

PROPOSING SOCIOLOGICAL RESEARCH ON CHILDREN HEALTH PROBLEMS IN PAKISTAN

Dr.Pasand Ali Khoso

Assistant Professor, Department of Sociology, University of Sindh Jamshoro Email: pasand.ali@usindh.edu.pk

Dr. Waheed Ahmed Abbasi

Assistant Professor, Department of Criminology, University of Sindh Jamshoro Email: <u>w.abbasi@usindh.edu.pk</u>

Dr.Beenish Malik

Department of Sociology, School of Social Sciences and Humanities, University of Management and Technology, Lahore Email: beenish.malik@umt.edu.pk

ABSTRACT

Like many low-income countries, Pakistan is facing children's health problems. The major health problems affecting children in the country are Pneumonia, Diarrhoea, Measles, Malaria and malnutrition. There is much research has already been conducted on biomedical and epidemiological aspects of these health problems, but little is known about the social and cultural dimensions of children's health issues. This paper attempts to propose the sociological research on children's health problems in Pakistan with the emic focus on local context. The proposed future research may mainly be situated in the interpretivist paradigm of qualitative inquiry. Thus, it will contribute in upscaling the very basic understanding of the meaning formed by people about social determinants of prevailing children health problems and their potential hazardous consequences in Pakistan.

Keywords: Children health problems, illness behaviour, Pakistan, qualitative review

INTRODUCTION

Children health is important for any country to grow with a healthy population. It is considered to be one of the solid pillars of a good health system of a nation. But the reality is somewhat bitter. From the death of a child families have to undergo sufferings and the waste of human potential is witnessed. Reports show that about 18000 children die before their fifth birthday every day globally and this situation is worse in economically disadvantaged countries (UNICEF, 2013). More than 6 million children under five years of age died globally in 2013. The distribution of these deaths among World Health Organization recognized regions (WHO Regions) looks like this:

Africa 2978000, Americas 227000, South East Asia 1700000, Europe 137000, Eastern Mediterranean 845000, and Western Pacific 395000 deaths (WHO, 2014a). Though the deaths of children have decreased globally but the figures are still alarming. From 12.2 million deaths per year in 2000 the under five mortality has reduced up to 6.3 million in 2014, but still more than 6 million children younger than five years die annually which is a question mark to the progress of overall reduction in children death tolls (UNICEF, 2014).

Worst is the situation in low income and poverty-hit countries. As we can see from the data above, the highest numbers of deaths are occurring in Africa and Southern Asia. Sub-Saharan Africa and Southern Asia are still facing high child mortality (Forsyth, 2015 and Rajaratnam, et.al., 2010). South Asia due to unrecognized factors have had slow progress in reduction of child mortality (Wang et.al., 2013). The 4th Millennium Development Goal (MDG) seems difficult to reach its target in these regions. The MDG 4 states that the under five mortality has to be reduced by two-thirds between 1990 and 2015. When comparing with other regions Southern Asia is still experiencing high under five mortality rate at 55 deaths per 1000 live births in 2013 further showing one out of three global deaths there. India than all other southern Asian countries is at the highest number of under-five mortality (1.3 million in 2013) (UNICEF, 2013).

Major part of the all deaths among under five years' children occur in their first twenty-eight days. This early stage of their life is very critical and dangerous. 44 percent of the children under five years of age lose their lives during these early days which are called to be taking place at the neonatal period (WHO, 2014). This shows that after preterm birth complications, the infectious diseases are major cause of death among children under five years of age globally. However, the high income countries of the developed nations have too much extent overcome the infectious diseases among masses generally and children particularly whereas this phenomenon is still one of the major causes of child mortality in low income countries where people are living in the state of poverty and less hygienic environments. Globally half of total figure of the children deaths is due to under nutrition. The under five mortality rate in 2013 was 76 per 1000 live births in low income countries which was twelve times higher than that of high income countries (UNICEF, 2014).

India, Nigeria, Pakistan, Democratic Republic of Congo, and China are the five countries which stood highest on the ranking in terms of under five mortality covering almost half of the total deaths in 2013 (UNICEF, 2014). The health of population, their socioeconomic development and progress, and overall quality of life can be seen through many mortality and morbidity indicators among which childhood mortality rates are significant ones. These childhood mortality indicators are further subcategorized into some age specific mortality rates, such as; Neonatal mortality, post-neonatal mortality, infant mortality, child mortality and under-five mortality. Neonatal mortality refers to "the probability of dying within the first month of life". Post-neonatal mortality is defined as "the difference between". The infant mortality rate is "the probability of dying between birth and the first birthday". Child mortality is expressed as "the probability of dying between the first and fifth birthday". The umbrella over all these mortality is the under-five mortality which states "the probability of dying between birth and the fifth birthday". These mortality rates are calculated as deaths per 1000 live births in a given year except the child mortality rate which is expressed as the deaths of the children "between age 1 and age 4 per 1,000 children surviving to age 1" (PDHS, 2012-13).

SITUATION IN PAKISTAN

According to the Pakistan Demographic and Health Survey (PDHS) 2012-13 the neonatal mortality rate during 2008 -2012 was 55 and the post-neonatal 19 deaths per 1000 live births which shows that the former rate was thrice greater than the latter one. A child remains at high risk in Pakistan during the period of first month of his/ her life. This risk reduces significantly in the next eleven months. It is irony of fact that Pakistan has failed to reduce the neonatal deaths since 1990s, however, it is observed that the neonatal mortality has increased slightly. During 1990-91 the neonatal mortality rate was 51 which has increased up to 55 deaths per 1000 live births in 2012-13. Besides decreasing the neonatal deaths and achieving some progress, Pakistan has faced an increase of 8 percent (though small) in it. It became very difficult for Pakistan to achieve Millennium Development Goal 4 in 2015 because the situation did not progress upto 2015.

The survey document comes up with the infant mortality rate at 74 deaths per 1000 live births during 2008-2012. The infant mortality

has decreased over the last twenty years. But this decrease is not promising because still one out of every 14 children of age one year dies annually (PDHS, 2012-13).

Reporting under-five mortality the PDHS survey findings state that 89 under-five children die annually per 1000 live births in Pakistan which is again a critical situation. In 1990 the figure was 117 per live 1000 births which reduced to 94 in 2006 and 89 during 2012-13. The reduction is at slow pace. Pakistan had to reduce the underfive mortality to 52 per 1000 live births by the end 2015 as per the MDG4. The target could not be met. As per latest PDHS report (2018-2019) even the current under five mortality rate is higher at 74 than was targeted as 52 in 2015. Though the rate has decreased but not up to the target.

Comparing with other regional as well as neighboring countries in South Asia Pakistan is still lagging behind in reducing childhood mortality despite its progress on the overall under-five mortality indicators (Bhutta et.al., 2013). The following table compares Pakistan with other countries in terms of under 5 mortality rate. Pakistan is lagging behind India, Bangladesh, Nepal, Indonesia, Iran, China, and Malaysia in annual rate of reduction of under five deaths

In 2012, the major causes of under five years mortality were the preterm birth complications, pneumonia, birth asphyxia, diarrhea (WHO, 2014b). The major killers of children under five years of age are pneumonia, diarrhoea, malaria, and measles especially of those who survived from neonatal period (WHO, 2012). These and other infectious diseases cause (communicable diseases) 51.8 percent deaths of under five children of the total 6.3 million deaths in 2013. 14.9%, 9.2%, and 7.3% children younger than 5 years died of pneumonia, diarrhoea, and malaria respectively in 2013 globally (Li Liu et.al., 2015).

In 2013, causing 935000 deaths of under five years of children worldwide Pneumonia remains the number one contributor (15 percent of overall under five deaths) of child mortality. Though pneumonia is found everywhere is the world but the most affected regions are sub-Saharan Africa and south Asia (WHO, 2014).

PNEUMONIA

Being one the countries of South Asia, Pakistan is also the victim of pneumonia among children under five years of age. Pneumonia ______,___,___,___,,

along with other communicable diseases coupled with malnutrition is the major causes of under 5 mortality (U5M) in the country (WHO, 2013). Pneumonia causes 91000 deaths of children annually in Pakistan (Das and Bhutta, 2013). Pneumonia is considered to be responsible as being the leading killer of children under five years of age in Pakistan (WHO, 2013a and PDHS, 2012-13). According to PDHS 2012-2013 during the conduct of survey 16 percent of children whose age was under five years showed symptoms of ARI in Pakistan. There was no significant difference of gender among such children. Compared with other provinces of Pakistan (Punjab, Sindh and Balouchistan) Khaiber Pakhtoon Khwa (KPK) had higher prevalence of pneumonia cases. Discussing the difference between rural and urban areas, pneumonia cases were higher in rural areas. The households using charcoal as a source of fuel for cooking witnessed higher cases of pneumonia (PDHS, 2012-13).

WHO describes pneumonia as type of acute respiratory infection (ARI) which affects lungs of a person. The infection of pneumonia develops fluids and pus in the lungs that lead to difficulty in adequate breathing. Viruses, bacteria and fungi including other infectious agents cause pneumonia in a person. Pneumonia can be spread virally and through blood transfusion. An infected person can spread it by cough or sneezing to others via air. The virus or bacteria reaches the lungs from throat or nose when inhaled. Difficulty in breathing, presence or absence of fever, chest congestion, occurrence of sound while breathing, to become unable to feed or drink, in most severe cases among infants getting unconscious, hypothermia and convulsions are some of the common symptoms of presence of pneumonia in a child. The children with weak immune system due to malnutrition are at the highest risk of getting infected with this disease. The environmental factors which bring the children at risk are air pollution in the households that use biomass fuels for cooking, living in crowded homes and parental smoking. A child can be prevented from pneumonia by getting him/her vaccinated, providing exclusive breast feeding (feeding the baby mother's milk exclusively for six months), proper hand washing, avoiding from living in crowded homes, parental smoking, and biomass fuels; and using a particular kind of antibiotics for HIV infected children (WHO, 2014c).

DIARRHOEA

Among the infectious diseases, after pneumonia, diarrhoea is the second largest determinant of under five mortality globally as well as in Pakistan. The estimated figure of deaths of children under five years of age globally was 0.578 million caused by diarrhoea in 2013 (Li Liu et.al., 2015). According to the media center of WHO, globally diarrhoea kills around 760000 children of under five years of age annually. The number of diarrhoea cases around the world reported to have reached 1.7 billion every year (WHO, 2013).

Two weeks before the conducting of PDHS 2012-13, 23 percent of the children of age under five years were having diarrhoea in Pakistan. Area wise KPK was reported to be with highest cases of diarrhoea followed by the province of Sindh. Punjab was at third number in prevalence of diarrheal cases whereas Baluchistan had the lowest cases. There was not much and significant difference between sexes and rural urban distribution of the cases (PDHS, 2012-13). If counted in total number of deaths of under five years of children caused by diarrhoea in 2013, the figure became 53300 annually in the country (Das and Bhutta, 2013).

This is a massive number of deaths of children which can easily be averted by simple interventions of giving Oral Rehydration Salts (ORS) with other fluids. Diarrhoea is defined by WHO as "the passage of three or more loose or liquid stools per day (or more frequent passage than is normal for the individual)". It is caused by bacteria, virus or parasitic organisms. The major source of this infection is contaminated water and food. And such contamination especially of water is caused by improper sanitation. An infected person passes loose watery stools which create dehydration in the body. People die of this dehydration if not handled with care. The oral rehydration salts (ORS) are recommended to be provided to the patient to control dehydration. Giving Zinc in the form of supplements and medicine to the infected children is also very useful intervention to mitigate the infection. The malnourished children are at major risk of diarrhea (WHO, 2013).

MALARIA

Malaria is also a fatal disease (if not diagnosed and treated early) among populations generally and in children particularly. According to latest report on malaria by WHO, 3.3 billion people are at risk whereas

Blaimail Research Volumer Grassivous Vol.5 1, 110.15

1.2 billion are at high risk of getting infected with malaria globally. The number of malaria cases which took place in 2013 was 198 million worldwide. This disease caused 584000 deaths in 2013 around the world. Among this death toll, 78 percent were children under five years of age. The most affected part is WHO's African region (WHO, 2014).

The most common fever in Pakistan is malarial fever. The majority of the cases of malaria among children are reported in the post monsoon period from August to November in Pakistan. According to PDHS 2012-13, the prevalence of fever (mostly malaria) among under five years children was 38 percent two weeks before the conduct of survey. The rural urban and gender differences were not wider. KPK followed by Punjab had the highest prevalence fever cases among children. Sindh was at number three and Baluchistan was the last on such prevalence (PDHS, 2012-13).

MEASLES

Another infectious disease which many of the times comes into the deadly shape of outbreaks in countries like Pakistan is measles. According to WHO fact sheet on measles, 145700 deaths occurred due to this infection globally in 2013. 400 children lost their lives every day, even 16 deaths per hour. However, measles can easily be prevented by immunization. This is a viral disease. The common symptoms of the disease are high fever, runny nose, cough, red and warty eyes, white spots on body particularly on face, and an ugly smell (WHO, 2015).

In Pakistan Sindh is the province which is most affected by measles. Measles outbreaks are observed upon every two or three years in the province. Beginning in late 2012 the outbreak of measles in Sindh took around 321 lives by the August 2013. Among such deaths mostly were children. Although Sindh was the hub of the outbreak, but it spread over to other parts of Pakistan also (Khan and Qazi, 2014).

Whether it is pneumonia, diarrhea, malaria (or any fever), measles or any other acute or chronic illness among children in Pakistan, the causes of deaths due to such illnesses can be averted with cost effective interventions (Bhutta et.al., 2013). One the intervening mechanisms can be of the help seeking process of the families especially of rural families where the children become sick for their

Diaminal research volume of assistant is not in the in-

recovery. The overall health-seeking behavior of such families may assume to be determining the outcome of the illness of the child, which could be recovery from the sickness or the graver situation, the death of the sick child. The high under five mortality in developing countries such as Pakistan can also be linked with the health-seeking behavior of the primary care givers (families, especially the parents) of the sick children (PDHS, 2012-13).

GAP IN THE LITERATURE

Many studies have been conducted on health seeking behavior of people for different health problems in Pakistan. Majority of these studies adopted quantitative approach and came up with statistical data. The major focus of such studies has remained the urban and semi urban areas (Bhatti, Fikree & Khan, 1999; Khan et.al., 2000; Sadik and de Muynck, 2001; Fatmi and Avan, 2002; Bhatti & Fikri, 2002; Rao and Soomro, 2004; Ali et.al., 2006; Jafri et.al., 2007; Qureshi, Morkve & Mustafa, 2008; Manzoor, Hashmi & Mukhtar, 2009; Hussain et.al., 2010). Based on quantitative approach these studies lack the deeper understanding of the socio-cultural processes involved in health seeking behavior of the people. A few studies were conducted on health seeking behavior from the qualitative research perspective (Hunte& Sultana, 1992; Hassan and Khanum, 2000; Shaikh, Haran & Hatcher, 2008 and Shaikh et.al., 2008). These researchers have tried exploring the health seeking behavior of general public with little focus on specific childhood illnesses. Though there have been conducted a little number of studies on health seeking behavior of parents or families for childhood illnesses (Mul and Mul, 1988; Kundi et.al., 1993; Mul and Mul, 1994; Haider and Thaver, 1995; Hassan and Khanum, 2000; D'Souza, 2003) but again majority of these researches were quantitative in nature. There is dearth of health seeking behavior researches for rural population in Pakistan (Anwar, Green & Norris, 2012).

The concentration of many studies have been in the big cities like Karachi, Islamabad, Lahore, Rawalpindi, Multan and some other small cities. The rural areas have been neglected in the previous researches, specially the remote rural populations of Thar Desert (Anwar, Green & Norris, 2012). Besides this, little is known about the health seeking behavior for children health problems in rural areas of Pakistan. However, Dr Zulfiqar Bhutta and his team at the Aga Khan University

Diamitual resourch volume of wish ooks volice is really

Karachi have done handful number of randomized control trials on different aspects of health of children under five years of age but the focus of these trials is to develop interventions to reduce child mortality in Pakistan (Bhutta et.al., 2008; Bhutta, Soofi & Cousens, 2011; Soofi et.al., 2012). The main problem with these trials is that they lack with the findings regarding socio-cultural and behavioral dimensions of community life and its impact on children health. Since children less than five years of age are totally dependent upon their primary care givers (in majority cases the parents) therefore it is necessary to study the health seeking behavior of these primary care givers. Looking at the previous literature on health seeking behavior of families or parents for childhood illnesses, there has found to be a wide research gap in it (Anwar, Green & Norris, 2012). To fill this gap this paper proposes to develop a substantive grounded theory of the process of health seeking behavior of families for childhood illnesses in rural Sindh, Pakistan.

RESEARCH QUESTION

The main research question to be addressed in the proposed study is 'What is the process of health seeking behavior of families for childhood illnesses in Rural Sindh, Pakistan?'. This main research question can be followed by some sub-questions such as; how do families identify and define childhood illnesses? What do they do when a child becomes sick at home? Where do they go and from whom do they seek help for childhood illnesses? What social conditions are prevailing in the community and how do they influence the health seeking behavior of the families for childhood illnesses? What are the consequences of the help seeking for childhood illnesses?

PURPOSE OF THE PROPOSED STUDY

According to the guideline provided by John W. Creswell (2013) for writing a clear and concise purpose statement for a qualitative study, the purpose of this proposed study would be to develop a substantive grounded theory of the process of health seeking behavior of families for selected childhood illnesses (pneumonia, diarrhea, fever and measles) in a rural community / village of Sindh, Pakistan. The systematic approach to develop grounded theory proposed by Strauss and Corbin (1990 and 1998) and Corbin and Strauss (2008 and 2014) may guide the researchers to conduct such studies in future.

JUSTIFICATION

The justification lies in the research gap for this study. There has not been a single study conducted with grounded theory approach on health seeking behavior of rural communities in Sindh, generally for all segments of population and especially for children health problems. Therefore, there is need of a substantive grounded theory of health seeking behavior of rural communities in general and the families in particular that may explain the process of help seeking for childhood illnesses. The process may involve action, interaction and consequences related to illness behavior of the participants from their own perspective.

SIGNIFICANCE

The academic significance of the proposed study is obvious from this fact that such study will be the first grounded theory research on the health seeking behavior of families for childhood illnesses in rural Sindh, Pakistan. Before this there has not been conducted a single study from the grounded theory approach on this topic in Pakistan. The researcher assumes that the findings of such proposed study will contribute to the sociological understanding of the health seeking behavior of families for childhood illnesses from the perspective of participants living in rural life. Hence, the study will add knowledge to the already existing literature in the field of medical sociology as well as rural sociology. This kind of first hand understating of health seeking behavior for childhood illnesses may help policy makers to revise and reformulate the child health policies in Pakistan. The evidence-based policy making for improving children health in Pakistan is crucial for the health service delivery and its acceptance and reception in rural areas where the cultural and religious systems are dominant determinants of social life.

SCOPE OF THE STUDY

The proposed study will cover the health seeking behavior or the process of help seeking by the families for the children of age less than five years facing any of these four types of illnesses: pneumonia, diarrhea, measles and fever. The families will be chosen from rural geographical setting of the Sindh province of Pakistan. The finding s of the study will be based on the subjective experiences of families regarding childhood illnesses. These findings will exhibit the families'

- - ,

especially parents' perspective of different determinants, process and consequences of seeking help for their children less than five years of age.

CONCLUSION

The proposed future study will be qualitative in nature. The researcher will adopt the grounded theory approach for the conduct of the study. The Strauss and Corbin (1998) version of the grounded theory will specially be used with the emphasis on constant comparative method coupled with theoretical sampling and coding design. The findings of the study will take the shape of a substantive theory grounded in data depicting the process of seeking help for the childhood illnesses by the rural families.

REFERENCES

- Ali, F., Sami, F., Rehman, H. & Haider, K. (2006). Relation of gender education and health behavior of the general population regarding psychiatric illness. *Journal of Pakistan Medical Association* 56:421-425.
- Bhutta, Z.A., Memon, Z.A., Soofi, S., Salat, M.S., Cousens, S. & Martines, J. (2008). Implementing community-based perinatal care: Results from a pilot study in rural Pakistan. *Bulletin World Health Organization* 86:452-549.
- Bhutta, Z.A., Soofi, S. & Cousens, S. (2011). Improvement of perinatal and newborn care in rural Pakistan through community-based strategies: a cluster-randomized effectiveness trial. *The Lancet* 377:403-412.
- Bhutta, ZA et.al. (2013). Reproductive, maternal, newborn, and child health in Pakistan: challenges and opportunities. *The Lancet*. 381:2207-2218.
- Chrisman, N.J. (1977). Health seeking process: an approach to the natural history of illness. *Culture, Medicine and Psychiatry* 1:351-377.
- Grundy, J. & Peter, A. (2010). Health-seeking behavior studies: a literature review of study design and methods with a focus on Cambodia. University of Melbourne, The Nossal Institute for Global Health's Health Policy and Health Finance Hub working paper series (Number 7).
- Hassan, I.J. & Khanum, A. (2000). A health care utilization during terminal child illness in squatter settlements of Karachi. *Journal of Pakistan Medical Association* 50:405-409.
- Hunte, P.A. & Sultana, F. (1992). Health seeking behavior and the meaning of medications in Balouchistan, Pakistan. Social Science & Medicine 34: 1385-1397.
- Hussain, S., Malik, F., Hameed, A., Ahmed, S. & Riaz, H. (2010). Exploring health seeking behavior, medicine use and self-medication in urban and rural Pakistan. *Southern Medical Review* 3(2):32.

- - ,

- Kundi, M.Z.M., Anjum, M., Mull, D.S. & Mull, J.D. (1993). Maternal perceptions of pneumonia sign in Pakistani children. *Social Science & Medicine* 37:649-660.
- Li Liu et.al. (2015). Global, regional, and national causes of child mortality in 2000-13, with projection to inform post 2015 priorities: an updated systematic analysis. *The Lancet*. 385:330-340.
- MacKian, S., Bedri, N. & Lovel, H. (2004). Up the garden path and over the edge: Where might health-seeking behavior take us?. *Health Policy and Planning* 19(3):137-146.
- Manzoor, I., Hashmi, N.R. & Mukhtar, F. (2009). Determinants and patterns of health care services utilization in post graduate students. *Journal of Ayub Medical College Abbottabad* 21:100-105.
- Mechanic, D. (1995). Sociological dimensions of illness behavior. *Social Science & Medicine* 41(9):1207-1216.
- Mul, J.D. & Mull, D.S. (1988). Mothers' concept s of childhood diarrhea in rural Pakistan: What ORT programme planners should know. *Social Science & Medicine* 27:53-67.
- Pakistan Demographic and Health Survey (2019). National Institute of Population Studies (NIPS), Islamabad.
- Parsons, T. (1951). The Social System. New York. Free Press.
- Pescosolido, B.A. (1992). Beyond rational choice: The social dynamics how people seek help. In Cockerham, W.C., Glasser, M. & Heuser, L.S. (ed.). *Readings in Medical Sociology*, 208-223. New Jersey. Prentice Hall.
- Qureshi, S.A., Markve, O. & Mustafa, T. (2008). Patients and health system delay: health care seeking behavior among pulmonary tuberculosis patients in Pakistan. *Journal of Pakistan medical Association* 58:318-321.
- Rajaratnam, J. K. et.al. (2010). Neonatal, post neonatal, childhood, and under-5 mortality for 187 countries, 1970-2010: A systematic analysis of the progress towards Millennium Development Goal 4. *The Lancet*. 375:1988-2008.
- Rao, M.H. & Soomro, I.B.M. (2004). Attitude and practice patterns of urban population in the use of local pharmacy in treatment seeking process and its comparison with the semi urban population of Karachi. *Pakistan Journal of Medical Research* 43:1-9.
- Right, R.E. & Perry, B.L. (2010). Medical sociology and health services research: past accomplishments and future policy challenges. *Journal of Health and Social Behavior* 51:S107-S119.
- Sadik, H & de Muynck, A. (2001). Healthcare seeking behavior of pulmonary tuberculosis patients visiting TB venter Rawalpindi. *Journal of Pakistan Medical Association* 51(01):10-16.
- Shaikh, B.T., Haran, D. & Hatcher, J. (2008). Where do they go, whom do they consult, and why? Health seeking behavior in the Northern Areas of Pakistan. *Qualitative Health Research* 18:747-755.

- - ,

Shaikh, B.T., Haran, D., Hatcher, J. & Azam, S.I. (2008). Studying health seeking behavior: collecting reliable data, conducting comprehensive analysis. *Journal of Biosocial Sciences* 40:53-68.

- Tipping, G. (2000). Health Care Seeking Behavior in Asian Transitional Economies: A Literature Review and Annotated Bibliography. (Development Bibliography 17). Brighton. Institute of Development Studies, University of Sussex.
- UNICEF. (2013). Committing to child survival: a promise renewed. Progress Report 2013. New York. UNICEF Division of Policy and strategy.
- Ward, H., Mertens, T.E. & Thomas, C. (1997). Health-seeking behavior and the control of sexually transmitted disease. *Health Policy and Planning* 12 (01):19-28.
- WHO.(2012). What are the key health dangers for children? Online Q & A September 2012.