



Government of Nepal
Ministry of Health and Population
Department of Health Services
Family Welfare Division



REPORT

**Assessment of Immunization Coverage
and Knowledge of Mothers/Care givers
towards Vaccination in 13 Districts
(Gavi DLI based) of Nepal**

Acknowledging the World Health Organization-Programme for Immunization Preventable Diseases (WHO-IPD) for providing continuous technical support to the National Immunization Program, including for conduction of this assessment on Immunization Coverage and Knowledge of Mothers/Caregivers towards Vaccination in 13 Districts (Gavi DLI based) of Nepal.



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FOREWORD

The National Immunization Program (NIP) stands as a cornerstone of our public health commitment, diligently working to protect our children by age of 15 months from thirteen major vaccine-preventable diseases. Central to the NIP's mission is the unwavering pursuit of equitable immunization services, ensuring that every child, regardless of their geographical location or socio-economic background, has access to life-saving vaccines.

NIP is dedicated to Immunization Agenda 2030, the Global and Regional Vaccine Action Plans, and the National Health Sector Strategy 2030. Recognizing the persistent challenges in achieving universal coverage, particularly in certain areas, the 2016 Gavi Joint Appraisal introduced performance-based disbursement linked indicators (DLIs). These were specifically tailored to catalyze improvements in Nepal's immunization outcomes, focusing on enhancing both overall Immunization coverage and equity in access. A critical aspect of this initiative has been the targeted efforts in 13 districts identified as low performing in 2013/2014, based on crucial metrics of accessibility and utilization of immunization services.

This report presents a vital assessment of immunization coverage among children aged 12–35 months in 13 low performing districts. This report will not only help us understand the current landscape of immunization in Nepal but also identify persistent gaps, celebrate successes, and strategically guide our future efforts. This evidence is crucial for refining our policies, strengthening our health systems, and ensuring that our resources are deployed most effectively to reach the unreached and leave no child behind.

I would like to extend my sincere appreciation to the team of Child Health and Immunization Service Section (CHISS), Family Welfare Division (FWD), for implementing the study and Technical Working Group formed under the leadership of FWD for their valuable guidance and support throughout the study.

I would like to acknowledge GAVI, the vaccine alliance for their invaluable support and every individual, health professionals, Female Community Health Volunteers (FCHVs) and community representatives for their unwavering commitment, assistance and expertise which contributed significantly to the success of this study.

I would also like to thank the World Health Organization (WHO Nepal) and implementing partner for their support to this vital assessment.

Together, we remain committed to protecting every child in Nepal from vaccine-preventable diseases and building a healthier, stronger, and more prosperous nation.

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The successful completion of the survey on "Immunization Coverage and Knowledge of Mothers/Caregivers towards Vaccination in 13 Gavi DLI-based Districts of Nepal" would not have been possible without the generous support, dedication, and collaboration of numerous individuals and organizations. We extend our heartfelt gratitude to all who contributed to this vital undertaking.

First and foremost, we would express our sincere appreciation to the Ministry of Health and Population (MoHP), Government of Nepal and the team of Child Health and Immunization Service Section (CHISS), Family Welfare Division (FWD), for their guidance, and unwavering support throughout all phases of this survey, from design to execution and analysis.


We extend our profound thanks to the federal, provincial, and local government authorities, Immunization coordination committees at all levels for their support, facilitation of field activities, and engagement with local communities which were crucial for the smooth execution of the study.

We are deeply indebted to the health workers, Female Community Health Volunteers (FCHVs), and community leaders at the implementation level. Their tireless efforts in mobilizing communities, facilitating access to households, and building trust were essential for ensuring high participation rates and the smooth conduct of fieldwork. Our gratitude goes to the mothers and caregivers in the 13 surveyed districts. Their willingness to participate, share their valuable time, experiences, and knowledge was the cornerstone of this research.

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Table of Contents

List of Acronyms and Abbreviations	4
List of Tables.....	6
List of Figures	8
EXECUTIVE SUMMARY.....	10
CHAPTER I: INTRODUCTION.....	12
1.1 Background.....	12
1.2 Objective of the survey:.....	18
1.2.1 Primary objective:.....	18
1.2.2 Secondary objectives:	18
CHAPTER II: STUDY METHODOLOGY	20
2.1 Study Design and Location	20
2.2 Study population	20
2.2.1 Inclusion criteria:	21
2.2.2 Exclusion criteria:	21
2.3 Sample Size	21
2.4 Sampling of Households and Respondents	23
2.4.1 Sampling technique for households	24
2.5 Development of Data Collection Tools	24
2.5.1 Piloting	25
2.6 Recruitment and Training of Field Staff.....	25
2.7 Data Collection and Monitoring	25
2.8 Data Quality Control Measures	26
2.9 Data Management and Analysis.....	26
2.9.1 Data Weight Calculation	27
2.10 Ethical Considerations	27
2.11 Limitations of the Study	27
CHAPTER III: RESULTS	30
3.1 Household information.....	30
3.1.1 Eligible and Non-eligible respondents	30
3.1.2 Sex of Household head.....	31
3.1.3 Relation of respondent with the child	31

3.2 Background characteristics of Mother/Caregiver	31
3.3 Profile of the sample children	33
3.4. Routine Immunization Vaccine Coverage	33
3.4.1 Routine immunization vaccine coverage by geography	33
3.4.2 Routine immunization vaccine coverage by demographic characteristics	35
3.4.3 Place from where vaccines are received.	37
3.4.4 Reasons for Partial /Zero dose vaccination	37
3.4.5 Sources of information about routine immunization	41
3.4.6 Routine Immunization Coverage for Children Aged 12-23 Months: First-Year Vaccines (Card and Recall)	42
3.4.7 Routine Immunization coverage for Children Aged 24-35 months: Second-Year of Life Vaccines (Card, Recall and Both).....	42
3.4.8 Coverage of All Vaccines Among Children Aged 24–35 Months (Card and Recall)	42
3.5 Retention of Vaccine card	43
3.5.1 Vaccine card retention.....	43
3.6 Knowledge and Attitude of Mother/Caregiver on Routine Immunization	44
3.6.1 Knowledge of mother/caregiver on routine immunization	44
3.6.2 Source of information about the vaccine	44
3.6.3 Attitude of mother/caregiver towards immunization	45
Attitude of mother/caregiver towards routine immunization	45
3.6.4 Reasons for positive attitude towards routine immunization	45
3.7 Adverse event experience following vaccination and Health seeking behavior	46
3.7.1 Experienced adverse event	46
3.7.2 Adverse event experienced after routine immunization	46
3.7.3 Source of Information regarding adverse event following immunization.....	46
3.7.4 Health seeking behavior post adverse event experience.....	47
3.7.5 Health Seeking Behavior of Mother/Caregiver	47
3.8 Behavior and Social Drivers of Immunization	49
3.8.1 Results on: Thinking and feeling	49
3.8.2 Results on Social Processes	51
3.8.3 Results on Motivation	52
3.8.4 Results on Practical issues	52
3.8.5 Others Drivers related to Child immunization (First and second year of life).....	56

CHAPTER IV: CONCLUSION AND RECOMMENDATION.....	58
References	63
Annex.....	64
Annex 1: Informed Consent.....	64
Annex 2: Data Collection Tool	68
Annex 3: Methodology used for calculating data weight	96
Annex 4: Other findings	98
Demographic characteristics of respondents.....	98
Routine immunization card retention by district	103
Annex 5: Result on Priority indicators according to BeSD framework	111
Annex 6: GPS maps	112
GPS map of children who have not received TCV vaccine	112
GPS map of children who have not received MR vaccine.....	113
GPS map of children who have not received MR vaccine, TCV vaccine and who are	113
partially immunized	113

List of Acronyms and Abbreviations

AEFI	Adverse Event Following Immunization
AES	Acute Encephalitis Syndrome
AFP	Acute Flaccid Paralysis
BCG	Bacillus Calmette-Guérin
BeSD	Behavioral and Social Drivers
CAPI	Computer-Assisted Personal Interviewing
CCEOP	Cold Chain Equipment Optimization Platform
CMDN	Center for Molecular Dynamics Nepal
DLI	Disbursement Linked Indicator
DPT	Diphtheria Pertussis Tetanus
EVM	Effective Vaccine Management
FID	Full Immunization Declaration
fIPV	Fractional-dose inactivated poliovirus vaccine
FWD	Family Welfare Division
FY	Fiscal Year
GPS	Global Positioning System
HH	Households
HPV	Human Papilloma Virus
MR	Measles Rubella
NDHS	Nepal Demographic Health Survey
NHRC	Nepal Health Research Council
NHSS	Nepal Health Sector Strategy
NIP	National Immunization Program
NIS	National Immunization Strategy
OPV	Oral Polio Vaccine
PCV	Pneumococcal Conjugate Vaccine
PPS	Probability Proportional to Size
SAGE	Strategic Advisory Group of Experts
SDG	Sustainable Development Goals

SEARO	Regional Office for South-East Asia
SPSS	Statistical Package for Social Sciences
TCV	Typhoid Conjugate Vaccine
UNICEF	United Nations International Children's Emergency Fund
VDC	Village Development Committee
VPD	Vaccine Preventable Diseases
WHO	World Health Organization

List of Tables

Table 1: Categorization of the districts based on the coverage of DPT-HepB-Hib3 and drop out for 2070/71 (2013-2014), source: Annual Health Report 2070-71	13
Table 2: Immunization related DLIs by National Health Sector Strategy	15
Table 3: Details of sample size calculation.....	21
Table 4: Eligible target child and sample covered by 13 districts	23
Table 5: Proportion of Eligible and Non-eligible respondents	30
Table 6: Relation of respondent with the child	31
Table 7: Background characteristics of Mother/Caregiver of children aged 12-35 months	32
Table 8: Profile of the sample children.....	33
Table 9: Routine immunization vaccine coverage by geography.....	34
Table 10: Routine immunization vaccine coverage by demographic characteristics	35
Table 11: Reasons for Partial/Zero dose vaccination	38
Table 12: Reasons for partial dose for MR2 and TCV	41
Table 13: Source of information about the vaccines	45
Table 14: Attitude of mother/caregiver towards routine immunization	45
Table 15: Adverse event experienced after routine immunization	46
Table 16: Source of Information regarding adverse event following immunization.....	46
Table 17: Health seeking behavior post adverse event experience.....	47
Table 18: Satisfaction Levels and Concerns Regarding Vaccination Services.....	53
Table 19: Drivers related to Child immunization (First and second year of life).....	56
Table 20: Demographic characteristics of respondents	98
Table 21: Routine immunization card retention by district	103
Table 22: First year of life vaccine coverage among (12-23 months) children (card and recall) by district.....	104
Table 23: First year of life vaccine coverage among (12-23 months) children from (card observation) by district.....	105
Table 24: First year of life vaccine coverage among (12-23 months) children from (recall) by district.....	106
Table 25: Second year of life vaccine coverage by district	107

Table 26: All vaccine coverage among (24-35 months) children (card and recall) by district	108
Table 27: All vaccine coverage among (24-35 months) children from (card observation) by district.....	109
Table 28: All vaccine coverage among (24-35 months) children from (recall) by district.....	110
Table 29: Time to reach the nearest immunization center	111

List of figures

Figure 1: Key Milestones of National Immunization Program (source: Annual Health Report 2079-80).....	12
Figure 2: Graphical representation of districts based on the coverage of DPT-HepB-Hib 3 and drop out for 2070/71 (2013-2014)	14
Figure 3: Fully Immunized Children as per NIP schedule (source: Annual health report 2079-80)	16
Figure 4: The Behavioral and social driver of vaccination framework.....	17
Figure 5: Study districts.....	20
Figure 6: Sex of Household head.....	31
Figure 7: Place from where vaccines are received.	37
Figure 8: GPS maps of Partial vaccinated children	39
Figure 9: Sources of information about routine immunization.	41
Figure 10: Vaccine card retention	43
Figure 11: Knowledge of mother/caregiver on routine immunization.....	44
Figure 12: Reasons for positive attitude towards routine immunization.....	45
Figure 13: Percentage who have experienced adverse event following vaccination	46
Figure 14: Health seeking behavior of mother/caregiver	48
Figure 15: Perceived importance of vaccines for child’s health	49
Figure 16: Perceived safety of vaccines for child’s health	50
Figure 17: Perceived confidence in health care workers	50
Figure 18: Percentage of mothers/caregivers who say most of their close family and friends want their child to be vaccinated.....	51
Figure 19: Percentage of mothers/caregivers who say most parents they know will get their child vaccinated	51
Figure 20: Percentage of mothers/caregivers who say their religious leaders want their child to be vaccinated	51
Figure 21: Percentage of mothers/caregivers who say their community leaders want their child to be vaccinated	52

Figure 22: Percentage of parents/caregivers who say they want their child to get all of the recommended vaccines	52
Figure 23: Percentage of parents/caregivers who say they know where to get their child vaccinated	52
Figure 24: Percentage of parents/caregivers who say it is easy to pay for vaccination for their child	53
Figure 25: Percentage of parents/caregivers who have been contacted about child being due for vaccination their child	54
Figure 26: Percentage of parents/caregivers who say they have taken youngest child for vaccination	54
Figure 27: Percentage of parents/caregivers who say they have never been turned away for child vaccination	55
Figure 28: Percentage of parents/caregivers who say it is easy to get child vaccination services	55
Figure 29: Percentage of parents/caregivers who say they are satisfied with the vaccination services for their child	55
Figure 30: GPS map of children who have not received TCV vaccine	112
Figure 31: GPS map of children who have not received MR vaccine	113
Figure 32: GPS map of children who have not received MR vaccine, TCV vaccine and who are partially immunized	113

EXECUTIVE SUMMARY

Background

The National Immunization Program (NIP) in Nepal prioritizes equitable immunization services, targeting 13 major vaccine-preventable diseases by 15 months of age. The Gavi Joint Appraisal in 2016 has established specific performance-based disbursement linked indicators (DLIs), tailored to enhance the country's immunization outcomes to improve EPI coverage and equity in access, especially in targeted 13 districts which was low performing in 2013/2014 based on accessibility and utilization. This survey is intended to assess immunization coverage among 12–35-month-olds focusing on evaluating immunization coverage for all vaccines included in the routine immunization schedule of NIP.

Results

The survey employed a two-stage probability-proportional-to-size sampling method. Data from the 2021 Census was utilized to develop the first-stage sampling frame. Sampling frame was created for each of the 13 districts. In the pre-specified districts, the clusters were chosen using probability proportional to size method. Altogether 120 clusters were selected from the 13 districts. The survey sampled 13,200 households for visiting, out of which 13,190 were reached. In total, 2,300 children were reached. The survey found 94% of children were fully vaccinated and 6 % of the children were partially vaccinated in the first year of life (12-23 months). Similar pattern was observed in the second year of life, where the larger group (93.5%) of children were fully vaccinated and only 4.1% and 2.3% were partially vaccinated and zero dose respectively. Immunization coverage varied regionally, with Gandaki showing the highest rates and Karnali and Sudurpaschim the lowest. Districts like Manang and Gulmi achieved full coverage, while Humla reported the lowest coverage at 73.2%.

The challenges outlined by the respondents included health workers refusing to vaccinate sick children, lack of awareness about vaccination sites, and misconceptions. Vaccine card retention was an issue, with 23.3% of children lacking cards, mostly due to cards being misplaced. Adverse events were reported by 41% of caregivers, with fever being the most common. Satisfaction with vaccination services was high in rural areas (95.6%) but slightly lower in urban settings (79.1%), highlighting the need for targeted interventions to address regional disparities, improve awareness, and enhance service delivery.

Conclusion

In conclusion, even though the survey demonstrates high immunization coverage among children in 13 districts with few districts as exception, the regional disparities and gaps in awareness highlight areas for improvement. Targeted interventions must be considered to address the challenges like low vaccine card retention, low vaccine coverage in certain districts and comparatively lower vaccine coverage especially for second year of life vaccines.



CHAPTER I: INTRODUCTION

1.1 Background

The National Immunization Program (NIP) has played a pivotal role in reducing morbidity, mortality, and disability linked to vaccine-preventable diseases (VPDs) by giving immunizations to newborns, children, and mothers throughout the nation.¹ It is a priority program (P1) in the Government of Nepal that aims to provide equitable services to geographically, economically, hard to reach, and marginalized communities of Nepal.¹ NIP targets children under the age of two years through routine immunization, provide missed child vaccination for up to five years, and Tetanus Diphtheria Toxoid (Td) vaccinations for pregnant mothers through more than 16,000 service delivery points, with a focus on hard-to-reach communities.^{1,2,3} The NIP currently provides vaccination for 13 major vaccine preventable diseases to be completed by 15 months of age.²

Over the years, NIP has made significant accomplishments. Nepal has been polio-free since 2010 and has switched from tOPV to bOPV on April 17, 2016. Tetanus has been eliminated in both maternal and neonatal populations since 2005. The burden of Japanese encephalitis was successfully reduced. The effort towards the measles elimination and control of rubella /congenital rubella syndrome is in progress (ref Fig: 1)

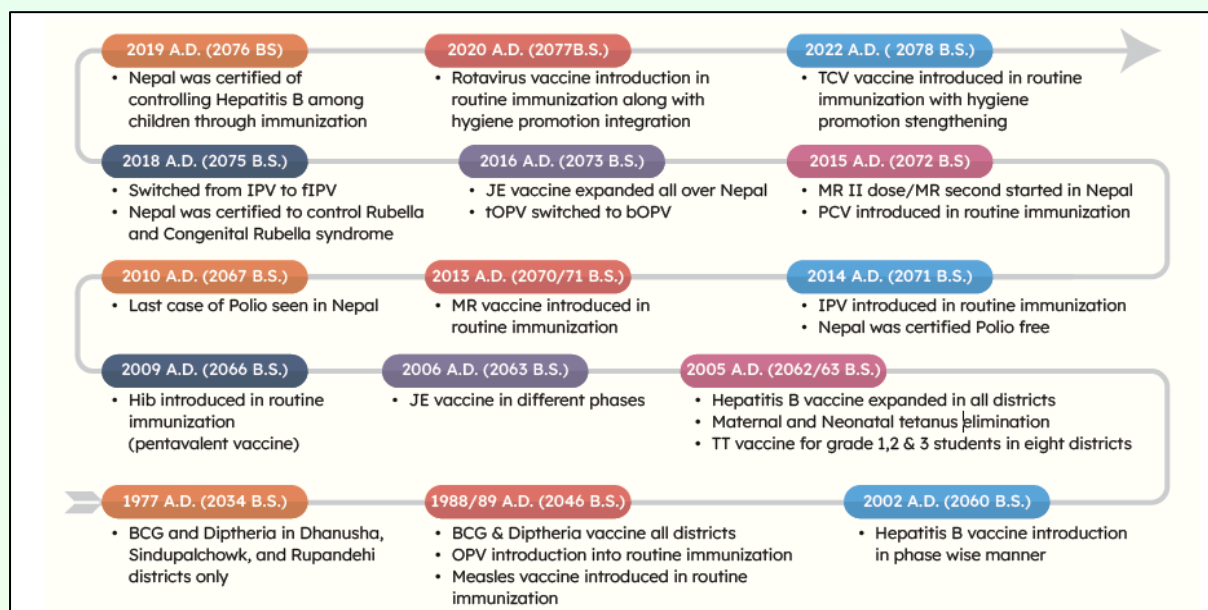


Figure 1: Key Milestones of National Immunization Program
(source: Annual Health Report 2079-80)

Unlike any other country in South-East Asia, Nepal is the first country to have an Immunization Act (2016) and the Immunization Regulation³ with provinces enacting their own acts demonstrating the government's commitment to recognizing vaccination as a fundamental right for all children.

Several policies and strategies have been implemented to increase immunization coverage, including the Full Immunization Declaration (FID) initiative, increasing routine immunization

through intensified immunization drive in the month of Baisakh (first month of Nepali Calendar Year), conducting annual household surveys, requiring immunization cards for children under five to receive government benefits, and identifying children through campaigns, surveys, and real-time monitoring. NIP also manages VPD surveillance activities and collaborates with the WHO, UNICEF, and other partners to monitor acute flaccid paralysis (AFP), measles rubella (MR), acute encephalitis-like syndrome (AES), neonatal tetanus and surveillance of other diseases including Rota, IBD etc. (fig 2). Furthermore, it focuses on epidemic response and treatment of VPDs, including outbreak response vaccination programs, surveillance, and public awareness campaigns.⁴

NIP classifies districts into four groups depending on their accessibility and usage of vaccination services. This categorization is based on DPT-HepB-Hib1 coverage and the dropout rate between DPT-HepB-Hib1 and MR2, which represent accessibility and utilization, respectively.⁴ In fiscal year 2070/71 (2013/14), the categorization was done based on 80% coverage of DPT-HepB-Hib3 (access) and 10% drop out of DPT-HepB-Hib1 Vs DPT-HepB-Hib3 in which 62 districts fell in the Category-1, 2 districts in Category -2, 11 districts in Category-3 and there were no districts in Category - 4 in 2070/71 (ref Table 1 and Fig 2).⁵

Table 1: Categorization of the districts based on the coverage of DPT-HepB-Hib3 and drop out for 2070/71 (2013-2014), source: Annual Health Report 2070-71

Category 1 (less Problem) Low Drop-Out (<10%) High Coverage (≥80%)	Category 2 (Problem) High Drop-out (≥10%) High Coverage (≥80%)	Category 3 (Problem) Low Drop-out(<10%) Low Coverage(<80%)	Category 4 (Problem) High Drop-out(≥10%) Low Coverage(<80%)
Bhojpur, Dhankuta, Ilam, Jhapa, Khotang, Morang, Okhaldhunga, Panchthar, Sankhuwasabha, Saptari, Siraha, Solukhumbu, Sunsari, Taplejung, Terhathum, Udayapur, Bara, Chitwan, Dhading, Dhanusha, Dolkha, Kavre, Mahottari, Nuwakot, Parsa, Rasuwa, Rautahat, Sarlahi, Sindhuli, Sindhupalchowk, Arghakhanchi, Baglung, Gorkha, Kapilvastu, Kaski, Lamjung, Myagdi, Nawalparasi, Palpa, Parbat, Rupandehi, Syangja, Tanahu, Banke, Dailekh, Dang, Dolpa, Mugu, Jajarkot, Jumla, Kalikot, Pyuthan, Rolpa, Rukum, Surkhet, Achham, Baitadi, Bajhang, Bajura, Dadeldhura, Darchula, Doti (62 Districts)	Gulmi, Humla (2 districts)	Bhaktapur, Kathmandu, Lalitpur, Makwanpur, Ramechhap, Manang, Mustang, Bardiya, Salyan, Kailali, Kanchanpur (11 districts)	

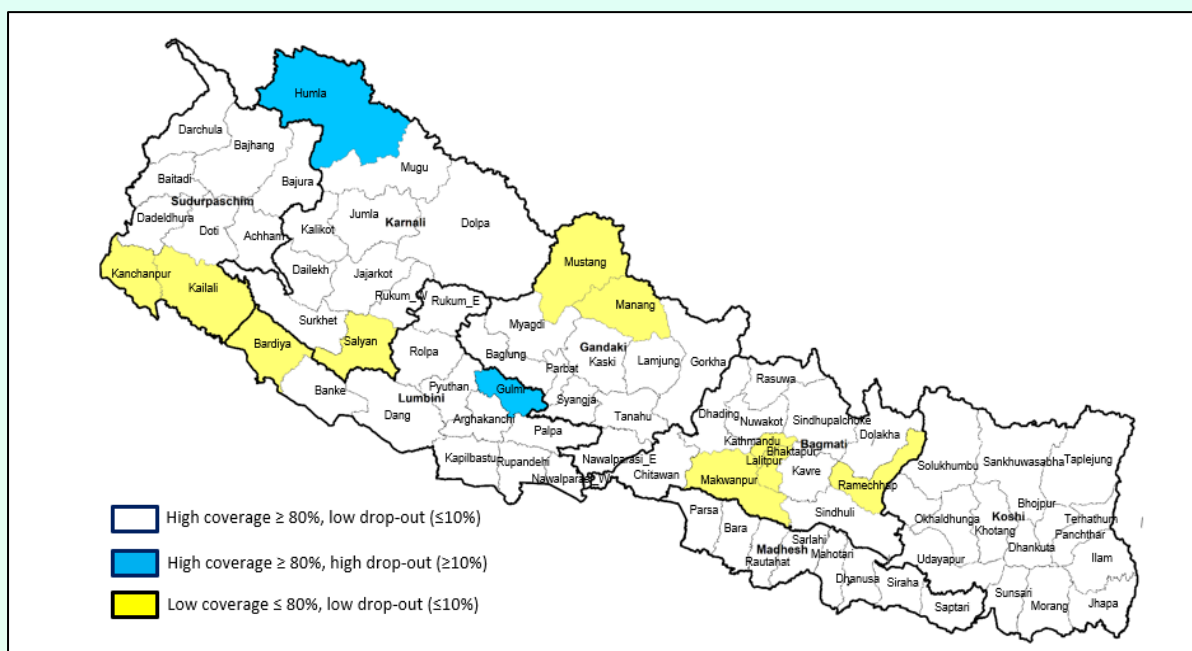


Figure 2: Graphical representation of districts based on the coverage of DPT-HepB-Hib 3 and drop out for 2070/71 (2013-2014)

NIP align its activities with the Nepal Health Sector Strategy (NHSS) which is based on the National Planning Commission's expanded policy and monitoring framework, and it also captured the core of the National Health Policy 2014. The NHSS aims for universal health coverage with four strategic pillars: equitable access, quality health services, health systems reform and a multi-sectoral approach. NHSS 2015-2020 provided basic framework for implementation of health programs and aimed to address socioeconomic determinants of health via multi-sector collaboration.⁶ Since 2000/2001, the National Immunization Program of Nepal has received support from Gavi, the Vaccine Alliance, a public-private global health partnership that aims to increase access to new and underutilized vaccines for children living in the world's poorest countries. This support includes the introduction of new and underutilized vaccines (vaccines and vaccine introduction grant), supplementary immunization activities, national vaccination campaigns (vaccines and campaign operational support), support for strengthening the health system (through pool fund mechanism), cold chain equipment optimization platform (CCEOP), COVID-19 vaccination, and other initiatives. With Gavi support, the NIP has included vaccinations such as pentavalent vaccine (DPT-HepB-Hib), measles second dose, IPV/fIPV, PCV, rotavirus vaccine, and TCV vaccines in routine immunization, with plans to include further vaccines such as HPV vaccine in the future.

Gavi Joint Appraisal 2016 proposed a performance-based disbursement mechanism to disburse HSS Grant to National Immunization Program for 2016-2020 utilizing the following indicators:

- i) percentage improvement in effective vaccine management (EVM) score over 2014 baseline is linked to outcome 1: and
- ii) improved equity access to immunization services in target districts is linked to outcome 3 (Table 2)⁷.

DLI indicators emphasized 13 low performing FY 2013/2014 districts with either category two (high DPT-HepB-Hib 1 coverage and high dropout) or category three (low DPT-HepB-Hib 1 coverage and low dropout). National Immunization Program has been performing verification of DLIs to receive allocated DLI (disbursement linked indicator) tranche for year two and subsequent years of the Nepal Health Sector Strategy (NHSS). During previous verification, all DLI has been achieved with the last DLI verification remaining.

Table 2: Immunization related DLIs by National Health Sector Strategy

Disbursement related indicators						
	Measure/ Indicator	Year 1 Baseline	Year 2	Year 3	Year 4	Year 5
DLI 1 Effective Operational Logistics and Supply chain management System	EVM Score improved over 2014 baseline	The average EVM score in 64% with two attributes achieving 80%	EVM score 70% with at least 4 attributes achieving 80%		EVM score 80% with at least 5 attributes achieving 80%	
DLI 2 Improved equity access to immunization services in targeted districts	Reduced equity gap in poor-performing districts	Poor performing districts (based on DTP coverage & dropout)		60% of low performing districts have fully immunized VDCs		100% of low performing districts have fully immunized VDCs

Nepal is committed to Immunization Agenda 2030 which plays a critical role in achieving the Sustainable Development Goals (SDGs). Immunization reaches more people than any other health and social service, making it the foundation of primary health care systems and a key driver toward universal health coverage. This makes immunization critical to SDG3 to ensure healthy lives and promote well-being for all at all ages. Because health is so fundamental to development, Immunization Agenda 2030 will also contribute either directly or indirectly to 13 of the other SDGs.⁸ National Immunization Program will be guided by National Immunization Strategy (NIS 2030) which aligns with Immunization Agenda 2030 and Global and Regional vaccine Action Plan and National Health Sector Strategy 2030 and is in final stage of endorsement.

The NIP has initiated full immunization declaration initiative which is one of the novel initiatives to reach zero dose and under immunized children. Full Immunization Declaration is a state when all children in each administrative area receive complete doses of vaccine as per the national immunization schedule.⁹

Intensified house to house survey is conducted every year to find zero dose and missed children and if identified, they are vaccinated as per the National immunization schedule as a part of FID initiative. In 2018, the NIP assessed improved equity access in a subset of 13 targeted districts which showed high level coverage for all basic antigens in 12-23 months and adherence of full immunization declaration as per full immunization declaration guideline. To date, Nepal has declared full immunization declaration in 76 of the 77 districts. 12 of the 13 districts linked to DLI, namely Bhaktapur, Bardiya, Gulmi, Kailali, Kanchanpur, Kathmandu, Lalitpur, Makwanpur, Manang, Mustang, Ramechhap, and Salyan declared Fully Immunized District by 2021. The remaining district, Humla, completed FID declaration in 2023.

According to the Annual Health Report 2079/80 (2022/2023) percentage of the fully immunized children in fiscal year 2079//80 is 84 % nationally and there is disparity among provinces with 2 provinces (Koshi and Gandaki) having coverages less than 80% (Fig: 4).⁴ Furthermore, a recent survey, the Nepal Demographic and Health Survey 2022 stated that 80% of all children aged 12-23 months were fully vaccinated against all basic antigens (BCG, oral polio, DTP-containing, and measles-rubella vaccine), and 52% were fully vaccinated for all antigens included in the national schedule (basic antigens in addition to OPV, fIPV, DPT-HepB-Hib, pneumococcal conjugate, rotavirus, Japanese encephalitis).¹⁰ Only four percent of all children had not received any vaccines.¹⁰

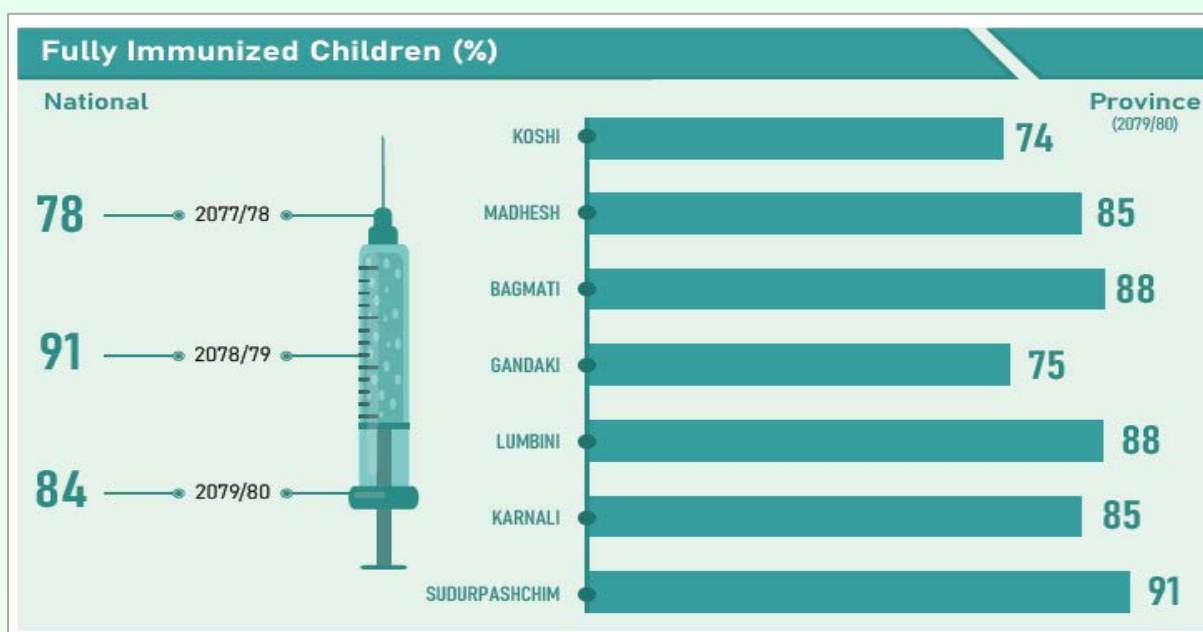


Figure 3: Fully Immunized Children as per NIP schedule (source: Annual health report 2079-80)

A vital tool for making sure a child gets all advised immunizations on time is a vaccination card. According to NDHS 2022, ninety-nine percent of children between the ages of 12 and 23 months and 24 and 35 months have a vaccination card or other document with their immunization history. Not every mother, nevertheless, was able to present their child's immunization record during the interview. At the time of the interview, 79% of children aged 12–23 months and 61% of children aged 24–35 months had their vaccination records visible and available.

There are multiple factors that affect vaccine uptake. Socio-demographic factors i.e., region of residence, gender, education, religion, birth order etc. play an important role in vaccine uptake. According to NDHS 2022, the percentage of children aged 12-23 months receiving all basic antigens decreases with birth order, from 82% for first-order births to 66% for fourth- to fifth-order births. Mountain zone children (89%) receive all basic antigens more than hill (84%) or terai (77%). Gandaki Province (93%) has the highest proportion of children fully immunized, while Madhesh Province (68%). 6% of children without education received no vaccinations, compared to 2% with secondary education. Similarly, according to “post campaign coverage survey of measles rubella supplementary immunization activity 2021 in Nepal” factors related to service delivery i.e., distance of vaccination center, availability of vaccines and other ancillaries, conduct of immunization sessions as per schedule and mentioned time, experience with the vaccinators, workload of parents etc. also drive vaccine uptake. Other factors, including knowledge gaps of mothers/ caregivers, factors affecting service uptake for e.g., presence of child at home, health of child at the time of vaccination, fear of Adverse Event Following Immunization (AEFI), fear of multiple injections, beliefs regarding vaccination and others also contribute to low vaccine uptake.

To boost vaccination coverage, understanding the reasons behind low uptake is crucial. It is paramount to gather data on people's thoughts, motivations, and social processes to develop evidence-based strategies for better intervention design, targeting, and evaluation, enabling greater impact and efficiency, and examining trends over time. WHO Strategic Advisory Group of Experts on immunization (SAGE) recommended the systematic gathering and use of data on Behavioral and social drivers of vaccination (BeSD) tools and practical guidance to assess the reasons for low uptake, for routine tracking of trends, and for monitoring and evaluation of interventions. The BeSD tools focus on proximal factors specific to vaccination, measurable in individuals and potentially changeable by programs. They do not include broader influences like literacy, political views, and socio-economic status, which can be explored using qualitative tools (ref Fig 4).

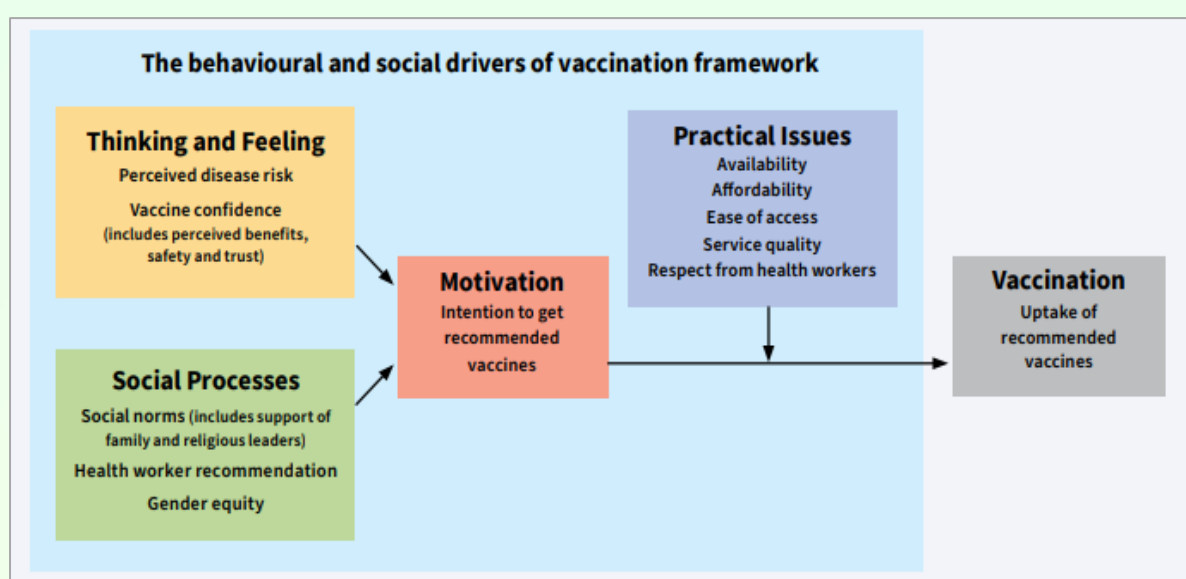


Figure 4: The Behavioral and social driver of vaccination framework.
The BeSD working group. Based on Brewer et al. Psychol Sci Public Interest. (2017)

1.2 Objective of the survey:

The survey was conducted to assess immunization coverage among 12-35 months children for all vaccines included in the national immunization schedule to be completed by the age of 15 months in the 13 low performing districts, which have been included in the DLI. The specific survey objectives were:

1.2.1 Primary objective:

- To estimate coverage among 12-23 months children at the time of survey for all antigens given in the first year of life
- To estimate coverage in 24-35 months children at the time of survey for all antigens given in the second year of life

1.2.2 Secondary objectives:

- To assess knowledge of mother/care givers towards routine vaccination
- To assess reasons for children who have not received single dose or missed one or more doses of vaccines in routine immunization
- To assess proportion of home-based vaccination card retention and assess the reasons for an absent home-based vaccination record among the mother/caretakers of children aged 12- 35 months who did not have a home-based record available at the time of survey
- To identify the factors related to vaccination uptake and barriers to seeking immunization service among mother/care givers.



CHAPTER II: STUDY METHODOLOGY

2.1 Study Design and Location

A cross-sectional study design was used, employing quantitative data collection techniques to achieve the study objectives.

The survey was carried out in the 13 low performing districts which have been included in the disbursement linked indicators (DLI). The districts were Gulmi, Ramechhap, Salyan, Makwanpur, Humla, Manang, Mustang, Kailali, Kanchanpur, Bardiya, Bhaktapur, Kathmandu and Lalitpur, where household visits were carried out.

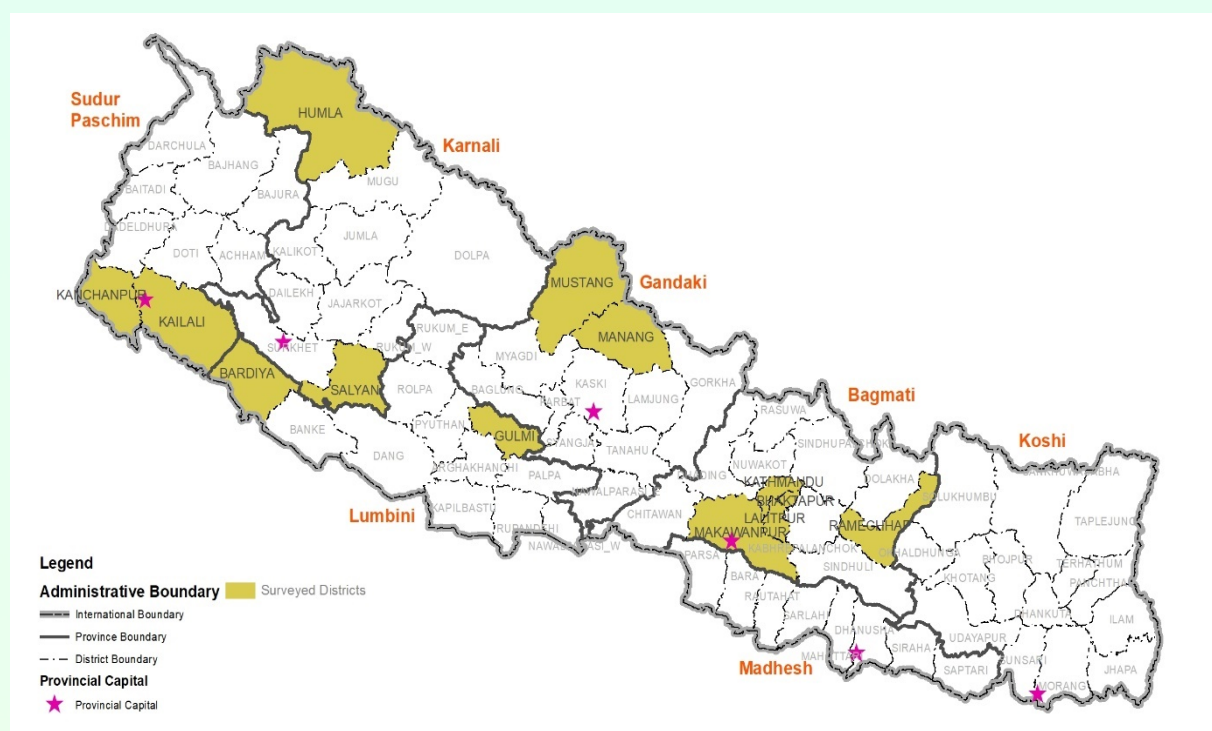


Figure 5: Study districts

2.2 Study population

The respondents for the study were mothers/caretakers of eligible children.

Here “mothers” and “caretakers” (grandmother, grandfather, uncle, aunt, and relatives with relationship with the eligible child) referred to individuals who take on the responsibility of caring for and nurturing the child, typically in the context of family or caregiving roles.

“Household” referred to a social unit composed of people who live together in the same dwelling and share common living arrangements.

2.2.1 Inclusion criteria:

The detailed target population for the survey were as follows:

Objectives	Target age group
Estimate the coverage among 12-23 months at the time of survey for all antigens given in first year of life	12 to 23 months at the time of survey
Estimate coverage in 24-35 months at the time of survey for all antigens given in second year of life	24-35 months at the time of survey

2.2.2 Exclusion criteria:

Any child less than or older than the defined age criteria.

2.3 Sample Size

The sample size calculation was based on WHO Vaccination Coverage Survey Manual, 2018. According to the NDHS 2022 report the lowest coverage is 71% for second dose rotavirus vaccine. Thus, for calculating sample size, estimate of expected coverage at 50-70 percent for 12-23 years age group was considered. The following table provides details of sample size calculation based on the WHO guideline.

Table 3: Details of sample size calculation

Design		RI
Number of strata (12-23) months and (24-25) months	1	One stratum was considered.
Estimate expected threshold	70%	Number of respondents required to estimate coverage for a simple random sample to be done. This number is derived with assumption that expected coverage of 70% and with desired precision of 5% (WHO manual, 2018).
Estimated Desired Precision	5%	
Effective sample size with 95%CI	401	
Average number of complete questionnaires per cluster (Assumed) (12-23) M=9 and (24-35) M=9	18	
Intra-cluster correction	0.3	
Coefficients or variation for unequal weight	0.3	

Design effect	2.5434	<p>Assuming that data would be collected from an average of $m=9$ respondents per cluster and assume an intra-cluster correlation coefficient of 0.167, so the design effect was 2.543 for RI survey design.</p> <p>An ICC of 1/6 is considered for this survey as the WHO survey manual has stated that for routine immunization surveys, an ICC between 1/6 and 1/3 is probably appropriate, with 1/3 being more conservative. If we use 1/3, this would significantly increase our sample size which would affect the timeline and budget of the study. After using ICC of 1/6, the number of required interviews was 1020 in each age group (i.e., 1020 for 12-23 months and 1020 for 24-35 months) in DLI linked 13 districts of Nepal which is higher than the NDHS survey, 2022 which is a Nationwide survey (sample size: 956 for 12-23 months and 1066 for 24-35 months).</p>
Average number of households to visit to find on eligible	12	<p>Three parameters, crude birth rate, infant mortality rate and household size were taken from NDHS 2022</p> <ul style="list-style-type: none"> - The crude birth rate: 22 per 1000 population - Infant mortality rate: 38 per 1000 live births - Average household size: 4.2 person - Years in cohort- 1 year <p>With the above-mentioned value: The average household would be 12.</p>
Percentage of household refusal	2%	Earlier household survey shows very few non-response rates, taking 2% as percentage of eligible household are likely to not respond.
Percentage of household eligible and non-response	1.02	
Total completed interview required (12-23) $M=1020$ and (24-35) =1020	2040	Multiplication of three parameter - no of strata, effective sample size and design effect. The total households visit to yield total completed questionnaires would be 12 for both age groups (In the same 12 households, more than 1 eligible child of age between 12-24 months and more than 1 eligible child of age between 24-35 months was expected). Thus, the number of completed interviews would be double (one for 12-23 months and one for 24-35 age groups).
Total number of households to visit to complete interview per cluster	110	Total number of households per cluster is outcome of average number to household to visit to get an eligible, non-response rate and target number to respondent.
Total number of clusters	113	Total number of clusters per stratum and number of strata.
Total number of households to visit the effective sample	12,430	

This table below presents data from a survey across 13 districts, detailing the number of wards, segments, and households (hh) sampled and reached. It highlights the total number of

households in each district, the sample sizes, and the children included in the survey. Overall, 13,200 households were sampled, with 13,190 successfully reached, and 2,300 children surveyed.

Table 4: Eligible target child and sample covered by 13 districts

District	# of ward in the district	# of ward/segment in the district	# of warrd/sample segment sampled	# of hh in the district	#of hh sampled for visiting	# of hh reached	# of targeted survey population	# of child sampled	#of child sample reached
Ramechhap	64	164	3	46,466	330	331	4,269	51	53
Lalitpur	71	437	8	140,130	880	881	12,248	136	187
Bhaktapur	38	331	8	108,406	880	879	11,396	136	175
Kathmandu	138	1619	32	542,892	3520	3516	47,601	544	578
Makwanpur	102	358	10	105,620	1100	1100	14,694	170	181
Manang	28	28	3	1,547	330	330	106	51	50
Mustang	25	26	3	3,606	330	329	284	51	35
Gulmi	93	240	5	66,100	550	548	7,788	85	84
Bardiya	75	345	10	106,285	1100	1100	15,167	170	198
Salyan	83	200	6	54,672	660	659	8,968	102	110
Humla	44	51	3	11,204	330	330	2,213	51	51
Kailali	126	625	18	195,872	1980	1976	27,533	306	372
Kanchanpur	167	364	11	217,452	1210	1211	16,571	187	226
Total	1,054	4,788	120	1,600,252	13,200	13,190	168,838	2,040	2,300

2.4 Sampling of Households and Respondents

A two-stage probability proportional to size sampling method was used to select clusters and households in the 13 districts stratum. A “ward” or “within” a ward (population size of 200 households) was considered as a cluster. The Census-2021 enumeration area served as the sampling frame for the first stage sampling (i.e., clusters). We created a sampling frame for each of the 13 districts. Large enumeration areas with 400-500 households were segmented into smaller segments around the size of 220 to 350 households, and one segment was randomly selected for enumeration. Enumeration involved merging households with less than 110 households. The estimated eligible sample was distributed based on the proportion of the number of eligible children of the survey districts. In the specified 13 districts, the predetermined number of clusters was chosen utilizing the PPS method.

2.4.1 Sampling technique for households

The survey teams verified all cluster boundaries and visited all households in each of the selected clusters for household listing. Total households of 110 was selected per cluster to complete the interview per cluster. The survey team selected households for interview by using systematic random sampling. In households where there were two or more eligible children, all eligible children (age groups 12-23 months and 24-35 months) that meet the criteria of selection was selected for the study. In case, the same household had eligible children from 2 age groups; both were included in the study. Households where there was no one at home was revisited twice. There was no replacement for non-response household. In the third stage interview was conducted with one eligible household member.

We selected 120 clusters in the specified 13 districts.

2.5 Development of Data Collection Tools

The data collection tools were designed/developed/adapted based on previous standard protocols, framework and recommendations from previous national surveys as follows:

- WHO Vaccination Coverage Survey Manual, 2018
- Behavioral and Social drivers of vaccination -Tool and practical guidance

The data collection tool was developed in close consultation with WHO. The tools included household roster sections and filter questions designed to identify the eligible child in the sample cluster and list all household members. The household roster was administered to the head of the household or most knowledgeable person in the household to discover those children who were eligible for the study. The structured questionnaire was developed in English and translated into Nepali instruments and back translated to English to monitor the quality of translation. The finalized tools were digitalized using tablets with Computer-Assisted Personal Interviewing (CAPI) systems that included GPS functionality. It provided the real-time data entry, enhanced the data accuracy, and enabled the geographical tracking of the data collection process.

2.5.1 Piloting

Before finalizing the survey tools, piloting was carried out in consultation with WHO and FWD. Non sampling sites was used for pre-testing of tools. The piloting was carried out at Macchegau, Ward No. 4, Kiritpur Municipality.

The teams were divided into two groups of 8 and 9 enumerators and were deployed to the field. The field teams were provided with instructions to visit households and collect data using the survey questionnaire in the CAPI tool. In case of any issues faced during data collection with the CAPI form, the field staff were requested to record all the details and report them in the review section. The feedback and findings from the pretesting were incorporated into the data collection tools for finalization.



In picture: Field staff conducting an interview with a mother/caregiver (photo captured after obtaining informed consent)

2.6 Recruitment and Training of Field Staff

CMDN recruited the field enumerators as required for the field operation. The field enumerators were selected based on their prior experience working in similar research activities.

The field enumerators received intensive three-day training from 14th August to 16th August in Kathmandu with support from the Family Welfare Division (FWD) and WHO. In the first day of the training, the field enumerators were provided an intensive session on the survey objectives, methodology, followed by discussion on survey questionnaire and CAPI based questionnaire application. The training aimed to enhance the knowledge and skills of field enumerators and staff regarding the survey's objectives and methodology. Participants engaged in interactive sessions and hands-on exercises throughout the training, followed by pilot testing of the survey on the third day.

2.7 Data Collection and Monitoring

The field teams were initially deployed in the Kathmandu Valley on August 21st, 2024, allowing for supervision and monitoring by the central level to ensure data quality. In total (5) field supervisors and (16) field enumerators were employed for the data collection. This setup also enabled the central core team to provide feedback to the field teams. The field data collection was completed on September 16th, 2024.

Monitoring and supervision were conducted regularly during field operations. A systematic monitoring schedule was developed, and survey monitoring was reinforced through ongoing communication between field teams. Regular review sessions were held within each team to strengthen training and address any operational errors.

A standard monitoring form/checklist and matrix were utilized to systematically guide monitoring activities. In addition to field visits, methods such as telephone and email were employed for monitoring purposes. These visits focused on observing the data collection process, assessing data quality, and ensuring protocol adherence. To ensure quality, robust monitoring was conducted by WHO-IPD and FWD alongside the field teams. Field monitoring was conducted by the central team alongside WHO-IPD and FWD in 5% to 10% of clusters across the survey districts.

2.8 Data Quality Control Measures

All data collectors received training in survey procedures and interviewing techniques before data collection began. At the end of each interview, the interviewer reviewed the completed questionnaire for completeness and consistency. Any inconsistencies were reconciled before the interview concluded. Completed interviews also underwent checks for completeness and accuracy by the field coordinator at the end of each day, and periodically by the Data Manager during supervisory visits to the sites. Logic checks were incorporated into the database, and the Data Manager regularly downloaded electronic data from the field to conduct quality assurance checks.

Any errors or inconsistencies identified were communicated to the field coordinators for clarification and resolution. An effective and robust monitoring system was established to ensure the collection of high-quality data and the timely completion of field tasks. Data collected was uploaded in real-time and continuously monitored. Additionally, built-in validations were implemented in the tool to prevent mistakes. A live dashboard was created to provide real-time insights, visualization, and tracking of data as it was collected. This dashboard was also utilized to identify and address data quality issues as they arose and to analyze data collection by different teams.

2.9 Data Management and Analysis

Survey data were primarily collected electronically on password protected mobile electronic devices, with paper-based tools available as a back-up in the event of electronic device failure in the field. The master database was stored on a secured server and was subjected to security protocols to prevent unauthorized access. Field teams and data collectors were trained in the survey procedures, interviewing techniques and use of mobile devices for data collection before data collection was initiated. Skip patterns, legal ranges, and consistency checks were implemented to ensure high quality data collection. A data dictionary was created to describe all the variables in the data system. From the point of entry, survey data was synchronized from the field devices into a cloud-based server at the end of each interview, or once per day. Only the data manager had access to the data.

For this survey, participants' ID were linked only by their unique study identification number, which consisted of a fixed area code, the interviewer code, and a serially assigned survey code. This unique ID code was associated with the questionnaire.

When the participant was enrolled, no one was able to link this “Unique ID” to a single individual. All survey data were password and accessible only to authorized survey staff. After the dataset was cleaned, preliminary analyses were performed using the SPSS/R program. Data were analyzed using descriptive statistics, as well as bivariate and multivariate analysis as needed.

2.9.1 Data Weight Calculation

To account unequal sample distribution across provinces, urban and rural areas response rate variations, sampling weights were applied to the survey data. This approach is essential to ensure that the survey results accurately reflect the target population at both district and domain levels. The assessment used two-stage stratified cluster sample, thus the sampling weights were computed based on the sampling probabilities for each stage and cluster. A detailed methodology for the data weight calculation is provided in Annex 3.

2.10 Ethical Considerations

Ethical approval was obtained from the Nepal Health Research Council (NHRC) (Ref: 45) and WHO-SEARO prior to the start of the survey. All participants/caregivers were informed about the purpose, methods, and outcomes of the study, as well as their right to decide whether to participate and their option to abstain from answering any questions. Participants were made aware of the confidentiality of their information and the voluntary and anonymous nature of the study. The purpose and activities of the study were explained in simple and understandable terms. They were also informed that their participation or non-participation would in no way affect the treatment they would normally receive.

Confidentiality and anonymity of the participants were strictly maintained. The research was conducted in compliance with ethical and human rights standards, adhering to NHRC and WHO ethical guidelines. Benefits or monetary compensation for the interviewees' time were not considered in this survey and were beyond the budget allotted for this survey. This was clearly mentioned in the informed consent, which was obtained before administering the questionnaire to mothers/caregivers.

In addition to informed consent, verbal consent was obtained from participants before taking any pictures during the study.

2.11 Limitations of the Study

- Since this was a cross-sectional study, data were collected on the 13 low-performing districts at a single point in time to examine the immunization coverage among 12–35-month-old children for all vaccines included in the national immunization schedule. Therefore, this survey provided a snapshot of the coverage in this population at that specific point in time.

- The survey was conducted in age group 12-23 months and 24-35 months in 13 districts so the results cannot be generalized to represent overall rural/urban/peri urban, ecological belts provincial and national coverage. Also, it cannot be generalized to represent children of other age group other than age group selected for this survey.
- Another major bias is obtaining the immunization information based on reports from the mother or caregiver, which could lead to recall bias, especially in situations where the vaccination card could not be presented during the interview. This recall bias could have been reduced by visiting health facilities to validate the vaccination records. However, due to survey design, time and cost constraints, this was not possible.



CHAPTER III: RESULTS

This chapter presents results on the information of households (eligible and non-eligible respondents, background characteristics of mother/caregiver, immunization coverage and Behavior and Social drivers of immunization. In the results section tables, the base values (N) represent unweighted counts, while the percentage values (%) are calculated using weighted bases.

3.1 Household information

3.1.1 Eligible and Non-eligible respondents

Table num 5. provides a breakdown of eligible and non-eligible survey respondents by provinces, districts, and ecological regions. Overall, 17.4% of respondents were eligible (2,300), while 82.6% were non-eligible (10,916) as per our study criteria, out of a total of total surveyed population i.e. 13,216.

Table 5: Proportion of Eligible and Non-eligible respondents

	Complete-eligible		Terminated/non-eligible		N
	N	%	N	%	
Provinces					
Bagmati	1174	17.5	5542	82.5	6716
Gandaki	85	12.9	574	87.1	659
Lumbini	282	17.1	1369	82.9	1651
Karnali	161	16.3	828	83.7	989
Sudurpaschim	598	18.7	2603	81.3	3201
Districts					
Ramechhap	53	16	279	84	332
Lalitpur	187	21.2	696	78.8	883
Bhaktapur	175	19.9	705	80.1	880
Kathmandu	578	16.4	2941	83.6	3519
Makwanpur	181	16.4	921	83.6	1102
Manang	50	15.2	280	84.8	330
Mustang	35	10.6	294	89.4	329
Gulmi	84	15.3	464	84.7	548
Bardiya	198	18	905	82	1103
Salyan	110	16.7	549	83.3	659
Humla	51	15.5	279	84.5	330
Kailali	372	18.7	1615	81.3	1987
Kanchanpur	226	18.6	988	81.4	1214
Ecological regions					
Mountain	136	13.8	853	86.2	989
Hill	428	16.2	2213	83.8	2641
Kathmandu valley	940	17.8	4342	82.2	5282
Terai	796	18.5	3508	81.5	4304
Total	2300	17.4	10916	82.6	13216

Note: Base N is taken unweighted and % is weighted

3.1.2 Sex of Household head

In the majority of the households, i.e. 69 %, the household heads were male. The remaining 31 % households were headed by females [N=2300].

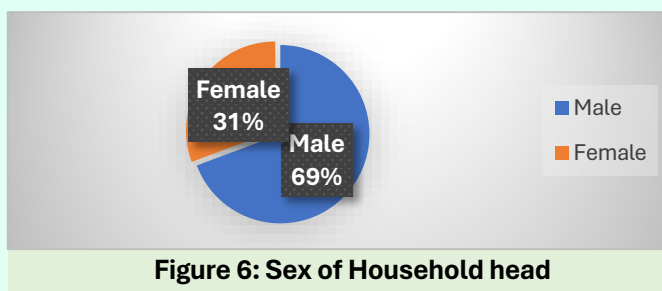


Figure 6: Sex of Household head

3.1.3 Relation of respondent with the child

The relationship of the respondent with the child was also recorded and the results indicated that majority of respondents i.e., 94.0%, were the child's mother followed by Grandmother (2.9%) and Father (1.7%) (Table 6).

Table 6: Relation of respondent with the child

Relation of respondent with child	Number	Percent
Mother	2162	94.0
Grandmother	66	2.9
Father	38	1.7
Grandfather	22	1.0
Others	12	0.6
Total	2286	100

*Others: [Uncle, Aunty]

*Note: Base N is taken unweighted and % is weighted

3.2 Background characteristics of Mother/Caregiver

This section presents the individual characteristics of mother/caregiver of the children aged 12-35 months. Under the individual characteristics, age, education, ethnicity, religion, occupation and use of mobile phone are discussed.

The table 7 presents the background characteristics of mothers or caregivers of children aged 12-35 months. The majority of mothers/caregivers (57.7%) were aged 25-34 years, while remaining were of age category up to 24 years (28.8%) and 35+ years (13.5%).

Likewise, nearly 30% of mothers/caregivers have completed grades 9-10, making it the largest group in terms of educational attainment. A notable 8.3% had no formal education.

In terms of ethnicity, the largest ethnic group noted is disadvantaged Janajatis accounting for 39.4%, followed by upper caste groups at 27.8%. The predominant respondent was of Hindu religion (86.1%) followed by Buddhist comprising 9.4% of the sample.

Similarly, 76.4% of mothers/caregivers were as housewives while a small portion were involved in sales and services (7.5%) and agriculture (7.6%). Most of the mothers/ caregivers had access to a personal mobile phone (93.4%) and frequently use Facebook as their primary media platform (83.5%). Other media, such as Instagram, Tiktok, and WhatsApp, were reported to be used much less frequently.

Table 7: Background characteristics of Mother/Caregiver of children aged 12-35 months

Background characteristics	Number	Percent
Age of Mother/Caregiver		
Up to 24 years	662	28.8
25-34 years	1327	57.7
35+ years	311	13.5
Education of Mother/Caregiver		
No formal education	190	8.3
1-5 grade	287	12.6
6-8 grade	413	18.1
9-10 grade	681	29.8
11-12 grade	511	22.4
13+ grade	204	8.9
Ethnicity of Mother/Caregiver		
Dalit	225	9.8
Disadvantaged Janajatis	901	39.4
Disadvantaged non-dalit Terai caste groups	89	3.9
Religious Minorities	86	3.8
Relatively advantaged Janajatis	343	15.0
Upper caste groups	636	27.8
Don't know	6	0.3
Religion of Mother/Caregiver		
Hindu	1969	86.1
Buddhist	213	9.3
Islam	38	1.7
Kirant	5	0.2
Christian	58	2.5
Others	3	0.1
Occupation of Mother/Caregiver		
Business/ technical sector workers	122	5.3
Clerical	10	0.4
Sales and services	172	7.5
Skilled manual	21	0.9
Unskilled manual	8	0.3
Agriculture	174	7.6
Student	23	1.0
House wife	1746	76.4
Others	10	0.4
Have a personal mobile phone		
Yes	2135	93.4
No	151	6.6
Media applications mostly used		
Facebook	1908	83.5
Instagram	11	0.5
Tiktok	17	0.7
Youtube	113	4.9
Imo	11	0.4
WhatsApp	21	0.9
Local FM/Radio	89	3.9
Television	36	1.6
Others	80	3.5

Note: Base N is taken unweighted and % is weighted

3.3 Profile of the sample children

Most children fall into the older age categories, with 42.1 % aged 15-23 months and 43.9% aged 24-35 months. The younger aged children (12-14) months were 14.0%. Male children slightly outnumbered the female children, representing 55.5 of the sample.

Table 8: Profile of the sample children

Profile	Number	Percentage
Child's age		
12-14 months	322	14.0
15-23 months	969	42.1
24-35 months	1009	43.9
Child's sex		
Male	1271	55.3
Female	1029	44.7

Note: Base N is taken unweighted and % is weighted

3.4. Routine Immunization Vaccine Coverage

This section presents the data on coverage of vaccines included in routine immunization program under the Government of Nepal to children aged 12-35 months. The results are presented in terms of coverage by geography and by demographic characteristics. The coverage is shown by first year of life vaccines among 12-23 months which includes following vaccines i.e. BCG, OPV1, OPV2, OPV3, FIPV1, FIPV2, DPT1, DPT2, DPT3, PCV1, PCV2, PCV3, ROTA1, ROTA2, and MR1.

Likewise, the results also have been presented by second year of life vaccines i.e. MR2, JE and with/without TCV among 24-36 months and by combined (first and second year of life vaccines (24-36 months). The results are characterized in three categories i.e. partially (i.e. child has missed either one particular dose of vaccine), fully (received all vaccines) and none (received none of the second year of life vaccines).

The field teams verified the information on routine immunization vaccination as recoded in the card available during the interviews. In situation where the card was not available, the field teams recorded the information based on recall. The field teams did not visit the health facilities for verification of records in this survey.

3.4.1 Routine immunization vaccine coverage by geography

Among children aged 12-23 months, 94% were fully immunized with the variations across provinces and districts. The partial immunization on first year of life vaccines can be observed highest among the Karnali province which could be the result of difficult geography.

Likewise, the partial immunization rates can be observed higher with TCV vaccine inclusion among the age group of 24-35 months children compared to without TCV vaccine signifying the gaps in timely administration of other routine vaccines alongside TCV. Coverage is observed to vary by settlement type as well, with rural areas showing slightly higher full immunization rates compared to urban areas. Regarding provincial coverage, Gandaki and Lumbini have the highest full immunization rates whereas districts like Humla in Karnali Province have significant gaps in vaccine coverage.

Geographically, mountainous region has the lowest immunization rate among children aged 12-23 months reflecting on the accessibility challenge. One zero-dose case have also been identified in Kathmandu district of Bagmati province.

Table 9: Routine immunization vaccine coverage by geography

	Among (12-23 months) children (first year of life vaccine)			Among (24-35 months) children (second year of life vaccine (With TCV))				Among (24-35 months) children (second year of life vaccine (Without TCV))				Among (24-35 months) children (All vaccine)			
	Partially	Fully	Base	Partially	Fully	None	Base	Partially	Fully	None	Base	Partially	Fully	Zero	Base
	%	%	N	%	%	%	N	%	%	%	N	%	%	%	N
Overall	6	94	1291	4.1	93.5	2.3	1009	1.5	96.1	2.3	1009	6.3	93.5	0.1	1009
Province															
Bagmati	6.9	93.1	696	4.6	93.3	2.1	478	1.7	96.2	2.1	478	6.5	93.3	0.2	478
Gandaki	0.8	99.2	45	2.6	97.4	-	40	-	100.0	-	40	2.6	97.4	-	40
Lumbini	1.9	98.1	153	1.8	97.1	1.1	129	-	98.9	1.1	129	2.9	97.1	-	129
Karnali	8.3	91.7	92	0.3	94.1	5.7	69	0.3	94.1	5.7	69	5.9	94.1	-	69
Sudurpaschim	5	95	305	5.7	91.2	3.1	293	2.6	94.3	3.1	293	8.8	91.2	-	293
District															
Ramechhap	5.2	94.8	29	-	100	-	24	-	100.0	-	24	-	100	-	24
Lalitpur	10.6	89.4	108	9.5	89.3	1.2	79	4.2	94.6	1.2	79	10.7	89.3	-	79
Bhaktapur	6.9	93.1	101	14.4	82.1	3.5	74	3.3	93.2	3.5	74	17.9	82.1	-	74
Kathmandu	6.7	93.3	360	2.2	94.9	2.9	218	1.2	95.9	2.9	218	4.6	94.9	0.5	218
Makwanpur	2.5	97.5	98	2.5	97.5	-	83	-	100.0	-	83	2.5	97.5	-	83
Manang	-	100	31	7.6	92.4	-	19	-	100.0	-	19	7.6	92.4	-	19
Mustang	2.2	97.8	14	-	100	-	21	-	100.0	-	21	-	100	-	21
Gulmi	-	100	44	-	100	-	40	-	100.0	-	40	-	100	-	40
Bardiya	3.3	96.7	109	3.3	94.8	2	89	-	98.0	2.0	89	5.2	94.8	-	89
Salyan	-	100	62	-	97.2	2.8	48	-	97.2	2.8	48	2.8	97.2	-	48
Humla	26.8	73.2	30	0.8	88.2	10.9	21	0.8	88.2	10.9	21	11.8	88.2	-	21
Kailali	5.2	94.8	187	5.2	91.8	3	185	2.3	94.7	3.0	185	8.2	91.8	-	185
Kanchanpur	4.6	95.4	118	6.7	90	3.3	108	3.1	93.5	3.3	108	10	90	-	108
Type of settlement															
Rural	3.2	96.8	293	2.7	95.9	1.4	266	0.7	97.9	1.4	266	4.1	95.9	-	266
Peri-urban	5.1	94.9	356	3.1	94.8	2.1	288	1.0	96.9	2.1	288	5.2	94.8	-	288
Urban	7.2	92.8	642	5.3	91.8	2.9	455	2.1	95.0	2.9	455	7.9	91.8	0.3	455
Type of palika															
Rural municipality	4.3	95.7	222	1.1	97.4	1.5	208	0.1	98.4	1.5	208	2.6	97.4	-	208
Urban municipality	4.2	95.8	769	5.1	92.8	2	588	1.8	96.2	2.0	588	6.9	92.8	0.3	588
Sub-metro city	7.3	92.7	106	6.2	89.3	4.5	82	2.5	93.0	4.5	82	10.7	89.3	-	82
Metro city	10.7	89.3	194	4.1	92.5	3.4	131	1.9	94.7	3.4	131	7.5	92.5	-	131
Geographic settlement															
Mountain	11.3	88.7	75	1.9	94	4.1	61	0.3	95.6	4.1	61	6	94	-	61
Hill	1.9	98.1	233	0.9	98.5	0.6	195	-	99.4	0.6	195	1.5	98.5	-	195
Kathmandu valley	7.5	92.5	569	5.3	92	2.6	371	2.1	95.3	2.6	371	7.7	92	0.3	371
Terai	4.5	95.5	414	5.1	92.1	2.8	382	1.9	95.2	2.8	382	7.9	92.1	-	382

Note: Base N is taken unweighted and % is weighted

3.4.2 Routine immunization vaccine coverage by demographic characteristics

The table illustrates the routine immunization vaccine coverage by demographic characteristics among different age groups. Among children aged 12-23 months, 94% were fully immunized, while 6% were partially immunized. For children aged 24–35 months, coverage for second-year-of-life vaccines with inclusion of TCV shows 93.5% fully immunized, 4.1% partially immunized, and 2.3% unvaccinated. The coverage of vaccines for children without inclusion of coverage of TCV vaccine shows slightly higher full immunization rates (96.1%) and fewer partially immunized (1.5%).

Clear disparities can be observed across demographics such as sex, maternal education, ethnicity, and place of delivery. Children of mothers with institutional delivery have higher full immunization rates compared to non-institutional delivery (94.5 % vs. 78.4%). Likewise, mother with higher education level have demonstrated higher coverage rates. In terms of ethnicity, mothers/caregivers belonging to disadvantaged groups such as Dalits and non-Dalit Terai caste groups exhibited comparatively lower coverage rates.

Table 10: Routine immunization vaccine coverage by demographic characteristics

	Among (12-23 months) children (first year of life vaccine)			Among (24-35 months) children (second year of life vaccine (With TCV))				Among (24-35 months) children (second year of life vaccine (Without TCV))				Among (24-35 months) children (All vaccine)			
	Partially	Fully	Base	Partially	Fully	None	Base	Partially	Fully	None	Base	Partially	Fully	Zero	Base
	%	%	N	%	%	%	N	%	%	%	N	%	%	%	N
Overall	6	94	1291	4.1	93.5	2.3	1009	1.5	96.1	2.3	1009	6.3	93.5	0.1	1009
Immunization history															
Card observation	7.2	92.8	1005	5.9	92	2.1	699	1.9	96.0	2.1	699	8	92	-	699
Recall	2.4	97.6	286	0.7	96.5	2.9	310	0.7	96.5	2.9	310	3.1	96.5	0.4	310
Sex of household head															
Male	6.3	93.7	886	5.1	93	1.9	708	2.1	96.0	1.9	699	6.8	93	0.2	699
Female	5.3	94.7	405	2.1	94.7	3.3	301	0.2	96.5	3.3	310	5.3	94.7	-	310
Age of mothers/care givers															
Up to 24 years	7.7	92.3	394	6.1	90.2	3.7	268	1.9	94.4	3.7	268	9.8	90.2	-	268
25-34 years	5.4	94.6	735	3.5	94.3	2.2	592	1.2	96.6	2.2	592	5.7	94.3	-	592
35+ years	4.9	95.1	162	3.7	95.4	0.9	149	2.0	97.1	0.9	149	3.7	95.4	0.9	149
Sex of child															
Male	5.9	94.1	710	3.6	93.5	3	561	1.7	95.3	3.0	561	6.3	93.5	0.3	561
Female	6.1	93.9	581	4.8	93.6	1.6	448	1.3	97.1	1.6	448	6.4	93.6	-	448
Age of child in months															
12-14 months	8.8	91.2	322	-	-	-	-	-	-	-	-	-	-	-	-
15-23 months	5.1	94.9	969	-	-	-	-	-	-	-	-	-	-	-	-
24-35 months	-	-	-	4.1	93.5	2.3	1009	1.5	96.1	2.3	1009	6.3	93.5	0.1	1009
Delivery place of child															
Institutional delivery	5.5	94.5	1251	4.2	93.8	2	980	1.5	96.5	2.0	980	6	93.8	0.1	980
Non-institutional delivery	21.6	78.4	40	2.5	82.6	14.9	29	2.5	82.6	14.9	29	17.4	82.6	-	29
Respondent															
Mother	6.3	93.7	1207	4.4	93.8	1.7	955	1.6	96.6	1.7	955	6.2	93.8	-	955
Other family members	1.5	98.5	84	-	89	11	54	-	89.0	11.0	54	8.8	89	2.2	54
Ethnicity of mother/caregiver															
Dalit	6.5	93.5	123	6.6	88.3	5.1	102	2.7	92.2	5.1	102	10.2	88.3	1.5	102

	Among (12-23 months) children (first year of life vaccine)			Among (24-35 months) children (second year of life vaccine (With TCV))				Among (24-35 months) children (second year of life vaccine (Without TCV))				Among (24-35 months) children (All vaccine)			
	Partially	Fully	Base	Partially	Fully	None	Base	Partially	Fully	None	Base	Partially	Fully	Zero	Base
	%	%	N	%	%	%	N	%	%	%	N	%	%	%	N
Disadvantaged Janajatis	4.2	95.8	498	3.7	95.7	0.6	403	1.6	97.7	0.6	403	4.3	95.7	-	403
Disadvantaged non-dalit Terai caste groups	12.2	87.8	53	9	84	6.9	36	2.2	90.9	6.9	36	16	84	-	36
Religious Minorities	2.2	97.8	53	2.8	80.5	16.7	33	-	83.3	16.7	33	19.5	80.5	-	33
Relatively advantaged Janajatis	6.3	93.7	186	5.1	90.8	4.1	157	2.1	93.8	4.1	157	9.2	90.8	-	157
Upper caste groups	7.4	92.6	366	3.1	96.9	-	270	.8	99.2	-	270	3.1	96.9	-	270
Don't know	37.3	62.7	3	-	100	-	3	-	100.0	-	3	-	100	-	3
Religion of mother/caregiver															
Hindu	6.7	93.3	1098	4.1	93.8	2.1	871	1.3	96.6	2.1	871	6	93.8	0.2	871
Buddhist	-	100	127	4	96	-	86	3.0	97.0	-	86	4	96	-	86
Islam	15.2	84.8	20	-	71.4	28.6	18	-	71.4	28.6	18	28.6	71.4	-	18
Kirant	-	100	3	-	100	-	2	-	100.0	-	2	-	100	-	2
Christian	1.5	98.5	32	10.3	89.7	-	26	5.0	95.0	-	26	10.3	89.7	-	26
Others	-	100	2	-	100	-	1	-	100.0	-	1	-	100	-	1
Education of respondent															
No formal education	10.3	89.7	105	0.6	88.4	11	85	-	89.0	11.0	85	9.8	88.4	1.8	85
(1-5 grade) Primary	3.3	96.7	153	5.5	92	2.5	134	2.0	95.5	2.5	134	8	92	-	134
(6-8 grade) Lower secondary	7.1	92.9	228	5.3	92.7	2	185	2.3	95.7	2.0	185	7.3	92.7	-	185
(9-10 grade) Secondary	5.6	94.4	387	3.2	95.1	1.7	294	1.5	96.8	1.7	294	4.9	95.1	-	294
(11-12 grade) Higher Secondary	4.4	95.6	279	6	92.8	1.2	232	1.8	97.0	1.2	232	7.2	92.8	-	232
(13+ grade) Graduate/Postgraduate	8.5	91.5	130	1.4	98.6	-	74	-	100.0	-	74	1.4	98.6	-	74
Occupation of respondent															
Working	5.8	94.2	288	3.1	96	0.8	242	-	99.2	.8	243	4	96	-	243
House wife	6.1	93.9	989	4.6	92.5	2.9	757	2.1	95.0	2.9	761	7.3	92.5	0.2	761
Have a personal mobile phone															
Yes	6	94	1206	4.4	93.6	2	929	1.6	96.4	2.0	929	6.2	93.6	0.2	929
No	6.4	93.6	76	1.2	91.7	7.1	75	-	92.9	7.1	75	8.3	91.7	-	75
Preferred media of respondent															
Facebook	6.2	93.8	1092	4.3	94.5	1.2	816	1.6	97.2	1.2	816	5.5	94.5	-	816
Other media	5.3	94.7	190	3.7	89.4	6.9	188	1.3	91.8	6.9	188	9.9	89.4	0.7	188

Note: Base N is taken unweighted and % is weighted

3.4.3 Place from where vaccines are received.

The pie chart shows the distribution of healthcare facilities from where the vaccines are received for the children as per the respondents interviewed in this survey. The majority (94.91%) of respondents have received the vaccines from government hospitals or health posts, while private hospitals or clinics account for 3.89%. A small percentage (1.20%) comes from other sources i.e. mobile clinics & outreach clinics.

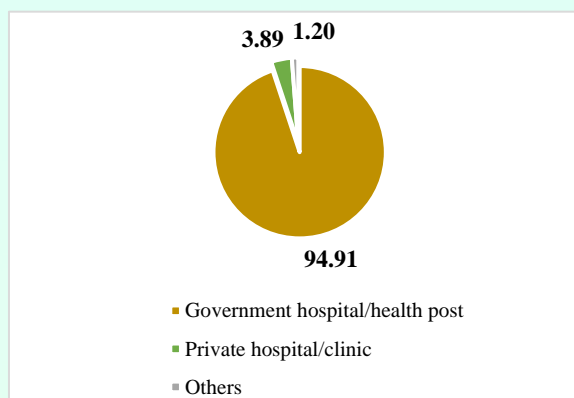


Figure 7: Place from where vaccines are received.

3.4.4 Reasons for Partial /Zero dose vaccination

The reasons for not vaccinating (Partial/Zero dose) have been grouped under four main broad themes; Service delivery, Knowledge gap, Service uptake and others. The reasons have been presented across rural, peri-urban, and urban regions in Nepal.

In rural areas, the major reasons outlined were knowledge gaps, such as being unaware of vaccination sites (16.3%), thinking vaccine is for trial (15%) and being aware of vaccination site but did not know about time and location (10%). Service uptake issues, like inconvenient session timing (14.8%), and other reasons like child's parent/guardian not present during vaccination (37.1%), also played significant roles.

Knowledge gaps, like unawareness of vaccination sites (22.1%) and misconceptions about vaccine used in routine immunization as trial vaccine's (8.6%), are also significant, particularly in peri-urban regions. Another significant reason reported in peri-urban regions were inappropriate age for vaccination (21.2%).

In urban areas, service delivery issues, such as health worker's refusal to vaccinate sick children (22%) was one of the notable factors outlined in the urban areas. Knowledge gaps, like unawareness of vaccination sites (14.8%) and misconceptions about trial vaccines (7.6%), were also reported.

Combined findings across all regions revealed that service delivery issues, particularly health workers' refusal to vaccinate sick children (17.7%), were vital across all three regions. Knowledge gaps, such as unawareness of vaccination sites (16.6%) and service uptake challenges like inconvenient timing (8.3%), including the absence of parents during sessions, are prevalent across all areas. Other reasons, such as parental absence during vaccination (9.7%) and mothers being too busy (10.4%), further highlighted the multifaceted barriers.

Table 11: Reasons for Partial/Zero dose vaccination

Reasons	Rural	Peri-urban	Urban	Total
	%	%	%	%
Service delivery				
Child sick and health worker unwilling to vaccinate the child	7.6	13.1	22	17.7
Vaccination site too far away	-	1.8	-	0.4
Child taken to vaccination site but not vaccinated	4.9	1.7	8.8	6.7
Knowledge gap				
Unaware of vaccine site	16.3	22.1	14.8	16.6
Unaware of need of vaccination	9.8	7.9	4.4	6
Thinking vaccine is for trial	15	8.6	7.6	9.1
Aware of vaccination site but did not know about time and location	10	6.2	8.4	8.2
Service Uptake				
Inconvenient session timing	14.8	13.2	4.8	8.3
Child sick and parent/guardian unwilling to get child vaccinated	7.4	4.8	9.3	8.1
Others				
Child's parent/guardian not present during vaccination	37.1	7.7	2.9	9.7
Fear of pain from injection	-	-	1.3	0.8
Mothers/guardians too busy	11.3	5.7	11.7	10.4
Not vaccinated due to in appropriated age	6.8	21.2	6.1	9.4
Vaccinated till date but not mentioned in card	7.6	-	-	1.3
Have Indian card so vaccine schedule is different	-	1.6	2.5	1.9
Don't know	-	7.8	17.2	12.3

3.4.4.1 GPS map of partial vaccinated and zero dose children

GPS map of Partial vaccinated children

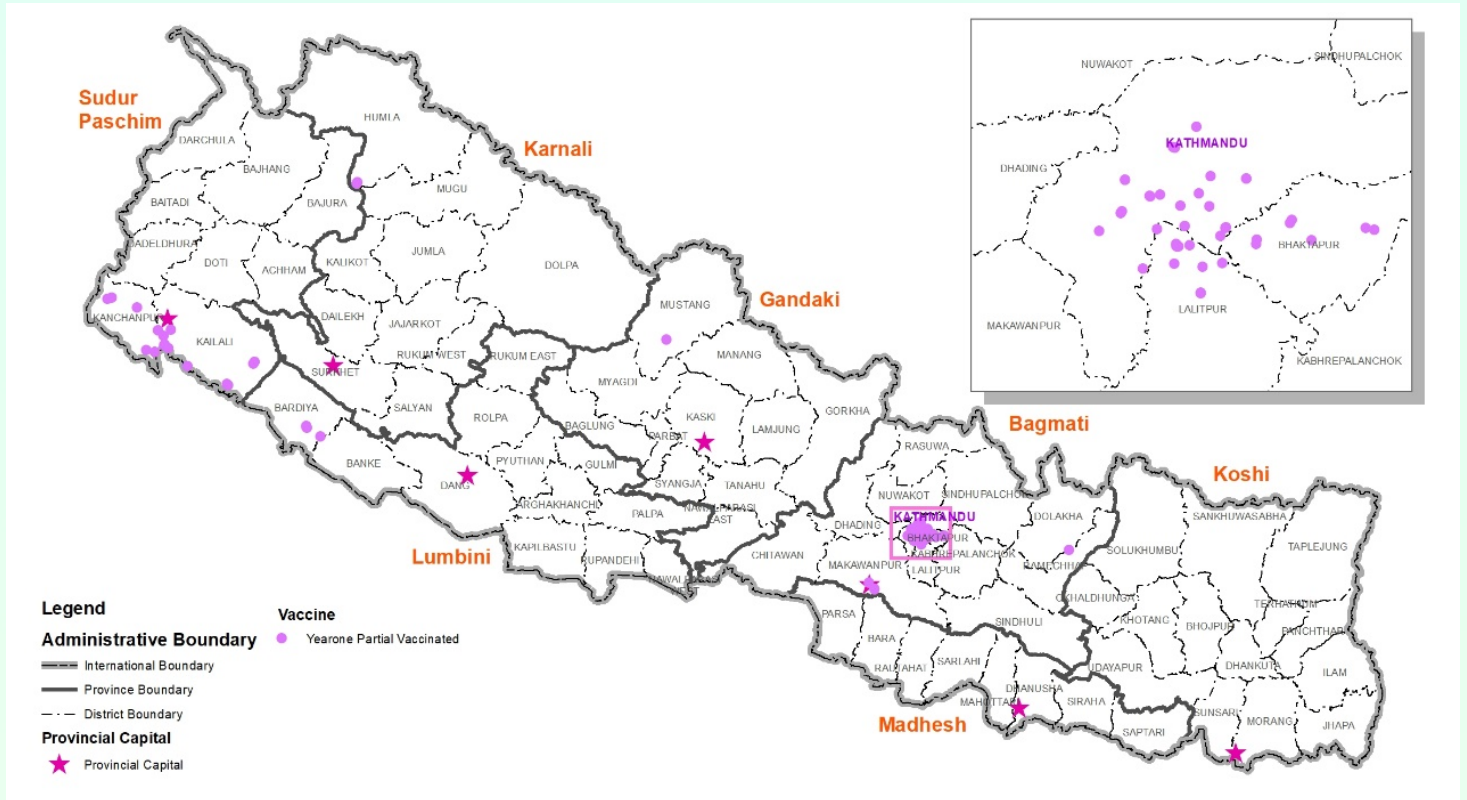


Figure 8: GPS maps of Partial vaccinated children

GPS map of Zero dose children

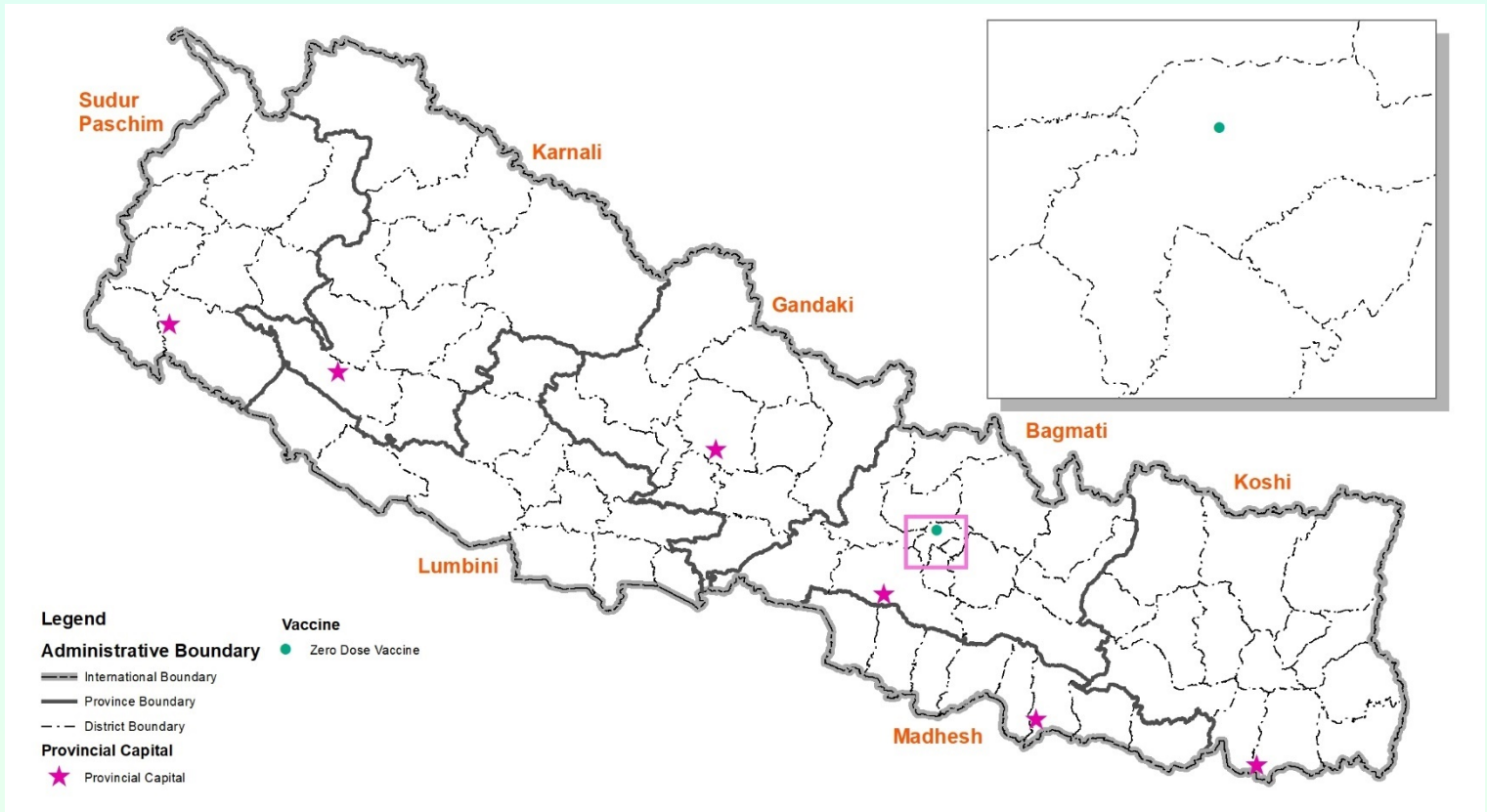


Figure 9: GPS maps of Zero dose children

3.4.4.2 Reasons for Partial dose for MR2 and TCV

The most common reason for partial dosing of MR2 and TCV was "Child sick and health worker unwilling to vaccinate" (19.4% for MR2 and 17.7% for TCV). "Unaware of vaccine site" was another major reason, outlined by 14.7% for MR2 and 16.6% for TCV. Other notable reasons included busy parents/guardians, inconvenient session timings, and lack of awareness about the need for vaccination. Another important finding to notice is that the respondents have cited the reasons as "Thinking the vaccine is for trial" and "Don't know" for TCV compared to MR2, reflecting greater uncertainty around TCV.

Table 12: Reasons for partial dose for MR2 and TCV

Reasons for partial dose for MR2 and TCV	MR2 (%)	TCV (%)
Unaware of vaccine site	14.7	16.6
Aware of vaccination site but did not know about time and location	10.0	8.2
Child's parent/guardian not present during vaccination	12.3	9.7
Unaware of need of vaccination	3.7	6.0
Child sick and parent/guardian unwilling to get child vaccinated	11.6	8.1
Fear of pain from injection	1.2	0.8
Mothers/guardians too busy	13.2	10.4
Vaccination site too far a way	0.6	0.4
Child taken to vaccination site but not vaccinated	3.7	6.7
Child sick and health worker unwilling to vaccinate the child	19.4	17.7
Inconvenient session timing	12.4	8.3
Not vaccinated due to inappropriate age	10.2	9.4
Thinking vaccine is for trial	7.0	9.1
Vaccinated till date but not mentioned in card	2.0	1.3
Have Indian card so vaccine schedule is different	2.8	1.9
Don't know	6.5	12.3
Total	122	186

3.4.5 Sources of information about routine immunization

The primary sources of information about routine immunization programs were Health worker (85.5%) and Female community health volunteer (48.9%). Neighbors were another source outlined (16.9%). Direct interactions with health personnel are key in promoting awareness about routine immunization.

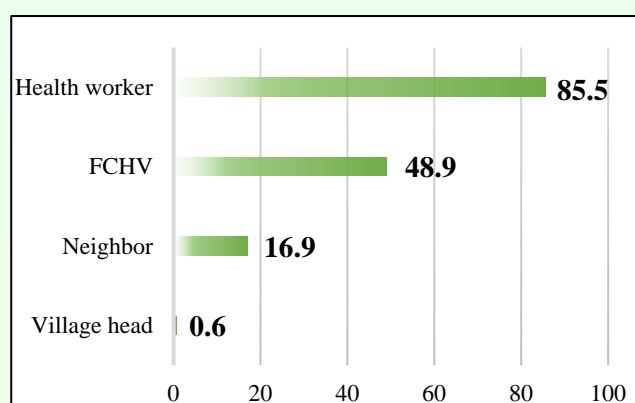


Figure 9: Sources of information about routine immunization.

3.4.6 Routine Immunization Coverage for Children Aged 12-23 Months: First-Year Vaccines (Card and Recall)

Consistently high coverage rate can be observed across most vaccines during the first year of life among children aged 12-23 months, with BCG achieving full coverage except for the district Kanchanpur. High level of coverage can be observed across most vaccines with some notable district level variations. For e.g. Ramechhap shows slightly lower coverage for OPV (94.8%) and FIPV1 (94.8%). Likewise, Humla exhibit lower coverage in certain vaccines i.e. FIPV 2(87.8%) and ROTA 2 (74.4%). Overall, the coverage is impressive across many regions, however, there are pockets of lower coverage that need targeted interventions to improve immunization rates (Ref: Table 22- In Annex).

3.4.6.1 Routine Immunization Coverage for Children Aged 12-23 Months: First-Year Vaccines (Card observation)

The routine immunization coverage based on card observation was found to be more than 97 % for all of the first-year life vaccines. However, in districts like Humla, lower coverage is observed for ROTA2 (58.7%) and FIPV2 (80.3%), suggesting challenges in vaccine delivery in more remote areas. Likewise, the coverage of FIPV1 is observed to be lower than FIPV 2 in Ramechhap districts which could be the result of recording and reporting error in the immunization card itself (Ref: Table 23 -In Annex).

3.4.6.2 Routine Immunization Coverage for Children Aged 12-23 Months: First-Year Vaccines (Recall)

Based on recall of the respondents, all of the districts have 100% coverage for BCG, OPV1, OPV2, DPT1, DPT2, ROTA1, and ROTA2 vaccines. However, a few districts show lower coverage for certain vaccines. Fewer vaccines like OPV 3, FIPV 1, PCV3, MR1and DPT3 had lower coverage rates below 100% in districts like Makwanpur but in overall the vaccination coverage is high (Ref: Table 24 -In Annex).

3.4.7 Routine Immunization coverage for Children Aged 24-35 months: Second-Year of Life Vaccines (Card, Recall and Both)

The coverage is observed to be higher for all three vaccines in the second year of life based on card and recall with notable disparity in coverage in Humla district i.e. below 85%. However, the card-based coverage is shown to be lower for TCV vaccine i.e. below 90% in districts as Bhaktapur (84%), Lalitpur (87.9%), Kailali (89.8%), Manang (85.7%), and Kanchanpur (86.8%)(Ref: Table 25 -In Annex).

3.4.8 Coverage of All Vaccines Among Children Aged 24–35 Months (Card and Recall)

The vaccine coverage data for children aged 24–35 months (card and recall) indicates near to universal coverage for some major vaccines, such as BCG, OPV, and DPT, across the districts, with rates exceeding 97% overall. However, there are districts where the coverage for certain vaccines is comparatively lower i.e. for MR2, JE, and TCV, the coverage is below 90% in Humla district. Likewise, in district Lalitpur, Bhaktapur, the coverage for TCV is lower than 90% (Ref: Table 26-In Annex).

3.4.8.1 Coverage of All Vaccines Among Children Aged 24–35 Months (Card)

The table presents the coverage of all vaccines among children aged 24–35 months based on card observation, disaggregated by district. Overall, the coverage is high for most vaccines i.e. BCG, OPV1, OPV2, and DPT1 reaching 100% across all districts. However, the coverage for TCV is below 90% in several districts, including Bhaktapur, Lalitpur, Manang, Kailali and Kanchanpur (Ref: Table 27 -In Annex).

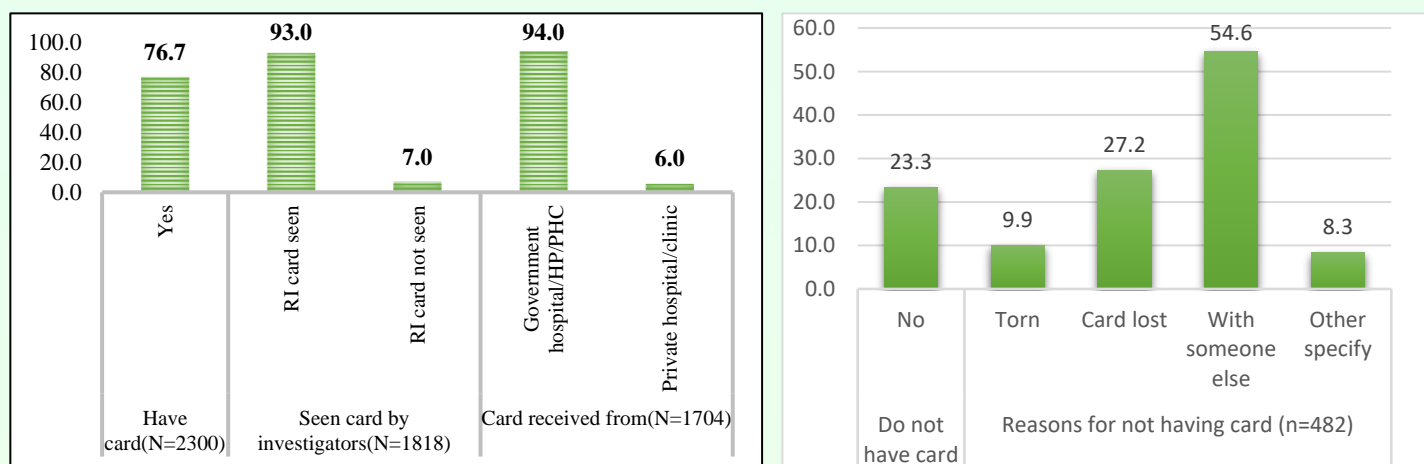
3.4.8.2 Coverage of All Vaccines Among Children Aged 24–35 Months (Recall)

The vaccine coverage data for children’s aged 24-35 months shows consistently high coverage for most vaccines across all the 13 districts. Many of the districts have full coverage for most of the vaccines based on recall. However, there are few variations in districts like Humla, Salyan, Bhaktapur, Kathmandu where there is no full coverage(Ref: Table 28 -In Annex).

3.5 Retention of Vaccine card

Retention and handling of routine immunization cards was also assessed for children under age 12-35 months. The detail vaccine card retention by 13 study districts is in Annex 4 [Table 21].

3.5.1 Vaccine card retention*



Note: Base N is taken unweighted and % is weighted

Figure 10: Vaccine card retention

The bar-diagram above shows, 76.7% of respondents have vaccine card, while 23.3% do not. Among those without a card (23.3%), the main reasons were that the card is with someone else (54.6%) and lost (27.2%).

Of the total cards seen, 93.0% were verified. Most respondents (94.0%) had received their card from a government health facility, while 5.8 % received theirs from a private hospital or clinic.

3.6 Knowledge and Attitude of Mother/Caregiver on Routine Immunization

3.6.1 Knowledge of mother/caregiver on routine immunization

Mother/caregiver were asked for their opinions on routine immunization. 71.0 % of the respondents had heard of vaccines available for routine immunization. Likewise, 62.3 % had been informed about possible adverse events related to immunization. However, the awareness of delayed vaccination schedule is nearly even split, with 45.7% knowledgeable and 54.3% not. A significant majority (90.2%) are unaware of the 13 vaccines included in the routine immunization schedule of Nepal.

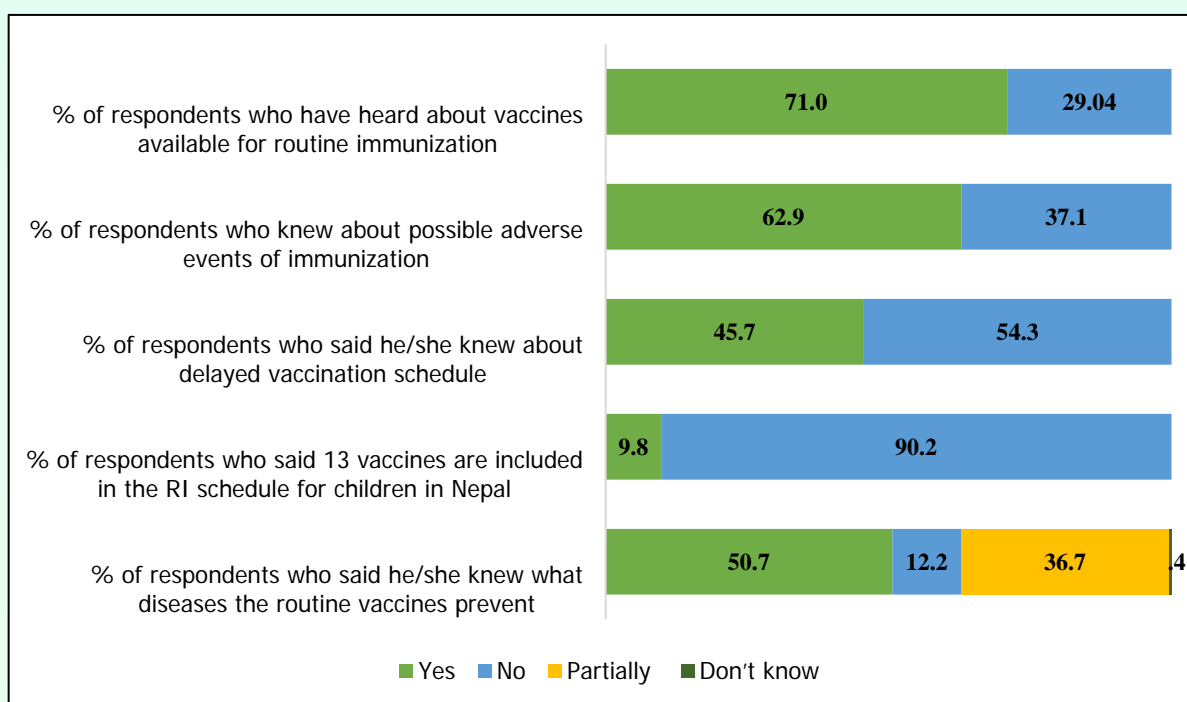


Figure 11: Knowledge of mother/caregiver on routine immunization

3.6.2 Source of information about the vaccine

Mothers/Caregivers were also asked about to mention the sources of information about the vaccines, where a majority outlined health care providers (97.7%) as the predominant source. Family member (38.8%) and friends (22.6%) also were the other most reported sources. Other sources, such as social media (19.2%), television (7.1%), and printed media (1.7%), have limited reach, indicating that direct engagement with healthcare professionals plays a crucial role in disseminating information about vaccines.

Table 13: Source of information about the vaccines

Source of Information	Percent
Healthcare provider	97.7
Family member	38.8
Community organization	28.4
Employer	7.2
Friend	22.6
Television	7.1
Radio	2.8
Social media	19.2
Printed media	1.7
Banner/billboard ad	3.1

3.6.3 Attitude of mother/caregiver towards immunization

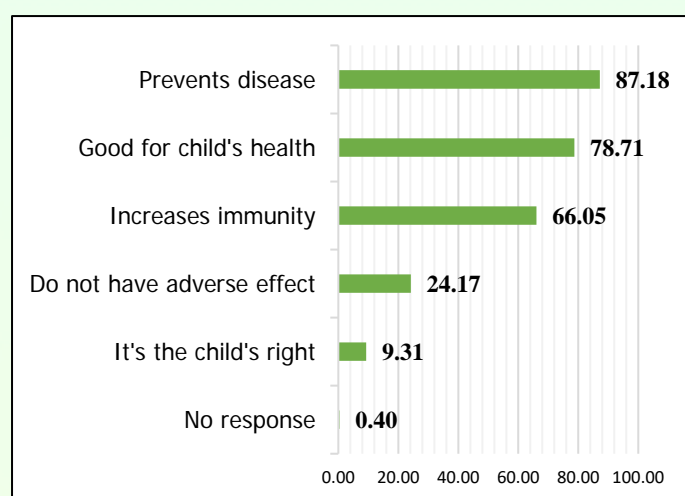
The mother/caregivers were asked for their opinion towards routine immunizations. The mothers/caregivers who had positive attitude towards immunization were 98.7% and 0.3 percent had negative attitude.

Table 14: Attitude of mother/caregiver towards routine immunization

Attitude of mother/caregiver towards routine immunization	Percent
Positive	98.7
Negative	0.3
Undecided	1.0

3.6.4 Reasons for positive attitude towards routine immunization

Among mother/caregiver (N= 2256) who had positive attitude were further asked for their positive attitude towards immunization. The most common reason outlined was that it "prevents disease" (87.18%) and is "good for the child's health" (78.71%). Other notable reasons include "increases immunity" (66.05%) and "does not have adverse effects" (24.17%).

**Figure 12: Reasons for positive attitude towards routine immunization.**

3.7 Adverse event experience following vaccination and Health seeking behavior

3.7.1 Experienced adverse event 41% of individuals reported experiencing an adverse event post-vaccination, while 58.5% did not. The majority had not encountered any issues following vaccination.

Fever was the most common adverse event experienced by 92.3 % of the children. The other common adverse experienced reported were redness and swelling (2.2%), Rashes and excessive cry (2.1%) and vomiting (0.6%) as shown in Table 3.8.2.

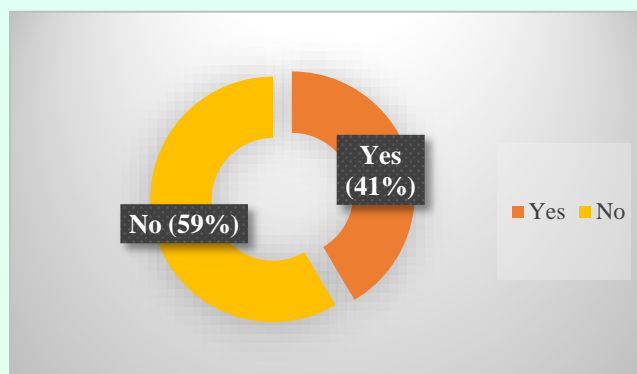


Figure 13: Percentage who have experienced adverse event following vaccination

3.7.2 Adverse event experienced after routine immunization

Table 15: Adverse event experienced after routine immunization

Adverse event	Percent
Fever	92.3
Rashes	2.1
Excessive cry	2.1
Redness and swelling	2.2
Vomiting	0.6
Others	0.6

3.7.3 Source of Information regarding adverse event following immunization

The data reveals that a high percentage of respondents (80.3%) were informed about adverse events following immunization, and 86.1% knew whom to contact if an adverse event occurred. Healthcare providers were the primary source of this information (96.3%), while other sources stated were family members (1.1%), community organizations (1.0%), and social media (0.7%).

Table 16: Source of Information regarding adverse event following immunization

Variables	Percent
% of respondent who were provided with information regarding adverse event following immunization (N=?)	80.3
% of respondent who knew whom to contact if any adverse event occurs (N=?)	86.1
Source of information regarding adverse events (N=?)	
Healthcare provider	96.3
Family member provider	1.1
Community organization	1.0
Social media	0.7
Others	0.9

3.7.4 Health seeking behavior post adverse event experience

36.9% of respondents had sought medical care in case their child experienced an adverse event following immunization. Among those who did seek care (N=330), the majority visited government healthcare facilities (68.2%), while smaller portions went to pharmacies (21.2%) or private clinics (10.0%).

Table 17: Health seeking behavior post adverse event experience

Variable	Percent
% of respondent who seek medical care if the child had any adverse event following immunization after vaccination(N=887)	36.9
Respondents who sought the following medical care for adverse events following child vaccination (N=330)	
Government Hospitals/PHC/HP	68.2
Private hospitals/ Clinics	10.0
Medical shops/Pharmacy	21.2
Traditional healers	0.3
Others	0.3

3.7.5 Health Seeking Behavior of Mother/Caregiver

The data provides insights into preferred healthcare facilities for treating a sick child across different region (Fig 14). Government hospitals or health posts were reported as the most common choice (58.3%), particularly in rural areas, where 73.5% of respondents rely on public healthcare facilities. In contrast, the preference for private hospitals is significantly higher in peri-urban (32.5%) and urban (31.1%) settings, reflecting a potential inclination towards private care in more developed areas.

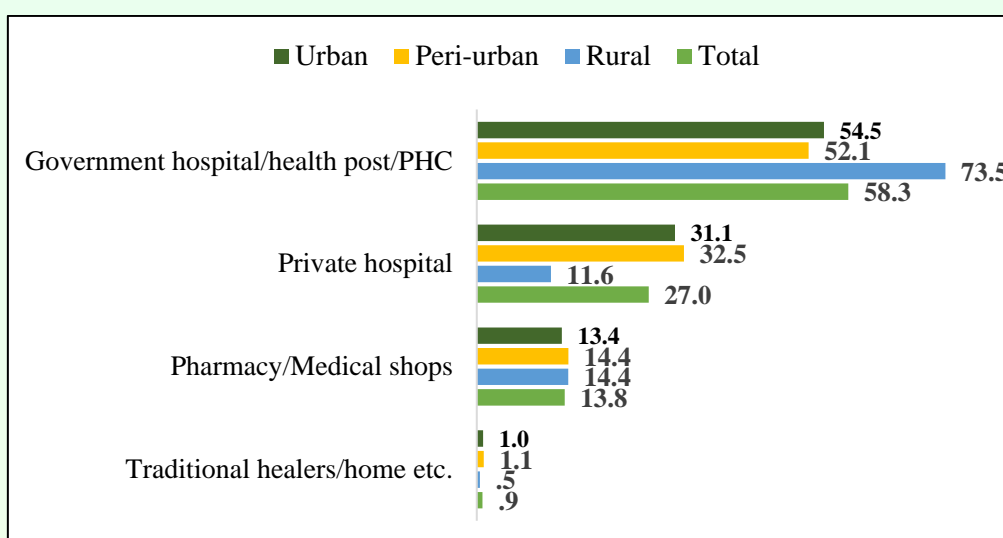


Figure 14: Health seeking behavior of mother/caregiver



3.8 Behavior and Social Drivers of Immunization

The survey also evaluated the behavioral and social drivers of vaccination (BeSD) to understand what influences vaccine uptake, which can help improve program implementation. BeSD are defined as vaccination-specific beliefs and experiences that can potentially be modified to increase vaccine uptake. These factors, identifiable through the survey, can be changed by vaccination programs. The assessment was based on the "Behavioral and Social Drivers of Vaccination - Tool and Practical Guidance."

Based on the framework of BeSD, the results are as follows:

3.8.1 Results on: Thinking and feeling

According to the BeSD framework, here the results regarding perceived disease risk, confidence in vaccines (perceived benefits, safety and trusts) have been presented.

Confidence in vaccine benefits

The data indicates a strong recognition of the importance of vaccines for children's health, with the majority of respondents across all areas rating them as "very important". Another significant finding is that the respondents reporting vaccines as not important were comparatively higher in the peri-urban regions. (Fig: 15).

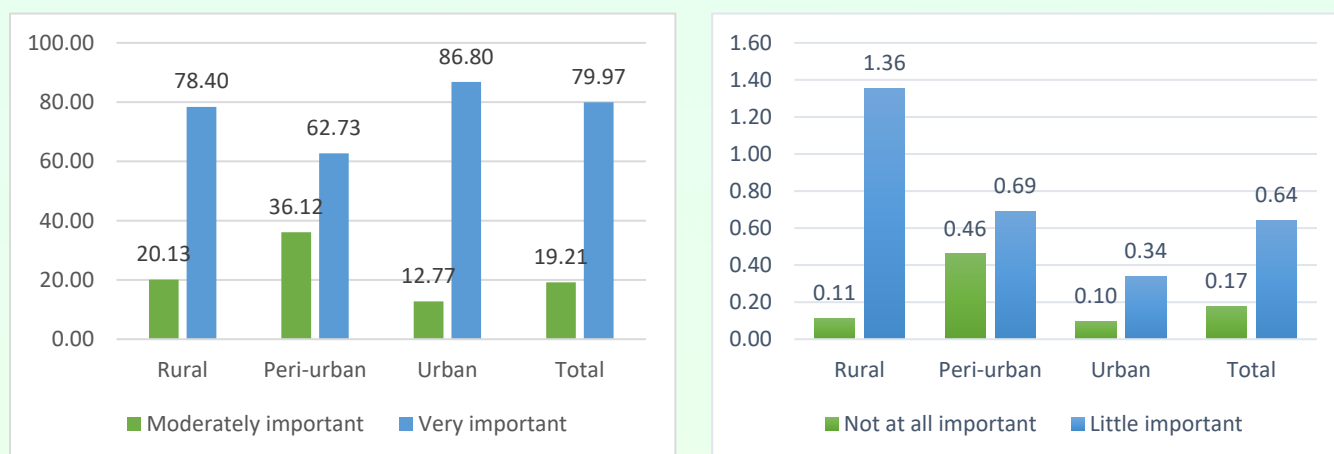


Figure 15: Perceived importance of vaccines for child's health

Confidence in vaccine safety

The data on confidence in vaccine safety shows a generally high level of trust in vaccines across all areas. The majority of respondents, particularly in urban areas (81.55%), believe vaccines are "very safe." A small proportion in each area, however, perceives vaccines as "not safe" or "a little safe" specifically, respondents from the rural area (0.30%). (Fig. 16).

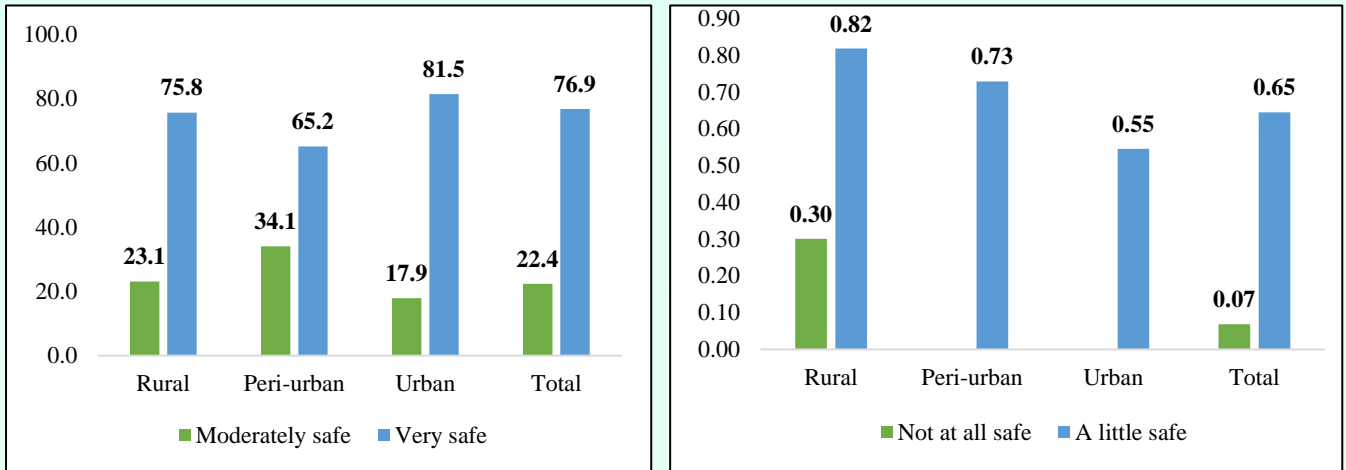


Figure 16: Perceived safety of vaccines for child's health

Confidence in health care workers

The results shows that mothers/caregivers have a very high level of trust in health workers, with the majority of respondents in all areas expressing "very trust." The proportion of individuals expressing "not trust" or "a little trust" is minimal across all areas, indicating overall confidence in health workers. It is worth noting that respondents from rural areas showed no trust compared to other regions. (Fig.17).

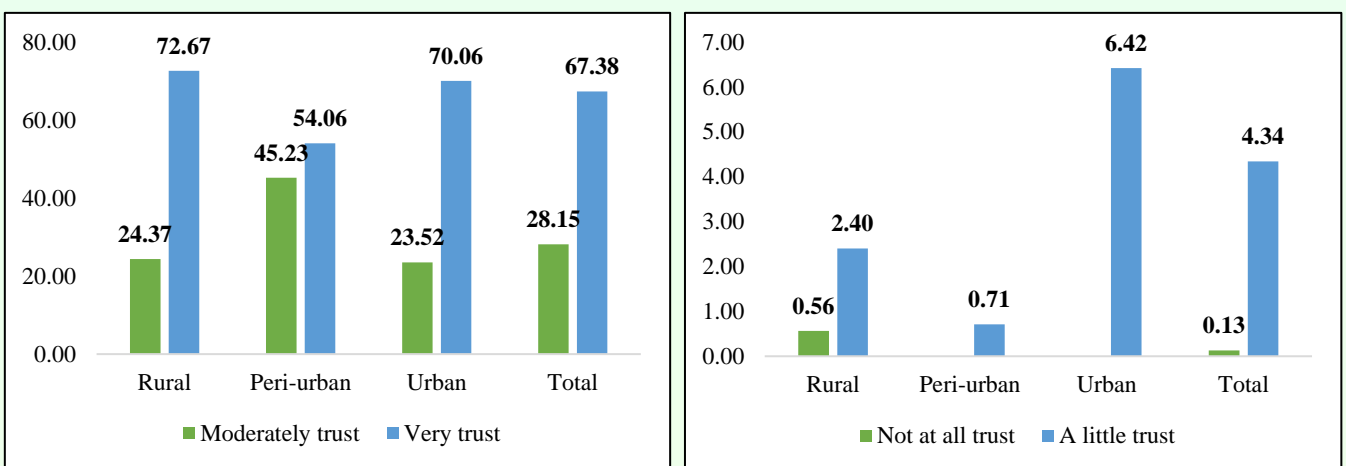


Figure 17: Perceived confidence in health care workers

3.8.2 Results on Social Processes

Family norms

Majority of mothers or caregivers across rural, peri-urban, and urban areas (99.8% overall) believe that most of their close family and friends support vaccinating their child. Only a very small percentage feel otherwise, indicating strong social support (in terms of close family and friends) for child vaccination across all settings.

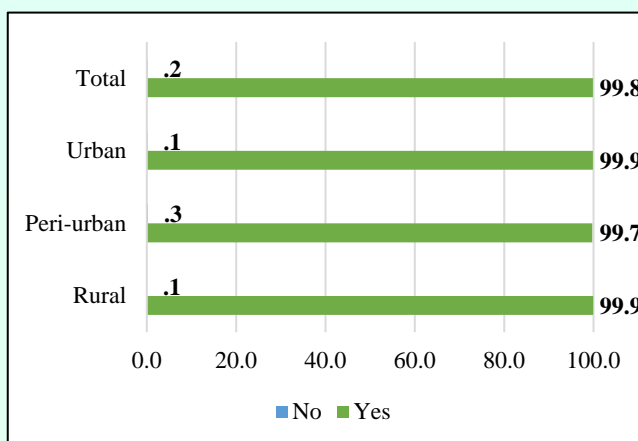


Figure 18: Percentage of mothers/caregivers who say most of their close family and friends want their child to be vaccinated

Peer norms

Social norms, or beliefs about the behaviors of close social contacts, were also assessed. Majority (93.7%) of respondents across all areas believe that most parents they know get their children vaccinated. This perception is highest in rural areas (98.8%) and slightly lower in peri-urban (94.5%) and urban areas (91.4%).

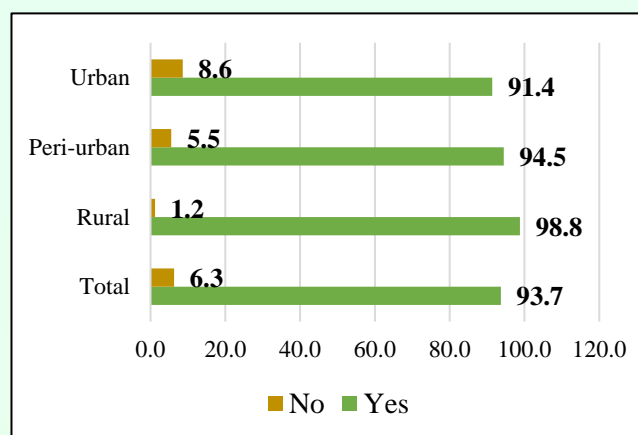


Figure 19: Percentage of mothers/caregivers who say most parents they know will get their child vaccinated

Religious leader norms

Majority (98.25%) of mothers/caregivers across all areas believe their religious leaders support child vaccination. This perception is consistent across settings, with the highest agreement in urban areas (98.62%) and slightly lower in rural (97.57%) and peri-urban areas (97.96%). Only a small minority (1.75% overall) believe their religious leaders do not support vaccination.

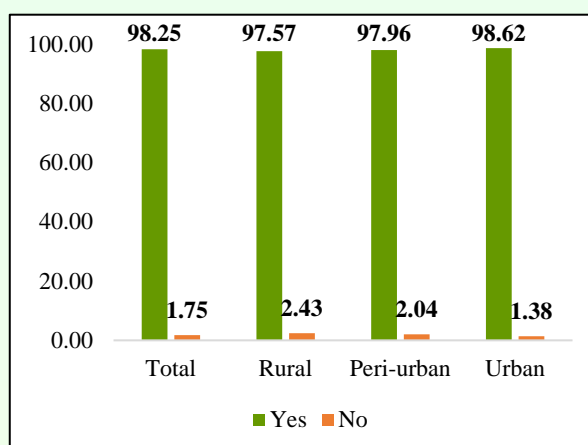


Figure 20: Percentage of mothers/caregivers who say their religious leaders want their child to be vaccinated

Community leader norms

A vast majority (97.81%) of respondents believed that their community leaders support child vaccination, with the highest approval in urban areas (99.34%) and slightly lower support in peri-urban areas (93.81%). This reflects strong community endorsement across all areas, with minor regional variations.

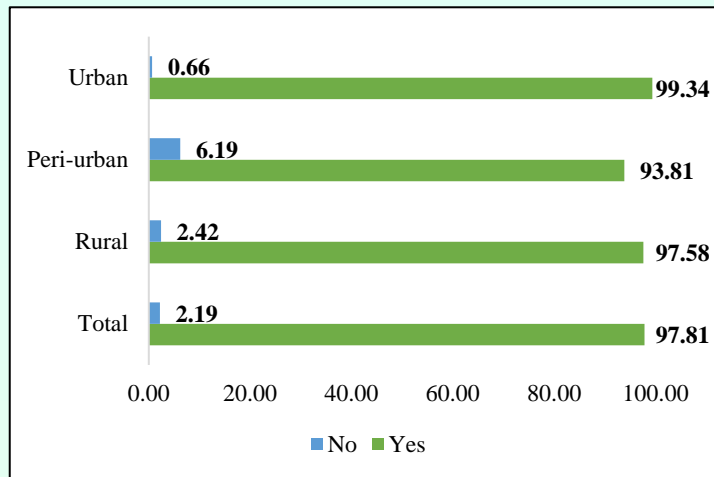


Figure 21: Percentage of mothers/caregivers who say their community leaders want their child to be vaccinated

3.8.3 Results on Motivation

Intention to get child vaccinated

The intention to vaccinate children with all recommended vaccines is high across all areas (overall at 94.6%). Rural and peri-urban areas show slightly higher intent at 94.5% and 96.6% respectively, compared to 93.9% in urban areas. Only a small fraction, particularly in rural areas (3.5%), indicate no intention to vaccinate with any of the recommended vaccines.

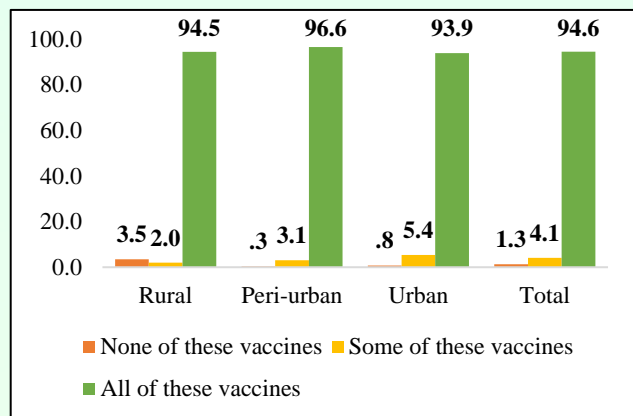


Figure 22: Percentage of parents/caregivers who say they want their child to get all of the recommended vaccines

3.8.4 Results on Practical issues

Know where to get vaccination

Overall, 97.9% of respondents were aware of where to obtain vaccines, with awareness levels highest among urban residents (98.7%) and slightly lower in rural areas (95.2%). A small fraction, 2.1% overall, do not know where to access vaccination services, with rural residents showing a slightly higher lack of awareness at 4.8%.

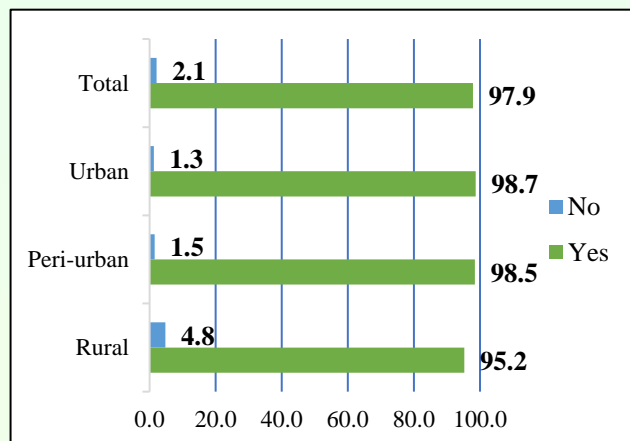


Figure 23: Percentage of parents/caregivers who say they know where to get their child vaccinated

Affordability

Most respondents reported that paying for vaccinations as "very easy". Here, the cost implies any payments to the clinic, the cost of getting there, plus the cost of taking time away from work. This perception is highest among urban residents (69.2%) and slightly lower in peri-urban areas (55.9%). Only a small percentage, 0.67% overall, report that paying for vaccination is "not at all easy" and it is worth noting that, comparatively higher proportion of respondents from the rural area shared it is not at all easy to pay for vaccination for their child.

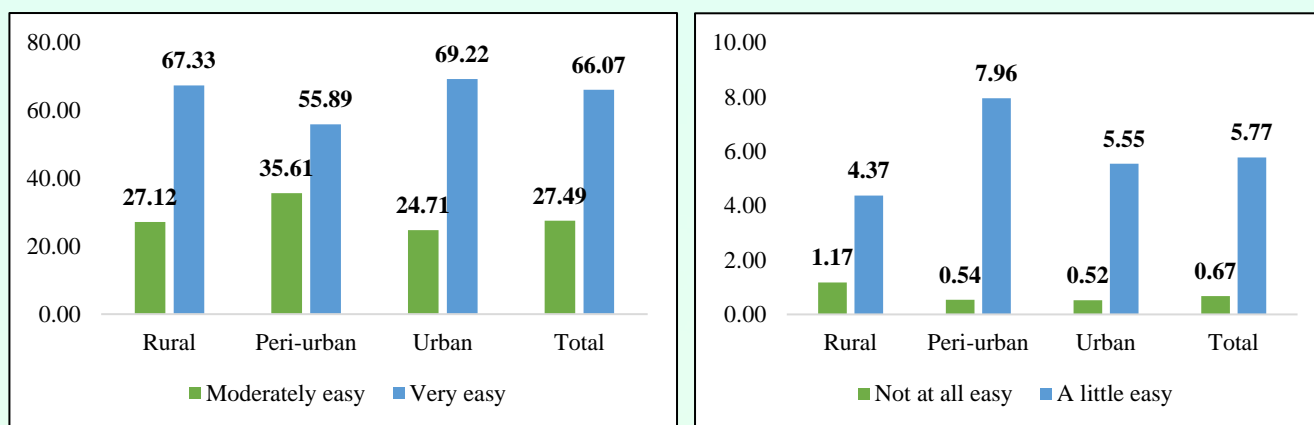


Figure 24: Percentage of parents/caregivers who say it is easy to pay for vaccination for their child

Service Quality

Most respondents are content with the vaccination services provided, with 79.1% reporting overall satisfaction. Key concerns outlined were long waiting times (11.2%) and occasional vaccine unavailability (5.6%). Other issues, such as lack of cleanliness, poorly trained staff, and disrespectful behavior from staff, were reported by very few respondents, indicating that these are not major issues across the regions.

Table 18: Satisfaction Levels and Concerns Regarding Vaccination Services

Satisfaction Levels and Concerns Regarding Vaccination Services	Rural	Peri-urban	Urban	Total
Nothing, you are satisfied	87.0	95.6	92.6	79.1
Vaccine is not always available	3.6	1.6	1.8	5.6
Waiting times are long	6.5	0.5	4.1	11.2
The clinic is not clean	0.0	0.2	-	-
Staff are poorly trained	0.9	-	-	2.0
Staff are not respectful	0.3	-	0.8	0.3
Others	1.2	2.1	0.4	1.2
Don't know	0.4	-	0.4	0.7

Others: lack of cleanliness, poorly trained staff, and disrespectful behavior from staff

Received recall

The data indicates that across all areas, the majority of respondents had not been contacted about their child being due for vaccination, with 76.2% answering "No." However, the likelihood of being contacted varied by geographic location. In rural areas, 27.5% of respondents reported receiving a reminder, compared to just 17.1% in urban areas.

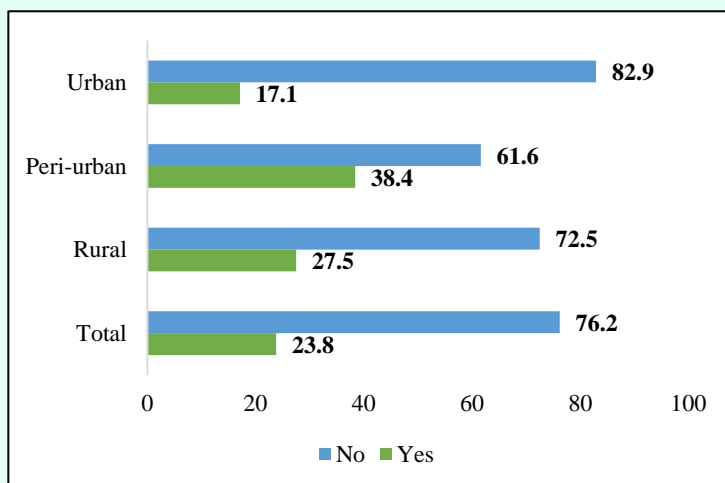


Figure 25: Percentage of parents/caregivers who have been contacted about child being due for vaccination

Took child for vaccination

A large majority of respondents (96.02%) reported personally taking their youngest child for vaccination. Only a small percentage (3.98%) have not taken their child for vaccination, with rural areas showing the highest rate of non-participation (8.44%).

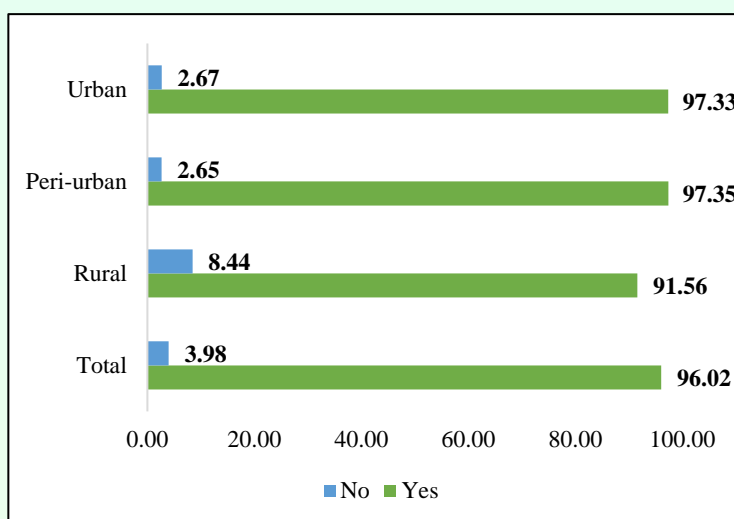


Figure 26: Percentage of parents/caregivers who say they have taken youngest child for vaccination

Vaccination availability

Majority of respondents (93.07%) had no issues in getting their child vaccinated, indicating general accessibility. However, 6.93% experienced being sent back without their child receiving the vaccine, with the highest occurrence in rural areas (7.74%) and slightly lower rates in urban (7.31%) and peri-urban (4.98%) areas.

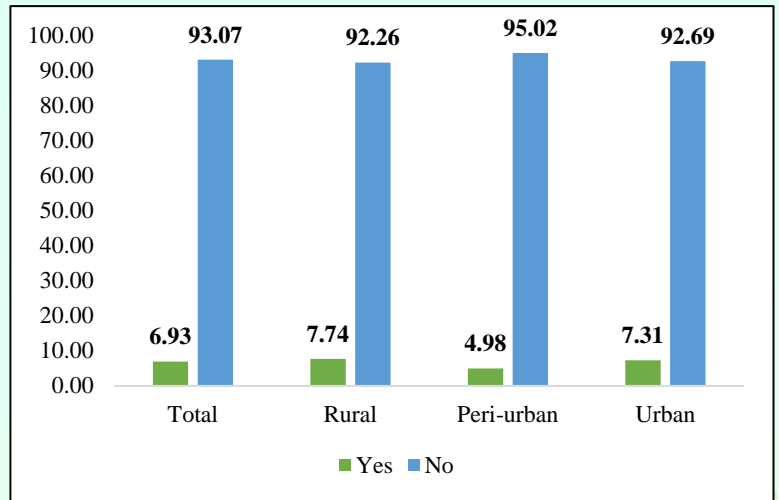


Figure 27: Percentage of parents/caregivers who say they have never been turned away for child vaccination

Ease of access

The figure 28 shows the perceived ease of accessing vaccination services for children across different geographic areas. Overall, 60.8% of respondents found it "Very easy" to access these services. Very few respondents in any area found it "Not at all easy" (0.3% total), indicating that, generally, access to vaccination services is perceived as accessible.

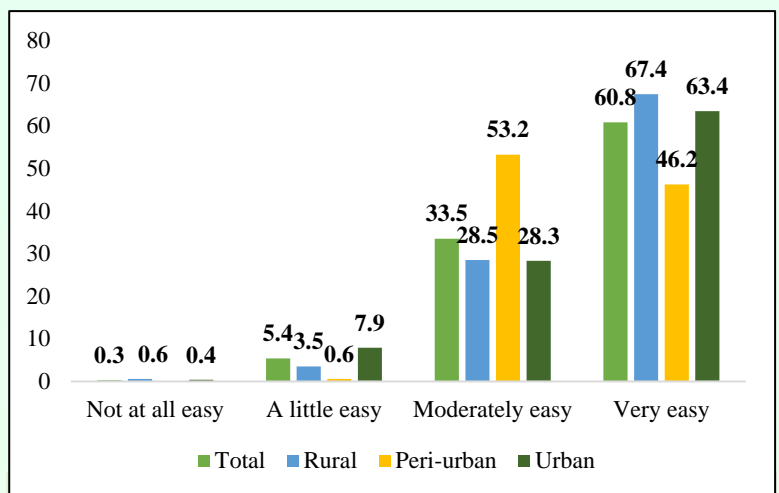


Figure 28: Percentage of parents/caregivers who say it is easy to get child vaccination services

Service satisfaction

Most respondents (69.88%) reported being "Very satisfied," with urban areas having the highest proportion of very satisfied respondents (74.91%), followed by rural (66.17%) and peri-urban areas (60.04%). Very few respondents expressed dissatisfaction, with only 0.98% "Not at all satisfied" and 3.38% "A little satisfied." These findings suggest high overall satisfaction with vaccination services.

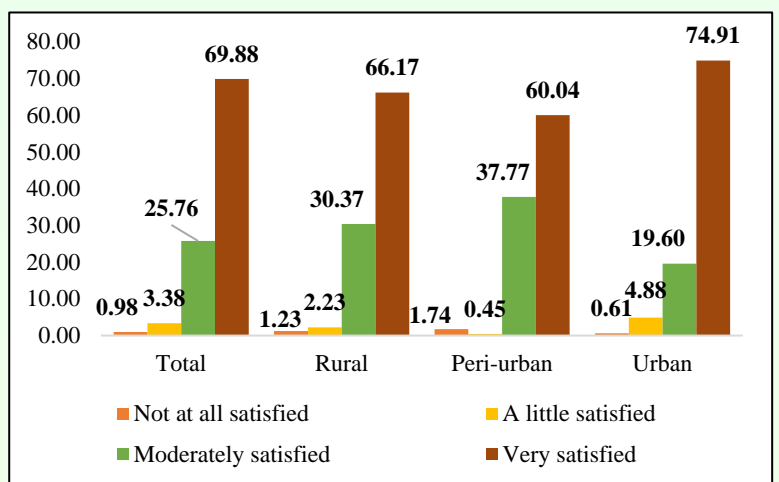


Figure 29: Percentage of parents/caregivers who say they are satisfied with the vaccination services for their child

3.8.5 Others Drivers related to Child immunization (First and second year of life)

Mothers play an important role in child vaccination decisions, with children of mothers who are primary decision-makers achieving a high rate of full vaccination (94.1%). Among children who were sent back without receiving vaccination, key reasons included vaccine unavailability (87.2%) and vaccinator absence (62.3). These findings highlight the need to address human resource and logistical barriers to improve vaccination continuity.

Table 19: Drivers related to Child immunization (First and second year of life)

Variables	Partial vaccination	Full vaccination	Base (N)
Decision makers of child's vaccination			
Mother	5.9	94.1	1229
Father	5.2	94.8	28
Mother-in Law	11.6	88.4	20
Others	19.8	80.2	5
Mother needs permission to take child for vaccination			
Yes	6.0	94.0	100
No	6.0	94.0	1182
Had experience of being sent back without the child getting vaccinated			
Yes	10.9	89.1	101
No	5.6	94.4	1181
Reasons for being sent back			
Vaccination session was not open	8.8	91.2	17
Vaccination session shifted to another site uninformed	-	100	5
Vaccinators not present	37.7	62.3	4
Vaccines not available	12.8	87.2	51
Card not available	100	-	1
Others	2.5	97.5	23

Note: Base N is taken unweighted and % is weighted



CHAPTER IV: CONCLUSION AND RECOMMENDATION

Routine Immunization Vaccine Coverage

In the routine immunization program, majority (94%) of the children were fully vaccinated and only (6%) were partially vaccinated in the first year of life (12-23 months). Similar pattern was observed in the second year of life, where the larger group (93.5%) of children were fully vaccinated and only 4.1% and 2.3% were partially vaccinated and zero dose respectively. At the time of the survey, no disparities in the sex of the children were reported, with approximately 94.1% and 93.9% male and female children reached in the first and second year of life correspondingly. Among the eligible respondents (17.4%), most of them (94%) were mothers of the eligible children. The significant proportion of caregivers of children aged 12-35 months (57.7%) were aged 25-34 years, almost 30% have finished grades 9-10, 76.4% were housewives and the greater share (93.4%) had access to personal mobile phones and could access social media.

The result indicate that the immunization coverage differed across regions, with the highest coverage in Gandaki with 99.2% and 97.4% fully vaccinated children in the first and second year of their life respectively and the lowest coverage in Karnali (91.7%) and Sudurpaschim (91.2%) respectively in the first and second year of their life. The district wise coverage shows that some of the districts like Manang, Gulmi and Salyan has full coverage for first year of life vaccines. However, the lowest coverage is observed at Humla i.e. 73.2 %. Similarly, when we examine the coverage of second-year-of-life vaccines, we observe that 2.3% of children were not immunized with all three vaccines recommended for the second year of life. The highest proportion is from Karnali Province (5.7%). At the district level, the highest proportion of partially immunized children is observed in Bhaktapur, while in Humla, the proportion of children who are not immunized with any of the vaccines is notably high. This highlights the need for targeted interventions in districts where there are high partially immunized children and also focus on second year of life vaccines. Vaccination coverage also significantly differed by geographic settlement, district, type of settlement, type of palika, recall of immunization history, sex of the household head, age, ethnicity and religion of the mothers/caregivers, age of the child at the time of the campaign, education and occupation of the mothers/ caregivers, use of personal mobile phone and preferred social media. Notably, institutional deliveries exhibited a higher coverage rate compared to non-institutional deliveries.

District-wise vaccine coverage

- Ramechhap
In Ramechhap district, the coverage for first-year-of-life vaccines is notably high, with some vaccines achieving full coverage, such as FIPV2, PCV3, and MR1. Similarly, 100% coverage was observed for all three second-year-of-life vaccines.
- Lalitpur
For first-year-of-life vaccines, the coverage is high for all vaccines, with more than 95% coverage. Full coverage is noted for BCG, OPV2, DPT1, and PCV3. However, for second-year-of-life vaccines, the coverage for TCV is comparatively lower at 89.3%.

- **Bhaktapur**
Full coverage has been observed for most first-year-of-life vaccines, including BCG, OPV1, OPV2, FIPV2, DPT1, DPT2, DPT3, PCV1, and MR1. However, for second-year-of-life vaccines, TCV coverage is the lowest at 84.0%.
- **Kathmandu**
In Kathmandu district, universal coverage is recorded only for BCG. For all other first-year-of-life vaccines, the coverage is higher than 95%. Regarding second-year-of-life vaccines, all three vaccines have coverage exceeding 95%.
- **Makwanpur**
Full coverage is recorded for BCG, OPV1, OPV2, DPT1, DPT2, PCV1, PCV2, and ROTA1. For second-year-of-life vaccines, coverage is almost complete, with rates above 97%.
- **Manang**
Manang district has 100% coverage for all first-year-of-life and second-year-of-life vaccines, except for TCV, which has a coverage rate of 97.5%.
- **Mustang**
Mustang district has full coverage for all first-year-of-life and second-year-of-life vaccines, except for FIPV2, which has a coverage rate of 97.8%.
- **Gulmi**
Gulmi district has full coverage for all first-year-of-life and second-year-of-life vaccines.
- **Bardiya**
In Bardiya district, full coverage is noted for all vaccines except FIPV1, PCV1, and MR1. For second-year-of-life vaccines, the coverage for all three vaccines is higher than 90%.
- **Salyan**
Salyan district has full coverage for all first-year-of-life vaccines. For second-year-of-life vaccines, coverage for all three vaccines is higher than 95%.
- **Humla**
In Humla district, full coverage is noted for BCG, OPV1, OPV3, FIPV1, DPT1, DPT2, DPT3, PCV1, and PCV2. However, some vaccines have comparatively lower coverage, such as ROTA2 (74.4%), ROTA1 (87.8%), and FIPV2 (87.8%). For second-year-of-life vaccines, all three vaccines have coverage below 90%.
- **Kailali**
In Kailali district, all first-year-of-life vaccines have coverage higher than 95%. For second-year-of-life vaccines, only TCV has comparatively lower coverage at 91.8%.
- **Kanchanpur**
In Kanchanpur district, most first-year-of-life vaccines have full coverage. For second-year-of-life vaccines, TCV has comparatively lower coverage at 90.0%.

Reason for not receiving vaccine

The reason for partial and zero dose vaccination in Nepal included service delivery issues, lack of awareness, service uptake and others. Overall, the predominating concern was that the health workers were refusing to vaccinate sick children (17.7%), many guardians didn't know where to go for the vaccine (16.6%) followed by parents being too busy (10.4%) to attain the program. The other prevailing issues were, unawareness of the vaccination sites, misconception about the vaccine trials, and absence of parents during the session, inconvenient timing and inappropriate age of the child. These findings underscore the need for targeted awareness campaigns that can improve the knowledge and trust in the immunization program. The key recommendation is launching a nationwide awareness program that highlights both the importance of routine immunization and its safety. Before the campaign it is crucial to strengthen pre-campaign efforts by providing clear information about the vaccination time and location in advance. This could include distributing vaccination cards that feature a map of nearby vaccination centers, marked with local landmarks to make them easier to find. Additionally, reaching remote areas to create awareness, where the access is more challenging through deploying volunteers and health workers would improve the coverage. Ensuring that health workers have the right training and knowledge will help more children get vaccinated and reduce missed opportunities. This will not only improve vaccination rates but also strengthen immunization programs, ultimately protecting children from preventable diseases.

Vaccine card retention (12-35 months)

This survey also identified retention of RI vaccination cards for children aged 12 to 35 months old. Of the children included in the survey, 23.3 % didn't possess a vaccine card. The dominant reasons for the lack of retention were that the card was with someone else (54.6%) and the larger group (94.0%) had received the vaccine card from a government health facility. The district wise findings shows that the retention of card is highest at Lalitpur district (90.7%) whereas the lowest retention can be seen at Humla (41.0%), Mustang (53.0%) and Salyan (60.0%) (Annex 4; Table 28). To increase the card retention rates, it is important to highlight the importance and safety of vaccines to caregivers. Healthcare workers and Female Community Health Volunteers (FCHVs) should be trained to communicate the significance of keeping vaccination cards and ensuring caregivers understand its value.

Knowledge and Attitude of Mother/Caregiver on Routine Immunization

In the survey a significant proportion (71%) of the participants were aware of routine immunization primarily from healthcare providers (97.7%), family members (38.8%), community organizations (28.4%), friends (22.6%) and social media (19.2%). Health care providers and community organizations contributed significantly to raising awareness about the routine immunization program, offering health advice, and acting as a key source of information about vaccinations for the community. Recommendation for future interventions would be to do a pre-campaign planning and may consider incorporating training and orientations for community organizations in pre-campaign outreach and promotion.

Though (98.7%) had a positive attitude towards immunization, a significant gap exists, with 90.2% of the participants unaware of the 13 vaccines included in the routine immunization schedule of Nepal.

This highlights the need for targeted awareness campaigns to educate the public about the full range of vaccines available and their importance in promoting public health. A key suggestion would be that healthcare workers and community organizations could educate parents and guardians on how to read and use the card effectively. By teaching caregivers to understand the information, including the vaccination schedule, healthcare workers can empower them to better track and ensure timely immunizations, ultimately improving vaccination coverage and protecting children's health.

Vaccination-related adverse events

Overall, 41% of the mother/caregivers reported that their child had experienced adverse event following vaccination, where the larger group (92.3%) addressed fever as the major concern followed by rashes and swelling and excessive crying. Majority (96.3%) of the respondents mentioned healthcare providers as the primary informant as the source of information regarding adverse events and only a few mentioned family members, community organizations and social media. This suggests that healthcare providers should be encouraged to address common concerns such as fever, rashes, swelling, and excessive crying during vaccine consultations. Additionally, expanding communication efforts to include community organizations, and social media could help reach a wider audience, ensuring that all caregivers are informed and confident about vaccination safety. This wider approach will help to reinforce the message and alleviate any vaccine-related anxieties.

Health seeking behavior

Following the adverse event experienced by children only 36.9% of the respondents took medical care among which the majority (68.2%) of the participants visited government hospital/PHC/HP and (21.2%) visited medical stores. The results indicate that the preferred health care facilities varied across different regions where government hospitals or health posts are the most commonly chosen option, particularly in rural areas where 73.5% of respondents rely on public healthcare. In contrast, the preference for private hospitals is notably higher in peri-urban and urban areas, with 32.5% and 31.1% of respondents, respectively, opting for private care. These findings show that while public healthcare facilities are still the main choice across different regions, more people in peri-urban and urban regions are leaning towards private healthcare. This shift may be due to perceptions of better quality or easier access in private facilities. To improve child health outcomes across the country, an important proposal could be to recognize these regional differences and work towards making healthcare services more efficient, accessible and equitable for everyone, regardless of where they live.

Behavior and Social drivers of Immunization

In all the regions, a significant proportion of the respondents recognized the importance of vaccines and have high level of trust in vaccines as well as in health workers. In terms of social processes, the majority of the respondents believed that most of their close family and friends supported vaccinating their child, most parents they know got their children vaccinated and believed their religious and community leaders support child vaccination. A motive to vaccinate was high in a significant majority.

A greater share of the participants knew where to obtain vaccines, could afford it, were satisfied with the services provided, personally took their youngest child for vaccination, had no issue in getting their child vaccinated, and had easy accessibility to immunization services.

Significant difference was observed in the level of satisfaction with vaccination services across different locations. A larger portion of the respondents (95.6% and 92.6%) were satisfied with the services provided in the rural and peri-urban respectively with slightly low satisfied respondents (79.1%) in the urban areas. Few respondents thought they need to wait for long in order to receive the service and vaccines are not always available. These results suggest that while vaccination services are generally well-received there are regional differences in satisfaction, highlighting the need for targeted improvements, particularly in urban areas where the population is high, to address issues such as service delays and vaccine availability. The issue of long wait times could be resolved by increasing the number of vaccination sites or improving logistical coordination. Ensuring a more consistent supply of vaccines in urban areas is crucial to meet demand and avoid shortages.

Conclusion

While the routine immunization program was able to achieve significant coverage among children aged 12-35 months in 13 districts (Gavi DLI based) of Nepal, it varied across regions and by various key factors. Key challenges included low awareness, service delivery barriers, and misconceptions about vaccines. To improve coverage, targeted awareness campaigns, better access to vaccination services in remote areas, and enhanced training for health workers are recommended. Addressing second-year-of-life vaccine gaps and emphasizing the importance of vaccination cards can further strengthen immunization efforts.

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Annex

Annex 1: Informed Consent

Assess Immunization coverage and knowledge of mother/care givers towards vaccination in 13 districts (Gavi DLI based) of Nepal Survey Consent

Namaste! My Name is _____. We are here on behalf of....., a research organization in Kathmandu. We are conducting a survey to assess Immunization coverage and knowledge of mother/care givers towards vaccination in 13 districts (Gavi DLI based) of Nepal. Your household was selected by random sampling to participate in the survey. The objective of this study will be conducted to assess immunization coverage among 12-35 months for all vaccines included in the national immunization schedule in the 13 low performing districts. We request you to participate in this survey. Information provided by you will be highly important to National Immunization Program to plan and guide immunization related activities in future. This interview is going to take approximately 45 minutes and we would like to assure you that you will experience no inconvenience, discomfort, or harm by participating in this study. To participate or not to participate in this study is completely voluntary. You may refuse to answer any question or choose to stop the interview at any given time. Information provided by you will be kept confidential and your name will not be included in any data set or report.

Risks

When participating in the interview, the main risk is the loss of confidentiality, that is, the risk that the information you give us will be improperly disclosed. However, interviewers will be reminded that everything said in the interview will be kept confidential. There is also a risk that you may share some personal or confidential information by chance, or that you may feel uncomfortable talking about some of the topics. Nevertheless, we do not wish for this to happen. You do not have to answer any question or take part in the interview if you feel the question(s) are too personal or if talking about them makes you uncomfortable.

Our project team members have been trained in ethical issues related to conducting interviews.

Benefits

There will be no direct benefit to you, but your participation is likely to help us gather data which will serve as a guidance for formulating strategies and devise innovative intervention to reach the unreached through campaigns and through routine programs.

Right to Refuse or Withdraw

You do not have to take part in this project if you do not wish to do so and choosing to participate will not affect you in any way. You may stop participating in the interview at any time that you wish without affecting you in any way.

Who to Contact?

If you have any question regarding the survey, you can contact:

1. Dr. Sameer Mani Dixit, Center for molecular dynamics Nepal [email: sameer@cmdn.org]
2. Dr Balwinder Singh Chawla, WHO-IPD [email: singhba@who.int]
3. Dr Rahul Pradhan, WHO-IPD [email: pradhanr@who.int]
4. Namita Ghimire (NHRC): meetnamitag@gmail.com; Tel.: +977 - 4254220 (Ext no 125)

We highly appreciate your participation in the survey.

Do you want to participate? 1. Yes 2. No End Interview

May I begin the interview? 1. Yes 2. No End Interview

Signature of respondent _____

Signature of witness (if the respondent is illiterate): _____

Signature of interviewer's: _____

____ / ____ / 2081

Date: DD / MM / YYYY

Start Time:

Assess Immunization coverage and knowledge of mother/care givers towards vaccination in 13 districts (Gavi DLI based) of Nepal Survey Consent

नमस्ते! मेरो नाम _____। हामी यहाँ काठमाडौंको _____ एउटा अनुसन्धान संस्थाको तर्फबाट यहाँ आएका छौं। हामीले Assess Immunization coverage and knowledge of mother/care givers towards vaccination in 13 districts (Gavi DLI based) of Nepal मा नेपालका १३ वटा जिल्लालाई समेटेर खोप कभरेज सर्वेक्षण अनुसन्धान गरिरहेका छौं। सर्वेक्षणमा भाग लिनको लागि नमूना छनोट विधिद्वारा तपाईंको घरपरिवार चयन गरिएको थियो।

यस अध्ययनको उद्देश्य नेपालका १३ जिल्लामा (Gavi DLI आधारित) खोप सम्बन्धी खोपको कभरेज र आमा/हेरचाहकर्ताहरूको ज्ञानको मूल्याङ्कन गर्नु हो। म तपाईंलाई नियमित खोप गतिविधि संगै खोपको कभरेज र आमा/हेरचाहकर्ताहरूको ज्ञानको बारे प्रश्न सोध्ने छु। हामी तपाईंलाई यस सर्वेक्षणमा सहभागी हुन अनुरोध गर्दछौं। भविष्यमा राष्ट्रिय स्तरमा कभरेज सर्वेक्षणलाई प्रभावकारी रूपमा कार्यान्वयन गर्न राष्ट्रिय खोप कार्यक्रमलाई मद्दत गर्न तपाईंले प्रदान गर्नुभएको जानकारी हाम्रो लागि अत्यन्त महत्त्वपूर्ण हुनेछ।

यो अन्तर्वार्ता लगभग ४५ मिनेट लाग्ने छ र यस अध्ययनमा भाग लिएर तपाईंले कुनै जोखिम, असुविधा वा हानिको अनुभव गर्नुहुने छैन भनी हामी आश्वस्त पार्न चाहन्छौं। यस अध्ययनमा भाग लिनु वा नलिनु पूर्णतया स्वैच्छिक हो। तपाईंले कुनै पनि प्रश्नको जवाफ दिन अस्वीकार गर्न सक्नुहुन्छ वा कुनै पनि समयमा अन्तर्वार्ता रोक्न सक्नुहुन्छ। तपाईंले प्रदान गर्नुभएको जानकारी गोप्य राखिनेछ र तपाईंको नाम कुनै पनि डाटा सेट वा रिपोर्टमा समावेश गरिने छैन।

जोखिमहरू

अन्तर्वार्तामा लिँदा मुख्य जोखिम भनेको गोपनीयताको भङ्ग हुनु हो, अर्थात्, तपाईंले हामीलाई दिनुभएको जानकारी अनुचित रूपमा खुलासा हुने जोखिम हो। यद्यपि, अन्तर्वार्ता लिनेहरूलाई अन्तर्वार्तामा भनिएका सबै कुरा गोप्य राखिनेछ भनी सम्झाइनेछ। तपाईंले संयोगवश केही व्यक्तिगत वा गोप्य जानकारी साझा गर्न सक्नुहुन्छ, वा केही विषयहरूको बारेमा कुरा गर्न असहज महसूस गर्न सक्नुहुन्छ भन्ने जोखिम पनि छ। तैपनि, हामी यो हुन चाहँदैनौं। तपाईंले कुनै पनि प्रश्नको जवाफ दिन वा अन्तर्वार्तामा भाग लिनु पर्दैन यदि तपाईंलाई प्रश्न(हरू) धेरै व्यक्तिगत छन् वा तिनीहरूको बारेमा कुरा गर्दा तपाईंलाई असहज महसूस हुन्छ सक्छ त्यसैले हाम्रो परियोजना टोलीका सदस्यहरूलाई अन्तर्वार्ता सञ्चालन गर्न सम्बन्धित नैतिक मुद्दाहरूमा तालिम दिइएको छ।

फाइदाहरू

यस बाट तपाईंलाई कुनै प्रत्यक्ष फाइदा हुने छैन, तर तपाईंको सहभागिताले हामीलाई डेटा सङ्कलन गर्न मद्दत पुग्ने छ जसले रणनीतिहरू तर्जुमा गर्न मार्गनिर्देशनको रूपमा काम गर्नेछ र नियमित कार्यक्रमहरू मार्फत पहुँचमा नपुगेकाहरूसम्म पुग्नको लागि योजना निर्माण गर्न सहयोग पुग्दछ।

अस्वीकार गर्ने वा छोडने अधिकार

यदि तपाईं त्यसो गर्न चाहनुहुन्न भने तपाईंले यस परियोजनामा भाग लिनु पर्दैन र भाग लिन छनौट गर्दा तपाईंलाई कुनै पनि हिसाबले असर गर्दैन। तपाईंले कुनै पनि तरिकाले तपाईंलाई असर नगरी आफूले चाहेको कुनै पनि समयमा अन्तर्वार्ता छोडन सक्नुहुन्छ।

यदि तपाईंसँग सर्वेक्षणको बारेमा कुनै प्रश्न छ भने, तपाईं निम्न सम्पर्क ठेगानामा सम्पर्क गर्न सक्नुहुन्छ वा तपाईंले निम्न व्यक्तिलाई सम्पर्क गर्न सक्नुहुन्छ:

1. Dr. Sameer Mani Dixit, Center for molecular dynamics Nepal [email: sameer@cmdn.org]
2. Dr Balwinder Singh Chawla, WHO-IPD [email: singhba@who.int]
3. Dr Rahul Pradhan, WHO-IPD [email: pradhanr@who.int]
4. Namita Ghimire (NHRC): meetnamitag@gmail.com; Tel.: +977 - 4254220 (Ext no 125)

सर्वेक्षणमा तपाईंको सहभागिताको हामी उच्च कदर गर्दछौं।

के तपाईं सर्वेक्षणमा भाग लिन चाहनु हुन्छ?

1. चाहन्छु 2. चाहन्न अन्तर्वार्ता अन्त्य गर्नुहोस्।

के म अन्तर्वार्ता सुरु गर्न सक्छु?

1. सक्नुहुन्छ 2. सक्नु हुन्न

उत्तरदाताको हस्ताक्षर _____

साक्षीको हस्ताक्षर (यदि उत्तरदाता निरक्षर छ भने) _____

अन्तर्वार्ताकारको हस्ताक्षर : _____

____ / ____ / 2081

Date: DD / MM / YYYY

अन्तर्वार्ता सुरु समय:

Annex 2: Data Collection Tool

Assess Immunization coverage and knowledge of mother/care givers towards vaccination in 13 districts (Gavi DLI based) of Nepal

Do you want to participate?

Agree to give interview.....1

Disagree to give interview..... 2 (End Interview)

No family member available at the time of visit.....3

Eligible respondent not available4

Respondent incapacitated (deaf, mentally sick)5(End Interview)

Signature of witness (if the respondent is illiterate): _____

Signature of interviewer's: _____

Visit:	1	2	3
Date:			
Time (24 hours):			
Result (take code from Q012)			

May I begin the interview? 1. Yes 2. No

Date: ____ / ____ / 2081 {DD / MM / YYYY}

Start Time:

Household Information	
002 Province name and number _____	<input type="text"/>
003 District name and number (please insert district) _____	<input type="text"/> <input type="text"/>
004 Local level (Metro/ Sub-metro/ Municipality/RM) name and number _____	<input type="text"/>
005 Ward number.....	<input type="text"/> <input type="text"/>
006 Cluster number.....	<input type="text"/> <input type="text"/>
007 Household ID.....	<input type="text"/> <input type="text"/>
008 Name of household head _____ 008.1 Sex of household head: Male=1 Female=2	008.2. Age of household head in complete years:
009. Name of respondent _____ 010. Name of interviewer and code _____ 011. Supervisor's name code _____ 013. Interview visits:	<input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
012. Result of Interview: 1. Begin interview not completed 2. Completed interview 3. No family member available at the time of visit 4. Eligible respondent not available 5. Respondent incapacitated (deaf, mentally sick) 6. Refused 9. Other (Specify) _____	

Retrieve GPS coordinates while standing outside the front door of the house under a clear sky when possible.

Household GPS Coordinates		
GPS 01	Latitude	
GPS 02	Longitude	
Alt 03	Altitude (m)	

Section 1: Household Roster

Total number of family members in the household

Total number of children above 12 months and below 35 months in the household)

S. No	101: Name of child	102. Sex Gender of Child Male =1 Female=2 Other = 3	103. Can you tell the date of birth child (Name)? Can only tell the year and month but not the day =0 Can tell year and day But don't know month =1 Can tell day, month and year=2 Child is one year complete But don't know the month And day = 3 Child is two years complete But don't know day and Month =4 Child is more than three Years=5	104. Date of Birth (DDMM YYYY)	105. Complete age of Child (In Months) at survey day {CAPI will generate Automatically}	106. Complete age of child {CAPI will generate Automatically}

Section 1: Selected child details & Details of caregiver/mother

Q.No.	Questionnaire	Coding	Skip
101	Age of child (completed month)	<input type="text"/> <input type="text"/> (Completed month)	
102	Sex of child	Male.....1 Female.....2 Other.....3	
105	What is the name of mother /care giver of selected child? Record Name Mother/caregiver	_____	
106	Age of mother /care giver of selected child (Name)?	<input type="text"/> <input type="text"/>	
107	Where did mother give birth to selected (NAME)?	Home.....1 Govt. Hospital.....2 PHC Center.....3 Health Post.....4 Other NGO facilities.....5 Pvt. Hospital/nursing home.....6 Others specify_____96	

Section 2: Background Profile of Mother/Caregiver of Selected Child

Q.No.	Questionnaire	Coding	Skip
201	Relation of respondent with child	Mother.....1 Grandmother.....2 Father.....3 Grandfather.....4 Uncle.....5 Aunty.....6 Others specify_____96	

Q.No.	Questionnaire	Coding	Skip
202	<p>What is the ethnicity of mother/caregiver? (<i>Review the code list</i>)</p> <p>1. Dalit</p> <ul style="list-style-type: none"> Hill: Kami, Damai, Sarkii, Gaine, Badi Terai: Chamar, Mushar, Dhusah/Paswan, Tatma, Khatway, Bantar, Dom, Chidimar, Dhobi, Halkhor <p>2. Disadvantaged Janajatis</p> <ul style="list-style-type: none"> Hill: Magar, Tamang, Rai, Limbu, Sherpa, Bhote, Walung, Byansi, Hyolomo, Garrti/Bhujel, Kuumal, Sunsar, Baramu, Pahari, Yakkah, Chhantal, Jirel, Darai, DuraMajhi, Danuwar, Thami, Lepcha, Chepang, Bote, Raji, Hayu, Raute, Kusunda, Terai: Tharu, Dhanuk, Rajbansi, Tajpuria, Gangai, Dhimal, Meche, Kisan, Munda, Santhal/Satar, Dhangad/Jhangad, Koche, Pattarkatta/Kusbadiay <p>3. Disadvantaged non-dalit Terai caste groups: Yadav, Teli, Kalwar, Sudhi, Sonar, Lohar, Koiri, Kurmi, Kanu, Haluwai, Hajam/Thakur, Badhe, Bahae, RajbaKewat, Mallah, Nuniya, Kumhar, Kahar, Lodhar, Bing/Banda, Bhediyar, Mali, Kumar, Dhunia</p> <p>4. Religious Minorities: Muslims, Churoute, Christians</p> <p>5. Relatively advantaged Janajatis: Newar, Thakali, Gurung</p> <p>6. Upper caste groups: Brahman (hill), Chhetri, Thakuri, Sanyasi, Brahman (Terai), Rajput, Kayastha, Baniya, Marwadi, Jaine, Nuraang, Bengali</p>	<p>Dalit.....1</p> <p>Disadvantaged Janajatis.....2</p> <p>Disadvantaged non-dalit Terai caste groups..3</p> <p>Religious Minorities.....4</p> <p>Relatively advantaged Janajatis.....5</p> <p>Upper caste groups.....6</p> <p>Don't know.....98</p> <p>No response.....99</p>	
203	What is the education level of mother/caregiver?	<p>No education.....1</p> <p>Basic education (1-8).....2</p> <p>Lower basic education (1-5).....3</p> <p>Upper basic education (6-8).....4</p> <p>Secondary (9-12).....5</p> <p>Lower secondary (9-10).....6</p> <p>Higher secondary (11-12).....7</p> <p>More than secondary (13 and above).....8</p>	
204	What is the religion of mother/caregiver?	<p>Hindu.....1</p> <p>Buddhist.....2</p> <p>Islam.....3</p> <p>Kirant.....4</p> <p>Christian.....5</p> <p>Others (Specify).....96</p>	
205	Occupation of mother/caregiver?	<p>Business/ technical sector workers.....1</p> <p>Clerical.....2</p> <p>Sales and services.....3</p> <p>Skilled manual.....4</p> <p>Unskilled manual.....5</p> <p>Agriculture.....6</p> <p>Student.....7</p> <p>House wife.....8</p> <p>Other specify.....96</p> <p>Don't know.....98</p>	
206	Do you have a personal mobile phone?	<p>Yes.....1</p> <p>No.....2</p>	
206.1	Can you please tell us your mobile number?	_____	

Q.No.	Questionnaire	Coding	Skip
207	Which of the following media do you use? (<i>Multiple choice</i>)	Facebook.....1 Instagram.....2 TikTok.....3 YouTube.....4 Emo.....5 Snapchat.....6 Viber.....7 WhatsApp.....8 Local FM.....9 TV.....10 Newspaper / Magazine.....11 Others (Specify) _____96	
208	Among the social media applications mentioned above, which applications do you use the most? (single choice)	Facebook.....1 Instagram.....2 TikTok.....3 YouTube.....4 Emo.....5 Snapchat.....6 Viber.....7 WhatsApp.....8 Local FM.....9 TV.....10 Newspaper / Magazine.....11 Others (Specify) _____96	

Section 3: Routine Immunization (12-35 months at the time of survey)

Q. No	Questionnaire	Coding	Skip
300	Name of child	_____	
301	Does (Name) has routine vaccination card? Can I see the card?	Yes.....1 No2	<i>If 2 skip 307</i>
301.1	If respondent has routine vaccination card, please take photo of the card		
301.2	If there is card, where did you receive the card from?	Government Hospitals/Health posts/PHC.....1 Private Hospitals/ Clinics.....2 Others, specify.....96	
301.2	What is the reason for not having routine vaccination card of (Name) with you/your household?	Torn1 Card lost2 With someone else.....3 Others specify _____96	<i>Skip 307</i>

Now, I will ask (child name)'s immunization status. If the child has immunization card, please show it to me. Record information from the vaccination card.

Please ask the question as per above National vaccine immunization schedule and record accordingly.

Visit	302. Name of Vaccine	303. Vaccine given/ not given given = 1 not given=2 (If respondent stated "Not given", then ask about other vaccines)		304. Vaccine given but date not recorded Recorded = 1 Not-recorded =2 If 2 Skip to 607		305. Date (DD/MM/YYYY) (If year not known then record 9998 and (If month not known then record 98 and if day not known then record 44) DAY MONTH YEAR			306. Location where vaccine taken Source**		
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
1.	BCG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2.	ROTA-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	ORAL POLIO VACCINE (OPV) -1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PCV-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3.	DPT-Hep B-Hib -1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	ROTA-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	ORAL POLIO VACCINE (OPV)-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PCV-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4.	DPT-HepB-Hib- 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	ORAL POLIO VACCINE (OPV)-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	fiPV 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5.	DPT-HepB-Hib- 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	PCV-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6.	fiPV 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	MR-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7.	JE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	MR-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	TCV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Q. No	Questionnaire	Coding	Skip
307	If vaccination card not available, then on respondent's recall (Interviewer: please mentioned all vaccines in Routine Immunization)		
308	Has (Name) ever received a BCG vaccination against tuberculosis, that is, an injection in the right shoulder that usually causes a scar?	Yes.....1 No.....2 Don't Know.....98	
308.1	If the respondents answered "No" or "don't know", please check for scar in the child's right shoulder.	Yes, scar-----1 No scar.....2 Child is not at home.....3	
309	Has (Name) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio given in 6 weeks?	Yes.....1 No.....2 Don't Know.....98	
310	Has (Name) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio given in 10 weeks?	Yes.....1 No.....2 Don't Know.....98	
311	Has (Name) ever received oral polio vaccine, that is, about two drops in the mouth to prevent polio given in 14 weeks?	Yes.....1 No.....2 Don't Know.....98	
311.1	Did (Name) get an fIPV injection in the right upper arm to protect against polio in 14 weeks?	Yes.....1 No.....2 Don't Know.....98	
312	Did (Name) get an fIPV injection in the right upper arm to protect against polio in 9 months?	Yes.....1 No.....2 Don't Know.....98	
312A	Did (Name) get an DPT-Hep B-Hib -1 injection in the left thigh to protect against diphtheria, tetanus, whooping cough given in 6 weeks?	Yes.....1 No.....2 Don't Know.....98	
312B	Did (Name) get an DPT-Hep B-Hib -2 injection in the left thigh to protect against diphtheria, tetanus, whooping cough given in 10 weeks?	Yes.....1 No.....2 Don't Know.....98	
313	Did (Name) get an DPT-Hep B-Hib -3 injection in the left thigh to protect against diphtheria, tetanus, whooping cough given in 14 weeks?	Yes.....1 No.....2 Don't Know.....98	
314	Has (Name) ever received a pneumococcal vaccination (PCV), that is, an injection in right thigh to prevent pneumonia given in 6 weeks?	Yes.....1 No.....2 Don't Know.....98	
315	Has (Name) ever received a pneumococcal vaccination (PCV), that is, an injection in right thigh to prevent pneumonia given in 10 weeks?	Yes.....1 No.....2 Don't Know.....98	
316	Has (Name) ever received a pneumococcal vaccine (PCV), that is, an injection in right thigh to prevent pneumonia given in 9 months?	Yes.....1 No.....2 Don't Know.....98	
317	Has (Name) ever received a rotavirus vaccine that is, drop in the mouth to prevent diarrhea given in 6 weeks?	Yes.....1 No.....2 Don't Know.....98	
318	Has (Name) ever received a rotavirus vaccine that is, drop in the mouth to prevent diarrhea given in 10 weeks?	Yes.....1 No.....2 Don't Know.....98	
319	Has (Name) ever received a measles rubella vaccine, that is, an injection in the left arm to prevent measles and rubella given in 9 months?	Yes.....1 No.....2 Don't Know.....98	
320	Has (Name) ever received a measles rubella vaccine, that is, an injection in the left arm to prevent measles and rubella given in 15 months?	Yes.....1 No.....2 Don't Know.....98	
321	Has (Name) ever received a JE vaccine, that is, an injection in the right thigh to prevent JE given in 12 months?	Yes.....1 No.....2 Don't Know.....98	
322	Has (Name) ever received a TCV vaccine that is, an injection in the left thigh to prevent typhoid given in 15 months?	Yes.....1 No.....2 Don't Know.....98	

Q. No	Questionnaire	Coding	Skip
323	Where did (Name) receive most of his/her vaccine? <i>Probe to identify the type of source. If unable to determine if public, private, or NGO sector, record '96' and write the name of the place</i>	Government hospital/health post.....1 Outreach clinic2 Mobile clinic3 Private hospital/clinic4 NGO.....5 Other source [vaccination campaign].....6 Others (specify)_____96	
324	Missed dose of immunization (auto coding from CAPI)	Partially1 Fully immunized.....2 Never immunized.....3	
325	If the child (name) is partially or never immunized in routine immunization, ask: "Why was the (Name) not vaccinated with any vaccine?" <i>Circle all reasons reported by the respondent. Do not read the responses. {Multiple responses possible}</i>	Unaware of vaccination site1 Aware of vaccination site but did not know about time and location2 Childs' parent/guardian not present during vaccination day.....3 Unaware of need for vaccination4 Child sick and parent/guardian unwilling to get child vaccinated5 Fear of pain from injection.....6 Fear of side effects of vaccine.....7 Mothers/guardians too busy.....8 Vaccination site too far away9 Child taken to vaccination site but not vaccinated ...10 Child sick and health worker unwilling to vaccinate the child.....11 Inconvenient session timing12 Long waiting time13 Vaccinator's behavior not friendly14 Vaccination team ran out of vaccine at session site.15 Vaccinator did not come to appointed site.....16 Not vaccinated due to inappropriate age.....17 Known severe allergy to any drug food or medicine18 Religious reasons.....19 Confusion eligibility.....20 Thinking vaccine is for trial21 Vaccine is not safe22 Vaccine is not effective23 Others (Specify) _____ 96 Don't know98	
326	How long does it take for you to reach nearest immunization center from your house? In minutes (walking distance)	Hours _____ Minutes _____	
327	From where do you receive information about routine immunization? (Circle all answers if applicable)	Health worker.....1 FCHV.....2 Neighbor.....3 Village head.....4 Others (Specify) _____ 96	

Section 4: Practical aspect of childhood immunization Survey questionnaires (Behavior and social drivers of vaccination)

Q. No	Questionnaire	Coding	Skip
401	Did any health worker or specialists give any suggestion for your child to get vaccinated?	Yes.....1 No.....2	
402	Who makes the decision in your family to vaccinate the child?	Mother.....1 Father.....2 Mother in-law.....3 Others (Specify) _____ 96	
403	If it was time for your child to get vaccinated, would the mother need permission to take her child to clinic?	Yes.....1 No.....2	
404	Have you personally ever taken your youngest child to get vaccinated?	Yes.....1 No.....2	
405	Have you ever been sent back without your child getting vaccinated when you tried to get your child vaccinated?	Yes.....1 No.....2	
406	If yes, why?	Vaccination session was not open.....1 Vaccination session shifted to another site uninformed.....2 Vaccinators not present.....3 Vaccines not availed.....4 Cards not available.....5 Others (Specify) _____ 96	
407	Do you know what diseases the routine vaccines prevent? <i>Probe</i>	Yes.....1 No.....2 Partially3 Don't Know.....98	
408	Do you know where to go to get your child vaccinated?	Yes.....1 No.....2	
408.1	Have you heard anything negative about routine immunization in the last one year?	Yes.....1 No.....2	
409	I would like to know about your general attitude towards vaccines. What is your attitude/view of routine vaccines given to your child?	Positive.....1 Negative.....2 Undecided3	
410	If positive, why do you think so? (Circle all response that are applicable.)	Good for child's health1 Prevents disease2 Increases immunity3 Do not have adverse effect.....4 It is the child's right.....5 Not responded6 Others (Specify) _____ 96	
411	How many vaccines are included in the routine immunization (RI) schedule for children in Nepal?	_____	
412	How much do you trust the health-care providers, who would give your child vaccines? Would you say you trust them?	Not at all..... 1 A little..... 2 Moderately..... 3 Very much..... 4	
413	How easy is it to get vaccination services for your child? Would you say...	• Not at all • easy..... • A little • easy..... • Moderately easy • Very easy.....	
414	Do the mother and caretaker know about delayed vaccination schedule (policy to vaccinate children till age 5 if they have never been vaccinated or missed during routine immunization)	Yes.....1 No.....2	
415	How important do you think vaccines are for your child's health? <i>Probe and ask</i>	Not at all important.....1	

Q. No	Questionnaire	Coding	Skip
		A little important.....2 Moderately important.....3 Very important.....4	
416	How safe do you think vaccines are for your child? Probe and ask	Not at all safe.....1 A little safe.....2 Moderately safe.....3 Very safe.....4	
417	Do you know about the possible adverse event following immunization?	Yes.....1 No.....2	
418	Did your child had any adverse event following immunization after vaccination? If no skip to Question 422.	Yes.....1 No.....2	
419	If your child had any adverse event following immunization, what was it?	Fever.....1 Rashes.....2 Excessive cry.....3 Redness and swelling.....4 Vomiting5 Others _____	
420	If your child had any adverse event following immunization after vaccination. Did you seek any medical care?	Yes.....1 No.....2	
421	If yes, where did you	Government Hospitals/PHC/HP.....1 Private hospitals/ Clinics.....2 Medical shops/pharmacy.....3 Traditional healers.....4 Others _____	
422	Do you know whom to contact if any adverse event following immunization happens?	Yes.....1 No.....2	
423	Were you provided information regarding adverse event following immunization during vaccination.	Yes.....1 No.....2	
424	If yes, where did you get the information?	Healthcare provider1 Family member provider.....2 Community organization.....3 Employer4 Friend.....5 TV6 Radio.....7 social media.....8 Printed media (newspaper, magazine) 9 Banner/billboard ad.....10 Other, (specify).....96 Don't know.....98	
425	Do you think most parents you know get their children vaccinated?	Yes.....1 No.....2	
426	Do you think your close family and friends want you to get your child vaccinated?	Yes.....1 No.....2	
427a	Do you think your religious leaders want you to get your child vaccinated?	Yes.....1 No.....2	
427	Do you think your community leaders want you to get your child vaccinated?	Yes.....1 No.....2	
428	Nepal has a schedule of recommended vaccines for children. Do you want your child to get all the recommended vaccines in routine immunization? (All vaccines mentioned in Routine Immunization)	None of these vaccines.....1 Some of these vaccines.....2 All of these vaccines.....3	
429	How easy is it to pay for vaccination? When you think about the cost, please consider any payments to the clinic, the cost of getting there, plus the cost of taking time away from work. Would you say...	Not at all easy.....1 A little easy.....2 Moderately easy.....3 Very easy.....4	
430	If your child has any difficulty in receiving vaccine, then what are the reasons for the difficulty?	Nothing/It's not hard.....1 The vaccination clinic is too far away.....2 The vaccination timing is inconvenient.....3 The clinic sometimes turns people away without vaccinating.....4 The waiting time is too long.....5 Others (Specify) 96	

Q. No	Questionnaire	Coding	Skip
431	Have you ever been contacted about your child being due for vaccination?	Yes.....1 No.....2	
432	If yes, by whom?	Health workers.....1 FCHV.....2 Others, (specify).....96	
433	If your child gets sick, where do you take your child for treatment?	Government hospital/health post/PHC.....1 Private hospital.....2 Pharmacy.....3 Traditional healers.....4 At home.....5 Others (specify).....96	
433.1	Name of the doctor/pharmacy/hospital where you usually take your child for treatment	Hospital _____ Doctor _____ Pharmacy _____ Clinic _____ Traditional Healer _____	
434	How much do you trust the health workers who give children vaccines?	Not at all trust.....1 A little trust.....2 Moderately trust.....3 Very trust.....4	
435	Have you heard about vaccines available for routine immunization?	Yes.....1 No.....2	
436	If yes, where, or from whom did you learn about vaccine?	Healthcare provider1 Family member provider.....2 Community organization.....3 Employer4 Friend.....5 TV6 Radio.....7 social media.....8 Printed media (newspaper, magazine).....9 Banner/billboard ad.....10 Other, (specify).....96 Don't know.....98	
437	How satisfied are you with the vaccination services (If fully satisfied, then end the interview)	Not at all satisfied..... 1 A little satisfied 2 Moderately satisfied..... 3 Fully satisfied..... 4	
438	What is not satisfactory about the vaccination services, (Skip if ticked very satisfied above)	Nothing, you are satisfied..... 1 Vaccine is not always available..... 2 The clinic does not open on time..... 3 Waiting times are long..... 4 The clinic is not clean..... 5 Staff are poorly trained..... 6 Staff are not respectful..... 7 Staff do not spend enough time with people..... 7 Other, (specify)..... 8 96	

Thank You

End time of the interview

Code Book list

Categories		Code List	
Caste	Dalit <ul style="list-style-type: none"> Hill: Kami, Damai, Sarkii, Gaine, Badi Terai: Chamar, Mushar, Dhusah/Paswan, Tatma, Khatway, Bantar, Dom, Chidimar, Dhobi, Halkhor 	Dalit	1
	Disadvantaged Janajatis <ul style="list-style-type: none"> Hill: Magar, Tamang, Rai, Limbu, Sherpa, Bhote, Walung, Byansi, Hyolomo, Garri/Bhujel, Kuumal, Sunsar, Baramu, Pahari, Yakkah, Chhantal, Jirel, Darai, DuraMajhi, Danuwar, Thami, Lepcha, Chepang, Bote, Raji, Hayu, Raute, Kusunda, Terai: Tharu, Dhanuk, Rajbansi, Tajpuriya, Gangai, Dhimarl, Meche, Kisan, Munda Santhal/Satar, Dhangad/Jhangad Koche, Pattarkatta/Kusbadiay 	Disadvantaged Janajatis	2
	Disadvantaged non-dalit Terai caste groups: <ul style="list-style-type: none"> Yadav, Teli, Kalwar, Sudhi, Sonar, Lohar, Koiri, Kurmi, Kanu, Haluwai, Hajam/Thakur, Badhe, Bahae, RajbaKewat, Mallah, Nuniya, Kumhar, Kahar, Lodhar, Bing/Banda, Bhediyar, Mali, Kumar, Dhunia 	Disadvantaged non-dalit Terai caste groups	3
	Religious Minorities: <ul style="list-style-type: none"> Muslims, Churoute, Christians 	Religious Minorities	4
	Relatively advantaged Janajatis: <ul style="list-style-type: none"> Newar, Thakali, Gurung 	Relatively advantaged Janajatis	5
	Upper caste groups: <ul style="list-style-type: none"> Brahman(hill), Chhetri, Thakuri, Sanyasi, Brahman (Terai), Rajput, Kayastha, Baniya, Marwadi, Jaine, Nuraang, Bengali 	Upper caste groups	6
Education	No education	1	
	Basic education	2	
	Lower basic education (1–5)	3	
	Upper basic education (6–8)	4	
	Secondary (9–12)	5	
	Lower secondary (9–10)	6	
	Higher secondary (11–12)	7	
	More than secondary (13 and above)	8	
Religion	Hindu	1	
	Buddhist	2	
	Islam	3	
	Kirant	4	
	Christian	5	

**Assess Immunization coverage and knowledge of mother/care givers
towards vaccination in 13 districts (Gavi DLI based) of Nepal**

के तपाईं सर्भेक्षणमा भाग लिन चाहनु हुन्छ?

अन्तरवार्ता दिन स्वीकार गरेको 1

अन्तरवार्ता दिन अस्वीकार गरेको 2 अन्तुवार्ता अन्त्य गर्नुहोस्।

अन्तरवार्ता लिन गएको समयमा घरमा कोहि नभएको 3

योग्य उत्तरदाता घरमा नभएको 4

उत्तरदाता अन्तुवार्ता दिन असक्षम (बहरो, दिमागी विमारी भइको,) 5 अन्तुवार्ता अन्त्य गर्नुहोस्।

अन्तरवार्ता लिन गएको पटक	1	2	3
मिति:			
समय (24 hours):			
अन्तरवार्ताको नतिजा (प्रश्न Q012बाट उपयुक्त कोड छान्नुहोस्।			

के म अन्तर्वार्ता सुरु गर्न सक्छु? सक्नु हुन्छ 1 सक्नु हुन्न 2

____ / ____ / 2080 Date: DD / MM / YYYY

: Start Time

Household Information	
002 प्रदेशको नाम र कोड नम्बर _____	
003 जिल्लाको नाम र कोड नम्बर _____	<input type="text"/>
004 स्थानीय तह (महानगरपालिका/ उपमहानगरपालिका /नगरपालिका/गाउँपालिका) र कोड नम्बर _____	<input type="text"/> <input type="text"/>
005 वार्ड नम्बर.....	<input type="text"/>
006 क्लष्टर नम्बर.....	<input type="text"/>
007 घरमुलीको नाम _____	<input type="text"/>
008.1 घरमुली पुरुष हुनुहुन्छ कि महिला हुनुहुन्छ ? पुरुष=1 महिला =2	008.2. घरमुलीले कतिवर्ष पुरा गर्नु भयो : <input type="text"/> <input type="text"/>
009 उत्तरदाताको नाम _____	
010 अन्तरवार्ताकारकव नाम/कोड _____	
011 सुपरिवेक्षण कर्ताको नाम/कोड _____	
013 अन्तरवार्ताको नतिजा:	
012 अन्तरवार्ताको नतिजा: 1. अन्तरवार्ता पुरा भएको 2. अन्तरवार्ता सुरु गरेर विचमा छोडेको 3. अन्तरवार्ता लिन गएको समयमा घरमा कोहि नभएको 4. योग्य उत्तरदाता घरमा नभएको 5. उत्तरदाता अन्तवार्ता दिन असक्षम (बहरो, दिमागी विमारी भइको,) 6. अन्तरवार्ता दिन अस्वीकार गरेको 9. अन्य (उल्लेख गर्नुहोस्) _____	

सम्भव भएसम्म सफा आकाशमुनि घरको अगाडिको ढोका बाहिर उभिएर GPS समन्वयहरू पुनः प्राप्त गर्नुहोस् ।

Household GPS Coordinates		
GPS 01	Latitude	
GPS 02	Longitude	
Alt 03	Altitude (m)	

Section 1: Household Roster

तपाईंको घरमा प्रयःजसो वसोवास गर्ने कतिजना सदस्यहुनुहुन्छ

तपाईंको घरमा प्रयःजसो वसोवास गर्ने १२ महिना देखि ३५ महिना सम्मका कतिजना बच्चा बच्चीहरु छन।

SN	101: बच्चाको नाम	102. लिङ्ग पुरुष = 1 महिला=2 अन्य = 3	103. के तपाईं (नामको) जन्म मिति भन्न सक्नु हुन्छ ? महिना वर्ष मात्र भन्न सक्छु तर जन्म गते थाहाछैन जन्म गते र साल सबै भन्न सक्छु तर महिना थाहाछैन जन्म गते महिना र साल सबै भन्न सक्छु एक वर्ष पुराभयो महिना गते थाहाछैन दुई वर्ष पुराभयो महिना गते थाहाछैन तिन वर्ष भन्दा पनि बढि उमेरको भैसक्यो	104. उमेर नामको जन्म मिति कहिले हो (DDMMYYYY)	105. अन्तरवार्ताको दिनामा पुरा भएको उमेर महिनामा महिनामा CAPIले गणना गर्ने छ	106. सर्वेक्षणको दिनमा बालबालिकाको पूरा उमेर (महिनामा) CAPIले गणना गर्ने छ

Section 1: Selected child details & Details of caregiver/mother

	Questionnaire	Coding	Skip
101	बच्चाको उमेर (पूरा भएको महिना)	<input type="text"/>	
102	बच्चाको	पुरुष.....1 महिला.....2 अन्य(उल्लेख गर्नुहोस्) _____96	
105	छनोट गरिएको बच्चा(नाम)को आमा/स्याहार कर्ताको नाम के हो?	_____	
106	छनोट गरिएको बच्चा (नाम)को आमा/स्याहार कर्ताले कति वर्ष पुरा गर्नु भयो ?	<input type="text"/>	
107	छनोट गरिएको बच्चा(नाम)को जन्म कहाँ गराईएको थियो?	घरमा 1 सरकारी अस्पताल 2 प्राथमिकस्वास्थ्य सेवा केन्द्रमा 3 हेल्थपोष्ट/सवहेल्थपोष्टमा 4 अन्यगैह सरकारी संस्थाका स्वास्थ्य सेवा केन्द्रमा 5 नीजिअस्पताल/नर्सिङहोममा 6 अन्य (उल्लेख गर्नुहोस्) _____96	

Section 2: Background Profile of Mother/Caregiver of Selected Child

Q.No.	Questionnaire	Coding	Skip
201	उत्तरदाताको बच्चा सँगको नाता	<p>आमा 1</p> <p>हजुर आमा 2</p> <p>बुबा 3</p> <p>हजुर बुबा 4</p> <p>काका 5</p> <p>काकी 6</p> <p>अन्य (उल्लेख गर्नुहोस्) _____ 96</p>	
202	<p>आमा / हेरचाह गर्नेको जात जातियता के हो?</p> <p>(Review the code list)</p> <p>Dalit</p> <ul style="list-style-type: none"> Hill: Kami, Damai, Sarkii, Gaine, Badi Terai: Chamar, Mushar, Dhusah/Paswan, Tatma, Khatway, Bantar, Dom, Chidimar, Dhobi, Halkhor <p>Disadvantaged Janajatis</p> <ul style="list-style-type: none"> Hill: Magar, Tamang, Rai, Limbu, Sherpa, Bhote, Walung, Byansi, Hyolomo, Garthi/Bhujel, Kuomal, Sunsar, Baramu, Pahari, Yakkah, Chhantal, Jirel, Darai, DuraMajhi, Danuwar, Thami, Lepcha, Chepang, Bote, Raji, Hayu, Raute, Kusunda, Terai: Tharu, Dhanuk, Rajbansi, Tajpuriya, Gangai, Dhimar, Meche, Kisan, Munda Santhal/Satar, Dhangad/Jhangad Koche, Pattarkatta/Kusbadiay <p>Disadvantaged non-dalit Terai caste groups:</p> <p>Yadav, Teli, Kalwar, Sudhi, Sonar, Lohar, Koiri, Kurmi, Kanu, Haluwai, Hajam/Thakur, Badhe, Bahae, RajbaKewat, Mallah, Nuniya, Kumhar, Kahar, Lodhar, Bing/Banda, Bhediyar, Mali, Kumar, Dhunia</p> <p>Religious Minorities: Muslims, Churoute, Christians</p> <p>Relatively advantaged Janajatis: Newar, Thakali, Gurung</p> <p>Upper caste groups: Brahman (hill), Chhetri, Thakuri, Sanyasi, Brahman (Terai), Rajput, Kayastha, Baniya, Marwadi, Jaine, Nuraang, Bengali</p>	<p>दलित..... 1</p> <p>पहुच नभएका जनजातिहरु 2</p> <p>पहुच नभएका गैर-दलित तराई जाति समुह 3</p> <p>धार्मिकरूपले अल्पसंख्यक 4</p> <p>तुलनात्मक रूपले पहुच भएका जनजातिहरु..... 5</p> <p>उपल्लो जातिय समूह 6</p> <p>थाहा छैन 98</p> <p>कुनै प्रतिक्रिया छैन 96</p>	
203	आमा / हेरचाह गर्नेको शैक्षिक स्तर के हो ?	<p>निरक्षर 1</p> <p>आधारभूत शिक्षा (१-८)..... 2</p> <p>तल्लो आधारभूत शिक्षा (१-५) 3</p> <p>माथिल्लो आधारभूत शिक्षा (६-८) 4</p> <p>माध्यमिक (९-१२) 5</p> <p>निम्न माध्यमिक (9-10) 6</p> <p>उच्च माध्यमिक (११-१२) 7</p> <p>माध्यमिक भन्दा बढी (१३ र माथि)..... 8</p>	
204	<p>आमा / हेरचाह गर्नेको धर्म के हो?</p> <p>(Review the code list)</p>	<p>हिन्दु..... 1</p> <p>बौद्ध..... 2</p> <p>इस्लाम..... 3</p> <p>किरात..... 4</p> <p>क्रिश्चियन..... 5</p> <p>अन्य (उल्लेख गर्नुहोस्) _____ 96</p>	

Q.No.	Questionnaire	Coding	Skip
205	आमा / हेरचाह गर्नेको पेशा केहो ?	व्यवासाहिक तथा प्राविधिक क्षेत्र कामदारहरु.....1 करिन्दाहरु-----2 व्यापारिक क्षेत्र तथा सेवा क्षेत्रका कामदारहरु----- 3 उत्पादन, शिल्पी तथा सम्बन्धित कामदारहरु-----4 गैर शिप कामदारहरु-----5 कृषि तथा वन सम्बन्धी कामदारहरु-----6 बिध्यार्थी-----7 गृहिणी-----8 अन्य (उल्लेख गर्नुहोस्) _____96 थाहा छैन पेशा नखुलेको-----98	
206	के तपाईंसँग आफ्नै मोबाइल फोन छ?	छ.....1 छैन.....2	
206.1	कृपया तपाईंको मोबाईल नम्बर बताई दिनुहोस ।		
207	तपाईं तल उल्लेखित कुन कुन संचार माध्यमहरु चलाउन मन पराउनु हुन्छ ?	Facebook 1 Instagram 2 Tiktok 3 Youtube 4 IMO 5 Snapchat 6 Viber 7 WhatsApp 8 Local FM 9 TV 10 Newspaper/Magazine 11 Other specify _____ 96	
208	तपाईं प्रायःजसो कुन संचार माध्यम चलाउन मन पराउनु हुन्छ ? एक मात्र उत्तर	Facebook 1 Instagram 2 Tiktok 3 Youtube 4 IMO 5 Snapchat 6 Viber 7 WhatsApp 8 Local FM 9 TV 10 Newspaper/Magazine 11 Other specify _____ 96	

Section 3: Routine Immunization (12-35 months at the time of survey)

Q.No	Questionnaire	Coding	Skip
	बच्चाको नाम	_____	
301	के तपाईंसँग बच्चाको नियमित खोप कार्ड छ? के म कार्ड हेर्न सक्छु? (उत्तरदातालाई (नाम) नियमित खोप कार्डको लागि सोध्नुहोस्)।	छ..... 1 छैन..... 2	If 2 skip 307
301.1	यदि उत्तरदातासँग नियमित खोप कार्ड छ भने, कृपया कार्डको फोटो खिच्नुहोस्		
301.2	तपाईं/तपाईंको परिवारसँग (नाम) को नियमित खोप कार्ड नहुँदाको कारण के हो?	च्यातिएको1 कार्ड हरायो2 अरु कसै संग-----3 अन्य (उल्लेख गर्नुहोस्)_____ 96	skip 307

अब, म (बच्चाको नाम) को खोप स्थिति सोध्नेछु। यदि तपाईंसँग बच्चाको खोप कार्ड छ भने, कृपया मलाई देखाउनुहोस्। खोप कार्डबाट जानकारी रेकर्ड गर्नुहोस्। कृपया माथिको राष्ट्रिय खोप तालिका अनुसार प्रश्न सोध्नुहोस् र तदनुसार रेकर्ड गर्नुहोस्।

Visit	302. खोपको नाम	303. खोप लगाएको छ वा खोप लगाएको छैन लगाएको छ = 1 लगाएको छैन=2 (यदि 2 कोड भएमा, अर्को खोपको बारेमा सोध्नुहोस्)	304. लगाएको खोप कार्डमा रेकर्ड गरिएको छ कि छैन? रेकर्ड गरिएको छ = 1 रेकर्ड गरिएको छैन =2 यदि रेकर्ड गरिएको छैन भने Q607मा जानुहोस्	305. मिति (DD/MM/YYYY) (यदि वर्ष थाहा छैन भने रेकर्ड 9998 र यदि महिना थाहा छैन भने रेकर्ड 98 र यदि दिन थाहा छैन भने रेकर्ड गर्नुहोस् 44)			306. खोप लिइएको ठाउँ उल्लेख गर्नुहोस् । **
				Day	Month	Year	
1	BCG	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
2	ROTA-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	ORAL POLIO VACCINE (OPV) -1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	PCV-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DPT-Hep B-Hib -1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
3	ROTA-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	ORAL POLIO VACCINE (OPV)-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	PCV-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DPT-Hep.B-Hib- 2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
4	ORAL POLIO VACCINE (OPV)-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	flPV 1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	DPT-Hep.B-Hib- 3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
5	flPV-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	PCV-3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	MR-1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
6	JE	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
7	MR-2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	TCV	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Q.No	Questionnaire	Coding	Skip
307	यदि खोप कार्ड उपलब्ध छैन भने, उत्तरदातालाई सम्झाउनुहोस् ।		
308	के (नाम) ले कहिल्यै क्षयरोग विरुद्ध BCG खोप पाएको छ, अर्थात् BCG खोप दायौँ पाखुराको माथिल्लो भागमा खोप लगाइन्छ जसले सामान्यतया दाग निम्त्याउँछ? नोट: यदि उत्तरदाताले छैन वा थाहाछैन भनेमा बच्चाको पाखुरामा खोप लगाएको खत छ कि छैन अवलोकन गर्नुहोस् । यदि खत नदेखिएमा मात्र छैन वा थाहाछैन भनि कोड गर्नुहोस् ।	छ.....1 छैन.....2 थाहाछैन.....98	
308.1	यदि उत्तरदाताले BCG लगाएको छैन वा थाहाछैन भनेमा, बच्चाको दायौँ पाखुराको माथिल्लो भागमा खोप लगाएको खत छ कि छैन अवलोकन गर्नुहोस् र खत छ वा खत छैनमा कोड गर्नुहोस् ।	छ1 छैन.....2	
309	के (नाम) ले कहिल्यै पोलियो रोकनको लागि पहिलो मात्रा दुइ थोपा पोलियो खोप मुखबाट खुवाउनु भएको छ अर्थात् पोलियोबाट बच्न मुखमा करिब दुई थोपा जन्मेको ६ हप्तामा पहिलो मात्रा दिइन्छ ।	छ1 छैन.....2 थाहाछैन.....98	
310	के (नाम) ले कहिल्यै पोलियो रोकनको लागि दोश्रो मात्रा दुइथोपा पोलियो खोप मुखमा खुवाउनु भएको छ अर्थात् करिब दुई थोपा १० हप्तामा दिइने पोलियो खोपको दोश्रो मात्रा खुवाइन्छ ।	छ1 छैन.....2 थाहाछैन.....98	
311	के (नाम) ले कहिल्यै पोलियो रोकनको लागि लागि तेश्रो मात्रा दुइ थोपा पोलियो खोप मुखमा खुवाउनु भएको छ अर्थात् करिब दुई थोपा १४ हप्तामा तेश्रो मात्रा खुवाइन्छ ।	छ1 छैन.....2 थाहाछैन.....98	
311.1	के (नाम) ले 14 हप्तामा दिइएको पोलियो विरुद्ध सुरक्षा गर्न दाहिने पाखुराको माथिल्लो भागमा fIPV सुई लगाइयो?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
312	के (नाम) ले ९ महिनामा पोलियोबाट जोगाउन दोश्रो मात्रा दायौँ पाखुराको माथिल्लो भागमा fIPV सुई लगाइयो?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
312A	के (नाम) ले बायाँ तिघ्राको विच बाहिरी भागमा डिप्थेरिया, टिटानस, लहरे खोकीबाट जोगाउन ६ हप्तामा DPT-1 सुई लगायो?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
312B	के (नाम) ले बायाँ तिघ्राको विच बाहिरी भागमा डिप्थेरिया, टिटानस, लहरे खोकीबाट जोगाउन 10 हप्तामा DPT-2 सुई लगायो?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
313	के (नाम) ले बायाँ तिघ्राको विच बाहिरी भागमा डिप्थेरिया, टिटानस, लहरे खोकीबाट जोगाउन १४ हप्तामा DPT-3 तेश्रो मात्रा सुई लगायो?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
314	के (नाम) ले कहिल्यै निमोकोकल खोप लिनुभएको छ, अर्थात् दायौँ तिघ्राको विच बाहिरी भागमा निमोनियाबाट बच्न PCV1 इन्जेक्सन ६ हप्तामा दिइएको छ?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	

315	के (नाम) ले कहिल्यै निमोकोकल खोप लिनुभएको छ, अर्थात् दायौं तिघ्राको विच बाहिरी भागमा निमोनियाबाट बच्च PCV2 इन्जेक्शन 10 हप्तामा दिइएको छ?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
316	के (नाम) ले कहिल्यै निमोकोकल खोप लिनुभएको छ, अर्थात् दायौं तिघ्राको विच बाहिरी भागमा निमोनियाबाट बच्च PCV3 इन्जेक्शन 9 महिनामा दिइएको छ?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
317	के (नाम) ले कहिल्यै रोटाभाइरस खोप ROTA1 प्राप्त गरेको छ, जुन ६ हप्तामा दिइएको पखाला रोकन मुखमा ड्रप गरिएको छ?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
318	के (नाम) ले कहिल्यै रोटाभाइरस खोप ROTA2 प्राप्त गरेको छ, जुन १० हप्तामा दिइएको पखाला रोकन मुखमा खुवाएको छ?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
319	के (नाम) ले कहिल्यै दादुरा रुवेला (MR1) खोप प्राप्त गरेको छ, अर्थात् दादुरा रोकनको लागि बायाँ पाखुराको माथिल्लालो भागमा ९ महिनामा खोप लगाइयो?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
320	के (नाम) ले कहिल्यै दादुरा रुवेला (MR1) खोप प्राप्त गरेको छ, अर्थात् दादुरा रोकनको लागि बायाँ पाखुराको माथिल्लालो भागमा १५ महिनामा खोप लगाइयो?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
321	के (नाम) ले कहिल्यै JE खोप लगाउनु भएको छ, अर्थात्, 12 महिनामा JE रोकनको लागि दाहिने तिघ्राको माथिल्लालो बाहिरी भागमा खोप लगाइएको छ?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
322	के (नाम) ले कहिल्यै TCV खोप लगाउनु भएको छ, अर्थात्, 15 महिनामा टाइपाइड रोकनको लागि बाया तिघ्राको विच बाहिरी भागमा खोप दिइएछ?	लगाएको छ1 लगाएको छैन.....2 थाहाछैन.....98	
323	तपाईंको बच्चा (नाम) ले आफ्नो धेरै जसो खोपहरू कहाँबाट प्राप्त गरेको थियो ? प्रष्टपार्नुहोस्: <i>सार्वजनिक, निजी वा गैरसरकारी क्षेत्र कुन हो भनि भन्न नसकेमा '९६' रेकर्ड गरी ठाउँको नाम लेख्नुहोस्।</i>	सरकारी अस्पताल / स्वास्थ्य केन्द्र 1 सामुदायिक स्वास्थ्य कार्यकर्ता/फिल्ड वर्क 2 मोबाइल क्लिनिक 3 निजि अस्पताल 4 एनजीओ क्लिनिक 5 अन्य श्रोत [खोप अभियान] 6 अन्य (उल्लेख गर्नुहोस्)96	
324	खोपको डोज छुटेको छ (CAPI बाट स्वतः कोडिड)	आंशिक रूपमा 1 पूर्ण खोप 2 कहिल्यै खोप लगाइएन 3	
325	यदि बच्चा (नाम) ले नियमित खोपमा आंशिक रूपमा वा कहिल्यै खोप लगाइएको छैन भने सोध्नुहोस्: "किन बच्चालाई कुनै खोप लगाइएन?" <i>उत्तरदाता द्वारा रिपोर्ट गरिएका सबै कारणहरू रेकर्ड गर्नुहोस्। उत्तरहरू नपढ्नुहोस्। बहु उत्तरहरू सम्भव छ।</i>	खोप स्थल बारे थाहानभएर1 खोप स्थलको बारेमा थाहा छ तर समय र स्थान बारे थाहा छैन2 खोपको दिनमा बालबालिकाका अभिभावक/अभिभावक उपस्थित नहुने.....3 खोपको आवश्यकता बारे अनभिज्ञ 4 बच्चा बिरामी र आमाबाबु/अभिभावक बच्चालाई खोप लगाउन चाहँदैनन्5 सुई लगाउदा दुख्ने डर.....6	

		खोपको साइड इफेक्टको डर.....7 आमा/अभिभावकहरू धेरै व्यस्त.....8 खोप स्थल धेरै टाढा9 बच्चालाई खोप स्थलमा लगियो तर खोप लगाइएन.....10 बच्चा बिरामी र स्वास्थ्यकर्मी बच्चालाई खोप दिन चाहँदैनन्11 असुविधाजनक खोप सेसन समय12 लामो समय कुर्नु पर्ने13 खोप दिने व्यक्तिको व्यवहार राम्रो नभएर14 खोप स्थलमा खोप सकिएर.....15 भ्याक्सिनेटर तोकिएको स्थानमा आएनन्.....16 उमेरका नमिलेको कारण खोप लगाइएको छैन17 कुनै पनि औषधि खानेकुरा वा औषधिबाट एलर्जी हुनेभएर18 धार्मिक कारण19 खोपको लागि योग्य छ छैन थाहानभएर20 भ्याक्सिन ट्रायलको लागि हो भनेर सोच्दै21 खोप सुरक्षित छैन22 खोप प्रभावकारी छैन23 अन्य (उल्लेख गर्नुहोस्) _____ 96 थाहा छैन98	
326	तपाईंको घरबाट नजिकको खोप केन्द्रमा पुग्न कति समय लाग्छ? मिनेटमा	घण्टा _____ मिनेटमा _____	
327	तपाईंले नियमित खोपको बारेमा जानकारी कहाँ कहाँ बाट प्राप्त गर्नुहुन्छ ? (उत्तरदाताले बताएका सबै उत्तरहरू रेकर्ड गर्नुहोस्)	स्वास्थ्यकर्मी1 महिला स्वास्थ्य स्वयम सेविका2 छिमेकि3 गाउँपालिका प्रमुख4 अन्य (उल्लेख गर्नुहोस्) _____ 96	

**Section 4: Knowledge related and practical aspect of childhood immunization Survey questionnaires
(Behavior and social drivers of vaccination)**

Q. No	Questionnaire	Coding	Skip
401	के कुनै स्वास्थ्यकर्मी वा विशेषजहरूले तपाईंको बच्चालाई खोप लगाउन कुनै सुझाव दिनुभएको थियो ?	थियो.....1 थिएन.....2	
402	सामान्यतया तपाईंको परिवारमा बच्चालाई खोप लगाउने निर्णय कसले गर्छ?	आमा.....1 बुबा2 सासू ----- 3 अन्य (उल्लेख गर्नुहोस्) _____ 96	
403	यदि तपाईंको घरमा कुनै बच्चालाई खोप लगाउन जान पर्दा बच्चालाई खोप क्लिनिकमा लैजान बच्चाको आमाले कसैको अनुमति लिनुपर्छ ?	चाहिन्छ.....1 चाहिदैन.....2	
404	के तपाईंले कहिल्यै आफ्नो सानो बच्चालाई खोप लगाउन आफैं लिएर जानुभएको छ ?	थियो.....1 थिएन..... 2	
405	तपाईंले आफ्नो बच्चालाई खोप लगाउन जादा के तपाईंले आफ्नो बच्चालाई खोप नदिईकनै फिर्ता आउनु भएको छ?	छ..... 1 छैन..... 2	
406	यदि फर्किनु परेको छ भने उक्त बच्चालाई खोप नलगाइ फर्किनुको मुख्य कारण के हो ?	खोप केन्द्र खुला थिएन1 खोप केन्द्र अर्को ठाउमा सारियो.....2 भ्याक्सिनेटरहरू उपस्थित थिएनन् 3 खोपहरू उपलब्ध थिएनन्4 कार्डहरू उपलब्ध थिएनन्5 अन्य (उल्लेख गर्नुहोस्) _____96	
407	नियमित खोपले के-कस्ता रोगहरूबाट बचाउछ भने बारेमा के तपाईंलाई थाहा छ ?	छ 1 छैन 2 आंशिक रूपमा3 थाहा छैन98	
408	के तपाईंलाई बच्चालाई खोप लगाउन कहाँ जानु पर्छ भने बारेमा थाहा छ?	छ1 छैन 2	
408.1	के तपाईंले गत एक वर्षमा नियमित खोपको बारेमा केही नकारात्मक कुराहरु सुन्नुभएको छ?	छ1 छैन 2	
409	खोपहरूप्रति तपाईंको धारणाको बारेमा जान्न चाहन्छु। बच्चालाई दिइने नियमित खोपहरूप्रति तपाईंको धारणा कस्तो छ?	सकारात्मक 1 नकारात्मक2 भन्नसकिदैन3	
410	यदि सकारात्मक छ भने, किन ? (एक भन्दा बढी उत्तर सम्भव छ))	बच्चाको स्वास्थ्यको लागि राम्रो.....1 रोग लाग्नबाट बचाउँछ2 रोग प्रतिरोधात्मक क्षमता बढाउँछ3 प्रतिकूल असर नपर्ने4 यो बच्चाको अधिकार हो5 जवाफ आएन6 अन्य (उल्लेख गर्नुहोस्) _____96	
411	नेपालमा बालबालिकाका लागि नियमित खोप (RI) तालिकामा कतिवटा खोपहरू समावेश गरिएकाछन्?	_____	

412	तपाईंको बच्चालाई खोप दिने स्वास्थ्य सेवा प्रदायकहरूप्रति तपाईं कतिको भरोसा गर्नुहुन्छ? तपाईं तिनीहरूलाई कतिको विश्वास गर्नुहुन्छ ?	बिश्वास छैन.....1 थोरै.....2 ठिक ठिकै रूपमा.....3 धेरै.....4	
413	तपाईंको बच्चाको लागि खोप सेवाहरू लिन कतिको सजिलो छ?	सहज छैन1 अलिकति सजिलो.....2 ठिक ठिकै सजिलो3 धेरै सजीलो.....4	
414	के तपाईंको बिचारमा आमा / हेरचाहकर्तालाई 5 वर्षको उमेर सम्मका कुनै बच्चले नियमित खोपको समयमा खोप लगाएका छैनन् वा छुटेका छन् भने सो अवस्थामा बच्चालाई खोप लगाउने ढिलो खोप तालिकाको सरकारको नीतिको बारेमा थाहा छ ?	छ1 छैन 2	
415	तपाईंको बिचारमा बच्चाको स्वास्थ्यको लागि खोपहरू कतिको महत्त्वपूर्ण छन् जस्तो लाग्छ?	कति पनि महत्त्वपूर्ण छैन 1 अलिकति महत्त्वपूर्ण2 ठिक ठिकै महत्त्वपूर्ण 3 धेरै महत्त्वपूर्ण..... ...4	
416	तपाईंको बच्चाको लागि खोपहरू कतिको सुरक्षित छन् भन्ने लाग्छ?	कतै पनि सुरक्षित छैन1 अलिकति सुरक्षित2 ठिक ठिकै सुरक्षित3 धेरै सुरक्षित4	
417	के तपाईंलाई खोप पछि सम्भावित प्रतिकूल घटना बारे थाहा छ?	छ1 छैन 2	
418	के तपाईंको बच्चालाई खोप लगाएपछि कुनै प्रतिकूल घटना भएको छ? यदि छैन भनेमा q422मा जानुहोस् ।	छ1 छैन 2	
419	यदि तपाईंको बच्चालाई खोप पछि कुनै प्रतिकूल घटना भएको थियो भने, के भएको थियो?	ज्वरो.....1 दाग2 अत्याधिक रुने.....3 रातोपन र सुनिने.....4 वान्ता हुनु5 अन्य (उल्लेख गर्नुहोस्) _____96	
420	यदि तपाईंको बच्चालाई खोप पछि कुनै प्रतिकूल घटना भयो भने तपाईंले कुनै चिकित्सा उपचार गराउनु भयो?	छ1 छैन2	

421	यदि हो भने, तपाईं कहाँ गराउनु भयो?	सरकारी अस्पताल/PHC/HP.....1 निजी अस्पताल / क्लिनिकहरू.....2 मेडिकल पसल/फार्मसी.....3 परम्परागत उपचार गर्नेहरू.....4 अन्य (उल्लेख गर्नुहोस्) _____96	
422	खोप पछि कुनै प्रतिकूल घटना भएमा कसलाई सम्पर्क गर्ने भनेर तपाईंलाई थाहा छ?	छ1 छैन 2	
423	खोप लगाउने क्रममा खोप पछि हुने सक्ने प्रतिकूल घटनाको बारेमा जानकारी दिनुभएको थियो?	छ1 छैन 2	
424	यदि थियो भने, तपाईंले कहाँबाट जानकारी प्राप्त गर्नुभयो?	स्वास्थ्य सेवा प्रदायक1 परिवारको सदस्य2 सामुदायिक संगठन3 रोजगारदाता4 साथी5 टिभी6 रेडियो7 सामाजिक सञ्जाल8 पत्र पत्रिका9 ब्यानर/बिलबोर्ड विज्ञापन.....10 अन्य(उल्लेख गर्नुहोस्) _____96 थाहा छैन98	
425	तपाईं बिचारमा अरु अभिभावकहरूले आफ्ना छोराछोरीहरूलाई खोप लगाउनुभएको छ?	छ1 छैन 2	
426	के तपाईंको नजिकको परिवार र साथीहरूले तपाईंको बच्चाहरूले पूर्ण खोप लगाउएको हेर्न चाहनु हुन्छ ?	छ1 छैन 2	
427a	के तपाईंलाई लाग्छ कि तपाईंका धार्मिक नेताहरूले तपाईंको बच्चालाई खोप लगाउन चाहनुहुन्छ?	छ1 छैन 2	
427	के तपाईं तपाईंको समुदायका नेताहरूले तपाईंको बच्चालाई खोप लगाउन चाहनुहुन्छ भन्ने लाग्छ?	छ1 छैन 2	
428	नेपालमा बालबालिकाका लागि सिफारिस गरिएका खोपहरूको तालिका छा के तपाईं आफ्नो बच्चाले सिफारिस गरिएका नियमित सबै खोपहरू प्राप्त गरेको भन्ने चाहनुहुन्छ? (नियमित खोपमा उल्लिखित सबै खोपहरू)	यी खोपहरू मध्ये कुनै पनि छैन 1 यी मध्ये केही खोपहरू 2 यी सबै खोपहरू3	
429	बच्चालाई खोप लगाउने क्रममा खोप लगाउने क्लिनिकमा यदि कुनै पनि भुक्तानी गर्न पर्ने भए सो भुक्तानी र त्यहाँ पुग्नको लागि लाग्ने यातायात र समयको खर्च, सो क्रममा कामबाट समय निकाल्न पर्ने जस्ता कुराहरूलाई तपाईं कतिको सजिलो ठान्नुहुन्छ ?	पटकै सजिलो छैन1 अलिकति सजिलो.....2 ठिकै सजिलो3 धेरै सजिलो.....4	
430	यदि तपाईंको बच्चालाई खोप लिन कुनै कठिनाई छ भने, ती कठिनाईका कारणहरू के के हुन? उत्तरदाताले भनेको सबै रेकर्ड गर्नुहोस् ।	केहि छैन/ केहि कठिनाई छैन1 खोप क्लिनिक धेरै टाढा छ2 खोपको समय असुविधाजनक छ3 क्लिनिकले कहिलेकाहीँ बच्चालाई खोप नलगाई टाढा लैजान्छ 4 धेरै समय कुनै पर्नेछ4	

		अन्य (उल्लेख गर्नुहोस्) _____ 96	
431	के तपाईंको बच्चालाई कुनै खोप लगाउन छुटेको छ भनेर कहिल्यै सम्पर्क गरिएको छ?	छ1 छैन 2	
432	यदि छ भने, कसले सम्पर्क गरेको थियो	स्वास्थ्यकर्मी.....1 महिला स्वास्थ्य स्वयम सेवीका2 अन्य, (उल्लेख गर्नुहोस्) _____ 96	
433	यदि तपाईंको बच्चा बिरामि प.यो भने उसको उपचारको लागि सामान्यतया कहाँ लैजानु हुन्छ ?	सरकारी अस्पताल/हेल्थ पोष्ट/PHC.....1 निजी अस्पताल2 अन्य (निर्दिष्ट गर्नुहोस्) 96	
433.1	प्रायःजसो बच्चाको उपचार गर्न लाने public/private अस्पताल, क्लिनिक, औषधीपसल , डाक्टर, धामी वा परमपरागत बैद्यको नाम सोधि रेकर्ड गर्नुहोस् ।	प्रायःजसो उपचार गर्न लैजाने एक मात्र स्थान वा स्वास्थ्य सेवा प्रदायको नाम उल्लेख गर्नुहोस् ।	
434	बालबालिकालाई खोप दिने स्वास्थ्यकर्मीलाई कतिको विश्वास गर्नुहुन्छ ?	कतै पनि विश्वास गर्दिन1 केही विश्वास गर्छु.....2 ठिकै विश्वास गर्छु.....3 धेरै विश्वास गर्छु.....4	
435	के तपाईंले नियमित खोपको लागि भ्याक्सिनहरूको उपलब्धताको बारेमा सुन्नुभएको छ?	छ1 छैन 2	
436	यदि हो भने, खोपको बारेमा तपाईंले कहाँ वा कसबाट थाहा पाउनुभयो?	स्वास्थ्य सेवा प्रदायक1 परिवारको सदस्य2 सामुदायिक संगठन3 रोजगारदाता4 साथी5 टिभी6 रेडियो7 सामाजिक सञ्जाल8 पत्र पत्रिका.....9 ब्यानर/बिलबोर्ड विज्ञापन.....10 अन्य, (उल्लेख गर्नुहोस्) _____ 96 थाहा छैन.....98	
437	खोप सेवाहरूबाट तपाईं कतिको सन्तुष्ट हुनुहुन्छ। यदि पुरै सन्तुष्ट छु भनेमा अन्तरवार्ता अन्त्य गर्नुहोस् ।	पटककै सन्तुष्ट छैन.....1 अलिकति सन्तुष्ट.....2 ठिक ठिकै सन्तुष्ट.....3 पुरै सन्तुष्ट.....4	
438	खोप सेवाको बारेमा के तपाईंको धारणा के छ ।	केहि छैन, सन्तुष्ट छु.....1 खोप सधैं उपलब्ध हुँदैन.....2 समयमै क्लिनिक खुल्दैन.....3 लामो समय सम्म पर्खनु पर्छ.....4 क्लिनिक सफा छैन.....5 दक्ष कर्मचारीहरू छैनन्.....6	

	कर्मचारीको ब्यबहार राम्रो छैन.....7	
	कर्मचारीहरु पर्याप्त समय दिदैनन्.....8	
	अन्य, ((उल्लेख गर्नुहोस्)) _____96	

धन्यवाद

Code Book list

Categories		Code List	
Caste	Dalit <ul style="list-style-type: none"> Hill: Kami, Damai, Sarkii, Gaine, Badi Terai: Chamar, Mushar, Dhusah/Paswan, Tatma, Khatway, Bantar, Dom, Chidimar, Dhobi, Halkhor 	Dalit	1
	Disadvantaged Janajatis <ul style="list-style-type: none"> Hill: Magar, Tamang, Rai, Limbu, Sherpa, Bhotte, Walung, Byansi, Hyolomo, Garrti/Bhujel, Kuumal, Sunsar, Baramu, Pahari, Yakkah, Chhanta, Jirel, Darai, DuraMajhi, Danuwar, Thami, Lepcha, Chepang, Bote, Raji, Hayu, Raute, Kusunda, Terai: Tharu, Dhanuk, Rajbansi, Tajpuriya, Gangai, Dhimar, Meche, Kisan, Munda Santhal/Satar, Dhangad/Jhangad Koche, Pattarkatta/Kusbadiay 	Disadvantaged Janajatis	2
	Disadvantaged non-dalit Terai caste groups: <ul style="list-style-type: none"> Yadav, Teli, Kalwar, Sudhi, Sonar, Lohar, Koiri, Kurmi, Kanu, Haluwai, Hajam/Thakur, Badhe, Bahae, RajbaKewat, Mallah, Nuniya, Kumhar, Kahar, Lodhar, Bing/Banda, Bhediyar, Mali, Kumar, Dhunia 	Disadvantaged non-dalit Terai caste groups	3
	Religious Minorities: <ul style="list-style-type: none"> Muslims, Churoute, Christians 	Religious Minorities	4
	Relatively advantaged Janajatis: <ul style="list-style-type: none"> Newar, Thakali, Gurung 	Relatively advantaged Janajatis	5
	Upper caste groups: <ul style="list-style-type: none"> Brahman(hill), Chhetri, Thakuri, Sanyasi, Brahman (Terai), Rajput, Kayastha, Baniya, Marwadi, Jaine, Nuraang, Bengali 	Upper caste groups	6
	Education	No education	1
Basic education		2	
Lower basic education (1–5)		3	
Upper basic education (6–8)		4	
Secondary (9–12)		5	
Lower secondary (9–10)		6	
Higher secondary (11–12)		7	
More than secondary (13 and above)		8	
Religion	Hindu	1	
	Buddhist	2	
	Islam	3	
	Kirant	4	
	Christian	5	

H	H	M	M
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अन्तरवार्ता सकिएको समय

Annex 3: Methodology used for calculating data weight

The following notations were used for data weight calculation:

P1hi: first-stage sampling probability of the i th cluster in stratum h

P2hi: second-stage sampling probability within the i th cluster (household selection)

Let nh be the number of clusters selected in stratum h, Mhi the number of households according to the sampling frame in the i th cluster, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the i th cluster in the study is calculated as follows:

$$\frac{n_h M_{hi}}{\sum M_{hi}}$$

Let shi be the proportion of households in the selected segment relative to the total number of households in sub-ward i in stratum h if the sub-ward is segmented; otherwise, shi =1. Then the probability of selecting cluster i in stratum h in the sample is:

$$P1_{hi} = \frac{n_h M_{hi} \times S_{hi}}{\sum M_{hi}}$$

Let Lhi be the number of households listed in the household listing operation in cluster i in stratum h, and let mhi be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P2_{hi} = \frac{M_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster i of stratum h is therefore the product of the two-stage selection probabilities:

$$\Phi_{hi} = P1_{hi} \times P2_{hi}$$

The sampling weight for each household in cluster i of stratum h is the inverse of its overall selection probability:

$$W_{hi} = \frac{1}{\Phi_{hi}}$$

A spreadsheet containing all sampling parameters and selection probabilities was prepared to facilitate the calculation of design weights. Design weights were adjusted for household nonresponse and for individual nonresponse to obtain the sampling weights for households and for children, respectively.

The final sampling weights were normalized so that the total number of unweighted cases was equal to the total number of weighted cases at the national level for both household weights and individual weights.

It is important to note that normalized weights are relative weights that are valid for estimating means, proportions, and ratios but not valid for estimating population totals or for pooled data. Also, the number of weighted cases using the normalized weight has no direct relation with survey precision, where the number of weighted cases is much smaller than the number of unweighted cases and only the latter are directly related to survey precision.

Annex 4: Other findings

Demographic characteristics of respondents

Table 20: Demographic characteristics of respondents

Demographic characteristics of respondent by district	Total		District																									
	N	%	Ramechhap		Lalitpur		Bhaktapur		Kathmandu		Makwanpur		Manang		Mustang		Gulmi		Bardiya		Salyan		Humla		Kailali		Kanchanpur	
			N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Sex of household head																												
Male	1594	69.3	37	69.8	137	73.3	146	83.4	289	50.0	108	59.7	41	82.0	24	68.6	66	78.6	152	76.8	79	71.8	47	92.2	301	80.9	167	73.9
Female	706	30.7	16	30.2	50	26.7	29	16.6	289	50.0	73	40.3	9	18.0	11	31.4	18	21.4	46	23.2	31	28.2	4	7.8	71	19.1	59	26.1
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Age of household head																												
up to 24 years	190	8.3	2	3.8	15	8.0	12	6.9	81	14.0	26	14.4	-	-	2	5.7	7	8.3	11	5.6	3	2.7	3	5.9	19	5.1	9	4.0
25-34 years	820	35.7	28	52.8	94	50.3	71	40.6	285	49.3	71	39.2	16	32.0	13	37.1	22	26.2	40	20.2	23	20.9	9	17.6	92	24.7	56	24.8
35-44 years	503	21.9	11	20.8	42	22.5	43	24.6	134	23.2	48	26.5	23	46.0	13	37.1	24	28.6	31	15.7	18	16.4	8	15.7	75	20.2	33	14.6
45+years	787	34.2	12	22.6	36	19.3	49	28.0	78	13.5	36	19.9	11	22.0	7	20.0	31	36.9	116	58.6	66	60.0	31	60.8	186	50.0	128	56.6
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Age statistics of household head in years																												
Maximum	91	-	66	-	76	-	91	-	78	-	78	-	70	-	70	-	84	-	83	-	86	-	80	-	80	-	87	-
Mean	40	-	36	-	36	-	40	-	34	-	37	-	40	-	39	-	41	-	46	-	48	-	47	-	44	-	46	-
Minimum	19	-	22	-	22	-	21	-	19	-	20	-	26	-	22	-	21	-	20	-	22	-	24	-	19	-	22	-
Std Deviation	14	-	11	-	11	-	15	-	11	-	13	-	11	-	12	-	13	-	14	-	14	-	15	-	14	-	15	-
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Age of child in months																												
12-14 months	322	14.0	8	15.1	30	16.0	21	12.0	84	14.5	27	14.9	4	8.0	4	11.4	8	9.5	35	17.7	18	16.4	7	13.7	50	13.4	26	11.5
15-23 months	969	42.1	21	39.6	78	41.7	80	45.7	276	47.8	71	39.2	27	54.0	10	28.6	36	42.9	74	37.4	44	40.0	23	45.1	137	36.8	92	40.7
24-35 months	1009	43.9	24	45.3	79	42.2	74	42.3	218	37.7	83	45.9	19	38.0	21	60.0	40	47.6	89	44.9	48	43.6	21	41.2	185	49.7	108	47.8
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Age statistics of child in months																												
Maximum	35	-	33	-	35	-	35	-	35	-	35	-	35	-	35	-	35	-	35	-	35	-	35	-	35	-	35	-
Mean	23	-	22	-	22	-	23	-	22	-	23	-	23	-	25	-	24	-	23	-	22	-	23	-	24	-	23	-
Minimum	12	-	12	-	12	-	12	-	12	-	12	-	12	-	12	-	12	-	12	-	12	-	12	-	12	-	12	-
Std Deviation	7	-	6	-	7	-	7	-	6	-	7	-	7	-	7	-	7	-	7	-	7	-	7	-	7	-	7	-

Demographic characteristics of respondent by district	Total		District																									
	N	%	Ramechhap		Lalitpur		Bhaktapur		Kathmandu		Makwanpur		Manang		Mustang		Gulmi		Bardiya		Salyan		Humla		Kailali		Kanchanpur	
			N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total	2300	-	53	-	187	-	175	-	578	-	181	-	50	-	35	-	84	-	198	-	110	-	51	-	372	-	226	-
Sex of child																												
Male	1271	55.3	26	49.1	92	49.2	101	57.7	309	53.5	97	53.6	31	62.0	16	45.7	53	63.1	107	54.0	61	55.5	31	60.8	214	57.5	133	58.8
Female	1029	44.7	27	50.9	95	50.8	74	42.3	269	46.5	84	46.4	19	38.0	19	54.3	31	36.9	91	46.0	49	44.5	20	39.2	158	42.5	93	41.2
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Place of birth																												
Home	69	3.0	-	-	4	2.1	7	4.0	19	3.3	9	5.0	-	-	1	2.9	2	2.4	4	2.0	5	4.5	2	3.9	10	2.7	6	2.7
Govt. Hospital/clinic	1855	80.7	53	100.0	140	74.9	136	77.7	475	82.2	129	71.3	50	100.0	28	80.0	72	85.7	139	70.2	105	95.5	49	96.1	293	78.8	186	82.3
PHC center	105	4.6	-	-	-	-	-	-	6	1.0	4	2.2	-	-	3	8.6	5	6.0	47	23.7	-	-	-	-	38	10.2	2	.9
Health post	89	3.9	-	-	1	.5	-	-	10	1.7	23	12.7	-	-	-	-	2	2.4	2	1.0	-	-	-	-	24	6.5	27	11.9
Other NGO facilities	1	.0	-	-	-	-	1	.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pvt. Hospital/nursing home	181	7.9	-	-	42	22.5	31	17.7	68	11.8	16	8.8	-	-	3	8.6	3	3.6	6	3.0	-	-	-	-	7	1.9	5	2.2
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Child delivery place																												
Institutional delivery	2231	97.0	53	100.0	183	97.9	168	96.0	559	96.7	172	95.0	50	100.0	34	97.1	82	97.6	194	98.0	105	95.5	49	96.1	362	97.3	220	97.3
Non-institutional delivery	69	3.0	-	-	4	2.1	7	4.0	19	3.3	9	5.0	-	-	1	2.9	2	2.4	4	2.0	5	4.5	2	3.9	10	2.7	6	2.7
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Age of mothers/care givers																												
up to 24 years	662	28.8	11	20.8	36	19.3	30	17.1	125	21.6	47	26.0	8	16.0	3	8.6	19	22.6	78	39.4	47	42.7	21	41.2	141	37.9	96	42.5
25-34 years	1327	57.7	34	64.2	114	61.0	114	65.1	351	60.7	101	55.8	29	58.0	23	65.7	55	65.5	106	53.5	55	50.0	26	51.0	201	54.0	118	52.2
35+ years	311	13.5	8	15.1	37	19.8	31	17.7	102	17.6	33	18.2	13	26.0	9	25.7	10	11.9	14	7.1	8	7.3	4	7.8	30	8.1	12	5.3
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Age statistics of mother/caregivers in years																												
Maximum	69	-	58	-	50	-	58	-	69	-	66	-	53	-	59	-	50	-	39	-	40	-	35	-	59	-	62	-
Mean	28	-	29	-	30	-	30	-	29	-	29	-	31	-	32	-	29	-	26	-	26	-	26	-	27	-	26	-
Minimum	17	-	19	-	19	-	19	-	18	-	19	-	20	-	21	-	19	-	19	-	18	-	18	-	17	-	18	-
Std Deviation	6	-	7	-	5	-	6	-	7	-	6	-	6	-	7	-	6	-	5	-	5	-	4	-	5	-	6	-
Total	2300	-	53	-	187	-	175	-	578	-	181	-	50	-	35	-	84	-	198	-	110	-	51	-	372	-	226	-
Relation of respondent with child																												

Demographic characteristics of respondent by district	Total		District																									
	N	%	Ramechhap		Lalitpur		Bhaktapur		Kathmandu		Makwanpur		Manang		Mustang		Gulmi		Bardiya		Salyan		Humla		Kailali		Kanchanpur	
			N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Mother	2162	94.0	48	90.6	177	94.7	161	92.0	535	92.6	169	93.4	49	98.0	33	94.3	73	86.9	198	100.0	98	89.1	33	64.7	368	98.9	220	97.3
Grandmother	66	2.9	4	7.5	4	2.1	4	2.3	21	3.6	3	1.7	1	2.0	1	2.9	6	7.1	-	-	10	9.1	5	9.8	3	.8	4	1.8
Father	38	1.7	1	1.9	1	.5	5	2.9	13	2.2	7	3.9	-	-	-	-	3	3.6	-	-	1	.9	6	11.8	-	-	1	.4
Grandfather	22	1.0	-	-	3	1.6	3	1.7	4	.7	2	1.1	-	-	-	-	1	1.2	-	-	1	.9	6	11.8	1	.3	1	.4
Uncle	2	.1	-	-	-	-	1	.6	-	-	-	-	-	-	1	2.9	-	-	-	-	-	-	-	-	-	-	-	-
Aunty	4	.2	-	-	1	.5	-	-	1	.2	-	-	-	-	-	-	1	1.2	-	-	-	-	1	2.0	-	-	-	-
Other specify	6	.3	-	-	1	.5	1	.6	4	.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Relation of respondent with child																												
Mother	2162	94.0	48	90.6	177	94.7	161	92.0	535	92.6	169	93.4	49	98.0	33	94.3	73	86.9	198	100.0	98	89.1	33	64.7	368	98.9	220	97.3
Other family member	138	6.0	5	9.4	10	5.3	14	8.0	43	7.4	12	6.6	1	2.0	2	5.7	11	13.1	-	-	12	10.9	18	35.3	4	1.1	6	2.7
Total	2300	100.0	53	100.0	187	100.0	175	100.0	578	100.0	181	100.0	50	100.0	35	100.0	84	100.0	198	100.0	110	100.0	51	100.0	372	100.0	226	100.0
Ethnicity of mother/caregiver																												
Dalit	225	9.8	6	11.3	7	3.8	12	6.9	24	4.2	7	3.9	2	4.0	4	11.4	26	31.0	15	7.6	16	14.5	16	31.4	48	13.0	42	18.8
Disadvantaged Janajatis	901	39.4	20	37.7	43	23.2	30	17.2	226	39.3	66	36.9	42	84.0	27	77.1	16	19.0	138	70.1	9	8.2	6	11.8	203	54.9	75	33.6
Disadvantaged non-dalit Terai caste groups	89	3.9	-	-	12	6.5	3	1.7	23	4.0	4	2.2	-	-	-	-	1	1.2	1	.5	1	.9	-	-	23	6.2	21	9.4
Religious Minorities	86	3.8	-	-	2	1.1	3	1.7	73	12.7	4	2.2	-	-	-	-	-	-	-	-	-	-	-	-	3	.8	1	.4
Relatively advantaged Janajatis	343	15.0	5	9.4	71	38.4	60	34.5	56	9.7	17	9.5	-	-	2	5.7	3	3.6	3	1.5	33	30.0	10	19.6	36	9.7	47	21.1
Upper caste groups	636	27.8	22	41.5	50	27.0	65	37.4	169	29.4	81	45.3	6	12.0	2	5.7	38	45.2	40	20.3	51	46.4	19	37.3	57	15.4	36	16.1
Don't know	6	.3	-	-	-	-	1	.6	4	.7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	.4
Total	2286	100.0	53	100.0	185	100.0	174	100.0	575	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	110	100.0	51	100.0	370	100.0	223	100.0
Education of respondent																												
No formal education	190	8.3	4	7.5	5	2.7	7	4.0	58	10.1	24	13.4	2	4.0	6	17.1	-	-	8	4.1	10	9.1	18	35.3	20	5.4	28	12.6
1-5 grade	287	12.6	4	7.5	28	15.1	16	9.2	65	11.3	28	15.6	14	28.0	14	40.0	11	13.1	23	11.7	7	6.4	4	7.8	40	10.8	33	14.8
6-8 grade	413	18.1	5	9.4	21	11.4	27	15.5	82	14.3	33	18.4	12	24.0	6	17.1	20	23.8	46	23.4	13	11.8	2	3.9	94	25.4	52	23.3
9-10 grade	681	29.8	25	47.2	43	23.2	47	27.0	163	28.3	38	21.2	9	18.0	6	17.1	27	32.1	74	37.6	51	46.4	11	21.6	123	33.2	64	28.7
11-12 grade	511	22.4	11	20.8	51	27.6	48	27.6	135	23.5	43	24.0	11	22.0	2	5.7	18	21.4	39	19.8	25	22.7	15	29.4	72	19.5	41	18.4
13+ grade	204	8.9	4	7.5	37	20.0	29	16.7	72	12.5	13	7.3	2	4.0	1	2.9	8	9.5	7	3.6	4	3.6	1	2.0	21	5.7	5	2.2

Demographic characteristics of respondent by district	Total		District																											
	N	%	Ramechhap		Lalitpur		Bhaktapur		Kathmandu		Makwanpur		Manang		Mustang		Gulmi		Bardiya		Salyan		Humla		Kailali		Kanchanpur			
			N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total	2286	100.0	53	100.0	185	100.0	174	100.0	575	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	110	100.0	51	100.0	370	100.0	223	100.0		
Religion of mother/caregiver																														
Hindu	1969	86.1	47	88.7	155	83.8	153	87.9	474	82.4	110	61.5	13	26.0	12	34.3	83	98.8	192	97.5	109	99.1	51	100.0	359	97.0	211	94.6		
Buddhist	213	9.3	6	11.3	19	10.3	12	6.9	70	12.2	45	25.1	36	72.0	23	65.7	-	-	1	.5	-	-	-	-	1	.3	-	-		
Islam	38	1.7	-	-	6	3.2	2	1.1	14	2.4	8	4.5	-	-	-	-	-	-	4	2.0	1	.9	-	-	3	.8	-	-		
Kirant	5	.2	-	-	-	-	-	-	5	.9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Christian	58	2.5	-	-	5	2.7	7	4.0	11	1.9	16	8.9	1	2.0	-	-	-	-	-	-	-	-	-	-	6	1.6	12	5.4		
Other (Specify)	3	.1	-	-	-	-	-	-	1	.2	-	-	-	-	-	-	1	1.2	-	-	-	-	-	-	1	.3	-	-		
Total	2286	100.0	53	100.0	185	100.0	174	100.0	575	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	110	100.0	51	100.0	370	100.0	223	100.0		
Occupation of mother/caregiver																														
Business/ technical sector workers	122	5.3	4	7.5	13	7.0	14	8.0	43	7.5	13	7.3	3	6.0	1	2.9	7	8.3	2	1.0	8	7.3	5	9.8	6	1.6	3	1.3		
Clerical	10	.4	-	-	-	-	1	.6	1	.2	3	1.7	1	2.0	2	5.7	-	-	-	-	-	-	-	-	1	.3	1	.4		
Sales and services	172	7.5	9	17.0	19	10.3	24	13.8	63	11.0	7	3.9	16	32.0	3	8.6	6	7.1	7	3.6	1	.9	-	-	13	3.5	4	1.8		
Skilled manual	21	.9	-	-	2	1.1	3	1.7	10	1.7	-	-	1	2.0	-	-	-	-	-	-	1	.9	-	-	2	.5	2	.9		
Unskilled manual	8	.3	-	-	2	1.1	1	.6	3	.5	-	-	-	-	1	2.9	-	-	1	.5	-	-	-	-	-	-	-	-		
Agriculture	174	7.6	12	22.6	1	.5	2	1.1	-	-	21	11.7	7	14.0	1	2.9	18	21.4	25	12.7	31	28.2	13	25.5	41	11.1	2	.9		
Student	23	1.0	1	1.9	3	1.6	1	.6	13	2.3	1	.6	-	-	1	2.9	3	3.6	-	-	-	-	-	-	-	-	-	-		
House wife	1746	76.4	27	50.9	144	77.8	128	73.6	435	75.7	134	74.9	22	44.0	26	74.3	50	59.5	162	82.2	68	61.8	33	64.7	306	82.7	211	94.6		
Other specify	7	.3	-	-	1	.5	-	-	4	.7	-	-	-	-	-	-	-	-	-	-	1	.9	-	-	1	.3	-	-		
Don't know	3	.1	-	-	-	-	-	-	3	.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total	2286	100.0	53	100.0	185	100.0	174	100.0	575	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	110	100.0	51	100.0	370	100.0	223	100.0		
Occupation of respondent																														
Working	530	23.3	26	49.1	40	21.7	46	26.4	133	23.4	45	25.1	28	56.0	9	25.7	34	40.5	35	17.8	41	37.6	18	35.3	63	17.1	12	5.4		
House wife	1746	76.7	27	50.9	144	78.3	128	73.6	435	76.6	134	74.9	22	44.0	26	74.3	50	59.5	162	82.2	68	62.4	33	64.7	306	82.9	211	94.6		
Total	2276	100.0	53	100.0	184	100.0	174	100.0	568	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	109	100.0	51	100.0	369	100.0	223	100.0		
Have personal mobile phone																														
Yes	2135	93.4	51	96.2	180	97.3	173	99.4	545	94.8	172	96.1	50	100.0	35	100.0	84	100.0	175	88.8	81	73.6	41	80.4	341	92.2	207	92.8		
No	151	6.6	2	3.8	5	2.7	1	.6	30	5.2	7	3.9	-	-	-	-	-	-	22	11.2	29	26.4	10	19.6	29	7.8	16	7.2		

Demographic characteristics of respondent by district	Total		District																									
	N	%	Ramechhap		Lalitpur		Bhaktapur		Kathmandu		Makwanpur		Manang		Mustang		Gulmi		Bardiya		Salyan		Humla		Kailali		Kanchanpur	
			N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
Total	2286	100.0	53	100.0	185	100.0	174	100.0	575	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	110	100.0	51	100.0	370	100.0	223	100.0
Media applications used the most																												
Facebook	1908	83.5	53	100.0	156	84.3	153	87.9	477	83.0	170	95.0	48	96.0	23	65.7	73	86.9	154	78.2	60	54.5	27	52.9	310	83.8	204	91.5
Instagram	11	.5	-	-	1	.5	1	.6	4	.7	2	1.1	1	2.0	1	2.9	1	1.2	-	-	-	-	-	-	-	-	-	-
Tiktok	17	.7	-	-	3	1.6	1	.6	4	.7	-	-	1	2.0	-	-	3	3.6	-	-	-	-	-	-	3	.8	2	.9
Youtube	113	4.9	-	-	14	7.6	15	8.6	42	7.3	5	2.8	-	-	1	2.9	1	1.2	4	2.0	22	20.0	4	7.8	3	.8	2	.9
Emo	10	.4	-	-	1	.5	-	-	7	1.2	-	-	-	-	1	2.9	1	1.2	-	-	-	-	-	-	-	-	-	-
Viber	1	.0	-	-	-	-	1	.6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WhatsApp	21	.9	-	-	6	3.2	-	-	9	1.6	-	-	-	-	-	-	-	-	1	.5	2	1.8	1	2.0	1	.3	1	.4
Local FM/Radio	89	3.9	-	-	1	.5	-	-	-	-	-	-	-	-	-	-	2	2.4	26	13.2	13	11.8	12	23.5	34	9.2	1	.4
Television	36	1.6	-	-	1	.5	1	.6	7	1.2	-	-	-	-	-	-	-	-	12	6.1	2	1.8	-	-	13	3.5	-	-
Newspaper/magazine	1	.0	-	-	-	-	-	-	1	.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Others	79	3.5	-	-	2	1.1	2	1.1	24	4.2	2	1.1	-	-	9	25.7	3	3.6	-	-	11	10.0	7	13.7	6	1.6	13	5.8
Total	2286	100.0	53	100.0	185	100.0	174	100.0	575	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	110	100.0	51	100.0	370	100.0	223	100.0
Preferred media of respondent																												
Facebook	1908	83.5	53	100.0	156	84.3	153	87.9	477	83.0	170	95.0	48	96.0	23	65.7	73	86.9	154	78.2	60	54.5	27	52.9	310	83.8	204	91.5
Other media	378	16.5	-	-	29	15.7	21	12.1	98	17.0	9	5.0	2	4.0	12	34.3	11	13.1	43	21.8	50	45.5	24	47.1	60	16.2	19	8.5
Total	2286	100.0	53	100.0	185	100.0	174	100.0	575	100.0	179	100.0	50	100.0	35	100.0	84	100.0	197	100.0	110	100.0	51	100.0	370	100.0	223	100.0

Note: Base N is taken unweighted and % is weighted

Routine immunization card retention by district

Table 21: Routine immunization card retention by district

RI card retention by district	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Have routine vaccination card														
Yes	76.7	74.5	90.7	90.7	68.3	71.6	78.8	53.0	83.8	85.9	60.0	41.0	86.4	89.8
No	23.3	25.5	9.3	9.3	31.7	28.4	21.2	47.0	16.2	14.1	40.0	59.0	13.6	10.2
Total	2300	53	187	175	578	181	50	35	84	198	110	51	372	226
Seen RI card														
RI card seen	93.0	100.0	94.0	90.9	87.8	100.0	99.6	84.3	91.9	99.4	96.8	100.0	96.0	92.8
RI card not seen	7.0	-	6.0	9.1	12.2	-	.4	15.7	8.1	.6	3.2	-	4.0	7.2
Total	1818	40	165	159	397	133	37	21	70	170	68	33	323	202
Photo taken of the card														
Captured photo	99.5	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0	100.0	96.9	89.9	100.0	100.0
No photo	.5	-	-	-	1.0	-	-	-	-	-	3.1	10.1	-	-
Total	1704	40	153	145	349	133	36	19	65	169	66	33	309	187
Card received from														
Government hospital/HP/PHC	94.0	72.4	95.0	94.0	92.0	97.9	54.9	100.0	93.7	100.0	97.5	100.0	98.6	99.4
Private hospital/clinic	5.8	27.6	5.0	6.0	8.0	2.1	45.1	-	6.3	-	2.5	-	-	-
Other specify	.2	-	-	-	-	-	-	-	-	-	-	-	1.4	.6
Total	1704	40	153	145	349	133	36	19	65	169	66	33	309	187
Reasons for not having routine vaccination card														
Torn	9.9	16.2	10.4	13.2	8.7	5.5	13.9	17.4	15.9	13.8	9.1	18.6	6.3	4.3
Card lost	27.2	38.7	22.8	29.7	27.3	26.5	56.9	17.4	13.6	25.2	24.4	20.3	29.2	48.4
With someone else	54.6	45.1	63.0	45.2	53.1	54.6	29.2	65.3	62.5	61.0	55.9	61.0	58.4	47.3
Other specify	8.3	-	3.8	11.9	11.0	13.5	-	-	7.9	-	10.6	-	6.1	-
Total	482	13	22	16	181	48	13	14	14	28	42	18	49	24

Note: Base N is taken unweighted and % is weighted

Table 22: First year of life vaccine coverage among (12-23 months) children (card and recall) by district

First year of life Vaccines	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BCG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.2
OPV1	99.3	94.8	98.0	100.0	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	100.0
OPV2	99.6	94.8	100.0	100.0	99.6	100.0	100.0	100.0	100.0	100.0	100.0	98.8	99.4	100.0
OPV3	98.8	94.8	99.0	99.0	98.2	99.1	100.0	100.0	100.0	100.0	100.0	100.0	98.5	100.0
FIPV1	98.2	94.8	97.0	97.8	98.0	99.1	100.0	100.0	100.0	99.1	100.0	100.0	98.0	99.4
FIPV2	97.7	100.0	97.9	100.0	96.8	98.3	100.0	97.8	100.0	100.0	100.0	87.8	96.5	97.6
DPT1	99.5	94.8	100.0	100.0	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	100.0
DPT2	99.4	94.8	99.4	100.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	100.0
DPT3	98.8	94.8	98.3	100.0	98.4	99.1	100.0	100.0	100.0	100.0	100.0	100.0	98.0	100.0
PCV1	99.2	94.8	98.0	100.0	99.1	100.0	100.0	100.0	100.0	99.2	100.0	100.0	99.4	100.0
PCV2	99.5	94.8	99.1	99.1	99.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.4	100.0
PCV3	98.3	100.0	100.0	99.0	97.1	98.3	100.0	100.0	100.0	100.0	100.0	98.8	96.9	97.9
ROTA1	98.7	94.8	96.5	97.8	99.2	100.0	100.0	100.0	100.0	100.0	100.0	87.8	99.4	100.0
ROTA2	98.2	94.8	96.6	96.9	98.7	99.2	100.0	100.0	100.0	100.0	100.0	74.4	99.0	100.0
MR1	98.6	100.0	99.2	100.0	98.0	98.3	100.0	100.0	100.0	98.4	100.0	98.8	96.9	99.3
Base(N)	1291	29	108	101	360	98	31	14	44	109	62	30	187	118

Note: Base N is taken unweighted and % is weighted

Table 23: First year of life vaccine coverage among (12-23 months) children from (card observation) by district

First year of life Vaccines	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BCG	99.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.1
OPV1	99.1	94.1	97.8	100.0	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	100.0
OPV2	99.5	94.1	100.0	100.0	99.4	100.0	100.0	100.0	100.0	100.0	100.0	98.1	99.3	100.0
OPV3	98.4	94.1	98.8	98.8	97.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	98.3	100.0
FIPV1	97.7	94.1	96.6	97.4	96.8	100.0	100.0	100.0	100.0	98.9	100.0	100.0	97.6	99.3
FIPV2	97.5	100.0	97.6	100.0	96.1	100.0	100.0	96.5	100.0	100.0	100.0	80.3	95.9	97.3
DPT1	99.4	94.1	100.0	100.0	99.1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	100.0
DPT2	99.3	94.1	99.3	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	100.0
DPT3	98.5	94.1	98.1	100.0	97.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	97.6	100.0
PCV1	99.0	94.1	97.8	100.0	98.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	100.0
PCV2	99.3	94.1	99.0	98.9	99.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.3	100.0
PCV3	98.0	100.0	100.0	98.8	96.0	100.0	100.0	100.0	100.0	100.0	100.0	98.1	96.3	97.6
ROTA1	98.3	94.1	96.1	97.4	98.7	100.0	100.0	100.0	100.0	100.0	100.0	80.3	99.3	100.0
ROTA2	97.6	94.1	96.1	96.3	98.0	98.9	100.0	100.0	100.0	100.0	100.0	58.7	98.8	100.0
MR1	98.5	100.0	99.1	100.0	96.9	100.0	100.0	100.0	100.0	100.0	100.0	98.1	97.0	99.2
Base(N)	1005	26	93	86	235	74	27	10	33	94	40	22	159	106

Note: Base N is taken unweighted and % is weighted

Table 24: First year of life vaccine coverage among (12-23 months) children from (recall) by district

First year of life Vaccines	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BCG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV3	99.7	100.0	100.0	100.0	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FIPV1	99.7	100.0	100.0	100.0	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FIPV2	98.5	100.0	100.0	100.0	98.1	93.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT3	99.7	100.0	100.0	100.0	100.0	96.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PCV1	99.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	94.2	100.0	100.0	100.0	100.0
PCV2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PCV3	99.0	100.0	100.0	100.0	99.0	93.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROTA1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROTA2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MR1	98.9	100.0	100.0	100.0	100.0	93.2	100.0	100.0	100.0	88.5	100.0	100.0	96.4	100.0
Base(N)	286	3	15	15	125	24	4	4	11	15	22	8	28	12

Note: Base N is taken unweighted and % is weighted

Table 25: Second year of life vaccine coverage by district

Second year of life vaccines	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
Card and Recall														
MR2	96.2	100.0	94.6	93.2	95.9	100.0	100.0	100.0	100.0	98.0	97.2	89.1	94.7	93.5
JE	97.6	100.0	98.8	96.5	97.1	100.0	100.0	100.0	100.0	98.0	97.2	88.2	97.0	96.7
TCV	93.9	100.0	89.3	84.0	95.7	97.5	92.4	100.0	100.0	94.8	97.2	88.2	91.8	90.0
Base(N)	1009	24	79	74	218	83	19	21	40	89	48	21	185	108
Card observation														
MR2	96.0	100.0	94.6	96.1	95.2	100.0	100.0	100.0	100.0	97.7	100.0	100.0	93.4	91.5
JE	97.9	100.0	100.0	98.5	96.7	100.0	100.0	100.0	100.0	97.7	100.0	95.9	96.3	95.6
TCV	92.5	100.0	87.9	84.5	94.8	96.3	85.7	100.0	100.0	93.8	100.0	95.9	89.8	86.8
Base(N)	699	14	60	59	114	59	9	9	32	75	26	11	150	81
Recall														
MR2	96.5	100.0	94.5	82.2	96.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
JE	97.1	100.0	94.5	88.9	97.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
TCV	96.5	100.0	94.5	82.2	96.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
Base(N)	310	10	19	15	104	24	10	12	8	14	22	10	35	27

Note: Base N is taken unweighted and % is weighted

Table 26: All vaccine coverage among (24-35 months) children (card and recall) by district

Vaccines	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BCG	99.9	100.0	100.0	100.0	99.5	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV1	99.5	100.0	100.0	100.0	98.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV2	99.4	100.0	100.0	100.0	98.4	100.0	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0
OPV3	98.6	100.0	100.0	98.8	97.2	100.0	100.0	100.0	100.0	98.0	100.0	100.0	98.5	98.2
FIPV1	99.3	100.0	100.0	99.0	99.0	100.0	100.0	100.0	100.0	96.9	100.0	100.0	100.0	98.2
FIPV2	98.0	100.0	96.8	97.8	97.6	100.0	100.0	100.0	100.0	97.0	97.2	89.1	99.0	98.2
DPT1	99.6	100.0	100.0	100.0	98.9	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT2	99.4	100.0	100.0	100.0	98.4	100.0	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0
DPT3	98.8	100.0	100.0	97.8	97.9	100.0	100.0	100.0	100.0	98.0	100.0	100.0	99.0	98.2
PCV1	99.4	100.0	98.6	100.0	98.4	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PCV2	99.1	100.0	99.1	100.0	97.9	98.7	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0
PCV3	98.1	100.0	99.1	97.8	97.9	100.0	100.0	100.0	100.0	97.1	97.2	89.1	97.9	97.4
ROTA1	99.3	100.0	100.0	98.5	98.3	100.0	100.0	100.0	100.0	100.0	100.0	98.8	100.0	100.0
ROTA2	98.9	100.0	100.0	95.4	97.8	100.0	100.0	100.0	100.0	99.0	100.0	98.8	100.0	99.3
MR1	98.4	100.0	100.0	97.8	98.4	100.0	100.0	100.0	100.0	98.0	97.2	89.1	97.9	97.4
MR2	96.2	100.0	94.6	93.2	95.9	100.0	100.0	100.0	100.0	98.0	97.2	89.1	94.7	93.5
JE	97.6	100.0	98.8	96.5	97.1	100.0	100.0	100.0	100.0	98.0	97.2	88.2	97.0	96.7
TCV	93.9	100.0	89.3	84.0	95.7	97.5	92.4	100.0	100.0	94.8	97.2	88.2	91.8	90.0
Base(N)	1009	24	79	74	218	83	19	21	40	89	48	21	185	108

Note: Base N is taken unweighted and % is weighted

Table 27: All vaccine coverage among (24-35 months) children from (card observation) by district

Vaccines	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BCG	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV1	99.7	100.0	100.0	100.0	98.8	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV2	99.7	100.0	100.0	100.0	99.1	100.0	100.0	100.0	100.0	98.9	100.0	100.0	100.0	100.0
OPV3	98.4	100.0	100.0	98.5	96.9	100.0	100.0	100.0	100.0	97.7	100.0	100.0	98.1	97.6
FIPV1	99.2	100.0	100.0	100.0	98.9	100.0	100.0	100.0	100.0	96.3	100.0	100.0	100.0	97.6
FIPV2	97.8	100.0	96.0	98.5	96.4	100.0	100.0	100.0	100.0	96.4	100.0	100.0	98.8	97.6
DPT1	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT2	99.7	100.0	100.0	100.0	99.1	100.0	100.0	100.0	100.0	98.9	100.0	100.0	100.0	100.0
DPT3	98.9	100.0	100.0	98.5	98.2	100.0	100.0	100.0	100.0	97.7	100.0	100.0	98.8	97.6
PCV1	99.8	100.0	98.2	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PCV2	99.2	100.0	98.8	100.0	98.2	98.2	100.0	100.0	100.0	98.9	100.0	100.0	100.0	100.0
PCV3	98.3	100.0	98.8	98.5	98.2	100.0	100.0	100.0	100.0	96.5	100.0	100.0	97.4	96.6
ROTA1	99.5	100.0	100.0	98.2	98.9	100.0	100.0	100.0	100.0	100.0	100.0	94.2	100.0	100.0
ROTA2	98.8	100.0	100.0	94.2	98.0	100.0	100.0	100.0	100.0	98.9	100.0	94.2	100.0	99.1
MR1	98.8	100.0	100.0	98.5	99.1	100.0	100.0	100.0	100.0	97.7	100.0	100.0	97.4	96.6
MR2	96.0	100.0	94.6	96.1	95.2	100.0	100.0	100.0	100.0	97.7	100.0	100.0	93.4	91.5
JE	97.9	100.0	100.0	98.5	96.7	100.0	100.0	100.0	100.0	97.7	100.0	95.9	96.3	95.6
TCV	92.5	100.0	87.9	84.5	94.8	96.3	85.7	100.0	100.0	93.8	100.0	95.9	89.8	86.8
Base(N)	699	14	60	59	114	59	9	9	32	75	26	11	150	81

Note: Base N is taken unweighted and % is weighted

Table 28: All vaccine coverage among (24-35 months) children from (recall) by district

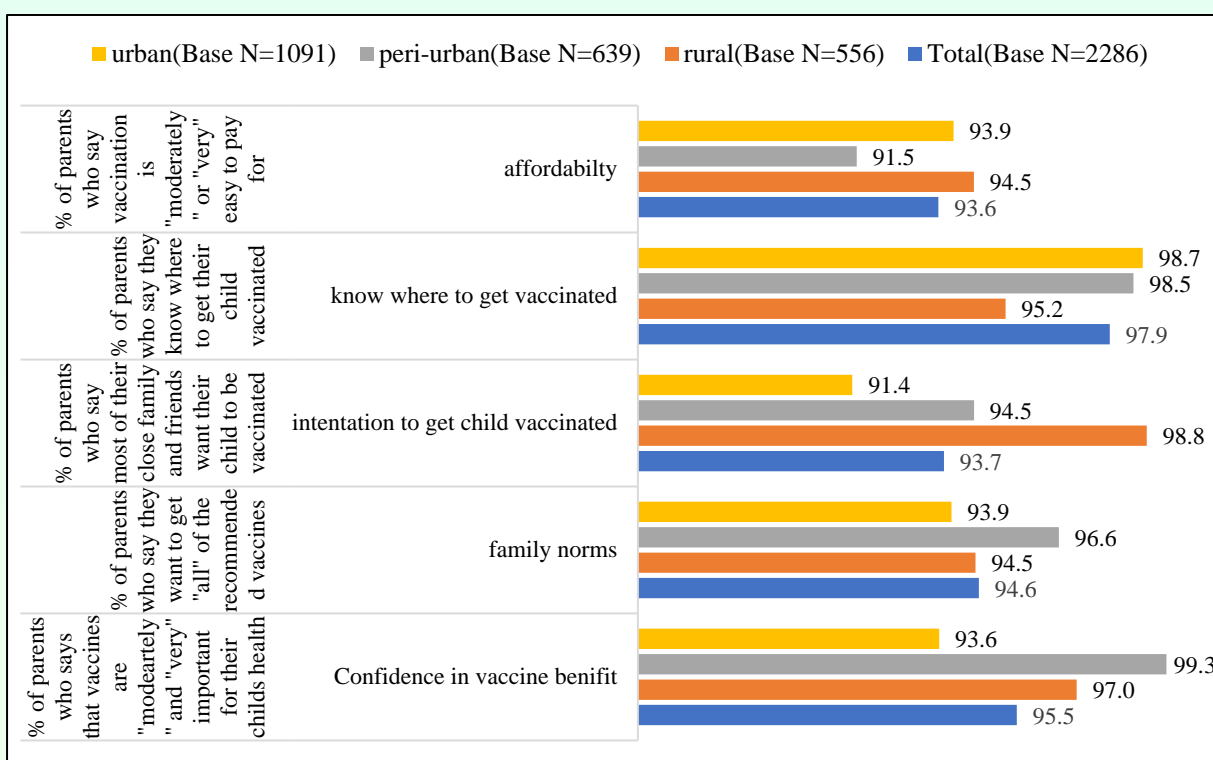
Vaccines	Total	Ramechhap	Lalitpur	Bhaktapur	Kathmandu	Makwanpur	Manang	Mustang	Gulmi	Bardiya	Salyan	Humla	Kailali	Kanchanpur
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
BCG	99.6	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV1	99.0	100.0	100.0	100.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV2	99.6	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
OPV3	99.6	100.0	100.0	100.0	99.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FIPV1	98.8	100.0	100.0	95.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
FIPV2	97.7	100.0	100.0	95.0	97.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
DPT1	99.0	100.0	100.0	100.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT2	99.0	100.0	100.0	100.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
DPT3	98.8	100.0	100.0	95.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PCV1	98.6	100.0	100.0	100.0	96.7	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PCV2	99.0	100.0	100.0	100.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
PCV3	97.7	100.0	100.0	95.0	97.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
ROTA1	99.0	100.0	100.0	100.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
ROTA2	99.0	100.0	100.0	100.0	97.6	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
MR1	97.7	100.0	100.0	95.0	97.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
MR2	96.5	100.0	94.5	82.2	96.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
JE	97.1	100.0	94.5	88.9	97.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
TCV	96.5	100.0	94.5	82.2	96.6	100.0	100.0	100.0	100.0	100.0	94.2	86.3	100.0	100.0
Base(N)	310	10	19	15	104	24	10	12	8	14	22	10	35	27

Note: Base N is taken unweighted and % is weighted

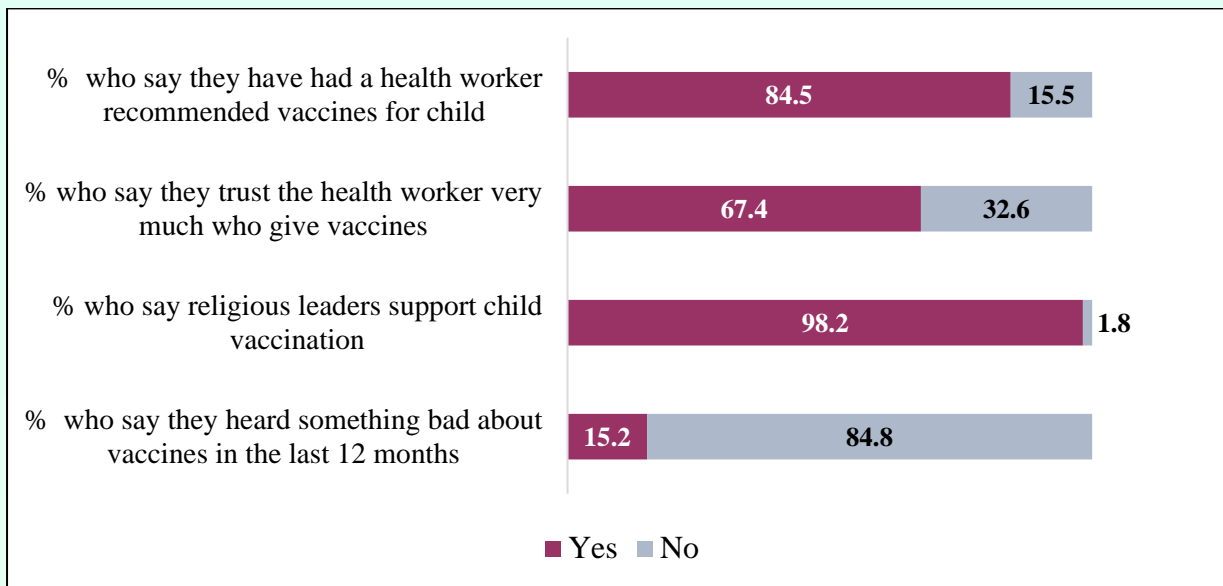
Table 29: Time to reach the nearest immunization center

Geographic settlement	up to 30 minutes	31-60 minutes	60 above minutes	Base
	%	%	%	N
Mountain	95.7	4.3	-	136
Hill	89.4	8.5	2.0	428
Kathmandu valley	93.3	5.5	1.2	940
Terai	94.0	5.8	0.1	796
Total	92.9	6.1	1.1	2300

Annex 5: Result on Priority indicators according to BeSD framework



Social Processes



Annex 6: GPS maps

GPS map of children who have not received TCV vaccine

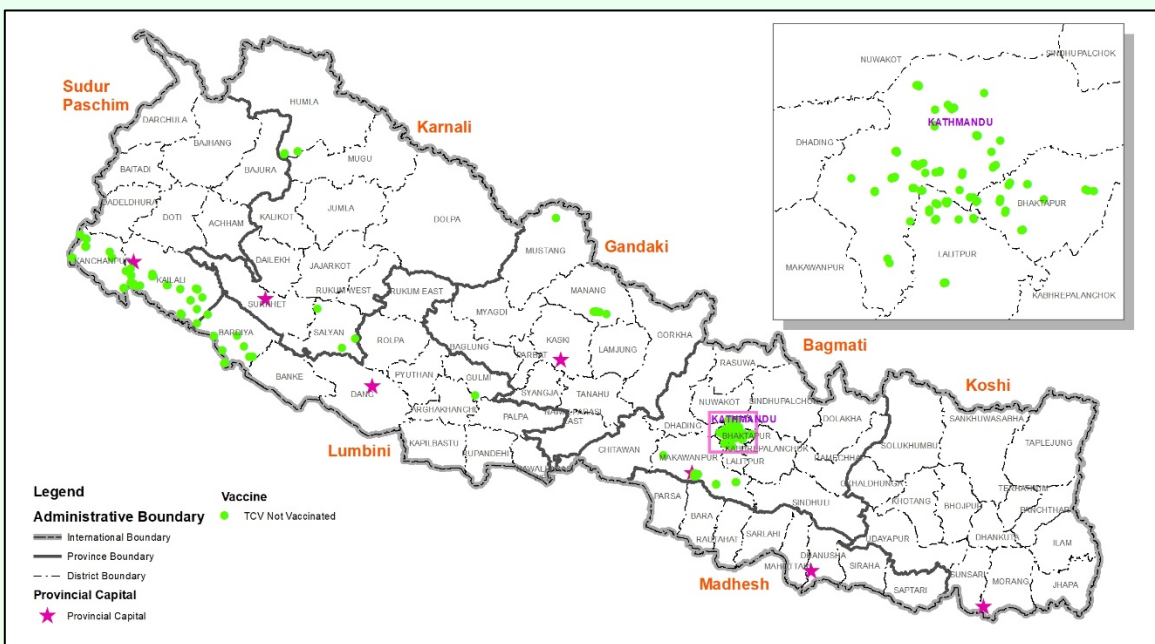


Figure 30: GPS map of children who have not received TCV vaccine

GPS map of children who have not received MR vaccine

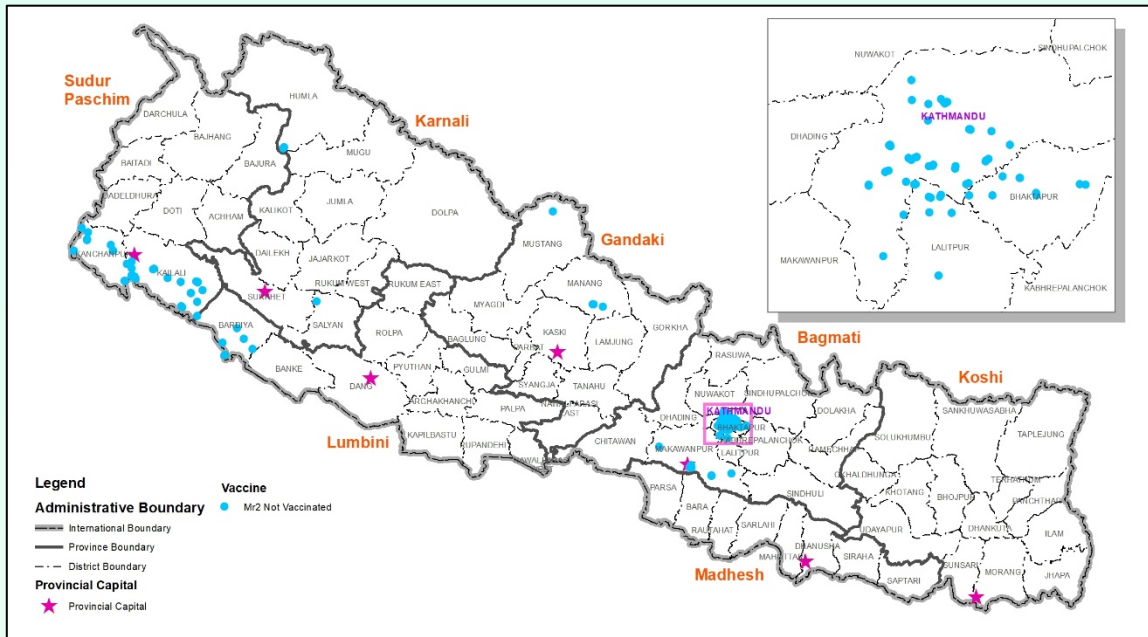


Figure 31: GPS map of children who have not received MR vaccine

GPS map of children who have not received MR vaccine, TCV vaccine and who are partially immunized

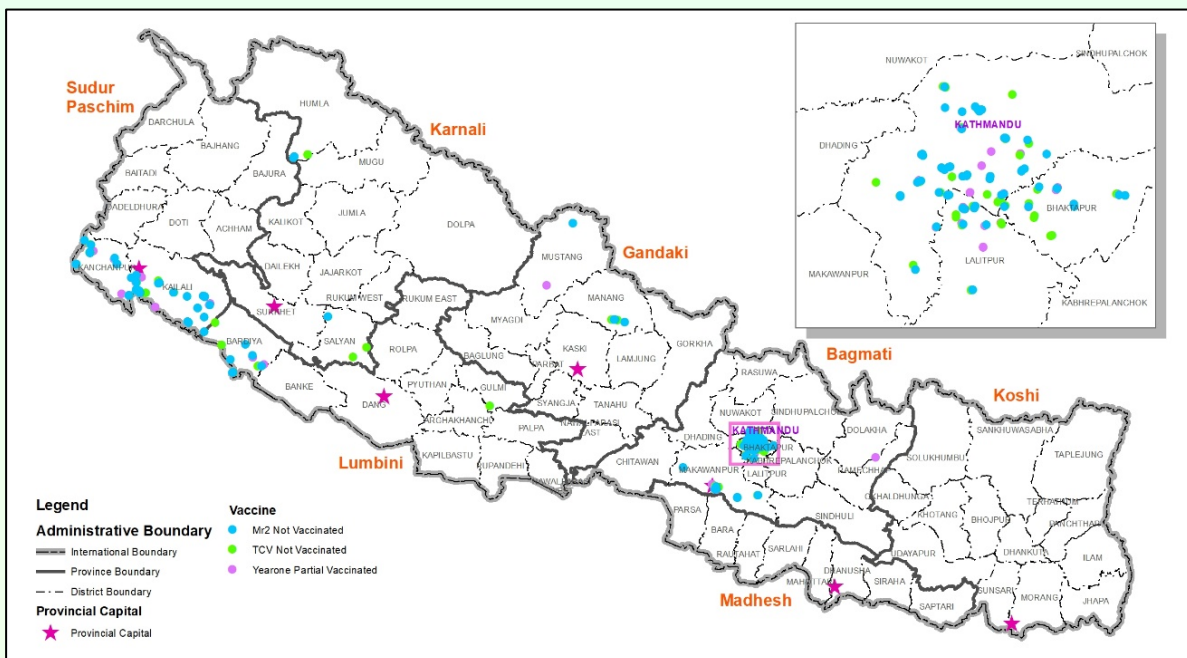


Figure 32: GPS map of children who have not received MR vaccine, TCV vaccine and who are partially immunized

**Assess Immunization Coverage and Knowledge of
Mothers/Caregivers towards Vaccination in 13 Districts
(Gavi DLI based) of Nepal)**