



## INFORMATIVE STUDY TO EXAMINE REASONS BEHIND VACCINE REFUSALS, RESISTANCES, AND BARRIERS



MINISTRY OF HEALTH  
OF THE KYRGYZ REPUBLIC



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**Informative Study to Examine Reasons behind Vaccine Refusals, Resistances, and Barriers. /**  
A. Namazova, L. Minbaeva. – Б: 2018 – pages.

The publication presents results of a qualitative study which examined reasons behind vaccine refusals, resistances, and barriers. It complements the quantitative data on knowledge, attitude and practice on immunization, collected in 2017. The research was done by “Rebikon” Company for the Ministry of Health of the Kyrgyz Republic with technical support from UNICEF under the Global Alliance for Vaccines and Immunisation (GAVI) funding.

It was carried out in January 2018 with four types of respondents: mothers of under 5 children, fathers of under 5 children, religious leaders, and healthcare professions. The data informed development of communication strategy on vaccination for 2018-2021 and can be further used by health promotion organisations in Kyrgyzstan to address vaccination hesitancy.

The opinions expressed in this document do not necessarily reflect the policies or views of the United Nations Children’s Fund and the organization does not bear any responsibility.

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## ABBREVIATIONS

AEFI	Adverse events following Immunization
BCG	Bacillus Calmette-Guéri: vaccine to tuberculosis, prepared from strain of weakened live bovine tubercle bacillus
DPT	diphtheria, pertussis and tetanus vaccine
FGD	Focus Group discussion
GAVI	Global Alliance for Vaccines and Immunization
HP	HealthCare Professionals
HSSA	Strengthening Health Systems
IDI	in Depth Interview
IM	Internal Migrant
IPC&C	Interpersonal Communication and Counselling
KR	Kyrgyz Republic
MMR	Measles, mumps and rubella vaccine
MOH	Ministry of Health
RCI	Republican Centre for Immunization
RI	Routine Immunization
RL	Religious Leaders
UNICEF	United Nations Children's Fund
VPD	Vaccine Preventable Diseases
WHO	World Health Organization



## ACKNOWLEDGMENT

The Ministry of Health of the Kyrgyz Republic expresses its gratitude to the UNICEF Office in Kyrgyzstan, the Health Systems Strengthening Project, the Global Alliance for Vaccines and Immunization (GAVI HSS) for providing technical support for this study and supporting the immunization program in Kyrgyzstan.

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The Ministry of Health would like to express particular thanks to the heads of healthcare facilities; healthcare professionals at family doctor groups, rural health points, territorial hospitals and maternity houses; immunologists and other healthcare professionals; and also to the leaders of community and religious organizations that provide support and invaluable assistance in organizing and conducting the study on the ground.

The Ministry of Health thanks everyone who participated in the study for showing their interest in the study, their trust and their patience. The study results, opinions and recommendations are important for the Ministry to improve the quality and effectiveness of immunization services.

Deepest thanks and appreciation for UNICEF Kyrgyzstan international consultant Marwa Kamel, UNICEF Kyrgyzstan, Senior Communication Consultant, and Dr. Dragoslav Popovic, Senior Health Consultant and Aigul Ilyasova, UNICEF Consultant for providing technical oversight and guidance throughout the development and implementation of this study.

A huge thanks to the study company «Rebikon» that planned and executed the survey. Special thanks to the company director Namazova A. and the data processing specialist L. Minbaeva, and the team of interviewers for the timely and well-executed work in achieving the goals and objectives of the research.

This study would not have been possible without the generous contributions of Global Alliance for Vaccines and Immunization.



## EXECUTIVE SUMMARY

In Kyrgyzstan, there is an established system of immunization with coverage rates of more than 96% of the population for the main types of antigens. The strong immunization program in the country has made it possible to achieve high coverage for vaccine preventable diseases (VPDs) in the country, leading to significantly reducing the incidence of infections such as diphtheria, tetanus, whooping cough, and hepatitis B.

During the past few years and despite the high nationwide immunization coverage, there has been a growing trend of refusals in different regions of the Kyrgyz Republic (KR). The Ministry of Health (MOH) launched the «Strengthening Health Systems» with the support of UNICEF to increase the credibility of vaccination among the general population and, in particular, among hard-to-reach groups of people.

The Ministry of Health represented by the Republican Centre for Immunization (RCI) acknowledging the growing number of refusals, decided to carry out an informative study to further understand the reasons for vaccine refusals, and barriers to immunization behaviors.

RCI together with UNICEF and under the Global Alliance for Vaccines and Immunisation (GAVI) funding contracted a local specialized research company to carry out a qualitative study to examine reasons behind vaccine refusals, resistances, and Barriers. The study was carried out in January 2018 with four types of respondents: Mothers of under 5 children, fathers of under 5 children, religious leaders (RL), and Healthcare professions(HPs). The study was carried out with people who are opponents of vaccination (apart from the healthcare professionals), thus negative attitudes predominated. The study revealed a number of important barriers towards vaccination as follows:

- Although there is a high level of knowledge of vaccination among study respondents, awareness is extremely superficial. The prevailing view among the study respondents is that the risk of contracting vaccine-preventable diseases is the same for vaccinated and unvaccinated children is based largely on information about specific cases in which children contracted diseases they had been vaccinated against. Moreover, there is a common belief that unvaccinated children are more protected because vaccination reduces immunity.
- There is a conviction that the children's inherited immunity and alternative methods can provide effective protection against diseases
- Everything is in God's hand, and vaccines cannot save lives, but God can
- VPDs do not pose a serious risk to children and the risk of infection is low
- Fear of negative reactions and post-vaccine complications, based on information received from various sources, as well as personal experience
- Some Healthcare professionals are also against vaccination
- Some respondents believe that vaccination is part of a pharmaceutical business aiming to make profits from creating a dependency on vaccines
- Some respondents see vaccination as an instrument towards a conspiracy against Muslims

The qualitative study did not reveal any open contradiction between religion and vaccination. Even information that vaccine composition include prohibited ingredients was not conclusive and was perceived as rumours and were not listed as reasons for study respondents to refuse vaccination. However, some people not wanting to directly attribute refusals due to religious reason, believe that several postulates are sometimes interpreted as an indirect prohibition of vaccination:





- A person has immunity, capable of resisting external factors “invasions”. Vaccination is an attempt to create an “improved version”, which cannot be done because a person is created in a perfect way.
- The vaccine causes harm, because it contains prohibited substances. Muslims are not allowed to harm their health, so vaccination should be refused.
- A big number of RL do not support vaccination, and none speak publicly in favour of vaccination

The qualitative study confirmed the finding of a quantitative survey that the main reason for refusing vaccinations is the fear of side effects. The overwhelming majority of study respondents said that their refusal to vaccinate had no connection with their religious beliefs, but it is believed that there is an intention not to mention religion as a reason and keep it as a hidden reason.

All the study respondents have worries about vaccination. The main points of concern are:

- Side effects and post-vaccine complications
- Long-term negative effects of vaccination
- Doubts about vaccine quality
- Doubts about the qualifications of healthcare professionals, worries that they do not follow the rules for administering vaccines
- Lack of trust in the vaccination procurement process and storing vaccines
- Safety concerns about some components of vaccines
- Too many vaccinations received by children in the first years of life
- Lack of accountability from the side of healthcare professionals and lack of guaranteed from the KR in case any complications arise
- Lack of information about the procedure for testing vaccine quality in Kyrgyzstan

It should be noted that despite the fact that all the HPs had positive attitudes towards vaccination, several respondents noted a lack of clear immunization procedures, and expressed opinion about the immunization calendar, and views to reduce number of vaccines in the calendar and delay the administration of vaccines.

Many study respondents who were refusing to vaccinate referred to the opinions of healthcare professionals. HPs who participated in the study confirmed that among their colleagues there are opponents of vaccination, but in general they do not discuss their views with their colleagues. HP’s opinion that religious beliefs are the main reason for refusing vaccination which differs from the opinion of participants from other target groups.

Study participants living in Osh city and Jalalabad oblast noted that law enforcement agencies are being used to influence parents refusing to vaccinate children. In Batken oblast, parents are forced to certify their refusal of vaccination by writing. It should be noted that the practice of making vaccination compulsory may have the opposite effects, while full-scale organized communication work can yield sustainable positive result. Parents who make a conscious decision about vaccination on the basis of qualitative information are less susceptible to rumours. Study respondents repeatedly expressed the opinion that they could reconsider their attitudes to vaccination if they received full and truthful information about immunization.



## I. INTRODUCTION

The Ministry of Health (MoH) of the Kyrgyz Republic(KR) is the central authority responsible for managing public healthcare in the country. Its main tasks include healthcare and health promotion; sanitary and epidemiological welfare; health financing and economics; healthcare system staffing; provision of medicines to the population; medical science and education; and compulsory medical insurance.

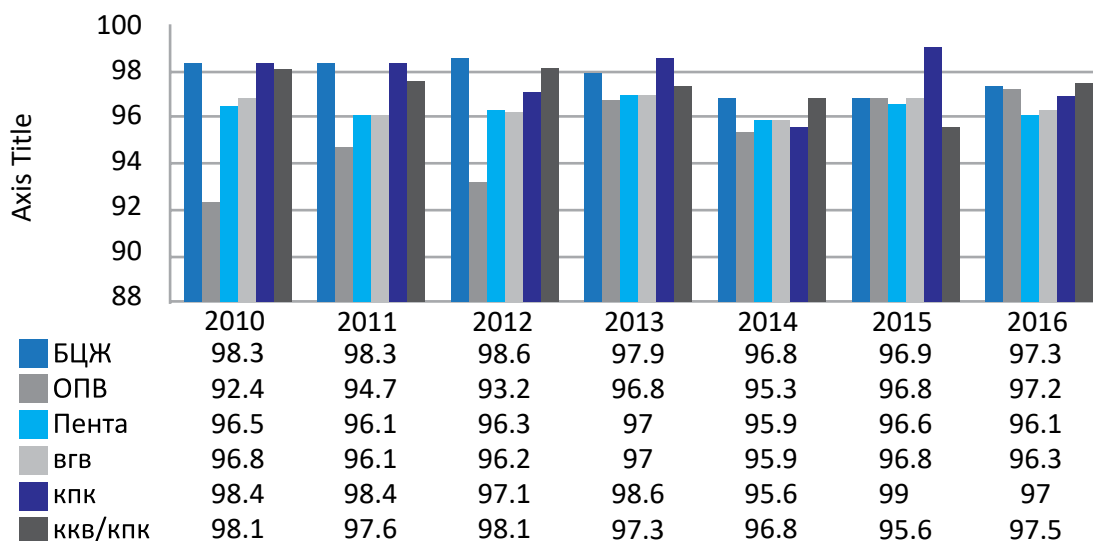
**Table 1:** KR Immunoprophylaxis Programme

Antigens	Vaccine
Diphtheria	DPT3+HBV+HIB
Tetanus	DPT3+HBV+HIB
Pertussis	DPT3+HBV+HIB
Tuberculosis	BCG
Epidemic parotitis	MMR
Hepatitis B	DPT3+HBV+HIB
Poliomyelitis	bOPV
Measles	MMR
Rubella	MMR
Hib infection	DPT3+HBV+HIB PCV
Pneumococcal infection	PCV

The Republican Centre for Immunization (RCI) is the main responsible body for immunization services in the country. The center is responsible for planning and following up on Routine immunization(RI) services, building systems for immunization at the national and local levels, monitoring and tracking vaccine supply and cold chain. All vaccines are provided free of charge to all citizens. Immunization is held against 11 infections using 9 types of vaccines as shown in (table1.)<sup>1</sup>.

### A. Immunization Coverage Rates

According to the RCI, Routine Immunization (RI) coverage rates for all antigens were over 96% in 2016.<sup>2</sup>



1 Zh. Zhumagulova, Key Strategic Directions of Immunoprophylaxis—Kyrgyzstan, Republican Center for Immunoprophylaxis, 2017.

2 Zh. Zhumagulova, Key Strategic Directions of Immunoprophylaxis—Kyrgyzstan, Republican Center for Immunoprophylaxis, 2017.



Kyrgyzstan enjoys very high immunization rates, even though these immunization coverage rates are extremely high, the system is witnessing a growing trend of refusals; as well as clusters of lower immunization coverage at some of the district levels. According to RCI records the below tables summarizes the number of vaccine refusals and reasons for 2016 and 2017.

## B. Vaccine refusals for VPDs in the Kyrgyz Republic 2016/2017

Number of vaccine refusals by region of the Kyrgyz Republic (2016 – 2017)<sup>3</sup>

	Total number of refusals		Doubts about safety of immunization		Religious convictions		Lack of information about benefits of immunization		Other reasons	
	2016	2017	2016	2017	2016	2017	2016	2017	2016	2017
Bishkek city	1,996	3,601	512	1,008	1,377	1,838	5	77	102	678
Chuy oblast	188	1214	25	359	135	760	3	29	25	66
Osh city	264	168	65	49	190	95	3		6	24
Talas oblast	86	357		33	86	324				
Naryn oblast	40	126			40	126				
Issyk Kul oblast	241	562	15	35	226	512		5		10
Osh oblast	859	387	84	23	766	335	5	7	4	22
Jalalabad oblast	556	992		60	556	913				19
Batken oblast	381	498			381	498				
Total	4,611	7905	701	1,567	3,757	5,401	16	118	137	819
Percentage of total			15.2	19.8	81.4	68.3	0.3	1.5	3	10.3

**Table 3.** Vaccination Coverage rates for children by antigen<sup>4</sup>

	2013	2014	2015	2016	2017
BCG	97.9	96.8	96.9	97.3	97
OPV-3	96.8	95.3	96.8	97.2	94.5
Penta-3	97.0	95.9	96.6	96.1	95.1
Hepatitis B	97.0	95.9	96.8	96.3	95.1
PCV-3					90.7
MMR-1	98.6	95.6	99.0	97	95.9
MM/MMR-2	97.3	96.8	95.6	97.5	95.4

The Ministry of Health is keen to understand the real reasons behind vaccine refusals, and thus with the support of UNICEF commissioned Rebikon studycompany to plan and implement a qualitative study to examine reasons behind vaccine refusals, resistances, and Barriers.

<sup>3</sup> Form 5 of the State Statistical Reporting "Report on the State of Vaccination Work", section 8.

<sup>4</sup> Отчетные данные РЦИ



## II. STUDY OBJECTIVES

The main aim of the qualitative study was to reveal the reasons behind vaccine refusals, get a deeper understanding of rumours, obstacles and barriers to vaccination

The study was planned to get a deeper understanding and analysis of the below points:

- Better understanding of the reasons behind refusing to immunize children or doubting the importance of vaccination
- Reveal barriers and reasons for doubting vaccination, and explore motivations that could help audience groups make the right decision to have their children vaccinated;
- Determine the main stereotypes and incorrect information that is used by target groups, and also the sources of this information;
- Identify the main sources of information about immunization, as well as the groups of individuals who influence parental decisions on immunization;
- Identify the main individual and system barriers to improving immunization, including healthcare professionals' skills to effectively advise and communicate with parents about the benefits of vaccination;
- Identify approaches and actions that can help parents make informed decisions in favour of vaccination.



### III. SAMPLE SIZE AND METHODOLOGY

Between 8 and 25 January 2018, a qualitative study was conducted to reveal the reasons for refusals to vaccinate and understand the obstacles and barriers. The study methods included focus groups and in-depth interviews.

A total of 166 people took part in the study, representing four target groups:

- Mothers of children aged under five years who are oppose vaccination or have doubts about the need to vaccinate: 109 individuals. Including mothers who do not have permanent registration in their places of residence (internal labour migrants 28 individuals).
- Family members who influence mothers concerning the immunization of children aged under five years. Fathers of children under five years: 15 individuals; and other family members: 8 individuals.
- 17 Religious leaders
- 17 Healthcare professionals

The study findings are not representative. The report reflects the perspectives of the participants who participated in the study. The study used a mix of Focus Group Discussions and In-Depth Interviews with several categories of respondents. A total of 21 focus groups were conducted as follows

Respondents category	Number of FGDs	Region & respondents characteristics
<b>Internal labour migrants</b>	2	New-built settlements in Bishkek city
<b>Internal labour migrants</b>	2	Osh city
<b>Mothers with children aged under five years who are opposed to vaccination</b>	13	7 FGs – one with mothers in each oblast 2 FGs- mothers in Bishkek and Osh cities 1 FG – highly-educated mothers (city) 2 FGs – mothers adhering to Islam (1 urban, 1 rural) 1 FG – mothers who do not trust healthcare professionals
<b>Fathers opposing vaccination</b>	3	1 – adherents of Islam in Osh city 1 – highly educated 1 - doubters
<b>Other persons providing care for children aged under five who oppose vaccination</b>	1	Bishkek city
<b>Total FGDs</b>	21	

Each of the FGDs included between six- eight individuals, to ensure that all respondents could express their opinions about issues raised during the discussion. The duration of each focus group ranged between 2 to 2.5 hours. All the focus groups were recorded on audio devices for subsequent data processing.

A total of **40 in-depth interviews** were conducted as per the below table:



Participants	Number	Region & respondent’s characteristics
Internal labour migrants	2	New-built settlements in Bishkek city
Internal labour migrants	2	Osh city
Mothers and persons providing care for children aged under five who oppose vaccination	2	Bishkek and Osh cities
Healthcare professionals	17	One from each of the 7 oblasts 2 – Bishkek and Osh cities 1 – representative of a private healthcare centre 2 – neurologist 1 – nurse, opposing, young, inexperienced 1 – neonatologist from a maternity house 1 – obstetricians from a hospital 1 – family doctor from a family medicine centre 1 - allergist
Religious leaders	17	7 – oblasts 2 – Bishkek and Osh 3 – women’s leaders 3 – imam, Islamic missionaries 2 – trained in madrassa or other religious educational institution
<b>Total IDIS</b>	<b>40</b>	

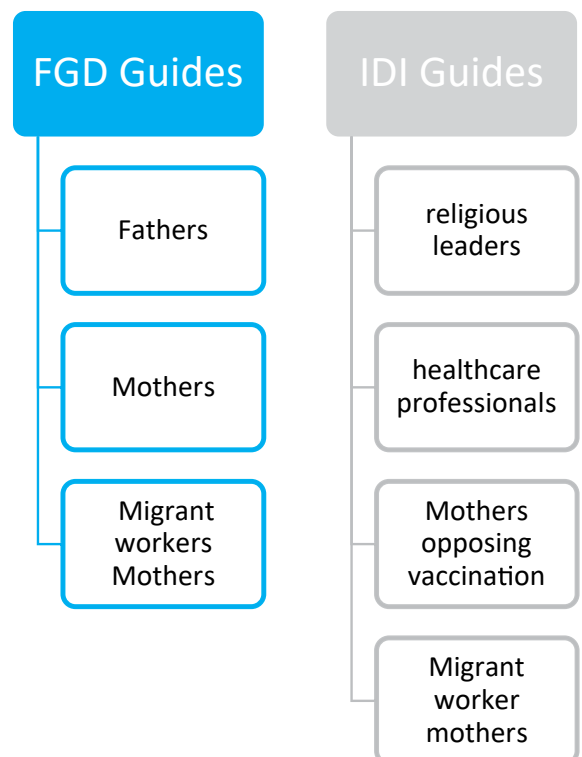
The Average length of each in-depth interview was around 1 hour; to ensure that respondents are able to concentrate and provide the needed information and engagement. All the in-depth interviews were recorded on audio devices for subsequent data processing and analysis.

**a. Preparation of survey tools and fieldwork**

Moderation guides and interview guides were developed including a list of topics for discussion. The guides were reviewed by UNICEF and members of the working group of the Ministry of Health of the Kyrgyz Republic. A total of seven guides were developed:

**b. Selection and training of study team**

Close attention was paid to the selection and training of moderators and interviewers. Moderators selected to conduct the qualitative informative study were all qualified and experienced in conducting qualitative studies and all were fluent in Russian and Kyrgyz.



Before the fieldwork began, training was conducted for the moderators and interviewers to familiarize them with the study aims, moderation guide and tasks and so they could carefully understand and get good handle of the instruments.

### **c. Ethical norms**

Before conducting the fieldwork, the entire study proposal including the methodology and questionnaires were submitted to the Bioethics Committee under the Ministry of Health of the Kyrgyz Republic “the Ethics Review Commission” for evaluation and approval to conduct the research.

All stages of the study followed the following rules:

- Only people above the age of 18 years were invited to participate in the study.
- Participation was voluntary.
- Respondents were informed about the aims and objectives of the research.
- All the information received during the study is confidential. The obligation to maintain confidentiality applies to all members of the study team with access to the information, including interviewers, supervisors and technical staff. All employees of the company engaged in the project signed non-disclosure agreements.
- The Client is the owner of all the information received during the study (questionnaires, lists, route registration forms and so on).
- The selection of respondents was conducted strictly in accordance with the criteria described in this methodology.
- When selecting respondents, individuals were not excluded on religious, ethnic or any other grounds not defined in the methodology.
- All files containing information received during the study is stored on a hard drive in Rebikons office, access to which is protected by a password known only to the data processing specialist.
- When preparing reports, all materials cited verbatim and borrowed from other documents (reports, legislative documents, etc.) are accompanied by references to the source.
- All computers on which data is processed are protected by unique passwords, which will change every two weeks. During data processing, a limited number of employees (data processing specialist, analyst) have access to them. Forms of consent with the personal data of the respondents are stored on paper in a safe. The names of the respondents were replaced with codes, and only the data processing specialist has the encryption key and password to access the file.
- After the Client accepts the work, all data, including consent letters and primary data files, will be handed back to UNICEF

### **d. Management of the study**

The coordinating body for developing and conducting the study was the Ministry of Health Working Group, established by Ministry of Health Decree 348 of 25 April 2017

The Working Group included heads and leading specialists from structural divisions of the Ministry of Health - the Republican Immunoprophylaxis Centre, the Republican Centre for Health Promotion, the National Centre for Maternal and Child Health, the Department for Disease Prevention, the State Sanitary and Epidemiological Service, and the Ministry of Health Press Service – as well as partners: the State Commission for Religious Affairs under the President, civil society and international



organizations: GAVI, UNICEF and WHO Europe Country Office. The Public Health Division of the Ministry of Health played the leading role.

Planning and implementation of every stage of the study was reviewed, agreed and approved with the Working Group members, taking into account the priorities and challenges of the healthcare system in the field of immunization.





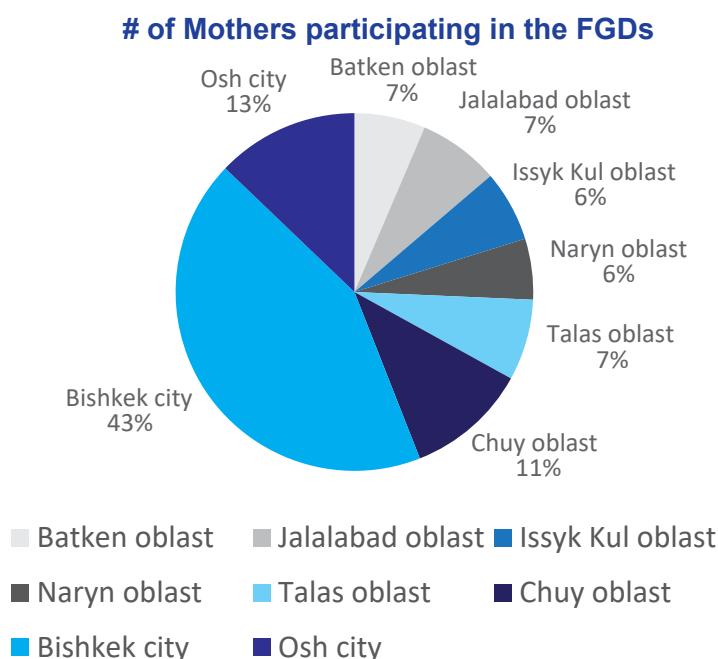
## IV. PROFILE OF RESPONDENTS

### a. Mothers of children under 5 years and labor migrants

A total of 109 mothers of children aged under five years who are either against vaccination or doubtful about the need for it took part in the qualitative study.

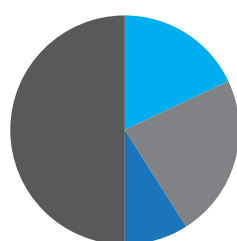
- 28 mothers were in the category “internal labor migrants” – lacking permanent registration in their places of residences having moved to Bishkek or Osh city in search of work.
- 81 mothers were in the general categories of caregivers of children below 5 years from different regions

The geographical distribution of respondents by region are given chart. *Distribution of participants by oblast and Bishkek and Osh cities*



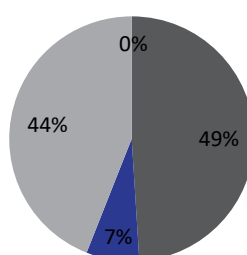
The below charts showcase the age of mothers who participated in the FGDs, and their level of education. The majority of mothers (81 per cent) were engaged in household duties, while the rest had paid work.

**Percentage of all mothers in the age group**



■ 19-28 years ■ 29-39 years ■ 40+ years ■ Total

**Distribution of participants by educational level**



■ Educational attainment of participants  
 ■ Higher / incomplete higher education  
 ■ Specialized secondary education  
 ■ Secondary education



### b. Fathers and other influencers of children under five years of age

A total of 15 fathers of children aged under five years took part in the study (residents of Bishkek and Osh cities), along with eight influencers (grandmothers, aunts and sisters) living in Bishkek city. The average age of the fathers was 34 years and of influencers average age was 54 years.

#### *Distribution of participants by age group*

Age of participants	Percentage of all fathers	Percentage of influencers
19-28 years	33%	0%
29-39 years	47%	25%
40+ years	20%	75%
<b>Total</b>	<b>100%</b>	<b>100%</b>

#### *Distribution of participants by level of educational*

Educational attainment of participants	Percentage of all fathers	Percentage of all other persons
Higher / incomplete higher education	47%	63%
Specialized secondary education	0%	25%
Secondary education	53%	13%
<b>Total</b>	<b>100%</b>	<b>100%</b>

All fathers who took part in the study had paid work, while caregivers were mostly retirees

### c. Religious leaders

Seventeen religious leaders took part in the study from all regions of Kyrgyzstan: nine female Religious leaders and eight males religious leaders, average age of RL was 44 years.

#### *Distribution of participants by oblast*

Region	Number of participants
Batken oblast	1
Jalalabad oblast	1
Issyk Kul oblast	2
Naryn oblast	1
Osh oblast	1
Talas oblast	1
Chuy oblast	2
Bishkek city	6
Osh city	2
<b>Total</b>	<b>17</b>

#### *Distribution of participants by age group*

Age of participants	Percentage of all participants
19-28 years	0%
29-39 years	75%
40+ years	25%
<b>Total</b>	<b>100%</b>



Fifty-three per cent of participants attended higher education, while the rest had either secondary or specialized secondary educational education. Six participants had received religious education.

#### d. Healthcare professionals

Seventeen healthcare professionals took part in the study from all of Kyrgyzstan's regions, including paediatricians, family doctors, neonatologists, neurologists, immunologists, allergists and nurses.

##### *Distribution of participants by oblast and Bishkek and Osh cities*

Region	Number of participants
Batken oblast	1
Jalalabad oblast	1
Issyk Kul oblast	2
Naryn oblast	1
Talas oblast	1
Chuy oblast	3
Bishkek city	6
Osh city	2
Total	17

##### *The average age of the participants was 49 years*

##### *Age of participants*

Age of participants	Percentage of all participants
19-28 years	7%
29-39 years	73%
40+ years	20%
Total	100%



## V. STUDY FINDINGS

### A. AWARENESS OF VACCINATION

#### A1. Mothers of children under five years of age

Despite the fact that all mothers who participated in the study had heard of vaccination, their level of awareness varied significantly. Some of the mothers (mainly those with higher education) revealed high knowledge of the need for vaccination and of the different antigens included in the vaccination schedule in Kyrgyzstan. However, most of the respondents had basic understanding that “vaccination is an injection against a disease”. Many of the women did not know the names of VPDs or of the risks posed by contracting those diseases.

*“I think that vaccination can prevent less serious viruses, but when a serious illness occurs they will not help anyway.”*

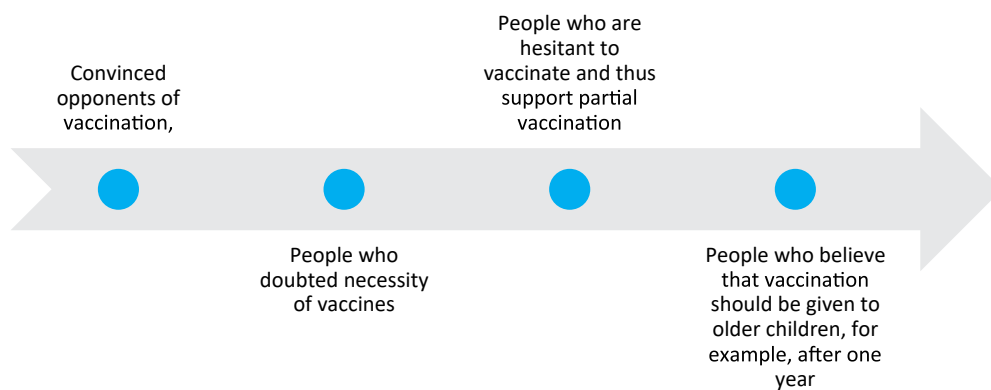
*Osh oblast, 32 years, secondary education*

There were also some women who heard about vaccination but did not understand what it is or what is its value.

*“I have absolutely no idea about vaccination. I think that it is just nonsense.”*

*Chuy oblast, 28 years, secondary education*

The respondents included participants who are:



Most of these groups believed that there is no need to vaccinate children, or to have their children partially vaccinated due to the following reasons:

1. All vaccine-preventable diseases can be treated
2. Vaccination reduces the child’s immunity
3. Vaccination does not fully guarantee protection against infections



4. Fear of post-vaccination complications
5. Healthcare professionals do not recommend vaccinating children
6. The risk of contracting vaccine-preventable diseases is low
7. Belief in fate and God's will

*“Everything is in the hands of Allah! If the time comes to fall ill, then we will fall ill.”*

*Bishkek city, 35 years, secondary education, “internal labour migrant”*

The conviction that vaccination does not protect children against diseases arises from lack of awareness of the VPDs. Some participants gave examples of children becoming ill with hepatitis A after being vaccinated. However, according to the calendar of vaccination children are vaccinated against hepatitis A. Women do not know the difference between different types of liver diseases and thus draw the wrong conclusions.

Most of the mothers believe that children are at risk of contracting infectious diseases, but they believe that the risk is the same for vaccinated and unvaccinated children. This belief is based on information that vaccinated children also contract vaccine-preventable diseases that they have been vaccinated against. Some women heard that vaccinated children are less affected by the disease, but do not believe it.

All the participants believe that practicing good hygiene, exercise and good nutrition are more effective in preventing vaccine-preventable diseases than vaccination. Most of them use traditional healing methods (lemon, onion, garlic, java, honey, black cumin, etc..) to treat their children, and thus they believe that they can also cure the child if the child contracts a vaccine-preventable disease.

*Our children are treated this way [folk medicine] and get better – there is no other way”.*

*Osh oblast, 26 years, secondary education*

Due to the success of the immunization program in KR and high prevalence rates in the country, people have not been seeing dangerous diseases and thus believing they can prevent VPDs by good hygiene, and nutrition.

*«In 2012, when there was a measles outbreak, those who had not received vaccinations immediately rushed to the hospital with their children. I personally saw how my neighbours rushed there. As soon as they learned that there were lethal outcomes, that blisters were appearing on the bodies, everyone already began fearing for their lives.”*

*Issyk Kul oblast, 27 years, higher education*

The overwhelming majority of study respondents believe that vaccination has a negative impact on children's immunity. The only argument that the participants cited was that from their personal experience, vaccinated children are more likely to get sick compared to non-vaccinated children. As a rule, women who notice a difference in their children's health blame it purely on vaccination, and do not want to consider other reasons.



*“I see it in my children. My son’s immunity is very weak, he talks poorly, and we take him to hospitals because he has a speech defect. When I was pregnant with my son, we were living in good conditions, and all the vaccinations were done. And I gave birth to my daughter in stress, alone, cold and hungry, but she did not have any vaccinations at all. Her immunity is good.”*

*Chuy oblast, 35 years, secondary education*

## A2. Internal Labor migrants

There were no significant differences between in views of “labour migrants” and “non-migrants” concerning awareness of vaccination.

## A3. influentials (Fathers and Grandparents)

All fathers participating in the study stated that they know what vaccination is, but almost all them believed that children should not be vaccinated.

While influentials denied the need for vaccination, some of them, mostly fathers, displayed very superficial knowledge about vaccine-preventable diseases and the consequences of contracting them. Some respondents believed that human immune system will protect them from any illness. However, when asked if they knew that there is a chance of contracting a deadly disease such as tetanus by puncture wounds or cuts, some participants replied that they did not know about it and did not believe that it is possible.

*“I’m not afraid of that and I do not believe it could happen”.*

*Father, Bishkek city, 34 years, higher education*

*“What is tetanus?”*

*Father, Osh city, 30 years, higher education*

*“There has been no plague for how many years already? So why are newborn children being vaccinated against the plague?»*

*Father, Osh city, 30 years old, higher education*

Nevertheless, most respondents accepted the fact that there is a risk of contracting vaccine-preventable diseases but stated that this does not depend on whether the children have been vaccinated or not. What is more, several believe that vaccination makes children more vulnerable, as it reduces their immunity. One of the respondents expressed the belief that the increased number of children with allergies is partly the result of vaccination.

*My husband has 22 nephews. Some have been vaccinated, others have not. The vaccines for any disease are difficult for the child, they always fall ill. And the ones who are not vaccinated tolerate easily.”*

*Other influential person (aunt), Bishkek city, 36 years, secondary education*

The participants suggested that vaccine-preventable diseases can be prevented by nutrition, observing good hygiene, being exposed to cold weather, physical exercise and also performing religious rituals.



#### A4. Religious leaders

All the religious leaders heard of vaccination, but the vast majority had an extremely superficial understanding of it. Most participants heard that vaccines contribute to building immunity from infectious diseases. The opinions expressed by some participants revealed a lack of awareness of the degree of danger of vaccine-preventable diseases. There is a belief that it is better to have the child exposed to the disease, so that they would not get it again in the future. It should be noted that several of the participants, mainly women religious leaders, when answering the question: “Do you know what vaccination is?” immediately spoke of their negative attitudes towards it.

*“Bacilli of the viruses are introduced into the body. I think that it should be the other way around, the child should be allowed into that environment. If his system is strong, he will be able to overcome it.”*

*Religious leader, woman, Talas oblast, higher education*

*“Vaccination is when we are made to inject children against various infectious diseases.”*

*Religious leader, woman, Chuy oblast, secondary specialized education*

The opinion of religious leaders towards their views if vaccination can harm children varied. Most of them agreed to this statement. Female religious leaders formed their opinion based on the basis of their own experiences of facing side effects after vaccinating their children. Some participants heard this information from acquaintances or colleagues, or else found it on the internet.

*The imam’s grandson died from vaccination. The imam told me himself.”*

*Religious leader, man, Osh oblast, higher religious education*

The opinions of several religious leaders about the harms caused to children by vaccination are based on the belief that vaccines contain dangerous chemicals, such as mercury, as well as pathogens of dangerous diseases. At the same time, there were some doubters among the religious leaders. It should be noted that during the interviews with religious leaders, that they reject the idea that someone or something can save lives and that this is not entirely acceptable, because this can only be a tool for the implementation of God’s will.

*“Only Allah saves: vaccines can only be the cause”*

*Religious leader, woman, Talas oblast, higher education*

But even disregarding this belief, most religious leaders do not agree that vaccination contributes to saving lives of people or children. As evidence, the study respondents cited the following arguments:

- Lack of evidence
- Information that during the measles outbreak, vaccinated and unvaccinated children were equally likely to contract the disease
- Distrust of healthcare professionals in general
- Vaccination is a way of making a profit for pharmaceutical companies
- Vaccination is a business organized by the Red Cross
- During the time of the Prophet, there were no vaccines or vaccinations
- Information about cases of severe complications after vaccination
- Information that there is no vaccination in Saudi Arabia, Turkey, or European countries



The opinions of religious leaders about whether vaccines can protect children from infections are divided. Some agree, with the provision that vaccination is not an absolute guarantee; while other disagree on the basis of believing that everything happens by the will of Allah.

*“If Allah wills it, the child will fall ill anyway, whether you do the vaccination or not.”*

*Religious leader, woman, Chuy oblast, secondary specialized education*

However, one of the religious leaders noted that despite the belief in fate and Allah’s will, people should take actions themselves to protect their health.

*“Allah gives both diseases and means to protect from them. But we should try our best. If we fall ill and are lying at home, the ambulance won’t come itself. For that, we need to call the doctor.”*

*Religious leader, man, Issyk Kul oblast, higher religious education*

Most of the religious leaders believe that a healthy lifestyle, proper nutrition and performing religious rituals are more effective methods to prevent vaccine-preventable diseases than vaccination. However, two interviewees did not agree with the majority and trust healthcare professionals advise on this.

*“It is very difficult to prevent diseases using other methods. If the medical professionals told us to vaccinate, it means we should do that.”*

*Religious leader, man, Jalalabad oblast, higher religious education*

## **B. ATTITUDE TOWARDS VACCINATION**

### **B1. Mothers of children under five years**

Most mothers do not believe that vaccinating their children is necessary due to the following reasons:

1. Vaccination is not an effective defence against vaccine-preventable diseases: vaccinated and non-vaccinated children are equally likely to fall ill
2. Vaccine-preventable diseases do not pose a serious danger to the child, the risk from contracting them is low

*“When we went for vaccination, there were no vaccines. I asked what the vaccine was protecting against? They said it was against rubella. I asked if anything would happen if my child got rubella. And they said that nothing would happen because of rubella, and they sent me away themselves. If it’s not serious, if there is no need for it, then I won’t bother my child.”*

*Naryn oblast, 29 years, higher education*

3. Concerns linked to personal experience of witnessing vaccine side effects and post-vaccine complications
4. Vaccination reduces the child’s immunity, can lead to development of serious diseases such as paralysis, autism, infertility, mental development disorders, etc.
5. The child isn’t ill, there is no need to vaccinate
6. Healthcare professionals also oppose vaccination





*We have an acquaintance: his mother is a medic. She is now teaching at a medical university, and she did not vaccinate her child. According to an immunologist who spoke on TV, if a parent did not vaccinate his child before the age of three, then that is a good parent «*

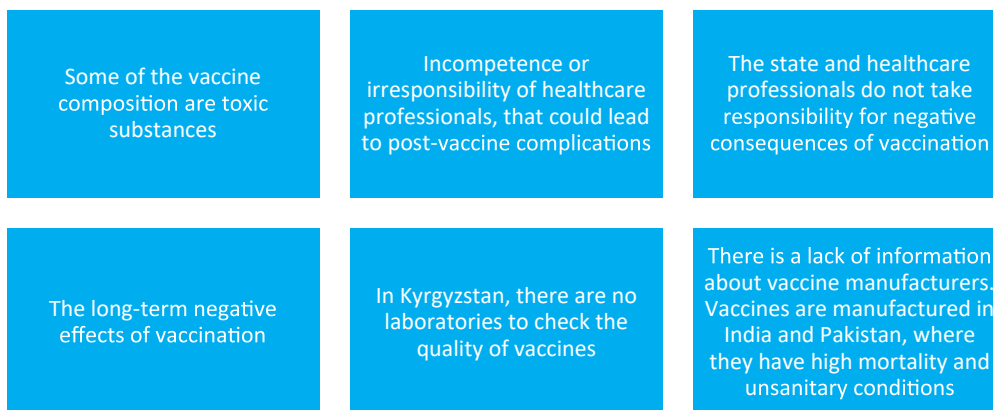
*Bishkek city, 34 years, higher education*

The study respondents included women whose opinion about vaccination was purely based on the opinions of people they trust.

*“I got information from my Muslim friends. When I found out what they say about vaccination, I refused.”*

*Chuy oblast, 32 years, higher education*

All the study participants had worries about vaccinating children. The main reason of concern, which the majority mentioned, was post-vaccine complications and side effects. The vast majority of women did not hear of cases of side effects, but also about serious illnesses in children, that they linked with vaccination. In addition, the mothers noted the following reasons for concern from vaccination:



None of the mothers mentioned any advantage to vaccination. It should be noted that the study respondents could not evaluate the benefits of vaccination, as none of them have relevant experience, and they do not have any comparable data on the incidence of vaccine-preventable diseases among vaccinated and non-vaccinated children. On the contrary, some of the women heard that children who are vaccinated against a disease are the first to get infected, and some have personal experience of this.

*“Despite the fact that I had all the vaccinations done for measles, they contracted measles. The child had a heart disease and this made it very hard. I even stayed with him at the hospital.*

*Bishkek city, 32 years, secondary education, “internal labour migrant”*

Only one of the study respondents regrets that she did not vaccinate her child for measles, because he contracted the disease and suffered a serious illness. According to some respondents even if vaccination protects against some diseases, the benefit does not outweigh the more tangible harm caused by side effects. Only one respondent suggested that vaccination might have protected her from infection.



*«We were vaccinated by my mother, we seem healthy and normal, and didn't catch severe infectious diseases. This means there's also a kind of advantage of vaccination»*

*Naryn oblast, 29 years old, higher education*

All women heard from friends, relatives or acquaintances, read materials on the internet, or had personal experiences of side effects after vaccination of children. Most of them named the expected reactions: fever, malaise, diarrhoea, and swelling at the injection site. Some respondents noted that they heard of cases when after vaccination, children developed severe illnesses, such as epilepsy, paralysis, mental development disorders, autism and allergies. They had also heard of deaths following vaccination.

Mothers do not believe that non-vaccinated children pose a danger to other children. This is because of their belief that non-vaccinated children have strong immune systems that will prevent them from getting infected.

Most of the study respondents, including women who follow Islam, do not agree that the main reason why parents refuse to have their children vaccinated is that it contradicts religious principles. The main reason, is the belief that vaccination can harm the child's health.

*"I wouldn't say that it is a refusal on religious grounds. There are some Muslim fanatics, but they have their children vaccinated."*

*Jalalabad oblast, 39 years, secondary education*

Some of the respondents suggested that pharmaceutical companies use vaccination to make profits.

*Now it's simply that the pharmaceutical industry creates the diseases and then sells medicines against these diseases. It's a business."*

*Issyk Kul oblast, 23 years, higher education*

All mothers heard that vaccines contain pig blood or pig fat. However, as of yet, they consider this a rumour, and none of the participants used this information as a reason to refuse vaccination.

*There is no such prohibition, either in the Quran or in canon – it's not written anywhere. If we know that it contains things forbidden by religion, then we won't take it ourselves, because it's not allowed."*

*Talas oblast, 34 years, secondary education*

Thus, Islam does not directly prohibit vaccination. Nevertheless, some postulates can be read as an indirect prohibition. One of the respondents, who follow Islam, supported her refusal to vaccinate on the grounds that people had inborn immunity that can prevent invasion from outside. Vaccination is an attempt to create an "improved version", which is forbidden as people are created perfect.

*"Allah cares about me, so I don't need to treat myself with vaccines – it is a small dose of any disease. Before they invented all these vaccinations, people somehow lived and lived not too badly "*

*Bishkek city, 32 years, higher education*

If we bear in mind that Muslims are not allowed to harm their health, then they can refuse vaccination based on this prohibition, fearing side effects and post-vaccination complications. Thus, some participants perceive a contradiction between religion and vaccination.



*“The Quran contains verses that state that we should not harm our bodies. Vodka is harmful and not allowed. It’s the same for vaccination.”*

*Batken oblast, 33 years, higher education*

Study respondents living in Naryn, Issyk Kul, Osh, Batken and Jalalabad oblasts said that they are familiar with people who refuse to vaccinate for religious reasons and have also heard of religious leaders who oppose vaccination. Residents of Osh and Batken oblasts noted that men receive information about the dangers of vaccination in mosques, and then forbid their wives to vaccinate their children. The main argument of opponents of vaccination is the belief that it harms the health of children and contains prohibited substances.

*I heard the imam says that they have pork fat and embryos after abortions. This is not the imam who works in the mosque, but an ordinary believer imam, who reads prayer five times «*

*Batken oblast, 39 years old, higher education*

*“We had a disc that said that the vaccine is made in America from the blood of a dead drug addict, that we are like guinea pigs. We got this disc when we went to Shailoo to study. That place is closed now, it’s true. Shailoo was a pharmacist himself, worked in the ministry. He knows about this directly. He says there is no evidence of the efficacy of vaccination. «*

*Bishkek city, 32, secondary education, “internal labour migrant*

None of the participants recalled a case in which a religious leader spoke up in favour of vaccination. In the best cases, they take a neutral position, leaving parents themselves to make the decision.

Most of the study respondents are absolutely convinced that vaccination is harmful, but some did not show these beliefs. They are, instead, disoriented by conflicting information. But since they have the real suspicion that vaccination can harm children, while the threat of contracting a vaccine-preventable disease is hypothetical, they prefer to avoid this threat by refusing vaccination.

Almost all the women reported that they have received information from relatives and friends: most of them try to check its reliability by consulting initially with healthcare professionals to get a competent answer. All the healthcare professionals contacted by the study participants urged them to have their children vaccinated, however, not everyone has persuasion skills, and some could not give convincing reasons for vaccination.

Negative attitudes towards vaccination stem from a number of factors:

1. An active information campaign has been deployed against vaccination, which has not yet been countered
2. Healthcare professionals do not have sufficient persuasion skills, and are not perceived by mothers as completely trustworthy sources of information about vaccination
3. The level of awareness of vaccination among people making decisions about the vaccination of children is low
4. There is not enough critical thinking about information on vaccination, including among representatives of religious communities, although there have been cases of agitation against vaccination based on religious / pseudo-religious postulates

The main and necessary condition to change the negative attitude of parents towards vaccination is to have full information about all its aspects.



*“Separate groups could be created, with nurses and young mothers at least once a week, for at least an hour, to explain and discuss. So, mothers are somehow informed about everything, about the possible consequences, what are the terrible consequences, when you need to turn to doctors, what we do not need treatment for in a healthcare facility: we don’t get any of this.”*

*Chuy oblast, 26 years, secondary education*

*“We need to gather the parents before vaccination. You will have a vaccination soon; do you know what a vaccine is? This vaccine is for this and is against this disease. Bring the children for vaccination, let them examine the child, before that take good care of the child, so that the vaccine is coped with well. He should eat like that. Go to these doctors, so they examine the child and take tests. And how do we do it? Come tomorrow, for a vaccination at such and such a time*

*Naryn oblast, 29 years, higher education*

When asked who can influence people with doubts about vaccines or refusing to have their children vaccinated, the study respondents were divided into three groups:

- Most of them believe that parent “refusing vaccination” could mainly be influenced by healthcare professionals
- Some of the women said that it was not possible to influence their decision not to vaccinate.
- A third group of women profess Islam and believe their religious leaders should be the influence

*“There are some people who I can trust: these are people in Islam, they cannot lie, and if they say ‘yes, you can’ I would listen. Because I’m sure they are not corrupt.”*

*Chuy oblast, 32 years, higher education*

Study respondents proposed the following forms of awareness work about vaccination, which they believe would be effective:

- Interpersonal communication with doctors
- Seminars / trainings
- Television broadcasts involving healthcare professionals
- Awareness raising about vaccinations through brochures and leaflets

*Currently UNICEF is disseminating brochures about how you need to feed your child, at what age. They could do that sort of brochure about vaccination.”*

*Issyk Kul oblast, 51 years, secondary education*

When planning awareness activities, it should be noted that husbands, who are often opponents, take decisions about vaccinating children in many families. In the opinion of study respondents, in such cases involving religious leaders would be effective.

*In general, our husbands forbid it. They go to the mosque, and maybe the imam will preach to them that God created these vaccines for something.”*

*Osh city, 30 years, specialized secondary education, “internal labour migrant”*



## B2. Internal Labor migrants

No significant differences between “migrants” and “non-migrants” were observed concerning attitudes towards vaccination.

## B3. Fathers and other persons who care for children under five years of age

The vast majority of study respondents are opponents to vaccination. The main factors influencing the creation of opinions about vaccination are:

1. A conviction that the risk of contracting vaccine-preventable diseases is not high

*“They vaccinate against 11 diseases that are not around now.”*

*Father, Osh city, 30 years, higher education*

2. A conviction that effective protection can be provided by one’s own immunity and alternative methods
3. Mistrust of conventional medicine, the perception that vaccination as part of a large pharmaceutical business, which has the goal of generating profits by creating dependence on vaccinations

*The healthiest person is a newborn and we, by giving vaccinations, make him dependent. Doctors know this: everything here is based on business. It’s like selling drugs.”*

*Father, Osh city, 32 years, higher education*

4. Fear of possible consequences of vaccination
5. Possible side effects after vaccination and discomfort connected to it

*We have a lot of problems about this very issue: the child is feverish and sick, and when doctors are called they sometimes come, but usually no one comes.»*

*Father, Osh city, 30 years old, higher education*

6. Personal negative experience

*“My husband had a niece. She was born healthy, and after two months she got her DPT. The expected reactions followed, and then she was taken to hospital. Her temperature was nearly 40, and nothing helped. She entered hospital in a coma and after the coma she was completely paralyzed. She is now seven years old, and she does not move, an invalid. She was treated abroad, they sold all their property to cure the child, but the result is the same. It happened after the vaccination.”*

*Other influential persons (aunt), Bishkek city, 31, higher education*

7. Negative attitude towards vaccination because of peer pressure

*Everyone refuses vaccinations, and I will as well.”*

*Father, Bishkek city, 34 years, higher education*

8. Faith in divine predestination



*“But no one knows what diseases there might be in the future. Apart from God no one knows – we are Muslims and should have faith in this.”*

*Father, Osh city, 32 years, higher education*

Most of caregivers influential negative attitudes towards vaccination are a result of their own observation of grandchildren, children, nephews and nieces. All the women confirm that non-vaccinated children fall ill much less often than vaccinated children.

All influentials expressed some kind of anxiety linked to vaccinating children. The study respondents gave the following reasons to worry:

1. Side effects and difficult complications after vaccination
2. The long-term negative influence of vaccines
3. Doubts about vaccine quality
4. Doubts about the qualifications of healthcare professionals, lack of observance by them of the rules for conducting vaccination and storing vaccines
5. Doubts about the safety of several components of vaccines
6. Too many vaccinations received by children in the first years of life
7. Lack of accountability among healthcare professionals and lack of guaranteed assistance from the state if severe complications arise

*“The doctor stated that he would not take responsibility if my child died after being vaccinated. Some children have weak constitutions, and they can die after vaccination. I asked: who will answer for that? The doctor said no one would.”*

*Father, Osh city, 26 years, secondary education*

The opinion of some study respondents is that vaccination is an instrument for implementing a conspiracy against Muslims and individual countries.

*“They say that America is deliberately crippling our children like this. It was the same with the Ebola virus: the Americans did it on purpose apparently. Now they are using such vaccines on us.”*

*Other influential person (grandmother), Bishkek city, higher education*

Almost all influential have heard of cases of side effects following vaccination of children. For the most part, these are expected reactions after vaccination: high temperature, skin reactions, malaise. Despite the fact that healthcare professionals usually warn about these reactions, parents find it emotionally hard to bear their children suffering.

*“Nobody knows how difficult it is for a small child to be vaccinated, even professors don’t know – the children can’t explain it themselves.”*

*Father, Osh city, 30 years, higher education*

Some study respondents also heard of severe illnesses that they associate with vaccination. In general, such information is accepted uncritically, without evidence, because it is an additional confirmation of already-established stereotypes.



*«When I was in the hospital, there was one man with his disabled child. I asked if he had been vaccinated? He said that in infancy, the child received a vaccine against paralysis, but fell ill. The doctors said that the child's body could not cope with it, and so he became paralyzed. «*

*Father, Osh city, 26 years old, secondary education*

None of the study respondents said that their negative attitude towards vaccination was directly linked to their religious beliefs, all influential women had this opinion. However, fathers did say several things about contradictions between vaccination and religion. None of the religious leaders openly said that vaccinating children is essential.

*“I haven't heard one [religious] teacher, not one of them say: ‘Yes, do it.’”*

*Father, Bishkek city, 37 years, higher education*

The main reason, which could have an actual religious basis, is the composition of vaccines. The idea that vaccines contain substances banned by Islam – pig blood and dead animals – is very common.

*“If you introduce a vaccine that includes some part of a living creature then your character will be like that of the animal.”*

*Father, Osh city, 32 years, higher education*

One of the participant noted that according to religious understanding, treatment is needed when the disease has occurred, and vaccination, as a medical procedure, may contradict this. The assumption that vaccination is less common in Islamic countries than in secular ones, is an unquestioned argument against vaccination.

None of the respondents of the study believe that unvaccinated children pose a threat to the health of their children. Moreover, some fathers reacted quite aggressively to this question and took it as an assumption that their unvaccinated children are dangerous.

*“In actual fact is that they are asking if my child is dangerous to society. It gives me the feeling that the state is humiliating me. My child is not at all dangerous to others. The law sets out that we have the right to refuse, and we take responsibility for it ourselves.”*

*Father, Osh city, 32 years, higher education*

The vast majority of influentials perceive vaccination negatively, and no one mentioned any benefits. Therefore, they all supported parents who refuse to have their children vaccinated.

#### B4. Religious leaders

There was a consensus among all religious leaders that the main reason for refusals to vaccinate is not related to religion, and this was supported by the fact that not only Muslims refuse to vaccinate.

In addition, the media contains a fairly large volume of information about the dangers of vaccinations specifically by healthcare professionals. Therefore, the main reason for refusals is the belief that vaccination harms a child's health. The only factor that, in the opinion of study respondents could lead to opposing vaccination from a religious standpoint is the composition of vaccines and the presence of prohibited substances or toxins.



*In the religion, there is no law that would categorically prohibit vaccination. It's just that people have heard of certain consequences of vaccination, and due to lack of reliable information about vaccines, vaccination is now doubted by the people."*

*Religious leader, man, Osh city, secondary education*

Most of the religious leaders do not believe that anyone is intentionally disseminating negative information about vaccination under the umbrella of religion. If there are such persons, they are expressing their own opinions.

All religious leader respondents, except for two of them heard of cases of side effects after vaccination. Some had personal experience, some have received information from relatives or friends, or read about it on the internet. Study participants described both expected reactions, such as high temperatures and malaise, and cases of severe diseases that they associate with vaccination.

*"There was a temperature for two or three days, and all the time I was crying. It wears you out."*

*Religious leader, woman, Bishkek city*

*"My neighbour had her daughter vaccinated against poliomyelitis in childhood, and she stopped walking, and at 16 she died"*

*Religious leader, woman, Bishkek city, secondary education*

The religious leaders agreed with parents who refuse to vaccinate children. The women supported "those who refuse to get vaccination", while most men were more neutral in their judgments and did not take either side.

*"It is everyone's free choice. They know themselves why they refused. I can't answer for them."*

*Religious leader, man, Batken oblast, higher religious education*

As mentioned above, the main reason to refuse vaccination, according to religious leaders, is the belief that vaccination is harmful for the child's health. Given that a Muslim should not deliberately harm his own health and that of his child, this reason can also be associated with religious beliefs. Some participants referred to a hadith, guided by Muslims in Saudi Arabia who refuse to vaccinate, but could not tell which one specifically.

Majority of religious leaders (13) stated that they had been approached for advice or information about the vaccination of children. More often, people ask whether they should vaccinate their children and if it is contrary to religious principles or not. All women religious leaders said they would advise not to vaccinate, because, in their opinion, the vaccine could harm the child. The men were more evasive. Some noted that they could not advise anything, and that in addition, the Spiritual Board of Muslims of Kyrgyzstan has not given any ruling or guidance on vaccination but recommends leaving the decision to the parents' discretion.

*"The Muftiate has not issued a special fatwa for vaccines. They told us that this is the right of every person. We cannot go to someone and force that person, this is that person's right. But, if we rely on the hadiths of the Prophet Muhammad, health is a duty (amanat). It is written in the hadith that one should protect health."*

*Religious leader, male, Naryn oblast, secondary special education*





Negative attitudes towards vaccination usually arise because of the prevalence of negative information about vaccinations, partly based on rumours and speculation.

Religious leaders do not see that healthcare professionals are making a contribution to addressing this situation. Currently, healthcare professionals are not equally strong to stand up for this negative attitude on vaccination. On the contrary, some participants stated that after talking with healthcare professionals they were even more sure of their opinion about the dangers of vaccination.

*“I asked the doctors why they insist so much that we vaccinate? They say openly that they receive money for it. I asked if there had been an Order from the Ministry of Health that vaccines are beneficial if they had done checks. They didn’t have anything. Therefore, we tell people not to go for vaccination.”*

*Religious leader, man, Bishkek city, higher education*

According to religious leaders, work with parents who refuse to vaccinate children should primarily be handled by healthcare professionals. The main condition for success in this work is the provision of complete, reliable, consistent information on vaccination, including information on vaccine composition, which is the most important point. In working with believers, more effects can be achieved if Muslim healthcare professionals are involved in outreach work. Some participants called for the involvement of religious leaders, but only if there is undeniable evidence that vaccination is safe.

*“Vaccines should be halal.”*

*Religious leader, woman, Osh city, secondary education*

One of the religious leaders expressed his opinion that work was also needed in educational institutions.

## B5. Healthcare professionals

Since the attitude of healthcare professionals is of great importance in shaping the attitude of the population toward vaccination, it is important to know to what extent they themselves accept vaccination. All the healthcare professionals expressed a positive attitude towards vaccination, though one noted that before vaccination one should have an examination from all doctors. According to all the doctors, it is necessary to vaccinate children in order to prevent the risk of infections. The only possible grounds for cancellation or postponement of vaccination is medical contraindications.

Some doctors noted that they heard of colleagues who expressed or showcased negative attitudes towards vaccination, and some were familiar with them personally. Of the six participants that mentioned knowing HP who are against vaccination, three mentioned neurologists, and a paediatrician and an infectious disease specialist were also mentioned. Some study participants associate negative attitudes among healthcare professionals with religious beliefs.

*“She is a neurologist. She does not decide about vaccination, she makes diagnoses. I checked the cards, and saw it was time for vaccination. I asked why she had not made an appointment, and she said that she was against vaccinations. Who told you that you do not need it? Where did you study, if you think you do not need them vaccinated? Where did you find this out? She referred to the internet. We talked very strictly. That was five years ago. Now has she changed her mind, and this is why I have my children vaccinated. «*

*Immunologist*



*“Only neuropathologists give permission for vaccination. I do not know why they have such an opinion. On the one hand, they ensure themselves, because pathologies are difficult to identify in small children. They are safe from the attack of our mothers, because now parents are very aggressive, they immediately make complaints, and record it on their phones.”*

*Family doctor*

*“A doctor can simply tell the parents that the child will be vaccinated later and delay the decision. In one area where there is a paediatrician, a few years ago the rates for vaccinations dropped below there. It was said that he simply sends mothers who came to vaccinate a child back home: ‘Come another time, but not now.’ When I talked with him, it turned out that he was reading prayers five times. He told me that he looked at the state of health and told them to come for the vaccination in 5-6 months, because the child’s condition is now weak. I said: «You’re a medic. If people hear this from you, then everyone will refuse. «*

*Immunologist*

Study respondents suggested that healthcare professionals who oppose vaccination usually do not express their opinions openly. As a rule, it occurs as follows:

- Healthcare professionals delay the vaccination of their patients (“to let the child get stronger”). This may be both because of that professional’s attitude towards vaccination, or also the fear of responsibility for possible side effects / playing safe
- Healthcare professionals share their opinions with relatives, friends and acquaintances, and do not vaccinate their children, or vaccinate later, after the child is one year old.

*“They do not advocate for [negatives attitude towards vaccination], they do not have their own children vaccinated. For example, some begin after a certain age. We have a doctor, she has not yet vaccinated her child, but she refuses herself because of Islam. «*

*Paediatrician*

The main benefit of vaccination, that all the healthcare professionals noted, is protection of the population from vaccine preventable diseases. At the same time, several respondents highlighted some drawbacks to vaccination:

- Children receive many vaccines in the first year of their lives. Some healthcare professionals believe that this is a serious load, which could be tough for some children
- 

*“Now they have added more diseases that they vaccinate against. I think that it is difficult for children. But there are some children who cope very well, while other children do not cope well.”*

*Neurologist*



- in the opinion of one of the respondents, Side effects post vaccination can be avoided if the child is carefully tested before being vaccinated.

*“A paediatrician doesn’t examine the child every time – they can send a child without being seen by a neurologist. When the child has contraindications, cysts or head indurations, or if the child has intracranial pressure or anything else, hypersensitivity or a precondition, the vaccination shouldn’t be carried out but it is done anyway. Paediatricians should do the vaccination. “*

*Neurologist*

High demand for observing the rules for transporting and storing vaccines, which if not followed strictly could lead to serious consequences.

*“Sometimes the cold chain is violated, and we don’t know what quality of vaccine were used.”*

*Paediatrician*

The vast majority of healthcare professionals believe that children should be vaccinated in accordance with the national immunization calendar if there are no medical contraindications. They are sure that the calendar takes into account the development of the child’s immune system, and that complying with it ensures the maximum effectiveness of vaccination. Most of the study participants consider the number of vaccines on the calendar acceptable and believe that introducing more than one vaccine does not overload the child’s body. In addition, it is convenient technically. First of all, this confidence is based on trust in the specialists who draw up the national immunization calendar. In addition, according to their experience, most children are vaccinated without complications.

It was difficult for the study respondents to explain their opinions of colleagues who oppose vaccination about the national immunization calendar, as they do not talk about it openly.

However, the study participants included doctors with different opinions about the national immunization calendar. One of them believes that it would be possible to exclude vaccines with a strong allergic component – such as whooping cough, measles from the vaccination calendar. He also does not agree with including pneumococcal vaccine in the calendar. However antiviral vaccination, in his opinion, should be included. In addition, the doctor is convinced that vaccinations should begin from three months, as was the case in the Soviet Union.

As mentioned above, according to some healthcare professionals, children receive too many vaccines in the first months of life, which causes a serious strain on the baby’s body. Vaccination is also a stress for healthy children, while currently a large number of pathologies are being diagnosed occurring both during childbirth and during pregnancy.

*“Previously, we had DTP, but now we have hepatitis, meningitis and pneumonia. I think that at times it is very much. It turns out, at the age of two months the child is vaccinated three times with an interval of one and a half months. The child falls mildly ill, the immunity wears down, and the temperature rises. Maybe increase the duration of the vaccination period?”*

*Neurologist*

Despite some disagreements regarding the national immunization calendar, all doctors are sure that vaccination should be mandatory because parents are not always aware of the risk and consequences of vaccine-preventable diseases for their children.



*“It should be mandatory. Previously they didn’t ask us, and just went ahead with everyone. For example, in Russia parents have to pay an administrative fine for refusing. But here it’s as you like, and so we’re sitting on the tip of an iceberg.”*

*Paediatrician*

All the healthcare professionals are convinced that when making decisions about vaccination the state is acting in the interests of children. They base this on the following arguments:

- A significant volume of financial resources is spent on buying vaccines, and children are vaccinated free of charge
- A state system has been established for accounting and reporting of immunization.

## C. THE PRACTICE OF VACCINATION

### C1. Mothers of children aged under five years

#### STATUS OF VACCINATION

The vast majority of mothers who participated in the study, are vaccinated for the following reasons:

- They were born in the Soviet Union, where vaccination was mandatory;
- There were no sources of information about vaccination
- The quality of care and quality of vaccines were better

All mothers noted that their children under the age of five include unvaccinated / partially vaccinated children. In some families’ older children are vaccinated, and younger ones are not. It should be noted that the respondents included women who intended to have their children vaccinated after reaching a certain age – one year or five years – when the child “is stronger”. Some respondents stated that their children received the first vaccine in the hospital, because we they were forced to take it, with threats that otherwise they would not be discharged.

Mothers named the following reasons for not vaccinating their children or partially vaccinating them:

- Fears of side effects and post-vaccination complications, most common reason
- Some of the respondents had negative personal experience towards vaccination, and others decided to refuse vaccination after receiving negative information from relatives, friends or acquaintances, or having read the materials on the internet.
- Fathers of the children were against vaccination
- Distrust of healthcare professionals conducting vaccination
- Distrust of vaccine quality. The study respondents repeatedly expressed the opinion that vaccines in Kyrgyzstan are low-quality vaccines intended for “third world” countries.

*“When I lived in Sweden, I went to a Swedish paediatrician who asked me why I was worried: this is Europe and vaccines here are all first class. She said that there are third class vaccines. She said I was going to Kyrgyzstan, where it is third class. They bring the poorest quality to African and Asian countries. I completely refused vaccinations in khyrgyzstan. I didn’t even receive BCG.”*

*Bishkek city, 36 years, higher education*



## THE DECISION TO VACCINATE

Most of the study respondents make joint decisions with their husbands in relation to vaccination. While some mothers primarily residents of Osh oblast, said that their husband takes the decision alone. Bishkek residents mainly decide on vaccination themselves. Other influencers and relatives were practically not mentioned as having an influence or a voice in these matters. Families of “internal labour migrants” the decision to vaccinate is taken jointly by the parents, while in Osh city it is the male decision.

## VACCINE SIDE EFFECTS

Many mothers talked about relatives and acquaintances whose children had suffered serious illnesses, became disabled or died due to vaccination. Often such information plays a decisive role in the parents’ decision-making.

*“The daughter of my classmate died after being vaccinated. Her daughter was vaccinated while having high temperature and then she died. After that not I or my children will be vaccinated.”*

*Batken oblast, 26 years, higher education*

Most of the mothers whose children were vaccinated had encountered cases of side effects: fevers and malaise. Some respondents noted that their children had really suffered from vaccination, and there were some cases of hospitalization.

*“He was vaccinated, that day he [the son] was taken to an infectious diseases hospital with a temperature of 39. But the doctors did not link it with the vaccine, they took all the tests and found no infection. His temperature could not go down by any means, injections, no suppositories, nothing. It was like this for about five days: the child was ill, antibiotics were taken, although there was not even any coughing. We were in hospital for 10 days; no diagnosis was given at all. I became annoyed that it happened after the vaccination. Then the child was six months old, and now he is four and a half years old, he is ok and not sick at all.”*

*Bishkek city, 27 years, higher education*

Some of the mothers blamed the consequences of vaccination on healthcare professionals, as their children had been vaccinated despite clear indications for exemption. Most of the study respondents, including “internal labour migrants” who had gone for vaccination noted that healthcare professionals always warned that there might be a fever, gave advice on caring for the child, and recommended taking antihistamines before the procedure.

## VACCINE QUALITY

As noted above, lack of trust of vaccine quality is one of the reasons for refusing to vaccinate children. This occurs for the following reasons:

- Lack of / insufficient information on vaccines composition and manufacturers;
- Being informed that vaccines contain toxic substances;
- Because the vaccination is free, it means it is low quality;



*They say that the vaccine builds immunity. Now medicines that strengthen immunity are very expensive, so why then are vaccines free?"*

*Bishkek city, 43 years, secondary education, "internal labour migrant"*

- Being informed that the vaccine was manufactured in India or Pakistan;

*"Do you know how un-hygienic it is in India? I would not want my child to be vaccinated with a vaccine from India."*

*Bishkek city, 34 years, higher education*

- Worry that the procedures for transporting and storing vaccines are not followed strictly, particularly when there are interruptions to electricity supply;
- Lack of information about how vaccine quality is checked in Kyrgyzstan.

Some of the mothers specifically link side effects to the quality of vaccines.

*"We were invited for the vaccination, and the vaccine was open. I link the fact that my son's leg later was swollen up to that."*

*Issyk Kul oblast, 51 years*

### **TRUST IN HEALTH CARE PROFESSIONALS**

When asked about trust in the healthcare professionals performing vaccination, the opinions of mothers varied. However, most of them did not trust the healthcare professionals for the following reasons:

- Insufficiently qualified;
- The low level of knowledge of the healthcare professionals about vaccination;
- The healthcare professionals not observing the rules for conducting vaccination;

*"After immunizing the first child they immediately vaccinate a second child. Without sterilizing, without gloves. Even if they have gloves, it's one pair for 10 people."*

*Batken oblast, 24 years, higher education*

- Healthcare professionals don't take responsibility for the consequences of vaccination;
- Healthcare professionals should fulfil the plan for vaccination: they have a material interest.

### **TRUST IN THE GOVERNMENT OF KYRGYZSTAN IN RELATION TO IMMUNIZATION**

Most of the mothers doubt that the Government of Kyrgyzstan is acting in the interests of children when it comes to vaccination. Several respondents used the following arguments to support their views:

- The procurement system for medicines, including vaccines, is corrupt. It is difficult that someone



can prove this. Clearly, when most respondents learn that large amount of money were spent on buying vaccines this triggers the corruption stereotype: “tender-big money means corruption and substandard vaccine”;

*«I was told how the person responsible for importing medicines to our country even signs through drugs that have not been tested, so that they are imported»*

*Bishkek city, 32 years, higher education*

*“An acquaintance wins the tender, maybe he brings a home-made vaccine, maybe it’s just water and they are pricking our children, how do we know?”*

*Bishkek city, 42 years, secondary education, “internal labour migrant”*

*The Government cannot make independent decisions because it is linked to credit obligations.*

*“We are forced to meet the demands imposed by the IMF. Our state does its bidding. These vaccinations, probably, are decided there, and so we are forced to do it or there will be no money.”*

*Bishkek city, 41 years, higher education*

## **PROCEDURE OF VACCINATION**

According to the study respondents, the time spent on vaccination can be up to several hours because of long queues. For some mothers this may be an additional argument against vaccination. Another problem that the respondents of the study faced during the vaccination process is that, as a rule, the vaccine vial is designed for several children, so sometimes extra waiting time is needed until the required number of children appear.

*“When my child was one year old, six people didn’t come, and we didn’t get the vaccination. They said they would invite but didn’t. It was difficult in the cold with the child, and we had to wait as well.”*

*Talas oblast, 30 years, secondary education*

Many study participants expressed a wish that children would be invited for vaccination by prior appointment with slips. The women estimated that the optimal time for the vaccination procedure, including a high-quality medical examination, is one hour. If they believed that vaccination was necessary, it would have absolute priority, like other issues relating to the child’s health.

Estimates of the quality of medical care for children differ significantly. Unfortunately, study respondents who are satisfied with how children are examined and the vaccination procedure are a minority.

The study respondents made the following claims:

- Unkindly attitude, and sometimes rudeness, on the part of healthcare professionals;

*“You go with a sick child and they say ‘why did you come, you should first have checked if your doctor is working or not. And after that we don’t even want to go to the hospital anymore.”*

*Naryn oblast, 37 years, secondary education*



- Insufficient qualified doctors;
- All patients, even the ones coming with sick children wait in one queue;

*“The queue includes everyone: the old and the sick with [diabetes], and so on. They don’t give way. You sit waiting with a small child. Children should have a separate doctor, a separate room «*

*Talas oblast, 35 years old, secondary education*

*“One girl came with hepatitis; a grandfather was brought with a swollen foot. And all of us stood in line. One family came with five children, and they all had fevers.”*

*Bishkek city, 24, secondary education, “internal labour migrant”*

- The polyclinics do not have comfortable conditions for mothers with infants: busy areas, no changing tables and insufficient chairs and benches;
- Prejudice against mothers who refused to vaccinate children. Some participants attribute this to the fact that doctors have a financial interest, while also documenting refusals to vaccinate requires additional time;

*They don’t like ‘refusing vaccination’. They say that because of you I am scolded and they cut my salary. It’s psychological pressure.”*

*Jalalabad oblast, 24 years, higher education*

- Prejudice among healthcare professionals towards women who profess Islam was noted by several residents of Bishkek.

*“There is one person working at the polyclinic [a relative] who says: ‘You’d better not come here again, we have instructions from above not to admit someone in a headscarf.’”*

*Bishkek city, 30 years, higher education*

## **HEALTH EDUCATION INFORMATION ABOUT VACCINATION**

If doubts have arisen in the mother about the need for vaccination then, of course, all these factors, including the attitude of healthcare professionals, will support a decision to refuse.

Most of the women are unsatisfied with the vaccination information they receive from healthcare professionals. They note that this information is superficial. Healthcare professionals, as a rule, only name the disease that the vaccine protects against. They do not talk in more detail about these diseases and the consequences of contracting them. Some mothers noted that their questions make the healthcare professionals irritated. Study respondents noted cases in which the explanatory work amounted to intimidation, that if vaccination were refused they would not receive medical assistance from these doctors, or be able to enter their children into children’s educational institutions. However, some mothers noted that none of the healthcare professionals explained which normative documents can be used to refuse an unvaccinated child admission to a children’s educational institution. In addition, forging the necessary documents could solve this problem.





*“They frighten people with unvaccinated children that they won’t be accepted to kindergarten or school. But it’s clear that you’d have to buy a certificate: many buy them from doctors. I have a sister in a hospital, and I’ll tell her that it’s nearly time for my son to go to kindergarten but he hasn’t been vaccinated. I ask how they do the certificates there. She says that you go to any polyclinic, give 500 som and they’ll do it for you there.*

*Bishkek city, 39 years, secondary education*

It can be concluded that often healthcare professionals do not possess skills for persuading parents, they cannot choose the tactics for the conversation correctly, and because of this mother mistrust and reject what they say.

None of the study participants believes that they can obtain full information from healthcare professionals about the risks and benefits of vaccination, or about vaccine-preventable diseases for the following reasons:

- Limited time for examination, large flow of patients;

*“The doctor doesn’t get enough time to talk with me. I still haven’t heard him explain everything in depth. He doesn’t even raise his head, but straight away fills in the form, asks the surname and sends for the procedure.”*

*Bishkek city, 42 years, secondary education, “internal labour migrant”*

- Healthcare professionals do not have all the information about vaccination;
- Healthcare professionals don’t have the right to give full information about vaccination, though many are themselves not supporters of vaccination.

*“He [the doctor] would be kicked out, probably, if he told it.”*

*Jalalabad oblast, 36 years, secondary education*

## **REFUSALS FORMS**

All mothers who refuse to have their children vaccinated fill out a refusal form. This is written in free paper and there is no special form. Residents of Batken oblast said that they are forced to certify the application to refusal by notary. Some participants, living in Talas oblast, noted that healthcare professionals did not convince them of the need for vaccination, and did not even look at what the statement of refusal said. Women who profess Islam face this more often, because, in their opinion, healthcare professionals do not believe that an explanatory conversation with them will be effective. It should be noted that some of the study respondents indicated religious considerations as the reason for refusing vaccination, only to avoid talking about the need for vaccination.

*If you go in a hijab they ask if you will do it or not. If you say no, they don’t even explain or try to persuade you. It may be that if they persuaded me we would have had the vaccine.”*

*Talas oblast, 36 years, secondary education*



In general, the women understand the need to fill out and sign a form of refusal. In their opinion, the form is needed for the following purposes:

- For medical statistics and reporting;
- As evidence that the parents take responsibility for the possible consequences of failure; and
- To protect their children from vaccination in children's educational institutions.

The inconvenience for "people who refuse vaccination" is that the statement of refusal of vaccination should be made again when the next vaccination period arrives. Some parents solve this problem by purchasing a certificate of medical exemption.

*"My acquaintance bought a form that said her son wasn't vaccinated from birth, because she didn't want to write the refusal again and listen to the kindergarten staff."*

*Chuy oblast, 32 years, higher education*

Many women living in various regions reported cases when vaccines were unavailable in the healthcare facility and the vaccination was postponed to a later date. In general, they are sympathetic to this, but it is inconvenient that they receive information about the lack of a vaccine when they are already at the healthcare facility. The vast majority of mothers do not have difficulty accessing a healthcare facility for vaccination.

## **INTERESTS IN NEW VACCINES**

Most of the study respondents (all residents of Naryn, Jalalabad and Batken oblasts, and most residents of Bishkek and Chuy oblast) categorically refused to be among the first vaccinated after new vaccines were introduced. The main argument for this is the belief that if the vaccine is new, then it is not sufficiently researched, and the vaccination is being conducted for testing purposes. However, some participants are ready to be vaccinated if they are provided with evidence of the need for and safety of the vaccine.

### **C.1.1 Internal labor migrants**

The study findings revealed that the opinions of "internal labour migrants" and "non-migrants" on the main issues do not differ significantly. However, since "internal labour migrants" do not have permanent residence registration, accessing healthcare services and, in particular, vaccination services, can be difficult. Nevertheless, the children of all labour migrants are attributed to the local healthcare facility at their place of residence. To register, it was only necessary to provide a certificate with the place of residence. Most "internal labour migrants" do not note particular negative attitudes among healthcare professionals and receive the same healthcare as residents with a permanent registration. However, some study respondents faced hostile attitudes, which they attribute to the fact that they were visitors.

Two Bishkek residents noted that they were denied service in hospitals in Bishkek and were recommended to ask a healthcare facility at the place of registration, village thirteen kilometres from the city, or to healthcare facilities serving residents of Chuy. However, within the framework of the study it is difficult to assess the legality of the refusal.



## C 2. Fathers and other influencers of children under five years of age.

### **STATUS OF VACCINATION**

All influential study respondents are vaccinated, whereas in their families, as a rule, older children are vaccinated, and younger ones are not vaccinated or partially vaccinated. The decision to refuse vaccination was taken either by the father alone, or jointly with the child's mother.

Most of the study respondents reported that they had not faced any problems concerning the vaccination of children. However, one of the fathers, a resident of Osh city, expressed the wish that parents who refused to vaccinate children be left alone. He mentioned cases in which law enforcement bodies exerted pressure on parents refusing to vaccinate.

### **VACCINE SIDE EFFECTS**

Some of the participants experienced adverse reactions after vaccination, such as fever, but they all received recommendations and advice from health professionals.

All influentials, with the exception of one, did not express lack of confidence in the quality of vaccines. The opinion of respondents concerning trust in healthcare professionals conducting vaccination was divided; most trust doctors partially, and some trust doctors who are relatives or friends.

Distrust of medical workers arose for the following reasons:

- Lack of professionalism and negligence of medical workers;
- Lack of personal responsibility for the consequences of vaccination;
- The material interest of healthcare professionals in vaccination.

Most of the study participants could not remember an event that changed their attitude towards vaccination. Two participants mentioned such events. One of them was linked to the massive HIV infection of children in Nookat district. The respondent connected this directly with vaccination, although according to information posted in the media, the infection was caused by repeated use of non-sterilized instruments.<sup>5</sup>

*They say that vaccination protects against infectious diseases, but the case in Nookat, on the contrary, led to them becoming permanently disabled. This is also considered 'vaccination'.*

*Father, Osh city, 32 years, higher education*

The second incident was the measles outbreak in 2015 in Kyrgyzstan. One participant believes that it was specifically the vaccinated children who died from the disease.

*"Two years ago, so many people died from measles, and it was those who had been vaccinated. The information is reliable. They showed it on television."*

*Father, Osh city, 30 years, higher education*

### **TRUST IN THE GOVERNMENT OF KYRGYZSTAN IN RELATION TO VACCINATION**

The vast majority of study participants believe that the Government of Kyrgyzstan does not act in the interests of children in matters of vaccination. For the most part, the influential people extrapolate their

<sup>5</sup> <https://24.kg/archive/ru/community/34518-2008/04/21/82687.html/>



negative perception both from the Government's activities in general and from its activities related to vaccination. However, some fathers expressed a belief that the Government of Kyrgyzstan is not alone in making vaccination decisions, but is fulfilling the order of some medical corporations, using the population of Kyrgyzstan for the purpose of testing of vaccines.

*“In international medicine Kyrgyzstan is like a laboratory, that can be used for various experiments. International medicine instructs our state what it needs to do.”*

*Father, Osh city, 30 years, higher education*

### **PROCEDURE AND TIME OF VACCINATION**

Caregivers Influentials have no complaints specifically about the process and procedures of vaccination. The waiting time depends on the number of children in the queue. They did not come across any complications in the vaccination process. Some participants, mostly Bishkek city residents, say that healthcare professionals treat them sympathetically. However, most fathers living in Osh city, said they were facing extremely negative attitudes towards parents refusing to vaccinate from healthcare professionals. They noted that healthcare professionals threatened them with referral to the law enforcement agencies, in particular, to the unit of the tenth Main Directorate of the Ministry of Internal Affairs.

*They are intimidated by claims that they will come from the 10th department and that those who do not get vaccinated are terrorists. Imagine, my child is one year old, and he is a terrorist because he did not receive a vaccination.”*

*Father, Osh city, 30 years old, higher education*

To be effectively persuaded with vaccination, information should come from parents that trust vaccination the most. It is also necessary to have enough time for parents to ask questions and get clarifications. Most of influentials believe that healthcare professionals do not talk about all the risks associated with vaccination due to the following reasons:

- The high workload and lack of time of healthcare professionals;
- Healthcare professionals do not have sufficient information;
- 

*“My sister-in-law is a nurse. I asked her why they give vaccinations. Do you know what they are made of? Do they tell you? And she said: ‘No’.”*

*Other influential person (grandmother), Bishkek city, secondary education*

- Healthcare professionals are not allowed to provide information to parents about vaccination. Therefore, most study participants do not trust healthcare professionals.

### **REFUSAL FORM**

Most caregivers influentials agreed with the need to sign the refusal form. In this way, parents take on themselves the responsibility for the consequences of their decision. In addition, the form is needed for statistics and for presenting in children's educational institutions.



### AVAILABILITY OF VACCINES

The participants did not experience any difficulties accessing vaccination services. Some of them had cases when there was not enough vaccine for all children. But these were isolated cases, which the respondents did not consider a serious problem.

### INTEREST IN NEW VACCINES

None of the participants was prepared to be vaccinated with or vaccinate children with new vaccines.

## C 3. Religious leaders

### STATUS OF VACCINATION

The vast majority of religious leaders are vaccinated, as they were born in the USSR, where vaccination of children was mandatory. Only one of the participants stated that she was not vaccinated, because the village where she lived had had no medical point.

Among children under the age of five in the families of study respondents, there are both vaccinated and unvaccinated children. Some study respondents said that their children were not vaccinated, because they refused to have them vaccinated. In families of five participants, all children under the age of five are vaccinated. Two of them noted that the children were vaccinated without taking their opinions into account.

*“I have five grandchildren and they’ve all been vaccinated. My daughters-in-law don’t listen and have the children vaccinated.”*

*Religious leader, woman, Bishkek city, incomplete secondary education*

### THE DECISION TO VACCINATE

In families of male religious leaders, the decision to vaccinate children is taken by the fathers. Some women religious leaders make this decision on their own, while others consult their husbands.

### VACCINE SIDE EFFECTS

Most of the study respondents did not encounter any problems related to vaccination. However, some participants reported negative attitudes from healthcare professionals when they refused to have children vaccinated. One of the participants was unhappy that healthcare professionals repeatedly called her to follow up and invite her for vaccination.

Half of the study participants have encountered cases of post vaccination side effects in children. As a rule, this is a temperature or malaise. At the same time, some participants believe that their own children suffered.

*My child was in pain – he was lying for so many days with a temperature: it seems it is a very terrible pain.”*

*Religious leader, woman, Talas oblast, higher education.*



At the same time, all the religious leaders stated that healthcare professionals warned them about side effects and gave recommendations.

### **VACCINE QUALITY**

Most of the religious leaders do not trust the quality of the vaccines, and some of them associate this with side effects after vaccination. Only one of them suggested that an unwanted reaction could be caused by the individual characteristics of the child's body.

Religious leaders differed on the issue of trusting healthcare professionals conducting vaccination. Nine of the seventeen participants did not trust the healthcare professionals for the following reasons:

- Incompetence, bad faith and uninformed healthcare professionals;
- Material interest among healthcare professionals in vaccination; and
- Severe subordination of healthcare professionals to Ministry of Health orders.

Most of the religious leaders could not remember an incident that changed their attitude towards vaccination. For other participants, this event was a personal experience or information they received about incidents of severe complications after vaccination. Only one of the participants noted that her attitude towards vaccination was influenced by the rude attitude of the personnel she encountered when visited the healthcare facility.

### **TRUST IN THE GOVERNMENT OF KYRGYZSTAN IN RELATION TO VACCINATION**

Most of the religious leaders, including all women, do not believe that the Government of Kyrgyzstan acts in the interests of children in matters of vaccination. Most often, the participants expressed the opinion that vaccination is business for the Government and state bodies, so officials have financial interest in Kyrgyzstanis vaccinating their children.

*They come to senior officials from big firms, asking to let them sell in the market, and they take the money and let these medicines and vaccines in."*

*Religious leader, man, Bishkek city, higher education*

### **PROCEDURE AND TIME OF VACCINATION**

Estimates of the time spent on vaccination vary considerably from a few minutes to two hours. At the same time, most participants are not prepared to spend more than twenty minutes to visit the polyclinic. Undoubtedly, the children's health is a priority for study respondents. When a visit to a doctor is necessary, they are the priority. However, for those who refused to vaccinate, the question of whether getting vaccinated or other things are more important is not relevant.

Most religious leaders did not encounter any problems when visiting healthcare facilities for vaccination that could influence their decision. One participant noted that there are health system issue, like queues she faced in Bishkek, and healthcare professionals being unhelpful are not determining factors to not vaccinating children.

Most of the religious leaders who addressed healthcare professionals with questions about vaccination were unhappy with responses received, being insufficient information. In addition, healthcare professionals do not possess this information. Given that some participants mentioned the financial interest of medical workers in vaccination, most do not believe that doctors will tell them honestly about its benefits and risks.



However, it can be assumed that healthcare professionals sometimes face very aggressive attitudes from parents, who ask questions unnecessarily wanting to get information.

*“I close them down [the healthcare professionals]. I ask them questions and then answer them myself, then they listen to me with their mouths closed. I tell them: ‘You’re the medic – answer my question.’”*

*Religious leader, women, Talas oblast, higher education*

### **REFUSAL FORMS**

Religious leaders who have completed refusal forms explained that they wrote them on empty papers and not a special form and understand the reason for them. The form is required for statistics, and also to present at children’s educational institutions.

*“I wrote that we expect healing from Allah, and that your medicine does harm. There is no benefit or harm from vaccination but benefit and harm will only come from Allah.”*

*Religious leader, woman, Issyk Kul oblast*

### **AVAILABILITY OF VACCINES AND LOCATION OF VACCINATION SITES**

According to the religious leaders, there are no problems concerning availability of vaccines or remoteness of vaccination rooms. Only one of the participants noted that she had encountered a case when the vaccine was not present in the healthcare facility, while the facility was in a neighbouring village.

### **ACCEPTANCE OF NEW VACCINES**

Most religious leaders categorically refused to be vaccinated with new vaccines. However, some would be willing to do so if information about the need for and safety of these vaccines was convincing enough.

## **C 4. Healthcare professionals**

### **STATUS OF VACCINATION**

All the healthcare professionals who participated in the study, stated that they themselves and their children are fully vaccinated. Some participants noted that in their milieu there are people who refuse to vaccinate their children, and that they often do not want to discuss the reasons for refusal. Basically, according to respondents, these people refuse on religious grounds.

*“Many of the religiously convinced [refuse vaccinations]. Now a large number of doctors perform prayers (namaz) five times a day. If you go to any hospital now, there is a prayer room. I’m against that – our state is not religious but secular.”*

*Immunologist*

### **HEALTH CARE PROFESSIONALS VIEWS OF REASONS OF VACCINE REFUSALS**

All the study respondents in their practice are faced by non-vaccinated or partly vaccinated children. Most of the parents, in their opinion, refuse to have their children vaccinated for religious reasons. They noted cases in which parents had fallen under the influence of radical religious functionaries who oppose vaccination.



*“They refuse because of religious convictions. It’s those women who wear hijab. Recently I heard that ‘refusing vaccination’ had started vaccinating their children. It turns out that they were encouraged not to have their children vaccinated by members of a group that was arrested by the police. After their arrest, all the people started having children vaccinated.”*

*Immunologist*

When refusing vaccination, these parents give the following reasons:

- The presence of prohibited substances in vaccines;
- There is no need for vaccination; everything, including disease, depends on divine predestination.

In addition to religious reasons, parents who refuse to have children vaccinated give other reasons:

- Fears of unwanted reactions;
- Vaccination kills the child’s natural immunity;
- Ineffectiveness of vaccination at preventing diseases;
- Distrust of vaccine quality.

Some participants stated that sometimes husbands or other family members put pressure on mothers when deciding about vaccination. In some families, conflicts arise over this.

*“Here [when deciding about vaccination] the mother only has 5 per cent of the decision, as for the rest a big role is played by the children’s father or grandmother. If the mother says ‘I’ll discuss with the family’ it means that the refusal is not her choice, but that of relatives.”*

*Neonatologist*

### **HEALTH CARE PROFESSIONALS VIEWS OF SIDE EFFECTS, VACCINE COMPOSITION AND WOMEN INTEREST IN INFORMATION ABOUT VACCINATION**

Most of the healthcare professionals have experienced cases of side effects after vaccination: temperature, malaise, redness and indurations at the injection site. All the parents receive recommendations about how to prepare the child for the vaccination and what to do if side effects occur. As a rule, healthcare professionals recommend taking antihistamines, and antipyretics if the temperature rises above 38.5 degrees.

Some doctors have experienced cases of post-vaccination complications that have arisen because of technical mistakes by healthcare professionals during the vaccination, or because the children were not properly screened before the procedure.

*“The paediatrician sent the child for vaccination but hadn’t checked him carefully. They did the vaccination without an examination by a neurologist or an ultrasound. After the vaccination there were complications, though not critical.”*

*Neurologist*

The study respondents described in detail the procedure for medical examination before vaccination. All the healthcare professionals who conduct such examinations explained that, in addition to the





examination, there is a discussion about vaccination, during which the parents receive information about the vaccine and the infections that it prevents and ask questions of interest to them.

Most parents ask the following questions:

- Why is vaccination needed?
- Does the vaccine present a danger to the child?
- Does the negative information about vaccination on the internet match reality?

In addition, parents are interested in information about the composition of vaccines. However, the description of the drug available to the healthcare professional is not clear for normal people lacking technical knowledge.

*Even if you read the contents [of the vaccine] they [the parents] don't understand. But if they ask, then we read them the contents."*

*Family doctor*

Therefore, several study respondents noted that they cannot answer parents' questions about vaccine contents, and also about the manufacturers, as time with families is extremely limited, and the doctors focus primarily on examination of the child. Nevertheless, most of the healthcare professionals are satisfied with their answers to mothers' questions about vaccination.

The vast majority of healthcare professionals talk to parents about the benefits of vaccination, but not all of them give information about the drawbacks for the following reasons:

- Complications following vaccination only rarely occur;
- Providing information about drawbacks of vaccination could lead to refusal; and
- Health professionals themselves don't not know the drawbacks of vaccination.

Healthcare professionals believe that examination of the child before vaccination on average takes around 20 minutes. However, if the child's parents refuse vaccination, the appointment might last up to one hour. For healthcare professionals practising in Bishkek, the timeframe is more limited because of the high flow of patients, and only 10-20 minutes can be spent per child. Therefore, there is extremely little time to discuss issues of vaccination with the parents.

*"There is not time, because there's always a crowd standing there. You try to do it quickly, and don't fully cover this question: we mainly use methods of intimidation."*

*Paediatrician*

Healthcare professionals note that the level of knowledge among mothers about vaccination varies immensely. Some mothers come well prepared, while some know nothing about vaccination. All the study respondents maintain the minimum of telling parents about vaccines and the diseases they prevent. However, the doctors need information materials in local language. There is a particularly acute need for such materials in Kyrgyz.

Healthcare professionals carry out their conversations with parents based on their own perceptions and experience. Obviously, there is no general strategy at their disposal for dialogue with parents. Thus, the voiced need among study respondents for training in effective ways of presenting information and persuading parents is highly needed and relevant. One of the doctors described how he usually runs the conversation:



*“Today, three come for the BCG vaccine, do you know what the vaccine is? If they all answer ‘yes’, then I do not ask any more. And if they ask: “What is the vaccine?” then I answer: “It is an inoculation against tuberculosis, we vaccinate so that your child will not get tuberculosis.» I ask: ‘Do you understand?’ If they do not understand, then I keep explaining until I get a positive answer.»*

*Neonatologist*

In explanatory conversations with parents about vaccination, healthcare professionals use both rational and emotional arguments. The rational arguments include statistical data about morbidity with vaccine-preventable diseases and comparative data about morbidity of vaccinated and non-vaccinated children, as well as their own personal positive experience of vaccination.

*“I use myself as an example. For three years now, I have been getting the FLU vaccine, Thank God I’ve never caught the flu.”*

*Paediatrician*

The emotional arguments are made in a way that touches the main value of every parent: the life and happiness of their child.

*“I ask them: do you think of your child’s future? So, your son didn’t get his vaccination, he contracted polio and he becomes paralyzed. In the future all his friends gets married and he will not have family because he is paralyzed. And then he asks you why am I paralyzed? you will tell him that he did not get the vaccine, that’s why. Then he will blame you, because he wasn’t vaccinated on time, it’s free, you should have vaccinated me, then I would not be sick like that. You parents, what will you say in this case?”*

*Immunologist*

### **DEALING WITH REFUSALS**

In practice, Health care professionals should refer parents who refuse vaccination to immunologists, however, in reality this does not happen. Half of the healthcare professionals who took part in the study stated that they did not refer parents who refuse vaccination for consultations with immunologists, due to the following reasons:

- There is no immunologist;
- did not think an immunologist should be invited; and
- Don’t see the point in inviting an immunologist.

*If necessary we invite an immunologist for advice, there have been such cases, but in any case, it doesn’t work.”*

*Family doctor*

Decisions to cancel or postpone vaccination for medical reasons are taken collegiately based on data about the condition of the child, after consulting with specialists. Depending on the condition of the child and the reasons, a new timeframe is established.



*We make a decision collegiately. There is the clinical doctor, a family doctor, who makes the diagnosis. We look at the diagnosis and the child's condition. Then we minute it and register the length of the medical exemption in a journal.*

*Immunologist*

### **FOLLOWING UP ON VACCINE DEFAULTERS**

It is mandatory to track children who have not been vaccinated at the family group practice/rural health point level. Healthcare professionals explained that at each site there are lists of children / vaccination registers, and a monthly vaccination plan drawn up. If the child does not visit the healthcare facility at the appointed time, healthcare professionals call the parents or visit the family. If the parents refuse to have their children vaccinated, trials to convince them are made. Under the Law on Immunization against Infectious Diseases, healthcare professionals cannot apply any measures to parents who refuse to vaccinate children, except for trials to explain and convince them.

### **VACCINATION AS A PRE-CONDITION TO SCHOOL ENROLMENT**

Study respondents explained that the sanitary and epidemiological station staff supervising preschool institutions receive information about children not vaccinated without medical exemptions. However, one of the doctors had faced a case in which the parents forged a vaccination card to arrange a child's placement in an educational institution.

*"The children hadn't received vaccinations, and they didn't have vaccination cards. The mother paid to have a vaccination card done. I don't know if a doctor or nurse did it, but it was filled in properly: I saw that vaccination card myself."*

*Neurologist*

Healthcare professionals practising in Jalalabad Oblast explained that if they receive information about cases in which parents refuse vaccination for religious reasons under the influence of agitation, they turn to law enforcement bodies.

Healthcare professionals in Batken oblast are concerned about the situation of children of external labor migrants, these children who were born outside, and come back to live in Kyrgyzstan, often do not register with medical institutions in their places of residence and, thus, do not get vaccinated on time. Individual vaccination plans are prepared for such children.

*"They are born in Moscow and receive a birth certificate from the Embassy there, and nobody pays attention to them. Then sterile children arrive here. This is a problem for us.*

*Doctor, Batken oblast*

### **WHAT AND WHO CAN INFLUENCE MOTHERS DECISION OF VACCINATION**

In the opinion of the study respondents, mothers' decisions about vaccination can be influenced by:

- 1. Healthcare professionals:** counselling and education about vaccination can be carried out in the form of meetings/discussions with parents, participation in thematic television programmes and discussions. One of the study respondents proposed resuming educational work in children's educational institutions;



2. **The internet:** It would be useful to monitor social networks and participate in discussions on forums where vaccination is raised. None of the medical workers mentioned the site *privivka.kg* as a source of information about vaccination. Indeed, the Republican Immunization Centre's site is currently not really a source and requires serious refinement. The information that representatives of all target groups needs is not on the site. In addition, the working version of the site only appears in Russian, and there must be a version in Kyrgyz language as well;
3. **Religious leaders.** Since, according to medical professionals, the main reason for refusals is the inconsistency of vaccination with religious principles, religious leaders need to be involved in counselling and educational work;
4. **community leader;** have a great role to play to impact the vaccination decision, and have an unmatched opportunity to convince parents
5. **husbands and grandparents:** are key as they influence the vaccination decisions as noted above, the only method healthcare professionals can use to combat refusals to vaccinate is through outreach, which in most cases is conducted through conversations with parents, as well as with community leaders.

One of the respondents in the study, a neonatologist, talked about how she, in an interactive forum, is teaching mothers about breastfeeding. She believes that in maternity hospitals, where women spend a few days, you can use similar educational methods for vaccination.

*"I have a very interesting approach, I do it in the form of a role-playing game, because breastfeeding is the most important thing for us now. On the first two days, I tell my mother's everything, and on the third day they tell me everything. Why am I doing this? If mother of new-borns cannot tell me what I told her over two days, she did not retain it in her head, and if she can express it, that's good. I sit down next to her, ask her to tell me, as if I had just given birth. Then they retain something, like in network marketing. I tell them to go for a walk in the courtyard, gather two or three mothers and tell them about breastfeeding, they told us so in the maternity hospital, and then all our population will know everything. You shouldn't throw around medical words to prove you are such a literate doctor. Our mothers are absolutely simple, you need to try to explain things to them in accessible language."*

*Neonatologist*

### **THE NEED FOR COMMUNICATION MATERIALS ON VACCINATION**

Health care professionals struggled with an acute shortage of visual materials, such as booklets, brochures, displays and posters. Currently there are no such materials about vaccination at the disposal of healthcare professionals.

*We have decrees: we take them and show them to the parents."*

*Paediatrician*

*"Spiral-bound books should be made for consultations. Currently they are popular. Here is one we have about breastfeeding. Everything is clearly shown here. You could show diseases and complications in this way."*

*Paediatrician*



Health care Professionals also expressed the need to conduct some advertising. They gave as an example the video clips that were shown on Uzbekistan's television, and also video clips created during the national immunization campaign against measles and rubella in Kyrgyzstan in 2015.<sup>6</sup>

*"If you show that sort of clip, it leads to good results. Before mass immunization we had videos about vaccination, and they were shown in polyclinics: that led to a degree of activeness in the population in having vaccinations."*

*Immunologist*

## QUALITY OF VACCINES

Most of the healthcare professionals have not encountered complaints about vaccine quality. In their opinion parents cannot judge their quality. However sometimes parents, receive information from various sources (including other healthcare professionals) that Kyrgyzstan uses poor-quality vaccines, intended for "Third World" countries, and ask specialists to explain this.

*Mothers told me that we have a medical centre – the name of which I don't know – where imported vaccines are purified, made for Europe, of very good quality, and it costs 5,000 som for those vaccines. My patients said that they will get vaccinated there. And the paediatrician told them that the vaccines are not very good, and that they come to us like a third world country and it is not clear how they are stored. This paediatrician, probably, works at a family doctor group."*

*Neurologist*

One of the medical workers talked about a case that occurred 3-4 years ago, when a vaccine was actually used, that had been stored in inadequate conditions. As a result, post-vaccination complications were recorded in children.

Most healthcare professionals trust the quality of the vaccines they use in their practice and believe that all these vaccines have been tested for quality and safety. One respondent said that there were parents' complaints about the MMR vaccine, which is produced in India. The doctors, in turn, turned to the RIC. A trip was organized to the plant that produces the vaccine, and a video was filmed about the manufacturing process. This eliminated doubts about the quality of the vaccines.

However, not all healthcare professionals know how vaccines are certified, and three HPs expressed doubts about the quality of vaccines. At the same time, they did not bring any arguments proving the validity of these doubts. Doubts are more likely to arise because of the lack of information about the procedure for quality control and certification.

*"I know that they should be checked, but I don't know if they have been checked for quality and safety. The level of trust varies somewhat."*

*Neurologist*

Many study participants from various target groups (including mothers and grandmothers) believe that vaccine quality was better before. Opinions differ among healthcare professionals on this issue. Most of the respondents believe that the quality of the vaccines used today is significantly higher. Some of them expressed the opinion that it is possible that children find it more difficult to take the

<sup>6</sup> <https://www.youtube.com/watch?v=Wz9OHNrGGw4>, <https://www.youtube.com/watch?v=PEc2-KHn-0g>



vaccines because of reduced immunity and environmental problems. However, there were also some healthcare professionals who took the opposite view.

*“We check the documents, and the child received a measles vaccination, but all the same he falls sick. There are few such cases, but you do encounter them. And previously there weren’t such cases.”*

*Family doctor*

### **STORAGE AND TRANSPORTATION OF VACCINES**

On the topic of storage and transportation of vaccines, doctors are unanimous in the opinion that currently this process is organized and performed much better.

*“During Soviet times, there was no transport or refrigerators. Now a special vehicle comes to us from Bishkek. Even from the store they only come in thermal bags, while there was no such things in Soviet times”.*

*Immunologist*

### **PROCEDURE AND TIME OF VACCINATION**

In state healthcare facilities, in the opinion of study respondents, the vaccination process takes on average 30-60 minutes. If a child needs a brain ultrasound, time allocated can be extended to one hour. In private healthcare facilities vaccination takes 15 minutes. Healthcare professionals explained that they try to organize the process in a way that minimizes waiting time. However, parallel to vaccination, seeing sick children in polyclinics happens at the same time, so healthcare professionals do worry about the risk of infection of healthy children.

*“Previously if a sick person came for assistance he would go through a box. We had ‘healthy’ days. But now an order has come through that we need to do vaccinations every day. But at least we should have a separate admissions area for healthy children.”*

*Immunologist*

Most healthcare professionals noted that the process of receiving vaccinations takes place in a friendly atmosphere, and that otherwise it could influence parents not to have their children vaccinated.

*“If we were rude to her [the mother], she might not come the next time. I always say that medics should change their attitudes to such parents.”*

*Immunologist*

However, some participants do not exclude the possibility that some cases do occur due to rude behaviours towards parents.

*“There are some doctors with strong characters, who are rude to patients, and many mothers are disappointed.”*

*Neurologist*



Most of the healthcare professionals have no difficulties with parents, who bring their children for vaccination. However, some participants noted that parents do not always follow their instructions for caring for the children after vaccination. One study respondent, a nurse, encountered cases in which parents had their children vaccinated in the absence of the facility manager, who should examine the child before vaccination. Sometimes parents try to persuade her to vaccinate a child without medical examination, thereby exposing the child to the risk of post-vaccination complications.

### **REFUSAL FORMS**

As a rule, refusals to vaccination are documented. Parents write a statement in a free form, in which they also explain the reason for refusal. All the healthcare professionals believe that this form is needed, and that it has to be signed by parents for the following reasons:

- For statistical recording of the reasons for failure; and
- In order to protect medical professionals from the allegations of parents if the unvaccinated child becomes ill.

*We had one case. One woman refused to have her child vaccinated against diphtheria. The adolescent contracted diphtheria and died. Then she went to court. In the court, she said: "If the doctor had explained to me that my child would die if he fell ill I would have run to have it done. But she herself always refused, but it was not in written form."*

*Immunologist*

### **VACCINE AVAILABILITY**

Most healthcare professionals noted that currently they virtually never encounter the problem of lack of or insufficient vaccines: vaccination goes as planned. Study respondents living in Batken oblast noted that such cases do still occur.

*"Last year it happened twice for 1.5-2 months each time. This year there are no vaccines this week. There is one vaccine but not a second."*

*Doctor, Batken oblast*

In other regions, such cases are isolated. Sometimes the day of vaccination is postponed because there are not enough children to open a vaccine vial.

### **INTEREST IN NEW VACCINES**

Healthcare professionals are worried about new vaccines. Only four of the seventeen participants expressed an unconditional desire to be among the first to use new vaccines.

## **D. SOURCES OF INFORMATION ABOUT VACCINATION**

### **D.1 Mothers of children aged under five years and Labor migrants**

Today, mothers have a wide number of sources of information about children's health. These sources can be divided into six types:



- Healthcare professionals - both employees of medical institutions visited by women, and relatives / friends / acquaintances with medical education.
- The mass media:
  - Television: Elena Malysheva's programmes on central Russian television, «Friday» channel (Doctor Komarovsky's school), «Balastan» channel, OTRK, and EITR.
  - Periodicals: Super-Info newspaper, My Baby magazine.
- Internet: sites www.rodin.ru, www.baby.ru, www.mama.ru, www.zdorove.ru, www.doktor.ru, Islamic sites (mentioned www.adept.kg), videos on YouTube channels;
- Social networks and forums: Facebook, classmates, Diesel Forum, Instagram;
- Relatives, friends and acquaintances; and
- Books

The internet is the most accessible and widespread source of information for study respondents. Most women who use internet resources to find information about health, trust it partly. At the same time, some participants believe that on some channels, for example, on YouTube, trustworthy materials are placed.

Healthcare professionals are also not absolutely reliable as a source of health information in the opinion of study respondents. Some women do not fully trust family doctors, as they believe that they cannot advise on matters that are not related to their specialty.

*He is a good doctor. But I heard that he is a gynaecologist. How can he become a family doctor? I showed him my child out of despair because there is only one doctor.”*

*Naryn oblast, 27 years, higher education*

Some mothers note that when they cannot receive the information that interests them from healthcare professionals, they have to look for it on the internet.

*“A nurse came and made us vaccinate. I asked her about the vaccine composition, but she couldn't answer satisfactorily, and so I went on the internet and looked for the information myself.”*

*Osh city, 38 years, secondary specialized education, “internal labour migrant”*

The paediatrician “Yevgeniy Komarovskiy” is very popular with mothers, who trust him based on his reviews and comments. Some women also referred to the opinions of Galina Chervonskaya, a Russian virologist. Some women who profess Islam noted that to treat children they use the method of prophetic medicine.

*I tested my daughter in practice. In the hospital, her ears were washed, then they prescribed a lot of medicines, I took the prescribed medicines and left. But at home I made Muslim herbs medicine from Qist al-Hindi [putchok] and honey, read Surah, asked Allah for help and gave my daughter this medicine for 10 days. There are no traces of pus left. When she has bronchitis, coughs and other minor illnesses, I give the same medicine.»*

*Chuy oblast, 38 years old, secondary education*





Women receive information on vaccinations from the same sources as health information. It should be noted that women professing Islam, in matters of health, they mostly trust Muslims who read prayers. So, in matters of vaccination, “Shilobek Urkunbaev”, a religious leader and an opponent of vaccination, is the authority for them. As practice has shown, in the eyes of believer’s healthcare professionals lose to religious preachers at the moment in discussions on vaccination.

*“There was a television broadcast involving Shailoo’s, where he talked about the dangers of vaccinations. He talked authentically and could even set out the composition of vaccines. A doctor sat opposite him and couldn’t answer him at all.”*

*Chuy oblast, 27 years old, secondary education*

All healthcare professionals should promote positive attitudes towards vaccination, not just those directly serving children under five. However, not all specialists, in the opinion of mothers, are sufficiently trained to respond expertly even to general questions about the need for vaccination.

*“We were invited out and chatted on the theme of vaccination. One acquaintance is a medic working in a rural health point. When we asked her why vaccination is needed, or if it is needed in general, and what is it made of, she couldn’t fully answer us. She only said that the vaccine contains sperm.”*

*Issyk Kul oblast, 51 years, secondary education*

### **INFORMATION WOMEN ARE INTERESTED IN ABOUT VACCINATION**

Most frequently, the study respondents wanted information about the contents and manufacturers of vaccines. This was because of wide dissemination and discussion of the idea that the contents of the vaccines used in Kyrgyzstan include toxins (mercury, formaldehyde and so on), as well as substances forbidden in Islam (pig fat and pig’s blood). Some of the participants believe that vaccines in developed European countries and USA are of better quality, purified, vaccines are used, so the likelihood of side effects in children is minimal. Study participants also worry about why vaccination is free. They link this with rumours that Kyrgyzstan’s children are being used to test vaccines. The information about vaccinations received by study respondents are mainly negative.

*“Half a year ago I went to study in a madrasa. They said there that children become dull after vaccinations. Our people all go to Russia, and they call them sheep there, because we get vaccinations free of charge.”*

*Jalalabad oblast, 36 years, secondary education*

#### **D.2 Fathers and Influencers for children under five years of age.**

During the discussion, the study participants mentioned several sources of information about health:

- television;
- the internet;
- social networks (Facebook and Whatsapp);
- healthcare professionals; and
- internet forums.



The most popular television programmes are those of Elena Malysheva. The participants also mentioned the channels OTRK, EITr, NTS and AyanTV, but they could not name which programmes they received information from. Fathers receive information about health by viewing videos on YouTube, but they could not name any specialized internet resource with such information. Discussion of issues related to children's health on internet forums is predominantly a practice of women.

*“Speaking frankly, for the last two years I’ve been treating my children using Google and the internet”*

*Other influential persons (aunt), Bishkek city, 36 years, secondary education*

Some participants receive information about health from relatives, such as wives and parents. For information about vaccination, they use the same sources.

None of the above sources, with the exception of close relatives, are, in the opinion of the study participants, absolutely trustworthy. The information provided on state television channels is, in their opinion, one-sided.

Influentials only trust healthcare professionals who are acquaintances. Mistrust arises for two reasons:

1. The assumption that healthcare professionals deliberately do not provide parents with full information about vaccination;

*“They are afraid to talk because even their telephones are being listened to now.”*

*Father, Bishkek city, 32 years, secondary education*

2. Healthcare professionals do not have full information about vaccination.

In general, information about vaccination obtained from different sources, is quite contradictory. Therefore, influentials compare and analyse it, some of them share their opinions with friends and acquaintances. Then they make conclusions, relying on facts, their experience, and the opinions of relatives and friends.

### **INFORMATION FATHERS AND INFLUENCERS ARE INTERESTED IN ABOUT VACCINATION**

Most of the study respondents noted that information about vaccination is important for them. At the moment, they would like to receive answers on the following issues:

- The negative consequences of vaccination;
- The long-term effects of vaccines on children;
- Vaccination in economically developed countries;
- How effective is vaccination: what is the probability of contracting a disease when vaccinated?

It should be noted that in the general information on vaccination received by study respondents is predominantly negative: this is the main reason why study participants do not accept vaccination: in other words, most of the fathers had not had personal experience of undesirable consequences. This attitude to vaccination is aggravated by the fact that negative information also comes from doctors, which is a key reason for doubts and the argument against vaccination.

*“Even academics can’t decide among themselves if vaccines do more harm or good.”*

*Father, Bishkek city, 52 years, higher education*



*“Before my child was born, the president of the family doctors came from Europe. In Osh they held a big conference, bringing together all of Kyrgyzstan’s doctors. I had the opportunity to ask him a personal question. They said that vaccination in Europe is quite different from here. Doctors from Bishkek said that they would recommend their patients not to receive vaccinations. They also said that the global pharmaceutical business provides all this, because they get a lot of money. They first vaccinate free of charge, and then the child falls ill, and that is an opening for this global pharmaceutical business.”*

*Father, Osh city, 30 years, higher education*

*“My grandson says that a doctor’s daughter is in his class, and she is never vaccinated, her mother doesn’t do it.”*

*Other influential person (grandmother), Bishkek city, 63 years*

Despite the fact that the information received from health professionals should be trusted more, the study shows that still many people trust more religious leaders with medical education.

*They’re that sort of people who in their time had incorrect lifestyles, made many mistakes. Then they come to faith in Islam and leave their previous lives and begin to talk about how things really are. That Hippocrates tricked me.”*

*Father, Osh city, 27 years, secondary education*

Thus, the respondents, both men and women, refer to the opinions of Shailoobek Urkunbaev. Shailoobek Urkunbaev is a pharmacist by training, and previously had a range of official positions, including heading the Department of Medical Provision and Medical Equipment. He is now famous as a religious leader and an opponent of vaccination.

*“I trust in Shailoobek ustad. I myself, of course, did not study, but I trust this person, I trust in Allah. And first of all he is a pharmacist and knows better than us. He worked in this field; he occupied a senior position in his time. I believe that he is not tricking us. He will answer for this before Allah. For me, he is an authoritative person and his opinion is important.”*

*Other influential person (grandmother), Bishkek city, 60 years, secondary education*

For several study respondents, the opinions of such people would be enough to change their attitudes towards vaccination.

*You don’t need to explain: we know anyway that vaccinations are dangerous. If, for example, Chubak aji says to do vaccinations we’ll do them. I trust him completely.”*

*Father, Bishkek city, 32 years, secondary education*



For most of the fathers clearly set out support for vaccination from religious leaders would also be very significant. Nonetheless, they should be provided with full non-contradictory information by healthcare professionals about the need for vaccination, including information about side effects and vaccine composition, as well as guarantees of the quality of vaccines.

*No way and nobody. Even if there's an outbreak or an epidemic, we will not vaccinate. If someone is fated to die, then that is the will of God!"*

*Other influential person, Bishkek city, 58 years, secondary education*

### D.3 Religious leaders

To receive information about the health, religious leaders use the same sources as members of the other target groups:

- Television (OTRK, EITr, OshTV, Osh Pirim and Ayan Tv);
- The internet;
- Social networks – Facebook, Odnoklassniki, WhatsApp;
- Healthcare professionals; and
- Friends and acquaintances.

Several respondents noted that they had watched video clips on YouTube channels, particularly Dr Komarovskiy's channel. The religious leaders also mentioned the printed press: the magazine "Zdorov'e [Health]" and the newspaper "ZOZh". Study respondents noted that the information they receive from these sources are contradictory, and so they only partially believe it. The most trusted source of information about health, in the opinion of the religious leaders, is theological books, as well as religious preachers – such as Yasin Khalid, Numan Ali Khan, Mufti Menk and Fatih Seferagic – who also post videos on their YouTube channels.

To receive information about vaccination, religious leaders use these same sources. Some of the religious leaders, like members of other target groups, mentioned Shailoobek Urkunbaev as someone they trusted, as he had studied medicine at university level.

*There were some special lectures: I have them on tape. Shailoo was lecturing. There was a lot about vaccination. I trust him. He explains excellently, concisely, clearly with evidence from the hadiths, he is educated."*

*Religious leader, woman, Chuy oblast, secondary specialized education*

Female religious leaders who decide to refuse vaccinations noted that they are not interested in information about it.

The other respondents noted that they are interested in the following information:

- The composition of vaccines;
- The countries of manufacture of the vaccines;
- Information about the need for and the benefits of vaccination;
- Information about the side effects of vaccination; and
- Information about the harm that vaccination can do to children.



It should be noted that in general the flow of information about vaccination of children received by most of the religious leaders is predominantly negative. The study participants noted that they share this information, not trying to prove or disprove it.

*“If I hear that somewhere Muslims are being vaccinated I say to them they shouldn’t, do it. Muslims are not allowed to do it. I heard it in the Jamaat.”*

*Religious leader, woman, Bishkek city, incomplete secondary education*

*“When I receive some sort of information about vaccination I don’t check it, I just trust these sources. How could I not believe such a respected person as our imam?”*

*Religious leader, man, Osh oblast, higher education*

Most of the religious leaders discuss the negative information they receive about vaccination with relatives and friends. Sometimes they turn to healthcare professionals for advice, but they do not receive answers to their questions. Based on this, they draw their own conclusions about the dangers of vaccination.

*When you tell them [the doctors] about the dangers, they agree themselves. They ask why we refuse. I, for example, say: ‘Sister: you understand yourself, you’re a doctor, you know how it is harmful.’ They just sit in silence.”*

*Religious leader, woman, Talas oblast, higher education*

Half of the religious leaders who participated in the study believe that there is enough information about vaccination, and if needed they can find it in open sources.

The other participants faced a lack of trustworthy information about vaccine composition, the diseases that vaccination is conducted to prevent, and the influence of vaccines on a child’s body. Two of the participants wanted to resolve their doubts concerning rumours that Jews are using vaccination in their struggle against Muslims.

*“As the doctors say, a vaccine is a microbe and it was developed by Jews. And I think they specifically want to wipe out Muslims, by damaging their brains.”*

*Religious leader, man, Chuy oblast, secondary education*

Most of the religious leaders do not want training on vaccination. Female religious leaders who have refused to have their children vaccinated would like to participate in training on the legal aspects of vaccination. Only three of the seventeen participants stated that they work in collaboration with healthcare professionals. At the meetings, the issues of combating tuberculosis and women’s health (abortions and caesarean section) were discussed. In addition, the vast majority of study respondents do not work on vaccination issues with the public. The reasons for this are the following:

- Unwillingness to influence the decisions of parents;
- Unwillingness to advise on issues that the religious leaders do not consider themselves sufficiently knowledgeable about; and
- Lack of confidence in the need for vaccination.



#### D.4 Healthcare professionals

The main source of information about vaccination for healthcare professionals is Ministry of Health Orders. Most of the participants mentioned this document first.

*“Every order has its own books, for example, vaccination against measles has a book of its own ... there everything is written, at what age, how to do it. Once we receive such an Order, we must trust it and carry it out. «*

*Family doctor*

Most of the study respondents when looking for specialized information, including about vaccination, use the internet. However, not one of them was able to name any internet resource that on their opinion contains reliable information.

*“I can’t name any sites, but I ask questions on Google and links come up.”*

*Immunologist*

Few of them use specialized medical publications and internet resources to expand their knowledge about vaccination. Only two participants mentioned the scientific journals “GNPI” and “Allergologiya immunologiya [Allergology and Immunology]”, as well as the site “Neonatologi Rossii [Neonatologists of Russia]”. Some doctors also mentioned the websites of the Ministry of Health and the Department of State Sanitary Epidemiological Surveillance as their sources of information about vaccination. As well as representatives of other target groups, healthcare professionals receive information about vaccination from television programmes and also periodicals (the newspaper “Bud’ zdorov [Be Healthy]”, and the magazine “Zdorov’e [Health]”). The information received from higher-level organizations is, in the opinion of medical workers, the most reliable. However, materials on vaccination appearing in the media should not be fully trusted as no one is responsible for their reliability.

*The internet can even be used by someone with schizophrenia, they can do anything.”*

*Immunologist*

One of the study participants noted that all the information needed about vaccination is contained in the Ministry of Health orders. For most medical professionals, this was the latest information they had received. However, an order is a directive document, and the information presented in it has a highly specialized character regulating the process of vaccination. In contrast, most study respondents need additional knowledge about:

- The composition of vaccines;
- Vaccine manufacturers;
- New vaccines;
- The impact of vaccines on the human body; and
- Unwanted reactions after vaccination.

The study respondents noted that most of the vaccination materials they receive from official sources are written in a specialized “medical” language. In order to use them for counselling parents, they



need to adapt them. Therefore, healthcare professionals have an acute need for clear and accessible information for parents, which should be provided in Kyrgyz language.

All the healthcare professionals share the information they receive with colleagues, including discussing negative information about vaccination obtained from various sources.

It can be concluded that the information of healthcare professionals in the field of vaccination is limited to official and news items. Most of the study participants had not studied academic studymaterials in the field of vaccination. Those who said that they did read scientific articles could not remember what they were about. Therefore, specialized courses and training should be used to, among other reasons, provide healthcare professionals with information about new scientific developments and studyin the field of vaccination. It should be noted that the coverage of healthcare professionals with specialized courses and seminars where vaccination issues are discussed is quite high. Only one of the seventeen participants had not taken part in such events, and ten healthcare professionals participated in vaccination training in 2017.

Most of the healthcare professionals receive comprehensive information at the training sessions. However, some of them noted that in vaccination training insufficient attention is paid to issues of working with the population, especially with parents who refuse to vaccinate children.

*“They told us that the imam are not against vaccination, gave out posters and little booklets to give to the mothers who refuse, and the rest of the seminar was like they always are.”*

*Neonatologist*

Therefore 13 of the 70 said that they required training on interpersonal communication and counselling on vaccination. The healthcare professionals believed that this could be organized in the form of lectures or master classes.



## VI. CONCLUSIONS

The qualitative study has confirmed the main finding of the quantitative study, and have highlighted several reasons behind vaccine refusals among the different respondent groups that can be highlighted in the below points:

1. Fear of vaccine side effects: the majority of respondents expressed their concern of vaccine side effect on the short and long term, and even though they some have not witnessed any side effects themselves, there is a lot of talk on this issue causing negative impressions that does not reflect reality
2. The study revealed that there no direct contradiction between religion and vaccination, and it is believed that this is due to the fact that most respondents of the study did not like publicly linking their refusal to vaccinate to religion.
  - a. Despite that the growth in the number of refusals motivated by religious conviction should not be ignored, as lobbying against vaccination is taking place among believers, based on religious and pseudo-religious postulates.
  - b. There is a belief that some postulates could be interpreted as an indirect prohibition of vaccination and are used widely to increase vaccination refusals. In addition, study participants who professed Islam could not name one religious leader in Kyrgyzstan who speaks out in favour of vaccination. At the same time, religious leaders who oppose vaccination are rather popular among parent “refusing vaccination”.
3. Lack of trust in vaccine quality: The population do not trust the quality of vaccines in the country most of which are based on rumors
  - a. Negative information about the vaccine quality (compositions, manufacturers) that are disseminated in various media and are not responded to effectively by the MOH
  - b. Lack of laboratories services in the country to check the quality of vaccines
  - c. Doubts about the vaccine shipping and cold chain process
  - d. lack of information about vaccine manufacturers, a belief that vaccines brought to the country are of lower quality “Third World Quality vaccines”
  - e. Vaccines are coming from countries like India and Pakistan, where they have high mortality and unsanitary conditions
4. In competency of some health care professionals:
  - a. A number of cases have been noted in which healthcare professionals are not able to counsel refusing parents resulting in confusion of parents and refusals to vaccines
  - b. A number of health care professional so not perform pre-vaccine check-ups and investigations on children leading to parents believing that this is so harmful for the children
5. frightening and forcing people to have their children vaccinated has a negative effect, leading to resentment and rejection. Meanwhile, parents who make conscious decision on vaccinating their children are less in danger of falling under the influence of negative information
6. Vaccine composition: A belief that some of the vaccine composition are of toxic substances; and includes prohibited items and thus should not be used
7. irresponsibility of the state and healthcare professionals: Neither the sate nor Health care professionals take responsibility for negative consequences of vaccination; pushing parents to think that they stand a risk by giving vaccines to their children





## VII. RECOMMENDATIONS

The study recommendations can be grouped in three main categories:

### **1. Capacity strengthening health care professionals(HPs) on IPC&C, and equipping them with communication materials on RI**

- a) One of the most effective ways of changing parents' negative opinions in favour of vaccination is interpersonal communication and counselling through healthcare professionals. Currently, counselling refusing parents "refusing vaccination" is a "weak spot". Healthcare professionals, in addition to time limitations, do not have sufficient persuasion skills to convince parents with vaccination. Thus, it is believed that there is a strong need to capacity strengthening of health care professionals to better educate and counsel parents on vaccination. Providing HPs with comprehensive information about vaccines and on counselling refusing parents.
- b) Developing Job Aids and communication materials that could be used by health care professionals to talk to parents, materials should include a list of vaccine refusals issues and how to respond to them

### **2. Engaging with religious leaders to promote RI**

It is crucial to engage leading religious leaders to publicly support and promote RI. As well as to develop a system of counterarguments to refusal related to religious claims.

### **3. Promoting RI facts**

developing a comprehensive communication package on RI that includes:

- Facts on the composition of vaccines
- Vaccines ability to protect children against VPDs
- Vaccines around the world
- Vaccine licensing, certification, shipping, storage and handling process
- Vaccine side effects



## ANNEX 1

### INFORMATIVE STUDY TO EXAMINE REASONS BEHIND VACCINE REFUSALS, RESISTANCES, AND BARRIERS IN-DEPTH INTERVIEW SCRIPT

#### MOTHERS AND OTHER CAREGIVERS OF CHILDREN UNDER AGE OF FIVE

##### INTRODUCTION BY MODERATOR (5 min)

Good afternoon, my name is \_\_\_\_\_. I am a representative of Rebicon agency. UNICEF and Ministry of Healthcare of the Kyrgyz Republic have contracted us to undertake a qualitative study via organization of focus group discussions. We thank you for accepting our invitation. Today's focus group (hereinafter discussion) will be devoted to learning more about attitudes towards immunization/vaccination of children.

Vaccination is a lifesaving health intervention that significantly contributes to children's health and protection from infectious diseases around the world. Immunization is recognized to be one of the most effective healthcare measures for reducing susceptibility to infectious diseases, especially among children.

Despite a high vaccination coverage in the Kyrgyz Republic, outreach to some groups of population leaves room for improvement. Lately, the number of refusals from vaccination has been increasing along with the growing disapproval and negative attitudes towards vaccination among some population groups. During our study, we would like to investigate what is causing current attitude to vaccination.

Let me tell you about the structure of our discussion. Our discussion will last for about 1.5 hours. I would encourage you to avoid being shy and to openly express your opinion. I would kindly ask you to take turns in speaking and not to interrupt each other. There are no right and wrong opinions. We value feedback provided by each one of you.

All information provided by you is confidential. It will be processed and presented as general recommendations. I need to make audio recording of our discussion to capture all of your feedback. Only I will use this recording. If you do not have any objections, I will turn on the voice recorder.

First, I would kindly ask you to introduce yourself and tell us about your background.

##### 1. WARMING-UP (10 min)

1. What is your name? How old are you? What education have you received? What do you do at present?
2. How many children under the age of five in your family?

##### ***For «internal work migrants»:***

3. Do your children attend pre-school educational institutions?
4. Are your children under five, registered with Family Practitioners (Medical and obstetric center) assigned to your place of residence?
5. Do you have a permanent registration ("propiska") in this residential area?



6. Where did you live before moving to Bishkek/Osh?
7. What was the reason behind your move to Bishkek/Osh?
8. Did you vaccinate your children in your previous place of residence? Why? And what about now, in your new place of residence? Why? Is there any difference in vaccinating children?
9. Do you currently face any challenges in obtaining medical services for your children? What type of challenges?
10. Do you need many certificates / official records in order to visit a doctor?
11. Are you treated differently by medical workers because you are a non-resident? Why do you think so?
12. Do you receive any help / support from some organizations? If so, from which?

## 2. COMMUNICATION CHANNELS AND TRUSTED SOURCE OF INFORMATION (20 min)

**Now I'd like us to talk about your sources of information about vaccination.**

1. Which sources of information related to health do you use? (LIST NAME OF SOURCES).
2. Do you believe in info from this source? Why?
3. What media do you use? Name TV channels, radio stations, internet websites, press, etc
4. Which sources of information related to vaccination do you use? (IF WEBSITES ARE MENTIONED, PLEASE ASK THE LINK)
5. Do you believe in info from this source? Why?
6. What info about vaccination you are usually interested in? Where do you search it?
7. Could you remember any last info about vaccination? What was it about? What source?
8. Do you share this information with others? Do you try to find a reliable source of information to crosscheck / validate or invalidate this information? Why so?
9. When you hear a negative rumour related to vaccine(s), do you:
  - Ask a friend what they think?
  - Ask a health worker?
  - Go to the Internet?
  - Other?
  - What do you think about it?
10. In your opinion, what is the negative opinion towards the vaccination
11. In your opinion, how one can influence parents, who refuse to vaccinate their children without medical evidence?
12. In your opinion, who can influence parents, who refused to vaccinate their children?
13. Which types of activities targeted on raising awareness of parents about importance of timely vaccination, in your opinion, would be most effective?

## 3. KNOWLEDGE ABOUT VACCINATION (10 min)

**Now let's discuss what vaccination is and what it is needed for.**

1. Would you please tell me what vaccination is? Why do you think children need to be vaccinated?



Why? Did you know that if you don't vaccinate a child against tetanus, then in can die from a simple scratch?

2. In your opinion, how high is the risk for your child/children to contact preventable by vaccines if a child is unimmunized? Why do you think that?
3. In your opinion, are there other ways to protect children from vaccine preventable diseases? If so, what are these ways? Why do you think that?
4. Do you think vaccines strengthen the immune system? Why? Why not? What make you think so?

#### 4. ATTITUDES TO VACCINATION (30 min)

***Now I would like to spend some time discussing your attitudes to vaccination.***

1. Do you think that vaccination must be compulsory? Why yes? Why not? Why do you think that?
2. Do you have any doubts about vaccinating children? Which specifically? What has caused you to be concerned?
3. Have you or your relatives/friends/ acquaintances heard about cases of unwanted reactions in children caused by vaccination? Please specify what were there unwanted reactions?
4. What are the advantages and disadvantages of vaccination? Why do you think that? How did you know about it? What are the reasons to believe in it?
5. Which unwanted reactions, in your opinion, a vaccine may cause? Please tell us where you learnt this information FOR ATTENTION OF MODERATOR: LEARN ABOUT EACH SIDE EFFECT, AND FIND OUT WHAT REASONS CAUSED IT.
6. Do you think that unvaccinated children pose a risk to health of your own child(ren)?
7. There are people / groups of people who refuse to vaccinate their children. What do you think about this decision? FOR ATTENTION OF MODERATOR: PLEASE TRY TO LEARN AS MUCH AS POSSIBLE ABOUT REASONS (MYTHS, MISCONCEPTIONS, OPINIONS) BEHIND A DECISION TO REFUSE VACCINATION.
8. If it is due to religious reasons then please ask, "Would you please tell us, which religious canons or postulates the immunization conflicts with?" How did you find out about it? Do you know other people, who are against of vaccination due to religious beliefs? Are there religious leaders who also support this idea? Who are these people? Where do they live and disseminate this information? In which oblasts and settlements? What arguments do they provide?
9. Do you agree with those who refuse to vaccinate their children? Why so?

#### 5. PRACTICE OF VACCINATION (15 МИН)

***The following questions are related to your personal experience.***

1. Please tell us whether you, personally, have been vaccinated. Why yes? Why not?
2. Were all children aged 0-5 that are under your care, have received all immunizations required for their age? Why?
3. Who in your family makes decision about vaccination?
4. Which issues related to vaccination of your children have your encountered in the past or do you face at present?
5. Did your children have any side effects? What kinds?
6. Did doctors give any kind of recommendations/advises about possible adverse reactions?



7. Do you trust the quality of vaccines? Do you associate unwanted reactions/side effects with the quality of vaccine, or not?
8. Do you trust medical workers administering the vaccine? Why?
9. Was there any event / incident that has compromised / increased your confidence in vaccination? What was it?
10. Do you trust that your government is making decisions in the best interest of children of Kyrgyzstan with respect to what vaccination? Why?

## 6. PROCEDURE AND TIME FOR VACCINATION (20 min)

### ***The following questions regarding vaccination services***

1. How much time do you need to spend in clinic to vaccinate your child? Is it too long? How much time you are ready to spend for vaccination?
2. Do you consider other activities (going to work, market, etc.) more important than getting a vaccine, or taking your child for vaccination? Why?
3. Is the process of being immunized welcoming? Do you think health providers treat you in the way you prefer, like? What problems do you have with health providers during vaccination?
4. What complications during vaccination can be in the health center? Can it stop you from vaccination?

### **HEALTH WORKER**

1. Are you satisfied with the health workers answers for your questions related on immunization? What answer are not enough for you? How credible she/he is? Why you think so?
2. Do you trust your health care provider to honestly tell you about the risks and benefits of vaccines?
3. Do you trust your health care provider to honestly tell you about the risks of vaccine preventable disease for you and your children?

### **REFUSAL FORM**

1. What is your attitude towards the refusal form? What is it?
2. Is it needed? Why? Do you think it is good to sign a form to refuse vaccination? Why? Why not?

### **ACCESS TO VACCINE**

1. Have you ever encountered any cases when vaccine was not available at the health facility? What did you do?
2. Is there any access issues to reaching the health facility to get vaccination?
3. When a new vaccine is introduced, do you want to be the first to get it? Why? Why not?



## ANNEX 2

### INFORMATIVE STUDY TO EXAMINE REASONS BEHIND VACCINE REFUSALS, RESISTANCES, AND BARRIERS IN-DEPTH INTERVIEW SCRIPT MEDICAL WORKERS

#### 1. INTRODUCTION BY MODERATOR (10 MIN)

Good afternoon, my name is \_\_\_\_\_. I am a representative of Rebicon agency. UNICEF and Ministry of Healthcare of the Kyrgyz Republic have contracted us to undertake a study. We thank you for accepting our invitation. Our interview will be devoted to discussion of attitudes towards immunization/vaccination of children.

Despite high vaccination coverage in the Kyrgyz Republic, outreach to some groups of population leaves room for improvement. Lately, the number of refusals from vaccination has been increasing along with the growing disapproval and negative attitudes towards vaccination among some population groups. During our study, we would like to investigate what is causing current attitude to vaccination.

Let me tell you about the structure of our discussion. Our interview will last for about one hour. All information provided by you is confidential. It will be processed and presented as general recommendations. I need to make audio recording of our discussion to capture all of your feedback. Only I will use this recording. If you do not have any objections, I will turn on the voice recorder.

First, I would kindly ask you to introduce yourself and tell us about your background.

#### 1. WARMING-UP (10 min)

1. What is your name?
2. How old are you?
3. What education have you received?
4. What is your specialization?
5. How many years of work experience do you have?
6. And your current title?

#### 2. COMMUNICATION CHANNELS AND TRUSTED SOURCE OF INFORMATION (20 min)

1. Which sources of information related to vaccination do you use? Moderator, clarify the source of information. If it is a medical magazine, then which one is it? What media do you use? Name TV channels, radio stations, internet websites, press, etc.
2. Which information sources do you trust? Why so? (IF WEBSITES ARE MENTIONED, PLEASE ASK THE LINK)
3. What info about vaccination you are usually interested in? Where do you search it? Where do you usually find info about vaccination?
4. What type of information about vaccination do you lack, what type of information about vaccination would you like to receive? In what way?



5. Could you remember any last info about vaccination. What was it about? What source?
6. Do you share this information with others? Do you try to find a reliable source of information to crosscheck / validate or invalidate this information? Why so?
7. Do you remember what was the last scientific article on vaccination or immunization you have read? What article is it? Where did you find it? Can I have the link?
8. Do you need trainings on methods of effective information delivery and persuasion? What type of training would you prefer the most?
9. Please try to remember the last time when you participated in training on vaccination. Please tell us the year and month.
10. Do you feel that training answered the questions you had or increased your doubts in vaccines? Why?
11. When you hear a negative rumour related to vaccine(s), do you:
  - a. Ask a friend what they think?
  - b. Ask a health worker?
  - c. Go to the Internet?
  - d. Other?

### 3. KNOWLEDGE ABOUT VACCINATION (10 min)

#### ***Now let's talk about vaccination***

1. In your practice, have you witnessed any complaints on the quality of vaccine? Please describe these cases.
2. Do you trust the quality of vaccines that you use in your practice? Do you believe that all vaccines used in your practice have been tested against quality and safety standards? Do you know who is in charge of testing?
3. Do you think that vaccines were of higher quality during Soviet times than now? Why do you think so?

### 4. ATTITUDES TO VACCINATION AND EXPERIENCE (30 min)

#### ***Now I would like to focus our discussion on your personal experience and attitude towards vaccination.***

1. What is your attitude toward vaccination? Why?
2. Do you know anyone among your colleagues, who are against of vaccination or have negative attitude about it? What is their specialization? Why do they have such opinions? How do they support their arguments and their negative attitudes towards it?
3. Do you agree with that these colleagues promote ideas to not vaccinate children, and openly tell it to their patients?
4. What are the advantages and disadvantages of vaccination? What makes you think so? How did you know about it?
5. Which of mentioned disadvantages are the main for you, your colleagues opponents about vaccination, patients? Why?
6. Do you think that children should be vaccinated according to the immunization schedule? Why yes? Why no? Do you know the ideas of fellow colleague opponents about vaccination?



7. How would you evaluate the number of vaccines in the calendar? Why? Do you think it is ok to have too many vaccines? Why? What about the vaccines schedule? Do you know the ideas of fellow colleague opponents about vaccination?
8. Do you think that vaccination should be compulsory? Why? Why not? Do you know the ideas of fellow colleague opponents about vaccination?
9. Would you say that administering more than one vaccine at the same time may overload a child's body? Where did you get this information from? Why do you think so?
10. Do you think that some vaccines are needed but some – not? Which are more important and why? And other opinion has you heard from colleagues? Do they share their thoughts with their patients? Who can influence parent's actions?
11. Why people should do vaccination? And in what cases they should not vaccinate their children?

## 5. PRACTICE OF VACCINATION (15 МИН)

***Now I would like to focus our discussion on your personal experience and attitude towards vaccination.***

1. Do you have children? Do you vaccinate your children? Why?
2. Do you know doctors, who do not vaccinate their own children? Why they don't vaccinate their children? How to they argument their refusal to not vaccinate their children? How do they register their children to kindergartens and schools?
3. Please tell us whether you, personally, have been vaccinated. Why yes? Why not?
4. Do you trust that your government is making decisions in the best interest of children of Kyrgyzstan with respect to what vaccination? Why?
5. Do most people you know are being vaccinated / are getting their children vaccinated? And what about your patients? What numbers of them are not vaccinated?
6. Have you in your practice any cases of unwanted reactions in children after vaccination? What advises do you give when side effects are found?
7. What are the main reasons of refusing vaccination? Do you know anyone who does not take a vaccine because of religious reasons? What are their reasons? What do you think of that ?
8. Can you briefly explain the process of mothers' visiting you... what do you tell them, etc.? How long do you talk to them? What kind of questions do they usually ask? Do you talk to them about vaccinations?
9. Do you think your patients know enough about vaccines? Are vaccines introduced or announced properly? What would you recommend to improve?
10. How do you usually prove to your patients or colleagues that vaccines strengthen the immune system?
11. Do you invite an immunologist so that so he/she can talk to a mother and convince her to get her child vaccinated? Why?
12. How do you make a decision on granting an immunization waiver/refusal form? What is your decision based on? Why?
13. Do you track vaccination defaulters? How? How do you follow up on these defaulters?
14. Who, do you think, can influence on a mother to make a decision about vaccination?
15. What activities do you conduct with parents who refuse vaccination? (Probe for awareness raising, educational, etc...)?





16. Are there any existing materials for counseling on vaccination refusals? Please, share these materials if available? Are these materials needed? Why? What types of materials would help you in counseling refusing parents and make your effort more effective?

## 6. PROCEDURE AND TIME FOR VACCINATION (20 min)

### ***The following questions regarding vaccination services***

1. How much time do mothers spend in the polyclinic when they bring their children for vaccination? Is it too long?
2. Is the process of being immunized welcoming? Do you think health providers treat you in the way you prefer, like?
3. What problems do you have with mothers/parents during vaccination?
4. Знаете ли вы или слышали ли вы о случаях каких-либо осложнений в процессе вакцинации ? (после прививки)

### ***HEALTH WORKER***

1. Are you satisfied with the your answers for mother's questions related on immunization?
2. What answer are not enough? Why?
3. Do you tell your patients about advantages and disadvantages of vaccination?

### ***REFUSAL FORM***

1. Do you have any forms to fill in when refused?
2. What is your attitude towards the refusal form?
3. What is it? Is it needed? Why? Do you think it is good to sign a form to refuse vaccination? Why? Why not?

### ***ACCESS TO VACCINE***

1. Have you ever encountered any cases when vaccine was not available at the health facility? What did you do?
2. When a new vaccine is introduced, do you want to be the first to get it? Why? Why not?



## ANNEX 3

### INFORMATIVE STUDY TO EXAMINE REASONS BEHIND VACCINE REFUSALS, RESISTANCES, AND BARRIERS IN-DEPTH INTERVIEW SCRIPT RELIGIOUS LEADERS

#### INTRODUCTION BY MODERATOR (5 min)

Good afternoon, my name is \_\_\_\_\_. I am a representative of Rebicon agency. UNICEF and Ministry of Healthcare of the Kyrgyz Republic have contracted us to undertake a qualitative study via organization of focus group discussions. We thank you for accepting our invitation. Today's focus group (hereinafter discussion) will be devoted to learning more about attitudes towards immunization/ vaccination of children.

Vaccination is a lifesaving health intervention that significantly contributes to children's health and protection from infectious diseases around the world. Immunization is recognized to be one of the most effective healthcare measures for reducing susceptibility to infectious diseases, especially among children.

Despite a high vaccination coverage in the Kyrgyz Republic, outreach to some groups of population leaves room for improvement. Lately, the number of refusals from vaccination has been increasing along with the growing disapproval and negative attitudes towards vaccination among some population groups. During our study, we would like to investigate what is causing current attitude to vaccination.

Let me tell you about the structure of our discussion. Our discussion will last for about 1.5-2 hours. I would encourage you to avoid being shy and to openly express your opinion. I would kindly ask you to take turns in speaking and not to interrupt each other. There are no right and wrong opinions. We value feedback provided by each one of you.

All information provided by you is confidential. It will be processed and presented as general recommendations. I need to make audio recording of our discussion to capture all of your feedback. Only I will use this recording. If you do not have any objections, I will turn on the voice recorder.

First, I would kindly ask you to introduce yourself and tell us about your background.

#### 1. WARMING-UP (10 min)

1. What is your name?
2. How old are you?
3. What education have you received?
4. What is your ethnicity?
5. What religion do you belong to?
6. What confession?
7. What is your job title?



## 2. COMMUNICATION CHANNELS AND TRUSTED SOURCE OF INFORMATION (20 min)

### **Now I'd like us to talk about your trusted sources of information**

1. Which sources of information related to health do you use? (LIST NAME OF SOURCES).
2. Do you believe in info from this source? Why?
3. What media do you use? Name TV channels, radio stations, internet websites, press, etc.
4. Which sources of information related to vaccination do you use? (IF WEBSITES ARE MENTIONED, PLEASE ASK THE LINK)
5. Do you believe in info from this source? Why?
6. What info about vaccination you are usually interested in? Where do you search it?
7. Could you remember any last info about vaccination? What was it about? What source?
8. Do you share this information with others? Do you try to find a reliable source of information to crosscheck / validate or invalidate this information? Why so?
9. When you hear a negative rumour related to vaccine(s), do you:
  - Ask a friend what they think?
  - Ask a health worker?
  - Go to the Internet?
  - Other?
  - What do you think about it?
10. What type of information about vaccination do you lack, what type of information about vaccination would you like to receive? In what way?
11. Do you need trainings? What type of trainings and from whom?
12. Do you cooperate with medical workers? In what ways?
13. Do you work with population on vaccination related issues? In what ways?

## 3. KNOWLEDGE ABOUT VACCINATION (10 min)

### **Now let's discuss what vaccination is and what it is needed for.**

1. Do you know what vaccination is? Is vaccination necessary? Why ?
2. Can vaccination harm children? In what way? Why do you think so? Where did you get this information from?
3. Medical workers say that vaccines save lives. Would you agree with this statement? Why?
4. Would you agree that vaccines help to protect children from vaccine preventable diseases? Why? Why not?
5. In your opinion, are there other ways to protect children from vaccine preventable diseases? If so, what are these ways? Why do you think that?

## 4. ATTITUDES TO VACCINATION (30 min)

### **Now I would like to focus our discussion on attitude towards vaccination.**

1. Lately some people have started refusing vaccination for religious reasons. What factors are behind these refusals? How can these people be convinced otherwise?



2. Is there a link/conflict between religion and vaccination? Please, elaborate and provide evidence for this link
3. Do you think there are people who use religion as an excuse to disseminate negative information about vaccination? How can we deal with those spreading negative information using religion as a cover-up?
4. Have you heard about cases of adverse reactions in children caused by vaccination? Would you please be more specific about types of adverse reactions you have heard about?
5. There are people / groups of people who refuse to vaccinate their children. Как Вы относитесь к такому решению? Why do you think they refuse vaccination? Please tell us about the reasoning behind a parental refusal to vaccinate their children. In your opinion, parents who refuse to vaccinate because of religion, what religious canons or postulates they are referring to in refusing vaccination?
6. Do people ask for your advice or consultation on issues related to child vaccination? Please, describe the most common types of problems / issues people come to you for? What types of questions do they ask? What do you usually recommend?
7. Would you recommend vaccination? Why ? why not?
8. In your opinion, what is the negative opinion towards the vaccination?
9. In your opinion, how one can influence parents, who refuse to vaccinate their children without medical evidence?
10. In your opinion, who can influence parents, who refused to vaccinate their children?
11. Which types of activities targeted on raising awareness of parents about importance of timely vaccination, in your opinion, would be most effective?

## 5. PRACTICE OF VACCINATION (15 МИН)

***The following questions are related to your personal experience.***

1. Please tell us whether you, personally, have been vaccinated. Why yes? Why not?
2. Do you have children aged 0-5? Were all children aged 0-5 that are under your care, have received all immunizations required for their age? Why?
3. Are there people you know, who do not vaccinate their children? Can you recall what they say about vaccination? Why don't they vaccinate their children?
4. Who decides on vaccination in your family?
5. Which issues related to vaccination of your children have you encountered in the past or do you face at present?
6. Did your children have any side effects? What kinds?
7. Did doctors give any kind of recommendations/advises about possible adverse reactions?
8. Do you trust the quality of vaccines? Do you associate unwanted reactions/side effects with the quality of vaccine, or not?
9. Do you trust medical workers administering the vaccine? Why?
10. Was there any event / incident that has compromised / increased your confidence in vaccination? What was it?
11. Do you trust that your government is making decisions in the best interest of children of Kyrgyzstan with respect to what vaccination? Why?



## 5. PROCEDURE AND TIME FOR VACCINATION (20 min)

### ***The following questions regarding vaccination services***

1. How much time do you need to spend in clinic to vaccinate your child? Is it too long? How much time you are ready to spend for vaccination?
2. Do you consider other activities (going to work, market, etc.) more important than getting a vaccine, or taking your child for vaccination? Why?
3. Is the process of being immunized welcoming? Do you think health providers treat you in the way you prefer, like? What problems do you have with health providers during vaccination?
4. What complications during vaccination can be in the health center? Can it stop you from vaccination?

### ***HEALTH WORKER***

1. Are you satisfied with the health workers answers for your questions related on immunization? What answer are not enough for you? How credible she/he is? Why you think so?
2. Do you trust your health care provider to honestly tell you about the risks and benefits of vaccines?
3. Do you trust your health care provider to honestly tell you about the risks of vaccine preventable disease for you and your children?

### ***REFUSAL FORM***

1. What is your attitude towards the refusal form? What is it?
2. Is it needed? Why? Do you think it is good to sign a form to refuse vaccination? Why? Why not?

### ***ACCESS TO VACCINE***

1. Have you ever encountered any cases when vaccine was not available at the health facility? What did you do?
2. Is there any access issues to reaching the health facility to get vaccination?
3. When a new vaccine is introduced, do you want to be the first to get it? Why? Why not?



## ANNEX 4

### INFORMATIVE STUDY TO EXAMINE REASONS BEHIND VACCINE REFUSALS, RESISTANCES, AND BARRIERS FOCUS GROUP DISCUSSION PLAN FATHERS OF CHILDREN UNDER AGE OF FIVE

#### INTRODUCTION BY MODERATOR (10 MIN)

Good afternoon, my name is \_\_\_\_\_. I am a representative of Rebicon agency. UNICEF and Ministry of Healthcare of the Kyrgyz Republic have contracted us to undertake a qualitative study via organization of focus group discussions. We thank you for accepting our invitation. Today's focus group (hereinafter discussion) will be devoted to learning more about attitudes towards immunization/vaccination of children.

Vaccination is a lifesaving health intervention that significantly contributes to children's health and protection from infectious diseases around the world. Immunization is recognized to be one of the most effective healthcare measures for reducing susceptibility to infectious diseases, especially among children.

Despite a high vaccination coverage in the Kyrgyz Republic, outreach to some groups of population leaves room for improvement. Lately, the number of refusals from vaccination has been increasing along with the growing disapproval and negative attitudes towards vaccination among some population groups. During our study, we would like to investigate what is causing current attitude to vaccination.

Let me tell you about the structure of our discussion. Our discussion will last for about 1.5 hours. I would encourage you to avoid being shy and to openly express your opinion. I would kindly ask you to take turns in speaking and not to interrupt each other. There are no right and wrong opinions. We value feedback provided by each one of you.

All information provided by you is confidential. It will be processed and presented as general recommendations. I need to make audio recording of our discussion to capture all of your feedback. Only I will use this recording. If you do not have any objections, I will turn on the voice recorder

Для начала я прошу вас представиться и немного рассказать о себе.

#### 1. РАЗОГРЕВ (10 МИН)

1. What is your name? How old are you? What education have you received? What do you do at present? How many children under the age of five in your family?
2. What religion do you belong to?

#### 2. КОММУНИКАЦИИ И ДОВЕРЕННЫЕ ИСТОЧНИКИ ИНФОРМАЦИИ (20 МИН)

1. Which sources of information related to health do you use? (LIST NAME OF SOURCES)?
2. Do you believe in info from this source? Why?
3. What media do you use? Name TV channels, radio stations, internet websites, press, etc



4. Which sources of information related to vaccination do you use? (IF WEBSITES ARE MENTIONED, PLEASE ASK THE LINK)
5. Do you believe in info from this source? Why?
6. What info about vaccination you are usually interested in? Where do you search it?
7. Could you remember any last info about vaccination? What was it about? What source?
8. Do you share this information with others? Do you try to find a reliable source of information to crosscheck / validate or invalidate this information? Why so?
9. When you hear a negative rumour related to vaccine(s), do you:
  - a. Ask a friend what they think?
  - b. Ask a health worker?
  - c. Go to the Internet?
  - d. Other?
  - e. What do you think about it?
10. In your opinion, what is the negative opinion towards the vaccination
11. In your opinion, how one can influence parents, who refuse to vaccinate their children without medical evidence?
12. In your opinion, who can influence parents, who refused to vaccinate their children?
13. Which types of activities targeted on raising awareness of parents about importance of timely vaccination, in your opinion, would be most effective?

### 3. KNOWLEDGE ABOUT VACCINATION (10 min)

**Now let's discuss what vaccination is and what it is needed for.**

1. Would you please tell me what vaccination is? Why do you think children need to be vaccinated? Why? Did you know that if you don't vaccinate a child against tetanus, then in can die from a simple scratch?
2. In your opinion, how high is the risk for your child/children to contact preventable by vaccines if a child is unimmunized? Why do you think that?
3. In your opinion, are there other ways to protect children from vaccine preventable diseases? If so, what are these ways? Why do you think that?
4. Do you think vaccines strengthen the immune system? Why? Why not? What make you think so?

### 4. ATTITUDES TO VACCINATION (30 min)

**Now I would like to spend some time discussing your attitudes to vaccination.**

1. Do you think that vaccination must be compulsory? Why yes? Why not? Why do you think that?
2. Do you have any doubts about vaccinating children? Which specifically? What has caused you to be concerned?
3. Have you or your relatives/friends/ acquaintances heard about cases of unwanted reactions in children caused by vaccination? Please specify what were there unwanted reactions?
4. What are the advantages and disadvantages of vaccination? Why do you think that? How did you know about it? What are the reasons to believe in it?



5. Which unwanted reactions, in your opinion, a vaccine may cause? Please tell us where you learnt this information FOR ATTENTION OF MODERATOR: Learn about each side effect, and find out what reasons caused it.
6. Do you think that unvaccinated children pose a risk to health of your own child(ren)?
7. There are people / groups of people who refuse to vaccinate their children. What do you think about this decision? FOR ATTENTION OF MODERATOR: PLEASE TRY TO LEARN AS MUCH AS POSSIBLE ABOUT REASONS (MYTHS, MISCONCEPTIONS, OPINIONS) BEHIND A DECISION TO REFUSE VACCINATION.
8. If it is due to religious reasons then please ask, "Would you please tell us, which religious canons or postulates the immunization conflicts with?" How did you find out about it? Do you know other people, who are against of vaccination due to religious beliefs? Are there religious leaders who also support this idea? Who are these people? Where do they live and disseminate this information? In which oblasts and settlements? What arguments do they provide?
9. Do you agree with those who refuse to vaccinate their children? Why?

#### 5. PRACTICE OF VACCINATION (15 МИН)

***The following questions are related to your personal experience.***

1. Please tell us whether you, personally, have been vaccinated. Why yes? Why not?
2. Were all children aged 0-5 that are under your care, have received all immunizations required for their age? Why?
3. Who in your family makes decision about vaccination?
4. Which issues related to vaccination of your children have you encountered in the past or do you face at present?
5. Did your children have any side effects? What kinds?
6. Did doctors give any kind of recommendations/advises about possible adverse reactions?
7. Do you trust the quality of vaccines? Do you associate unwanted reactions/side effects with the quality of vaccine, or not?
8. Do you trust medical workers administering the vaccine? Why?
9. Was there any event / incident that has compromised / increased your confidence in vaccination? What was it?
10. Do you trust that your government is making decisions in the best interest of children of Kyrgyzstan with respect to what vaccination? Why?

#### 6. PROCEDURE AND TIME FOR VACCINATION (20 min)

***The following questions regarding vaccination services***

1. How much time do you need to spend in clinic to vaccinate your child? Is it too long? How much time you are ready to spend for vaccination?
2. Do you consider other activities (going to work, market, etc.) more important than getting a vaccine, or taking your child for vaccination? Why?
3. Is the process of being immunized welcoming? Do you think health providers treat you in the way you prefer, like? What problems do you have with health providers during vaccination?
4. What complications during vaccination can be in the health center? Can it stop you from vaccination?





### *HEALTH WORKER*

1. Are you satisfied with the health workers answers for your questions related on immunization? What answer are not enough for you? How credible she/he is? Why you think so?
2. Do you trust your health care provider to honestly tell you about the risks and benefits of vaccines?
3. Do you trust your health care provider to honestly tell you about the risks of vaccine preventable disease for you and your children?

### *REFUSAL FORM*

1. What is your attitude towards the refusal form? What is it?
2. Is it needed? Why? Do you think it is good to sign a form to refuse vaccination? Why? Why not?

### *ACCESS TO VACCINE*

1. Have you ever encountered any cases when vaccine was not available at the health facility? What did you do?
2. Is there any access issues to reaching the health facility to get vaccination?
3. When a new vaccine is introduced, do you want to be the first to get it? Why? Why not?



## ANNEX 5

### INFORMATIVE STUDY TO EXAMINE REASONS BEHIND VACCINE REFUSALS, RESISTANCES, AND BARRIERS FOCUS GROUP DISCUSSION PLAN MOTHERS, CAREGIVERS OF CHILDREN UNDER AGE OF FIVE

#### INTRODUCTION BY MODERATOR (10 MIN)

Good afternoon, my name is \_\_\_\_\_. I am a representative of Rebicon agency. UNICEF and Ministry of Healthcare of the Kyrgyz Republic have contracted us to undertake a qualitative study via organization of focus group discussions. We thank you for accepting our invitation. Today's focus group (hereinafter discussion) will be devoted to learning more about attitudes towards immunization/vaccination of children.

Vaccination is a lifesaving health intervention that significantly contributes to children's health and protection from infectious diseases around the world. Immunization is recognized to be one of the most effective healthcare measures for reducing susceptibility to infectious diseases, especially among children.

Despite a high vaccination coverage in the Kyrgyz Republic, outreach to some groups of population leaves room for improvement. Lately, the number of refusals from vaccination has been increasing along with the growing disapproval and negative attitudes towards vaccination among some population groups. During our study, we would like to investigate what is causing current attitude to vaccination.

Let me tell you about the structure of our discussion. Our discussion will last for about 1.5-2 hours. I would encourage you to avoid being shy and to openly express your opinion. I would kindly ask you to take turns in speaking and not to interrupt each other. There are no right and wrong opinions. We value feedback provided by each one of you.

All information provided by you is confidential. It will be processed and presented as general recommendations. I need to make audio recording of our discussion to capture all of your feedback. Only I will use this recording. If you do not have any objections, I will turn on the voice recorder.

First, I would kindly ask you to introduce yourself and tell us about your background.

#### 1. WARMING-UP (10 min)

1. What is your name? How old are you? What education have you received? What do you do at present?
2. How many children under the age of five are there in your family? Their ages?
3. Do your children attend pre-school educational institutions? Are your children under five, registered with Family Practitioners (Medical and obstetric center) assigned to your place of residence?

#### **For «internal work migrants»:**

1. Do you have a permanent registration ("propiska") in this residential area?
2. Where did you live before moving to Bishkek/Osh?



3. What was the reason behind your move to Bishkek/Osh?
4. Did you vaccinate your children in your previous place of residence? Why? And what about now, in your new place of residence? Why? Is there any difference in vaccinating children?
5. Do you currently face any challenges in obtaining medical services for your children? What type of challenges?
6. Do you need many certificates / official records in order to visit a doctor?
7. Are you treated differently by medical workers because you are a non-resident? Why do you think so?
8. Do you receive any help / support from some organizations? If so, from which?

## 2. COMMUNICATION CHANNELS AND TRUSTED SOURCE OF INFORMATION (20 min)

### ***Now I'd like us to talk about your trusted sources of information***

1. Which sources of information related to health do you use? (LIST NAME OF SOURCES).
2. Which information sources do you trust? Why so?
3. Where do you usually find info about immunization
4. What media do you use? Name TV channels, radio stations, internet websites, press, etc. Which sources of information related to vaccination do you use? ? (IF WEBSITES ARE MENTIONED, PLEASE ASK THE LINK)
5. Do you believe in info from this source? Why?
6. What info about vaccination you are usually interested in? Where do you search it?
7. Could you remember any last info about vaccination. What was it about? What source?
8. Do you share this information with others? Do you try to find a reliable source of information to crosscheck / validate or invalidate this information? Why so?
9. When you hear a negative rumour related to vaccine(s), do you:
  - a. Ask a friend what they think?
  - b. Ask a health worker?
  - c. Go to the Internet?
  - d. Other?
  - e. What do you think about it?
10. What do you think causes negative attitudes toward immunization?
11. In your opinion, HOW can we influence parents who have doubts about vaccination or refuse to vaccinate their children without medical reasons?
12. In your opinion, WHO can influence those in doubt about vaccination or refusing to vaccinate their children?
13. Which types of activities targeted on raising awareness of parents about importance of timely vaccination, in your opinion, would be most effective?



### 3. KNOWLEDGE ABOUT VACCINATION (10 min)

**Now let's discuss what vaccination is and what it is needed for.**

1. 1. Would you please tell me what vaccination is? Why do you think children should be vaccinated? Why? WHY NOT? Did you know that if you don't vaccinate a child against tetanus, then in can die from a simple scratch?
2. In your opinion, how high is the risk for your child/children to contact preventable by vaccines if a child is unimmunized? Why?
3. In your opinion, are there any other more effective ways to prevent vaccine preventable diseases other than vaccination, ways to protect children from these diseases? Would you please elaborate on which are these?
4. Do you think vaccines strengthen the immune system? Why? Why not? What make you think so?

### 4. ATTITUDES TO VACCINATION (30 min)

**Now I would like to spend some time discussing your attitudes to vaccination.**

1. Do you think that vaccination must be compulsory? Why yes? Why no? Why do you say that?
2. Do you have any doubts about vaccinating children? What are these doubts? What has caused you to be concerned?
3. Have you or your relatives / friends / acquaintances heard about cases of unwanted reactions/ signs in children caused by vaccination? Which complications / diseases specifically? Please tell us more details about this case.
4. What are the advantages and disadvantages of vaccination? What makes you think so? How did you know about it? What are the reasons to believe in it?
5. Which unwanted reactions, in your opinion, a vaccine may cause? Please tell us where you learnt this information. FOR ATTENTION OF FG MODERATOR: Learn about each side effect, and find out what reasons caused it.
6. Do you think that unvaccinated children pose a risk to health of your own child(ren)?
7. There are people / groups of people who refuse to vaccinate their children. What do you think about this decision? FOR ATTENTION OF FG MODERATOR: PLEASE TRY TO LEARN AS MUCH AS POSSIBLE ABOUT REASONS (MYTHS, MISCONCEPTIONS, OPINIONS) BEHIND A DECISION TO REFUSE VACCINATION
8. If it is due to religious reasons then please ask, Would you please tell us, which religious canons or postulates the immunization conflicts with? How did you know about it? Do you know others who are also against vaccination because of religious beliefs? Are there religious leaders who support this? Who? In which areas? what is their argument?
9. Would you rather agree or disagree with them? Why?

### 5. PERSONAL EXPERIENCE (15 MIN)

**The following questions are related to your personal experience**

1. Please tell us whether you, personally, have been vaccinated. If yes then why? If no then why?
2. Were all children aged 0-5 that are under YOUR care, have been immunized based on their age? Why?
3. Who in your family makes decision about vaccination?



4. Which issues have you faced during your visit to the medical facility with the purpose of being vaccinated?
5. Did your children have any side effects? What kinds?
6. Did doctors give any kind of recommendations/advises about possible adverse reactions?
7. Do you trust the quality of vaccines? Do you associate unwanted reactions/side effects with the quality of vaccine, or not?
8. Do you trust medical workers administering the vaccine? Why so?
9. Was there any event / incident that has compromised / increased your confidence in vaccination? What was it?
10. Do you trust that your government is making decisions in the best interest of children of Kyrgyzstan with respect to what vaccination? Why?

## 6. PROCEDURE AND TIME FOR VACCINATION (20 min)

### *The following questions regarding vaccination services*

1. How much time do you need to spend in clinic to vaccinate your child? Is it too long? How much time you are ready to spend for vaccination?
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1. Are you satisfied with the health workers answers for your questions related on immunization? What answer are not enough for you? How credible she/he is? Why you think so?
2. Do you trust your health care provider to honestly tell you about the risks and benefits of vaccines?
3. Do you trust your health care provider to honestly tell you about the risks of vaccine preventable disease for you and your children?

### REFUSAL FORM

1. What is your attitude towards the refusal form? What is it?
2. Is it needed? Why? Do you think it is good to sign a form to refuse vaccination? Why? Why not?

### ACCESS TO VACCINE





1. Have you ever encountered any cases when vaccine was not available at the health facility? What did you do?
2. Is there any access issues to reaching the health facility to get vaccination?
3. When a new vaccine is introduced, do you want to be the first to get it? Why? Why not?



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