



Journal homepage: <http://www.journalijar.com>

INTERNATIONAL JOURNAL
OF ADVANCED RESEARCH

ISSN NO. 2320-5407

The Study of Emergency Care center of children Under 5 year's age in Indira Gandhi Institute of Child Health, Kabul Afghanistan

Dissertation Submitted in partial fulfilment of the Requirement for the award of the degree of Master of Public Health

Submitted by

Dr. Sayed Asadullah Sadaat
Roll No. 1603035110042
MPH-Batch 2016-18

Supervisor

Ms. Bhawna Sati
Assistant Professor
Dr. Abhishek Lohra
Assistant Professor
Maulana Azad University

Co-Supervisor

Dr Najibullah Safi MD, MSc. HPM, DMS



Department of Public Health
Maulana Azad University, Jodhpur



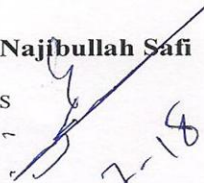
Certificate

Certified that the dissertation **the study of emergency care center of children Under 5 year's age in Indira Gandhi Institute of Child Health, Kabul Afghanistan** is a record of the research work undertaken by **Dr. Sayed Asadullah Sadaat** in partial fulfillment of the requirements for the award of the degree of Master of Public Health under my guidance and supervision.

Signature of Dr. Najibullah Safi

MD, MSc. HPM, DMS

Date:


15-07-18

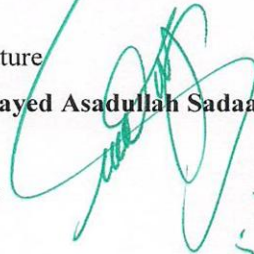
Declaration

I hereby declare that this dissertation **the study of emergency care center of children Under 5 year's age in Indira Gandhi Institute of Child Health, Kabul Afghanistan** is the bonfire record of my original field research. It has not been submitted to any other university or institution for the award of any degree or diploma. Information derived from the published or unpublished work of others has been duly acknowledged in the text.

Signature

Dr. Sayed Asadullah Sadaat

Date:



15 July 2018

Background: The recent Afghanistan Demographic Health Survey (DHS) conducted in 2015, revealed general and significant improvement in all of the national health indicators over the past decade or more precisely newborn health and survival depend on the care provided to the under 5 years' age. Under 5 year age care is crucial element in reducing child mortality, it's often receives less or poor attention and the less than one year mortality rate is 45 per 1000 live birth while significant percentage of this mortality is happening during the neonatal period, based all the improvement in health system, emergency care at facility level is immature and not fully cover the needs of emergency conditions, according to WHO data 10-20% of childhood's illness needs hospitalization and emergency care.

Method: Cross sectional study; structure questionnaires are used in data collection. The study has been conducted in emergency in/outpatient departments of IGICH in Kabul province. Selected center located in 10th street of Wazir Mohammad Akbar Khan in front of Sardar Mohammad Dawood Khan military hospital 10th district of Kabul city. Although, in Afghanistan's Emergency Triage Assessment and Treatment (ETAT) program, is the highest level for delivery of emergency of Health Services including morbidity and mortality of children health services.

Results: This section presents the data as captured from the questionnaires of child care providers that attended in Indira Gandhi Institute of Child Health (IGICH) from 50 health care providers.

Numeric data was analyzed through the use of descriptive statistics, and the output was then presented through the use of table and figures (s). We targeted 350 child caretaker respondents and 50 health care providers.

The response rate was 100% since we were able to reach 400 respondents. 73% of respondents were known about emergency center health delivery services

1. 4% of respondents were previously has used any emergency health delivery services
2. 4% of respondents were experienced the adverse effects while has been used emergency health delivery services.
3. 29% of respondents don't want to use any other health delivery services of this emergency center in the future

Conclusion: Afghanistan at the moment is experiencing a lot of pressure on its resource due to a tremendous increases of <5 children vulnerabilities due to less of emergency or improperly equipped or

standard centers. This has brought about a significant challenge for the country as more and more not enough trained health service providers in major cities in Afghanistan.

Key words: Emergency health center, child caretaker, health service providers, under five children, Kabul, Afghanistan

Acknowledgements

I am deeply grateful to my thesis supervisor Dr. Najibullah Safi for his attentive supervision in the whole process of study, starting from conception of idea to the completion of thesis. Without his emotional and technical support and encouragement I could not have come this far. He enabled me to think critically and act scientifically. He also helped me a lot refining my statistical analysis and also made me understand the conceptual basis of it.

I would like to express my sincere gratitude to Ms. Bhawna Sati, Assistant Professor, Dr. Abhishek Lohra, Assistant Professor who not only served as my committee members but also encouraged and challenged me throughout the thesis process and this thesis could not have been completed without their professional and skillful instructions from Epidemiologic point of view.

Finally, I am sincerely grateful to all the participants in the study, who wearily give us time and shared their knowledge, and without whose consent this study would not be possible. It is my sincere hope that the results of the study may benefit them and their families.

Table of contents

Certificate	Error! Bookmark not defined.
Declaration	Error! Bookmark not defined.
Abstract	4
Acknowledgements	6
Table of contents	7
Introduction.....	8
Review of Literature	9
Research Question and hypothesis	10
Aim's and Objectives	10
Methodology	11
Plan of Analysis:.....	13
Data Management and Quality Control.....	13
Result Section	15
Respondent Characteristics.....	15
Discussion.....	19
Conclusions.....	20
References:.....	22
List of tables	23
List of charts	25
Annexures	26
Annex 2. : Checklist for In-Depth Interview with Health Professional Staff.....	27
Annex 3.: Checklist for Interview with Child caretaker	29
Annex 4.: Consent form for interviews with pregnant women attending selected health facilities	33
Annex 5.: Consent Form and Research Subject Information Sheet 1:.....	35

Introduction

The recent Afghanistan Demographic Health Survey (DHS) conducted in 2015, revealed general and significant improvement in all of the national health indicators over the past decade or more precisely newborn health and survival depend on the care provided to the under 5 years' age. Under 5 year age care is crucial element in reducing child mortality, it's often receives less or poor attention and the less than one year mortality rate is 45 per 1000 live birth while significant percentage of this mortality is happening during the neonatal period, based all the improvement in health system, emergency care at facility level is immature and not fully cover the needs of emergency conditions, according to WHO data 10-20% of childhood's illness needs hospitalization and emergency care. Poor knowledge of mothers low level of education, unskilled birth attendants, unhygienic delivery practices, malnourished mothers, late breast feeding, no breast feeding, newborn immediate bathing, poor access to required health services, very late arrival to health facilities, poor quality of services at the health facilities and poor commitment of Governments are the main contributing factors in newborn death.

The greatest gap in <5-year age care is often during the newborn and mainly critical first week of life when most neonatal and maternal deaths occur at home and without any contact with the formal health sector.

The Afghanistan National Hospital Survey designed to provide information on some unacceptable practices such as unskilled birth attendants during unhygienic delivery practices, so it has found the gaps in the knowledge and practices of newborn care and to providing inputs into developing feasible and sustainable community-based interventions to improve neonatal survival. Policies were developed pertaining to neonatal health and survival. Latter on all stakeholders were tasked to implement the policies in order to give neonatal survival issues the needed attention. Community-based volunteers were trained and equipped with the necessary skills to ensure that the needs of neonates and their mothers are met. Less than five ages' especially newborn health and survival depend on the care given to the newborn, although newborn care is a very essential element in reducing child mortality.

Review of Literature

Extensive review of many journals, books and magazines for neonatal, infant and children less than less than 5-year age illness and mortality survival of the newborn is an issue of great concern especially for the developing world. Care for the neonate often receives little attention in maternal and child health programs. Although various efforts have been made by governments to reduce infant mortality, neonatal mortality keeps increasing. Of the approximately four million global neonatal deaths that occur annually, 98 percent occur in developing countries, where most newborns die at home while they are provided care among those, more than two-thirds die in their first week and among those, two thirds die in their first 24 hours after birth (Lawn et al, 2001). Poor emergency care in health facilities account major challenge in children hospitals in Afghanistan, Delay of every hour in emergency care for children increase 8% mortality, Improvement in the survival of the newborn is dependent on healthcare that spans antenatal, intranasal and postnatal periods, i.e. interventions directed to mothers during pregnancy; labor and delivery have a profound impact on newborn survival, especially during the first week of life when three-fourths of neonatal mortality occurs. Improvements in the survival of the newborn include the care given to women during pregnancy, for example, nutrition of young girls can have an impact on their adult height which in turn can influence outcomes for labor and delivery. Another example would be that the pregnancy folic acid status of the mother can determine the incidence of some congenital abnormalities. Maternal care is, therefore, not only important for reducing maternal mortality but also neonatal mortality. It is estimated that about 12 million pregnant women in Sub-Saharan Africa do not get tetanus immunization, however, the presence of a midwife, nurse or doctor at child birth in developed countries is taken for granted (Vinod, 2005). Another study in Nepal reports that newborn babies are considered dirty since they came out of their mother's womb, so almost all newborn babies are bathed within the first hour of birth (Yadav, 2007). However, a study conducted by Yadav (2007) on traditional practices in newborn care in Nepal shows that colostrum is regarded as dirty milk in some communities, and babies were fed with cow or goat milk immediately after birth for the popular belief that it were make the baby become more intelligent. A study conducted in Haryana, India revealed that 75 percent of newborns were given pre lacteal feeds of honey, tea and diluted milk, and babies are often not breastfed during the first three days. They are often given sweetened water; presuming that colostrum should be discarded (Bhandari et al., 2003)

Research Question and hypothesis

What are the factors contributing to existing gap of emergency care to reduce the child mortality and morbidity rate among children less than 5-year age Indira Gandhi Institute of Child Health.?

Aim's and Objectives

Study aim: To identify factors influencing existing gap of emergency care centers to reduce the child mortality and morbidity rate among children less than 5 years of age in Indira Gandhi Institute of Child Health.

Study objectives:

1. To study the gaps of emergency care center for reduction of mortality and morbidity rate among children less than 5 years age in Indira Gandhi Institute of Child Health (IGICH) in Kabul province.
2. To identify the main reasons articulated for mortality and morbidity of less than 5 years children by the emergency care center which are attending IGICH in Kabul province.

Methodology

Study design: Cross sectional study; structure questionnaires are used in data collection

Study Methods: The Interview has been done to identify the factors influencing the impact of emergency centers by non/professional child caretaker in IGICH, Kabul, Afghanistan.

Study setting: The study has been conducted in emergency in/outpatient departments of IGICH in Kabul province. Selected center located in 10th street of Wazir Mohammad Akbar Khan in front of Sardar Mohammad Dawood Khan military hospital 10th district of Kabul city. Selecting less than < 5 years' age children from urban and sub-urban of entire the country was help to have both the rural and urban perspectives on the issue. Although, in Afghanistan's Emergency Triage Assessment and Treatment (ETAT) program, is the highest level for delivery of emergency of Health Services including morbidity and mortality of children health services.

Sample subjects: The key informants were purposefully selected among the < 5years age who attend IGICH due to any reason and the hospital male/female staff. We were including children < 5 years' age who are attending in/outpatient of IGICH Kabul province due to any reason. In addition, 30 F/male nurses and 18 doctors of emergency center were interviewed.

Lab technicians, pharmacist and imaging were included into the study since the status of emergency center being either expected or unexpected is directly linked with the reducing of morbidity and mortality of children.

The study was excluding those outpatient child caretakers who did not want to do interview due to serious health problems of h/her children, so that they were not able to attend the interview; and those who were not give consent for the interview.

Sample teams: The head of emergency, nursing from outpatient/emergency and medical record officer were hired to undertake data collection. The data collectors were fluent in both spoken and written Dari and Pashto. They were responsible for conducting the interviews; and transcribing them.

Principle Investigator (PI) were in charge of coordinating the activities, training the data collectors, managing the data and controlling the quality of the whole process.

Data collection: The data collectors each were carry out a minimum of 50 Interview with child caretaker with an Interview with all related doctors and M/female nurses in IGICH.

In total, 400 Interview with child caretaker were conducted in IGICH of Kabul Province.

Adhering to the principles of qualitative study, the number of interviews was not determined prior to data collection. The data collection and analysis were performed simultaneously and the interviews were continued with the subjects till reaching the point of saturation. This is when the data collected from participants are redundant and no new information is given by any new participant.

Study duration: The study was completed within six months' period starting from October 2017 and ending in March 2018. The study timeline presented below summarize the main study activities and their proposed times.

Activities/Months	M1	M2	M3	M4	M5	M6
Develop and submit draft outline proposal	X					
Revise and submit the final outline proposal	X					
Application for ethical approval	X					
Submission of questionnaire		X				
Ethical approval		X				
Data collection and initial analysis			X	X		
Draft methodology and result chapters					X	

Draft discussion chapter					X	
Final draft						X
Final submission						X

Plan of Analysis:

The Principle Investigator (PI) were carry out the analysis manually taking the following steps:

1. Were read through all the data repeatedly until an insight develops about them of each interview.
2. Information were organized into two section including description of child caregiver's knowledge on their attendance to the emergency center and their reasons for not coming.
3. Themes were identified and labeled.
4. Each theme was searched for identification of the specific and most frequently mentioned reasons for not coming to the emergency center by each group of participants. Moreover, we were searching for common reasons among both groups of participants i.e. the child caretaker and the health staff.

Data Management and Quality Control

Principle Investigator (PI) oriented the data collectors on data collection methods and interview guides. And organized regular meetings with the study teams on a daily basis before them to start their interviews practically. The teams shared their experience, and the problems they faced during the interview. Possible solutions or refinements in the process were also discussed.

The teams were responsible for conducting the interviews and transcribing them while Interview data kept in separate files for IGICH emergency health services center and type of participants. The files updated on daily basis and kept in as save place.

Nobody except me, and the team members in case of need, permitted to have access to them and also reviewed all filled checklist were collected by data collectors during interviews, checked all transcriptions and translate them from local language to English.

Result Section

This section presents the data as captured from the questionnaires of child care providers that attended in Indira Gandhi Institute of Child Health (IGICH) from 50 health care providers.

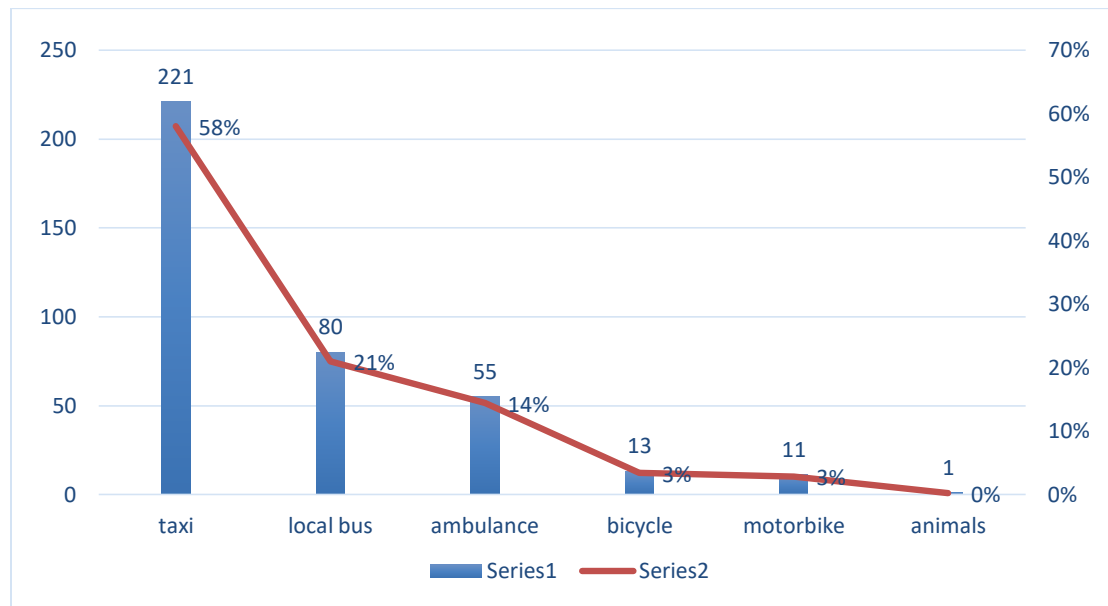
Numeric data was analyzed through the use of descriptive statistics, and the output was then presented through the use of table and figures (s). We targeted 350 child caretaker respondents and 50 health care providers.

The response rate was 100% since we were able to reach 400 respondents. This was reasonable and adequately taken from initial random sample and ensured that all the cases had equal opportunity in the study.

Respondent Characteristics.

Age	Obs	Mean	Std. Dev.	Min	Max
-----+-----					
var1	350	30.29143	7.499432	17	50

Table 1.: Kind of transportation have you used for arriving to the emergency center



Looking at table 1 we found that fifty-eight percent of the health caretakers were used taxi, 21% local bus, 14% ambulance, and only 3% were used bicycle following by motorbike.

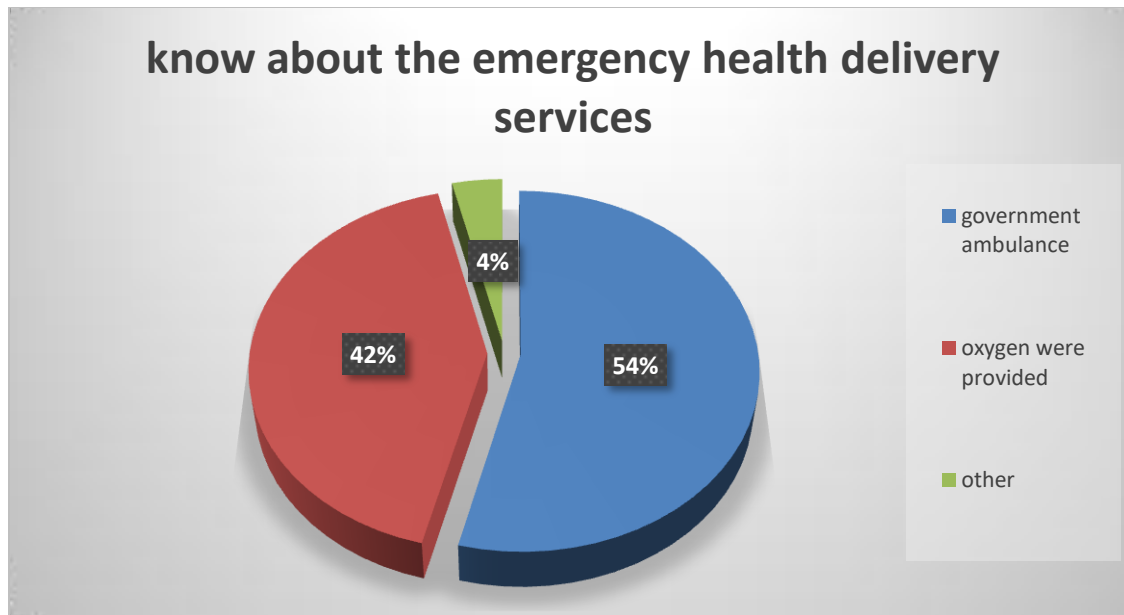


Figure 1.

This figure shows that majority of child caretaker have known about the governmental ambulances, 42% of them were know about oxygen delivery services while only few of respondents named other services.

Table 2.: Destitution of problems preventing child caretakers from using emergency health services

Lack of medicine	68	18%
Transportation	62	16%
More crowding	55	14%
Security problem	36	9%
Low awareness	35	9%
Health care provider behavior	29	8%
Male dominate	24	6%
Economical problem	24	6%
Wrong perception	23	6%
Going to local healer	14	4%
Existence of irrational referring system	12	3%
Udder table charge request	3	1%

As illustrated in table 2, the most common problems preventing child caretakers from using emergency health services reported 16%% (n=62) Transportation, 14%% (n=55) More crowding, 9% (n=36), 9% (n=35) Security, 8% (n=29) health care provider behavior, 6% (n=24) Male dominate, economical problem and wrong perception, 4% (n=14) Going to local healer and only few them were problem with existence of irrational referring system following by under table charges request by health care providers.

Table 3.: Main concerns or worries not letting child caretakers from use of emergency center

Low quality of health services	55	37%
Unclear consequences for the parent	48	32%
Wrong perception	46	31%

Table 3.: Shows that the majority of child caretakers had concerns about low quality of health services following by unclear consequences for the parents and then by wrong perception were they have.

Table 4.: Distribution of unpleasant experiences by child caretaker had caused them not using the health delivery services from emergency centers (n=350)

Lack of medicine	86	37%
More crowding	56	24%
Health care provider bad behavior	43	19%
Existence of irrational referring system	43	19%
Under table charge request	3	1%

The results in table 4, indicate that the number of child caretakers were not satisfied from the delivery of health services from emergency center due to lack of medicine 37%, bad behavior of health care providers 19%, same as existence of irrational referring system and very few of them were experienced under table charges request by health care providers.

Table 5.: Child caretaker satisfaction and wait time to get their children to a treatment room (n=350)

Good	181	52%
Very good	100	29%
Fair	61	17%
Poor	7	2%
Very poor	1	0%
Courtesy of staff (Nurses, physicians, technicians, residents, students)		
Good	157	45%
Very good	137	39%
Fair	46	13%
Poor	9	3%
Very poor	1	0%

fifty-two percent of child caretaker were show that; the time had been spent time was good till their children reaching to a treatment room, however few of them were complained with the delivery of health services.

Furthermore, majority of child caretakers 45% were said nurses, physicians, technicians, residents and new student's courtesies is good while few of them realized poorer courtesy of them as shown in table 5.

In-depth interview with health care providers in IGICH:

A total of 50 health service providers were interviewed in order to provide an insight of emergency center preventing issues for not coming of child caretakers, most frequent shared compliments, main

concerns/worries, perception of health care provider's suggestion and needs and what should be done to improve access and further utilization of emergency center by child caretaker and <5 children.

Majority of health service providers said that lack of medicines, low awareness, health provider's behavior, more crowding, security, transportation, wrong perception, existing of irrational referring system, going to local healer, economical issues and male dominant were the main problem for not using of health caretakers from emergency centers. High number of service providers thought that said the worries of child caretakers are unclear consequences followed by wrong perception and very few of them had concerns with the quality of health services.

Some of health service providers mentioned that trained health care providers, completeness of emergency medicine, required instruments with proper standard layout for emergency ward may grantee child caretaker satisfaction for using of emergency delivery health services. So, also most them have been suggested Ministry of Public Health (MoPH) and other related emergencies to provide them short and long term training for better provision of health service delivery with high standard level to Afghan children as shown in table 6 and figure 2.

Figures 2. Perception of health care providers on preventing issues with child caretaker for not coming to the emergency center

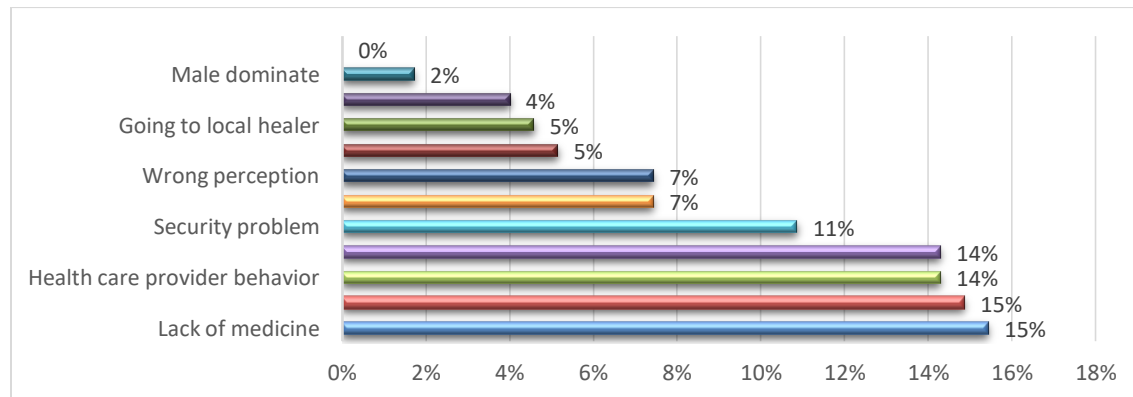


Table 6.: Perception of health care provider for the most frequently shared complaints by child caretaker concerning not coming to the emergency center

Frequent complaints	Number	%
Lack of medicine	32	34%
Health care provider bad behavior	27	29%
More crowding	23	25%
Existence of irrational referring system	11	12%

Under table charge request	0	0%
Main concern/worries		
Unclear consequences for the parent	45	73%
Wrong perception	16	26%
Low quality of health services	1	2%
Related issues hamper the use of emergency health delivery services		
Trained health care provider	34	36%
Complete emergency medicine	33	35%
Required emergency instrument	14	15%
Standard layout for emergency ward	13	14%
Health care providers suggestion from MoPH for the improvement emergency center		
Trained health care provider	50	26%
Regular monitoring and supervisory visits	43	22%
Short term fellowship	42	22%
Complete emergency medicine	26	13%
Long term fellowship	13	7%
Standard layout for emergency ward	12	6%
Required emergency instrument	9	5%

Discussion

Description of perception of child caretaker regarding emergency center.

Key findings of current study:

Knowledge on emergency center as dissenting order; 42% of them were know about oxygen delivery services while only few of respondents named other services

16%% (n=62) Transportation, 14%% (n=55) More crowding, 9% (n=36), 9% (n=35) Security, 8% (n=29) health care provider behavior, 6% (n=24) Male dominate, economical problem and wrong perception, 4% (n=14) Going to local healer and only few them were problem with existence of irrational referring system following by under table charges request by health care providers.

Worries of child caretakers for not using of emergency center:

majority of child caretakers had concerns about low quality of health services following by unclear consequences for the parents and then by wrong perception were they have.

Dissatisfaction of child caretaker with the delivery of health services.

As indicated that the number of child caretakers were not satisfied from the delivery of health services from emergency center due to lack of medicine 37%, bad behavior of health care providers 19%, same

us existence of irrational referring system and very few them were experienced under table charges request by health care providers.

Describing the perception of health care providers on the use of emergency center by child caretakers.

Based on health care providers Majority of health service providers said that lack of medicines, low awareness, health provider's behavior, more crowding, security, transportation, wrong perception, existing of irrational referring system, going to local healer, economical issues and male dominant were the main problem for not using of health caretakers from emergency centers. High number of service providers thought that said the worries of child caretakers are unclear consequences followed by wrong perception and very few of them had concerns with the quality of health services.

Some of health service providers mentioned that trained health care providers, completeness of emergency medicine, required instruments with proper standard layout for emergency ward may grantee child caretaker satisfaction for using of emergency delivery health services. So, also most them have been suggested Ministry of Public Health (MoPH) and other related emergencies to provide them short and long term training for better provision of health service delivery with high standard level to Afghan children.

Conclusions

Afghanistan at the moment is experiencing a lot of pressure on its resource due to a tremendous increases of <5 children vulnerabilities due to less of emergency or improperly equipped or standard centers. This has brought about a significant challenge for the country as more and more not enough trained health service providers in major cities in Afghanistan.

- As result of this study, it is clear that, child caretakers are not wearing for the emergency center use, and is still very high in IGICH and therefore, needs urgent need for the Afghanistan government, non-governmental organizations and other stakeholder in emergency centers to act swiftly towards reducing the vulnerability rate of its citizens in order to realize the Afghanistan MDGs and SDGs.
- We observed that, child caretakers are not willing for the emergency center use is dominant among child caretakers were experienced side effects of it.

- Health professionals especially field staff should be trained to provide an informed choice to child caretakers under five children and also adequate knowledge should be imparted regarding emergency centers.
- Similar studies to be done on respondents from post primary learning institutions, unmet need for emergency health center on its service delivery among child caretaker attending other health facilities providing the health services.
- Lastly, there should be coordination between public and private sector to provide adequate emergency medical and non-medical supplies.

References:

1. Afghanistan Health Survey (AHS), 2015
2. Afghanistan Mortality Survey (AMA), 2010
3. Afghanistan Demographic and Health Survey (ADHS), 2015
4. BMC's Health Survey Research Articles, 2017
5. Afghanistan National Hospital Survey, 2004 – 2005
6. International Journal of Advance Research (IJAR), 2010
7. National Risk and Vulnerability Assessment (NRVA): Institution Consultancy Services, European Union (EU), Ministry of Public Health (MoPH), ICON-Institute (2008).
8. World Health Statistics, 2017. Geneva, Switzerland: World Health Organization (WHO)
9. Afghanistan national health strategy 2016-2020
10. Indira Gandhi Institute of Child Health post graduate curriculum 2014
11. Pediatric Hospital Improvement, child and adolescent health directorate 2012
12. Emergency Trauma Assessment and treatment (ETAT) 2012
13. Pediatrics hand book WHO/EMRO 2010
14. Johns Hopkins Essential Package of Hospital Services 2010
15. Afghanistan Demographic Household Survey 2015
16. Basic Package of Health services 2010, MoPH Afghanistan \
17. Midpub report journal 2016
18. Health Management Information System 2011, Ministry of Public Health
19. Health Information Services for hospital packages 2012, Aghakhan Hospital
20. Pediatric Hospital treatment protocols 2015, IGICH, Afghanistan

List of tables

Table 2.: Destitution of problems preventing child caretakers from using emergency health services

Lack of medicine	68	18%
Transportation	62	16%
More crowding	55	14%
Security problem	36	9%
Low awareness	35	9%
Health care provider behavior	29	8%
Male dominate	24	6%
Economical problem	24	6%
Wrong perception	23	6%
Going to local healer	14	4%
Existence of irrational referring system	12	3%
Udder table charge request	3	1%

Table 3.: Main concerns or worries not letting child caretakers from use of emergency center

Low quality of health services	55	37%
Unclear consequences for the parent	48	32%
Wrong perception	46	31%

Table 4.: Distribution of unpleasant experiences by child caretaker had caused them not using the health delivery services from emergency centers (n=350)

Lack of medicine	86	37%
More crowding	56	24%
Health care provider bad behavior	43	19%
Existence of irrational referring system	43	19%
Under table charge request	3	1%

Table 5.: Childe caretaker satisfaction and wait time to get their children to a treatment room (n=350)

Good	181	52%
Very good	100	29%
Fair	61	17%
Poor	7	2%
Very poor	1	0%
Courtesy of staff (Nurses, physicians, technicians, residents, students)		
Good	157	45%
Very good	137	39%
Fair	46	13%
Poor	9	3%
Very poor	1	0%

Table 6.: Perception of health care provider for the most frequently shared complaints by child caretaker concerning not coming to the emergency center

Frequent complaints	Number	%
Lack of medicine	32	34%
Health care provider bad behavior	27	29%
More crowding	23	25%
Existence of irrational referring system	11	12%
Under table charge request	0	0%
Main concern/worries		
Unclear consequences for the parent	45	73%
Wrong perception	16	26%
Low quality of health services	1	2%
Related issues hamper the use of emergency health delivery services		
Trained health care provider	34	36%
Complete emergency medicine	33	35%
Required emergency instrument	14	15%
Standard layout for emergency ward	13	14%
Health care providers suggestion from MoPH for the improvement emergency center		
Trained health care provider	50	26%
Regular monitoring and supervisory visits	43	22%
Short term fellowship	42	22%
Complete emergency medicine	26	13%
Long term fellowship	13	7%
Standard layout for emergency ward	12	6%
Required emergency instrument	9	5%

List of charts

Figures 2. Perception of health care providers on preventing issues with child caretaker for not coming to the emergency center

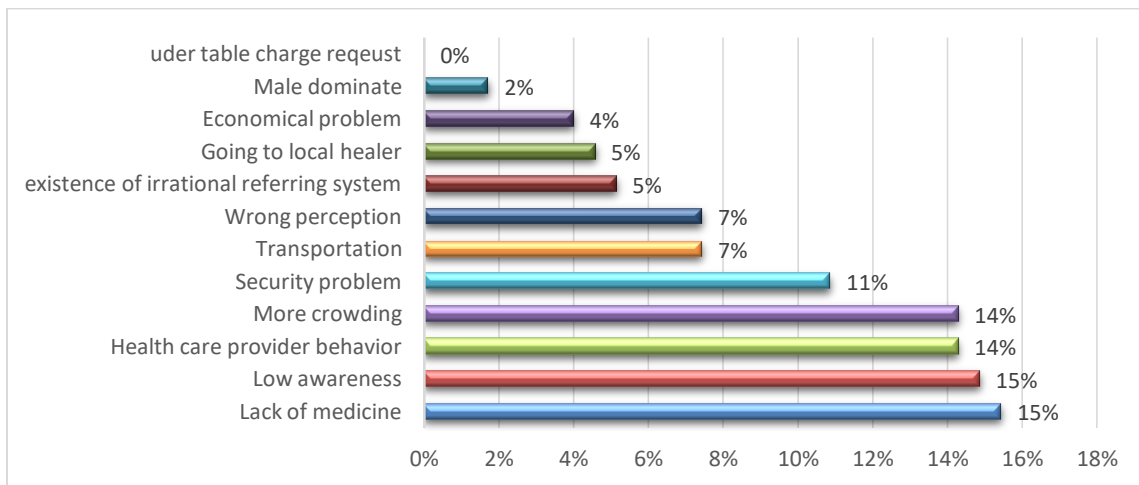


Table 1.: Kind of transportation have you used for arriving to the emergency center

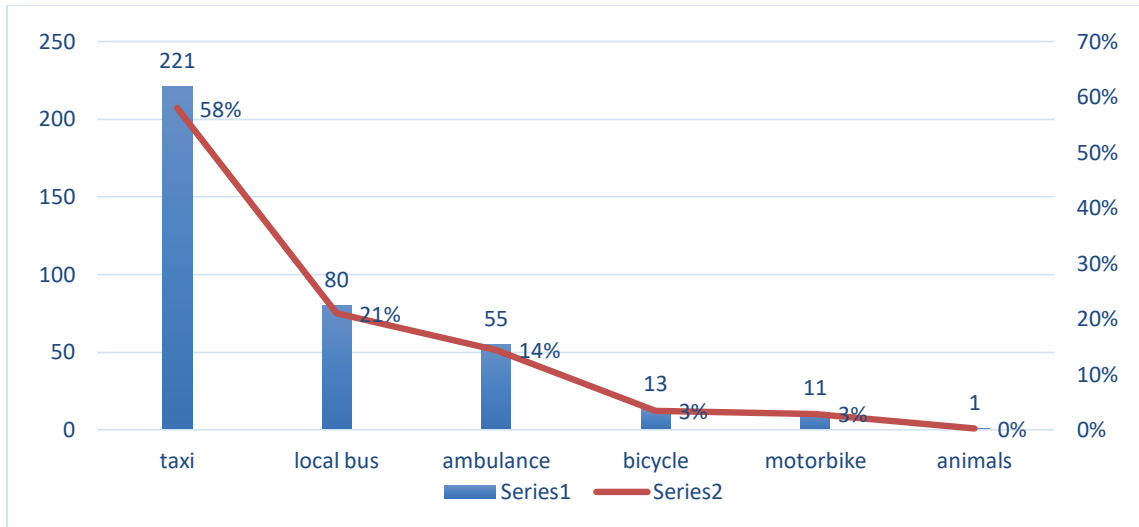
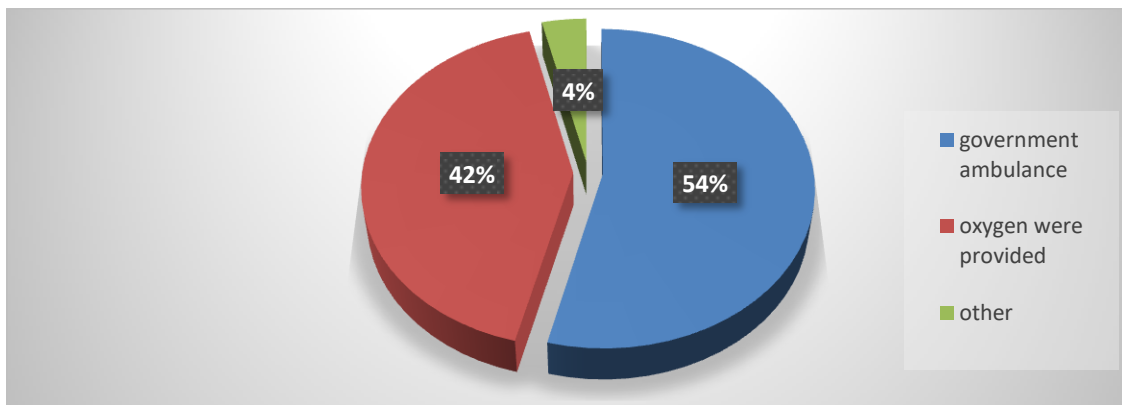


Figure 1. Distribution of respondents known about the emergency health services



Annexures

Annex 1. Schedule for study period.

Activities/Months	M1	M2	M3	M4	M5	M6
Develop and submit draft outline proposal	X					
Revise and submit the final outline proposal	X					
Application for ethical approval	X					

Submission of questionnaire		X				
Ethical approval		X				
Data collection and initial analysis			X	X		
Draft methodology and result chapters					X	
Draft discussion chapter					X	
Final draft						X
Final submission						X

Annex 2. : Checklist for In-Depth Interview with Health Professional Staff

- **Welcome and thank the participant**
- **Introduce yourself**
- **Introduce topic of research**
- **Read the consent form and take the verbal consent**
- **Start the questions**
 - a. Respondent's number: _____
 - b. Hospital Code: _____
 - c. Date: / /
 - d. Time Interview Started: _____
 - e. Time Ended: _____

1. Could you please share your perception, as a health care provider, with regard to barriers on the IGICH section of emergency center?
 - a. What problems do you think might prevent child caretaker for not coming to the emergency center?

- | | | |
|-------|--|--------------------------|
| I. | Health care provider behavior | <input type="checkbox"/> |
| II. | Transportation | <input type="checkbox"/> |
| III. | Wrong perception | <input type="checkbox"/> |
| IV. | Low awareness | <input type="checkbox"/> |
| V. | Security problem | <input type="checkbox"/> |
| VI. | Male dominate | <input type="checkbox"/> |
| VII. | Going to local healer | <input type="checkbox"/> |
| VIII. | Economical problem | <input type="checkbox"/> |
| IX. | Lack of medicine | <input type="checkbox"/> |
| X. | More crowding | <input type="checkbox"/> |
| XI. | Under table charge request | <input type="checkbox"/> |
| XII. | Existence of irrational referring system | <input type="checkbox"/> |

b. What are the most frequently shared complaints by child caretaker concerning not coming to the emergency center that you are thinking in the future?

- | | | |
|------|--|--------------------------|
| I. | Lack of medicine | <input type="checkbox"/> |
| II. | Health care provider bad behavior | <input type="checkbox"/> |
| III. | More crowding | <input type="checkbox"/> |
| IV. | Under table charge request | <input type="checkbox"/> |
| V. | Existence of irrational referring system | <input type="checkbox"/> |

c. What are the most important concerns/worries of child caretaker in not coming to the emergency center on time while being advised by you?

- | | | |
|------|-------------------------------------|--------------------------|
| I. | Wrong perception | <input type="checkbox"/> |
| II. | Low quality of health services | <input type="checkbox"/> |
| III. | Unclear consequences for the parent | <input type="checkbox"/> |

d. What issues, relating with service delivery, do you think might hamper use of emergency health delivery services?

- | | | |
|------|------------------------------------|--------------------------|
| I. | Trained health care provider | <input type="checkbox"/> |
| II. | Standard layout for emergency ward | <input type="checkbox"/> |
| III. | Required emergency instrument | <input type="checkbox"/> |
| IV. | Complete emergency medicine | <input type="checkbox"/> |

- e. What do you suggest the health sector or other sectors should do to improve emergency center uses by children age particularly <5 age in Afghanistan?
- | | | |
|------|---|--------------------------|
| I. | Trained health care provider | |
| II. | Standard layout for emergency ward | <input type="checkbox"/> |
| III. | Required emergency instrument | <input type="checkbox"/> |
| IV. | Complete emergency medicine | <input type="checkbox"/> |
| V. | Regular monitoring and supervisory visits | <input type="checkbox"/> |
| VI. | Short term fellowship | <input type="checkbox"/> |
| VII. | Long term fellowship | <input type="checkbox"/> |
- **Close the interview and thank the participant**

Annex 3.: Checklist for Interview with Child caretaker

- **Welcome and thank the participant**
- **Introduce yourself**
- **Introduce topic of research**
- **Read the consent form and take the verbal consent**
- **Start the questions**

- a. Respondent's number: _____
- b. Hospital Code: _____
- c. Date: / /
- d. Time Interview Started: _____
- e. Time Ended: _____

1. How old are you? _____
2. Are you child caregiver? Yes No
3. Did someone tell you about the emergency center? Yes No

4. Could you tell me which kind of transportation have you used for arriving to the emergency center?

- I. Taxi
- II. Local bus
- III. Animals
- IV. Motorbike
- V. Bicycle
- VI. Ambulance

5. Could you tell me how long were you wait time to reach in the emergency Center in Minutes? _____

6. Do you know about the emergency health delivery services? Yes No

If yes, can you name them?

- I. Government ambulance
- II. Oxygen were provided
- III. Other _____

7. Are you previously has used any emergency health delivery services? Yes
No if Yes :

8. Follow- up questions should be asked otherwise escape to Q8.

Follow-up questions:

- I. When did you used?
- II. How frequently you have done you used?
- III. Any adverse effects associated with the use
of emergency health delivery services?

9. Are you wearing to use the emergency health delivery services? Yes No

10. Could you tell me don't you use any other health delivery services of this emergency center in the future? Yes No

if yes follow it otherwise close the interview.

a. What are the problems preventing you from using emergency health services?

- I. Health care provider behavior
- II. Transportation
- III. Wrong perception
- IV. Low awareness

- V. Security problem
 - VI. Male dominate
 - VII. Going to local healer
 - VIII. Economical problem
 - IX. Lack of medicine
 - X. More crowding
 - XI. Under table charge request
 - XII. 1Existence of irrational referring system
- b. What are your concerns or worries not letting you use of emergency center?
- I. Wrong perception
 - II. Low quality of health services
 - III. Unclear consequences for the parent
- c. What unpleasant experiences have caused you to stop using the health delivery services from emergency centers?
- I. Lack of medicine
 - II. Health care provider bad behavior
 - III. More crowding
 - IV. Under table charge request
 - V. Existence of irrational referring system
- d. What are the things you think are required in order for you to be better able to use from the emergency delivery services for the purpose of your child being healthy?
- -
 -

How satisfied you were on each of the following	Very Poor	Poor	Fair	Good	Very Good
Time you had to wait before you were brought back to a treatment room	1	2	3	4	5

Courtesy of staff (Nurses, physicians, technicians, residents, students)	.11	1	2	3	4	5
--	-----	---	---	---	---	---

- **Close the interview and thank the participant**

Annex 4.: Consent form for interviews with pregnant women attending selected health facilities

Introduction

I am Dr. Sayed Asadullah Sadaat, student of Master of Public Health at University of Maulana Azad. I am the Principal Investigator of current research on “Study, Knowledge, Attitude and practices of children caretaker regarding routine immunization in Afghanistan”. You need to understand the following information to make an informed choice about participating in this research.

Background information

The recent Afghanistan Demographic Health Survey (DHS) conducted in 2015, revealed general and significant improvement in all of the national health indicators over the past decade or more precisely newborn health and survival depend on the care provided to the under 5 years’ age. Under 5 year age care is crucial element in reducing child mortality, it’s often receives less or poor attention and the less than one year mortality rate is 45 per 1000 live birth while significant percentage of this mortality is happening during the neonatal period, based all the improvement in health system, emergency care at facility level is immature and not fully cover the needs of emergency conditions, according to WHO data 10-20% of childhood’s illness needs hospitalization and emergency care.

Purpose of this research study

To identify factors influencing existing gap of emergency care centers to reduce the child mortality and morbidity rate among children less than 5 years of age in Indira Gandhi Institute of Child Health.

Procedures

The study will be conducted in emergency in/outpatient departments of IGICH in Kabul province. Selected center located in 10th street of Wazir Mohammad Akbar Khan in front of Sardar Mohammad Dawood Khan military hospital 10th district of Kabul city. Selecting less than < 5 years’ age children from urban and sub-urban of entire the country will help to have both the rural and urban perspectives on the issue. Although, in Afghanistan’s Emergency Triage Assessment and Treatment (ETAT) program, is the highest level for delivery of emergency of Health Services including morbidity and mortality of children health services.

Possible risks or benefits

Except granting your time, there is neither risk nor direct benefit to you in this study. However, the results of the study may help us to develop more effective policies and strategies.

Sharing the Results

If you agree we will take your contact address to send you summary of the findings before it is made available to the public.

Right of refusal to participate and withdrawal

You are free to choose or to refuse to participate in the study without any loss of benefit which you are otherwise entitled to. You may also withdraw any time from the study or refuse to answer questions if you don't feel comfortable.

Confidentiality

Nobody except Principal Investigator will have an access to information provided by you. Your name and identity will also not be disclosed at any time.

Available Sources of Information

If you have any questions you may contact the Principal Investigator Dr. Sayed Asadullah Sadaat at University of Maulana Azad by using following options:

Cell #: +93(0) 773 030 405

Email: igichkabul@gmail.com

Authorization

I have understood this consent form. I volunteer to participate in this research. I understand that my consent does not take away any legal rights in the case of negligence or other legal fault of anyone who is involved in this study. I further understand that nothing in this consent form is intended to replace any applicable national or local laws.

Annex 5.: Consent Form and Research Subject Information Sheet 1:

Consent Letter from Site Supervisor (MPH 2016-18)

Date: October, 2017

To,
The Head
Department of Public Health,
Maulana Azad University
Jodhpur, Rajasthan

Sub: Consent Letter to be a site supervisor for project/ thesis of Dr. Sayed Asadullah Sadaat

Dear Madam,

This is in reference to the above mentioned subject. In this regard I wish to inform you that I am willing to accept Dr. Sayed Asadullah Sadaat as my student for guiding his project/thesis work leading to the MPH degree from Maulana Azad University, Jodhpur. I will guide him for the entire duration of his project/thesis work and will supervise him throughout the process.

Thanking you

Yours faithfully

Signature

Dr. Najibullah Safi

Program Manager, Health System Development
World Health Organization (WHO), Kabul, Afghanistan

+ 93 (0) 777890835

najibullah.safi@gmail.com