Data , International Journal of Population Research Volume 2016
[9] Henry B. Perry, Allen G. Ross, and Facile Fernand : Assessing the causes of under-five mortality in the Albert Schweitzer Hospital service area of rural Haiti , Rev Panam Salud Publica/Pan Am J Public Health 18(3), 2005
[10] http://www.emro.who.int/child-adolescent-health/newborn-health/newborn-health.html Child and adolescent health » Child health
[11] Zohra S Lassi etal: Essential interventions for child health Lassi et al. Reproductive Health 2014, 11(Suppl 1):S4 http://www.reproductive-health-journal.com/content/11/S1/S4

DOI: 10.23958/ijirms/vol03-i01/16