

Knowledge, Attitude and Practice (KAP) SURVEY

Water, Sanitation and Hygiene (WASH)



FINAL REPORT
NRC, SC, WV Kirkuk-IRAQ
September 2015

TABLE OF CONTENTS

LIST OF TABLES	3
LIST OF FIGURES	3
ACRONYMS	4
EXECUTIVE SUMMARY	5
BACKGROUND	8
CONTEXT	8
SURVEY OBJECTIVES.....	9
SCOPE OF REPORT	9
METHODOLOGY	9
Quality control.....	11
Data management and analysis plan.....	11
LIMITATIONS AND CHALLENGES.....	11
KEY FINDINGS AND RESULTS	12
DISCUSSION OF KEY FINDINGS AND RESULTS.....	25
RECOMMENDATIONS	29
DISSEMINATION.....	29
CONCLUSION	30

LIST OF TABLES

Table 1: Survey Area by Governorate and Organization	10
Table 2: Main Water Source (%) by INGO and Overall	14

LIST OF FIGURES

Figure 1: Outline of sex of respondents.....	12
Figure 2: Sex and Age Disaggregated Data (SADD) (%)	13
Figure 3: Main Water Source	14
Figure 4: Most Common Water Treatment Practices	16
Figure 5: Most Common Reasons for Water Treatment	16
Figure 6: Existence of a Water Management Committee for Main Water Source.....	17
Figure 7: Knowledge of WMC meeting regularity.....	17
Figure 8: Most Common Defecation Practices by Respondents	18
Figure 9: Adaptability of Latrines for Individuals with Special Needs	19
Figure 10: Child Friendliness of Available Latrines	19
Figure 11: Adaptability of Bathing Showers for Children	20
Figure 12: Level of Satisfaction with the Solid Waste Management System	21
Figure 13: Most Common Times for Hand Washing (%)	22
Figure 14: Most Effective Way of Receiving Hygiene Messages.....	23
Figure 15: Most Commonly Experienced Disease of Boys Under Five Years	23
Figure 16: Most Commonly Experienced Disease of Girls Under Five Years	24
Figure 17: Most Common Diarrhea Prevention Methods	24

ACRONYMS

FGD	Focus Group Discussions
HH	Household
IDP	Internally Displaced People
IEC	Information, Education and Communication
KAP	Knowledge, Attitude and Practice
KII	Key Informant Interviews
KRI	Kurdistan Region of Iraq
ORS	Oral Rehydration Solution
SPSS	Statistical Package for Social Sciences
TOR	Term of Reference
WMC	Water Management Committee
WASH	Water, Sanitation and Hygiene

EXECUTIVE SUMMARY

Background

Essential public services in Iraq have been severely weakened by escalating violence and the massive influx of displaced people. According to the national WASH Cluster, an estimated 7.1 million people across Iraq, around 20% of the national population, is currently in need of WASH assistance¹. Fighting has damaged water systems and in some cases entire districts have had their water supply networks cut-off by armed groups. Power cuts, fuel shortages and disruption to supply routes have left already vulnerable communities without access to clean water for drinking and domestic use.

Survey objectives

This KAP survey provides benchmark values for indicators of NRC, SC and WV WASH projects and will be used as a tool to inform future program planning, as well as, to measure the progress of current programming in the operational areas in the governorate of Kirkuk. To achieve the survey objectives, this report addresses key questions regarding the benchmark values for indicators of WASH projects, with collected data providing baseline, mid-line and end-line values depending on the specific project. Due to the high volume of data collected, this report focuses on identifying the risks associated with practices pertaining to water, sanitation and waste, hygiene knowledge at the **governorate level** for the locations sampled in the governorate of Kirkuk.

Methodology

The survey population for the KAP survey consists of the affected population, children, women and men, residing in the governorate of Kirkuk where NRC, SC and WV are currently operational or has ambitions to begin operations as part of our WASH programming². The target population considered for this survey was 10,765 households, with a sample size of 1,147 households or 382 households for each organization. The sampling method employed was multi-stage random sampling was conducted, combining systematic random sampling with cluster sampling to select the locations and households for participation in the survey.

Key Findings and Results

Following is a summary of the key findings and results from the KAP survey report.

Household demographics

- Total of 1,147 household respondents, accounting for approximately 10% of the targeted households sampled by Norwegian Refugee Council, Save the Children and World Vision in the 42 locations of the governorate of Kirkuk
- Females accounted for 24% of respondents, while males accounted for 76% of respondents
- Average household size was 6.6 members, for collective shelters 10.8 members
- Household members are composed mainly children, 55%, including, 22% of children under five, 33% of adolescent and children from 5 – 17 years. Households also include 22% of adult females and 21% adult males, 18 years old and older, 2% members with disabilities.

¹ Iraq WASH Cluster, Humanitarian Needs Overview (HNO), WASH Cluster Input, 2015

² Save the Children Iraq, is currently only operational in 4 of the 7 locations sampled in Kirkuk governorate, constituting 24.1% of the total sampled households.

Water

- Most common main water source is ‘piped water supply’, cited at 84% overall for the locations sampled. The second most common water source is ‘protected borehole’ cited at 6%.
- Water collection responsibility was found to be held mainly by males overall for the locations sampled by 54% of the households, and females cited 35%
- Households did report Adolescent and Child, under 18 years old, being responsible for water collection, with 33% reported difficulties while collecting the water For SC , 88% with no issues for NRC and 13% feeling danger crossing the road for WV
- 89% households reported collecting ‘over 50 litres of water’ daily overall for the locations sampled
- 85% of households reported the distance to the main water source as ‘less than 100 metre’ overall for the locations sampled
- 60% of households reported the time taken to collect water, including queuing and travel time, as ‘less than 15 minutes’ overall for the locations sampled
- Availability of the main water source was reported as ‘consistently available (constant or regular delivery on a daily basis)’ overall for the locations sampled by 12% of the households, with the remainder reporting as ‘inconsistently available (no regular schedule or not available daily)’ which cited 88%.
- Physical status of the main water source was reported as ‘functioning well / no damages’ overall for the locations sampled by 30% of the households, with 64% reporting ‘partially functioning / need to repair’
- Most common water treatment practice reported differed, 27% of the households reported using ‘chlorine tablets’, 11% of the households reported drinking water that was ‘already treated’ , 42% of households reported ‘no treatment’
- 82% of households reported ‘no Water Management Committee’ (WMC), and 60% cited ‘do not know if WMC received training.

Sanitation and Waste

- Access to latrines was cited at 83% for ‘latrine (individual)’, 15% for ‘latrine (communal)’ and 3% for ‘no access’ overall for the locations sampled
- For those that cited access to a latrine, 1% reported latrines being adapted for disabled, elderly and/or pregnant females overall for the locations sampled. 15% reported latrines being adapted for children or as ‘child friendly’ overall for the locations sampled
- Of the households that reported access to a fully function latrine, 27% of the sampled households, 62% ‘partially damaged or need repair, 29% cited the availability of a functioning hand washing facility near the latrine overall for the locations sampled.
- Access to bathing showers was reported by 9% of households as ‘communal’ and by 75% of households as ‘individual’, 16% cited ‘no access’ overall for the locations sampled
- For those that cited access to bathing showers, 1% reported the bathing shower being adapted for disabled, elderly and/or pregnant females overall for the locations sampled. 19% reported the bathing showers being adapted for children or as ‘child friendly’ overall for the locations sampled
- The physical status of the bathing showers was reported as ‘functioning well / no damages’ overall for the locations sampled by 29% of the households, with 61% reporting ‘partially functioning / need to repair’.
- The most common solid waste disposal practice was cited as use of ‘burning’ by 35% followed by ‘existing waste management system (i.e. garbage collection)’ by 27%, 25% ‘open pit, uncovered and not buried’ of households overall in the locations sampled

- Among 42% dissatisfied household with the solid waste management and collection system, 39% reported `service is not available/do not exist`

Hygiene Knowledge and Practice

- Most common times for hand washing was cited as ‘Prayer time’ by 22% of respondents overall for the locations sampled. This was followed by 18% for ‘after defecation or latrine use’, 18% for ‘before eating’, 18% for ‘after eating’, 13% for ‘before food preparation’, 5% for ‘after handling children/infant faeces and 4% at ‘before breastfeeding infants’
- 90% of the households reported most commonly using soap/shampoo/laundry detergent to wash their hands overall for the locations sampled, 76% indicated the main reason for washing hands ‘get rid of dirt’, 9%, ‘improving health condition’, 8% ‘to kill bacteria’ and 4% ‘social status’
- 31 % of households reported that the cleaning campaign was the most effective way of receiving messages overall for the locations sampled
- 42% of households reported that the use of ‘posters or flyers’ was the least effective way of receiving messages overall for the locations sampled
- Most common diseases was reported as ‘Diarrhoeal diseases (within last 2 weeks)’, by sex and age, by 20.5% of the households overall for the locations sampled. ‘Skin diseases (within the last 2 months)’, by sex and age, was reported by 18.8% of the households
- In particular, for children under five, it is important to note the reporting of ‘diarrhoeal diseases (within the last 2 weeks)’ was reported by households at a rate of 26% for males and 32% for females overall for the locations sampled
- Most common methods used to prevent diarrhoea, with 26% citing ‘hand washing with soap’, 19% ‘drinking clean water’, 10% ‘proper personal hygiene’, 10% ‘proper household hygiene’, 10% ‘eating well cooked food and 8% ‘use of latrine/no open defecation` overall for the locations sampled
- Most common diarrhoea treatment methods, with 43% seeking ‘medication from a health centre / clinic’ and 31% using ‘herbs or traditional medicine’ overall for the locations sampled

Recommendations

The key recommendations from this KAP survey report focus on a broader objective to be achieved by the WASH programming currently being implemented by the Norwegian Refugee Council, Save the Children and World Vision as follows:

- Conduct KIIs and FGDs based on issues / gaps in the quantitative data within the coming weeks based aspects highlighted in the Discussion of the Key Findings and Results of this report
- Based on quantitative and qualitative data collected, develop short briefing sheets on the key findings and results for specific locations i.e. camp and non-camp settings for Kirkuk governorate
- Develop a response plan for the findings from Kirkuk governorate to respond to the identified needs in the locations where WASH gaps is not currently met
- Develop a continuous monitoring framework to collect key indicators for WASH projects, on a quarterly basis with a representative sample size. This can be carried out in coordination with other WASH partners with activities in complementary operational areas
- Advocate the national WASH Cluster to establish a technical working group focused on data collection through technology to further support the establishment of a continuous monitoring framework to collect key WASH indicators amongst all WASH partners in country on a systematic basis, using an agreed upon methodology, including a representative sample size to better understand the needs of the affected population in real-time

- Increase the involvement and participation of children of different ages in the current response, particularly looking at issues plaguing children in emergencies, such as excreta disposal, hygiene messaging etc.

BACKGROUND

As of March 2015, an estimated 2.7 million people have been displaced since January 2014 dispersed across 3,038 locations in Iraq³. Currently, there are 161,136 internally displaced people (IDPs) in Diyala governorate, 445,104 IDPs in Dohuk governorate and 355,380 IDPs in Kirkuk governorate⁴. The first major wave of displacement took place in eastern Anbar in late December 2013 and early January 2014 and occurred as result of fighting between different Armed Opposition Groups – (AOG). Population in the affected areas displaced to different parts of Iraq, with at least 50% of the population in Fallujah displacing to other towns within Anbar and into northern and central Iraq. The second major wave of displacement occurred after 6 June 2014, when the Islamic State of Iraq and the Levant (ISIL) and affiliated armed groups assaulted Iraq's second largest city, Mosul. Over the course of several days, more than 450,000 people fled the city - or nearly a quarter of the city's population - with the vast majority travelling to the Ninewa Plains and Kurdistan Region of Iraq (KRI) to seek refuge. These displaced people included large minority communities. The most recent large-scale IDP movement began on 3 August 2014, when ISIL occupied the city of Sinjar, in Ninewa Governorate. At least 300,000 people, mostly Yazidi families fled to Mount of Sinjar before reaching Syria and then, entering the Kurdistan Region of Iraq (KRI)⁵.

CONTEXT

Geographic context

Within Iraq, the area of current operation for WASH programming is located in the northern part of the country in KRI. This covers an area of 78,736 km², including the disputed territories, consisting of mountainous regions. The administrative divisions of KRI include: Erbil, Dohuk, Halabja and Sulaymaniyah governorates. The disputed locations include: Diyala, Kirkuk and Ninawa governorates. KRI has an increasing urban population with a significant rural population⁶.

Demographic context

The estimated total population of Iraq as of January 2014 is 36,004,554 people, with estimates of 9, 850, 00 people in KRI⁷ in 2015. This includes 1,548,493 people in Diyala governorate, 1,220,396 people in Dohuk governorate and 1,508,804 in Kirkuk governorate⁸. The ethno-linguistic make-up of Iraqi Kurdistan is diverse and includes Kurds and some large ethnic minorities, including, Arabs, Assyrians, Turkmens, Shabaks and Yezidis⁹.

³ IOM, Round XVII Displacement Tracking Matrix (DTM) Report, March 2015 and DTM Dashboard, 26 March 2015, <http://iomiraq.net/dtm-page>

⁴ IOM, Round XVII Displacement Tracking Matrix (DTM) Report, March 2015 <http://iomiraq.net/dtm-page>

⁵ OCHA, Humanitarian Needs Overview (HNO) 2014 / 2015 http://reliefweb.int/sites/reliefweb.int/files/resources/HNO_2014-2015_Iraq.pdf 12 August 2014

⁶ http://en.wikipedia.org/wiki/Iraqi_Kurdistan

⁷ http://en.wikipedia.org/wiki/Iraqi_Kurdistan

⁸ OCHA, Humanitarian Needs Overview (HNO) 2014 / 2015 http://reliefweb.int/sites/reliefweb.int/files/resources/HNO_2014-2015_Iraq.pdf 12 August 2014

⁹ http://en.wikipedia.org/wiki/Iraqi_Kurdistan

Water, Sanitation and Hygiene (WASH) context

Essential public services in Iraq have been severely weakened by escalating violence and the massive influx of displaced people. According to the national WASH Cluster, an estimated 7.1 million people across Iraq, around 20% of the national population, is currently in need of WASH assistance¹⁰. Fighting has damaged water systems and in some cases entire districts have had their water supply networks cut-off by armed groups. Power cuts, fuel shortages and disruption to supply routes have left already vulnerable communities without access to clean water for drinking and domestic use.

The national WASH Cluster has identified that water is needed for drinking, domestic use with water treatment and quality assurance requiring particular attention. Other key needs identified are adequate coverage to appropriate and sustainable sanitation facilities, along with sustainable and equitable access to hygiene items and the promotion of good hygiene practice¹¹. In displacement camps and non-camp setting, urgent sanitation and hygiene support is required to prevent the spread of diseases: due to overcrowding, inadequate waste disposal and cases of open defecation. These locations have been erected in the immediate aftermath of the displacement and are often not fit for purpose with latrines located far from where families are sheltering, presenting potential protection risks for young children, especially girls. With the violence showing no sign of abating, thousands who are now living in abandoned or unfinished buildings face a lack of safe drinking water, latrines, and bathing facilities.

SURVEY OBJECTIVES

This survey provides benchmark values for indicators of NRC, SC and WV WASH projects and will be used as a tool to inform future programme planning, as well as, to measure the progress of current programming in the operational areas in the locations of NRC, SC and WV. This survey also aims to build the capacity of WASH and MEAL team through the application of KoBo Toolbox¹² and the use of tablets to support data collection through technology.

SCOPE OF REPORT

To achieve the survey objectives, this report addresses key questions regarding the benchmark values for indicators of WASH projects, with collected data providing baseline, mid-line and end-line values depending on the specific project. Due to the high volume of data collected, this report focuses on identifying the risks associated with practices pertaining to water, sanitation and waste, hygiene knowledge at the **governorate level** for the locations sampled in the governorate of Kirkuk.

METHODOLOGY

Survey population

The survey population for the KAP survey consists of the affected population, children, women and men, residing in the governorate of Kirkuk where World Vision, Norwegian Refugee Council and Save the Children Iraq is currently operational or has ambitions to begin operations as part of WASH programming. The target population considered for this survey was 10,975 households.

¹⁰ Iraq WASH Cluster, Humanitarian Needs Overview (HNO), WASH Cluster Input, 2015

¹¹ Iraq WASH Cluster, Humanitarian Needs Overview (HNO), WASH Cluster Input, 2015

¹² KoBoToolbox is a suite of tools for field data collection for use in challenging environments. In September 2014 we launched a significant new phase of our KoBoToolbox software suite in coordination with the United Nations and the International Rescue Committee (IRC) to make electronic data collection more standardised, more reliable, and easier to use in humanitarian crises. <http://www.kobotoolbox.org/>

Survey area

The survey area consists of the operational areas for WASH programming for World Vision, Norwegian Refugee Council and Save the Children Iraq in the governorate of Kirkuk. The study area was divided into three clusters covering forty-two location of WASH projects as summarized in Table 1.

Table 1: Survey Area by Governorate and Organization

District (Kirkuk)							
Label	%WVI	%NRC	%Save the Children	#WVI	#NRC	#Save the Children	% overall
Dabes	0%	0%	0%	0	0	0	0%
Daquq	0%	0%	24%	0	0	90	8%
Hawiga	0%	0%	0%	0	0	0	0%
Kirkuk	100%	100%	76%	383	382	292	92%

Sampling design

The sample unit was determined to be households. A sample size of 1,147 households was calculated based on the target survey population of 10,765 households in the selected governorates of Kirkuk. The sample size was calculated using Survey System online calculator¹³. Sample size for each cluster was determined independently using a 95 % confidence level and 5 % margin of error. A total sample size of 382,383,382 households was calculated for each of NRC, WV, and SC respectively, with an additional 10% to account for the discarding of improperly collected data. The sampling method employed was multi-stage random sampling was conducted, combining systematic random sampling with cluster sampling to select the locations and households for participation in the survey. The protocol for data collection in camp and non-camp, i.e. village locations is summarized in Annex 1.

Ethics and consent procedures

The purpose of the KAP survey was shared with the respondents and agreement to participate was sought prior to the interview using oral ‘informed consent’ as outlined on the online, structured questionnaire. Confidentiality was also discussed and confirmed with respondents prior to the interview. Coding based on tent number, when applicable and GPS coordinates instead of names was used to further ensure confidentiality of respondents.

Training of data collectors and supervisors

A two day training of the data collector and supervisors was carried out in the three field offices in the locations of NRC, SC and WV, conducted by the WASH and MEAL Advisors, Coordinators and Managers. The training focused on the basics of conducting KAP surveys. The participants learned how to use the tablets and online, structured questionnaires developed on KoBo Toolbox and also carried out role plays. A field trial of the online, structured questionnaire developed for the KAP Survey was conducted in field

¹³ <http://www.surveysystem.com/sscalc.htm>. Survey System online calculator utilises the following formula to calculate the same size. $n = D Z^2(p)(1-p)/c^2$ where N = required minimum sample size, D = design effect, which is 1 for simple and systematic random sampling, and 2 for cluster sampling Z = Z value (a value that is associated with certain confidence levels: for instance, the Z value for a 95% confidence level is 1.96), p = percentage picking a choice, expressed as decimal (0.5 used for sample size needed) and c = confidence interval, expressed as decimal (e.g., .05 = ±5)

locations, with approximately 20 – 30 households per field office. Based on the field trial and feedback from the field trials in the field offices in the locations of NRC, SC and WV, the coordination team carried out a detailed revision and finalization of the online, structured questionnaire developed for the KAP Survey.

Data collection and quality control

Data collection

The survey focused on quantitative data collection. The quantitative information was collected using the tablets and an online, structured questionnaire created on KoBo Toolbox developed by the WASH and MEAL team, globally and in-country. The online, structured questionnaire was based on a mapping of the key indicators. Data collection was carried out over a five day period as follows:

- WV – 4 days data collection from August. 26th – 29th
- SC – 4 days data collection from Sept. 6th – 9th
- NRC – 4 days data collection from Sept. 27th – 30th

Data was collected in the field using the remote, offline function provided by KoBo Toolbox using tablets, with daily uploading of the data using KoBo Collect by the survey teams in the field offices of NRC, SC and WV per the established Tablet Standard Operating Procured (SOP) attached in Annex 4. A list of all data collectors and supervisors in each field office location is attached in Annex 5.

As the KAP survey aim was to collection quantitative data, the use of Key Informant Interviews (KIIs) and Focus Group Discussions (FGD) did not occur as part of the scope of this survey and will take place after the analysis of the quantitative data as deemed necessary. Triangulation will be utilised to ensure the use of more than one method of data collection, including that of qualitative data collection and secondary data sources, to crosscheck and ensure the validity of all information.

Quality control

Data checking and validation for completeness and consistency was carried out on a daily basis from downloads from KoBo Toolbox, based on the uploaded entries to KoBo Collect from the tablets. Data that was deemed inconsistent was highlighted and shared with the relevant coordination team at the field office location for rectification and cleaning. The main inconsistency that commonly occurred was the total number of households in comparison to the disaggregated data by sex and age. However, quality control was ensured on a daily basis, with corrections being carried out on a real-time basis within the first 48 hours of data collection.

Data management and analysis plan

All quantitative data was analyzed using Excel and Statistical Package for the Social Sciences (SPSS). Based on the raw data, available for download from KoBo Toolbox, a master database was developed and data cleaning was carried out. A quantitative data framework was set up in Excel for all validated data. A series of frequencies, count and other statistical methods were employed in the analysis of the data. All collected and analyzed data tables are attached in Annex 6.

LIMITATIONS AND CHALLENGES

The limitations and challenges during the process of conducting the KAP survey were minimal, particularly, considering the fact that this was the first time that WV and NRC carried out data collection using technology i.e. tablets and KoBo Toolbox for WASH programming. The main challenge faced was the

discrepancy cited regarding the inconsistency between the total number of households in comparison to the disaggregated data by sex and age. However, as highlighted, quality control was conducted on a daily basis; thus, this was rectified in real-time within the first 48 hours of data collection.

As previously cited, due to the high volume of data collected, this report focuses on identifying the risks associated with practices around water, sanitation and waste and hygiene knowledge at the **governorate level** for the IDP locations sampled in the governorate of Kirkuk. Detailed information regarding locations or type of location i.e. camp and non-camp settings is available from the WASH and MEAL teams and will be synthesis in additional reports accordingly.

Additionally, it is important to note, the fact that sampled households do not all fall in locations operational by NRC, SC and WV requiring disaggregation of collected data to ensure the appropriate use of this data for assessment purposes.

KEY FINDINGS AND RESULTS

Household demographics

Respondents

The KAP survey achieved a total of 1,147 household respondents, accounting for approximately 10% of the targeted households sampled by World Vision, Norwegian Refugee Council and Save the Children Iraq in the 42 locations of the governorate of Kirkuk. Males accounted for 76% of respondents, while females accounted for 24% of respondents.

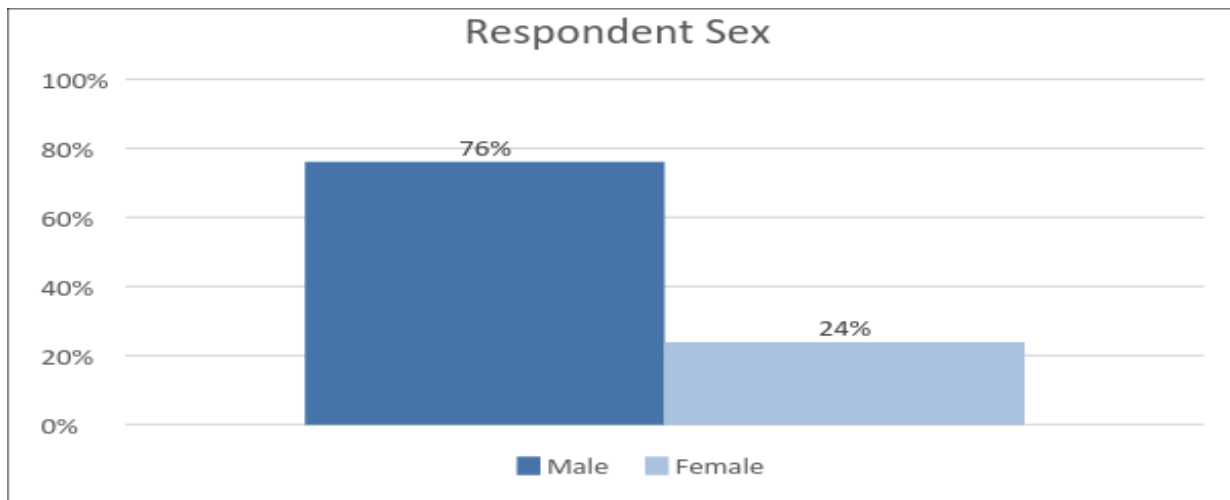


Figure 1: Outline of sex of respondents

Household characteristics

Household members are composed mainly children, 55%, including, 22% of children under five, 33% of adolescent and children from 5 – 17 years. Households also include 22% of adult females and 21% adult males, 18 years old and older.

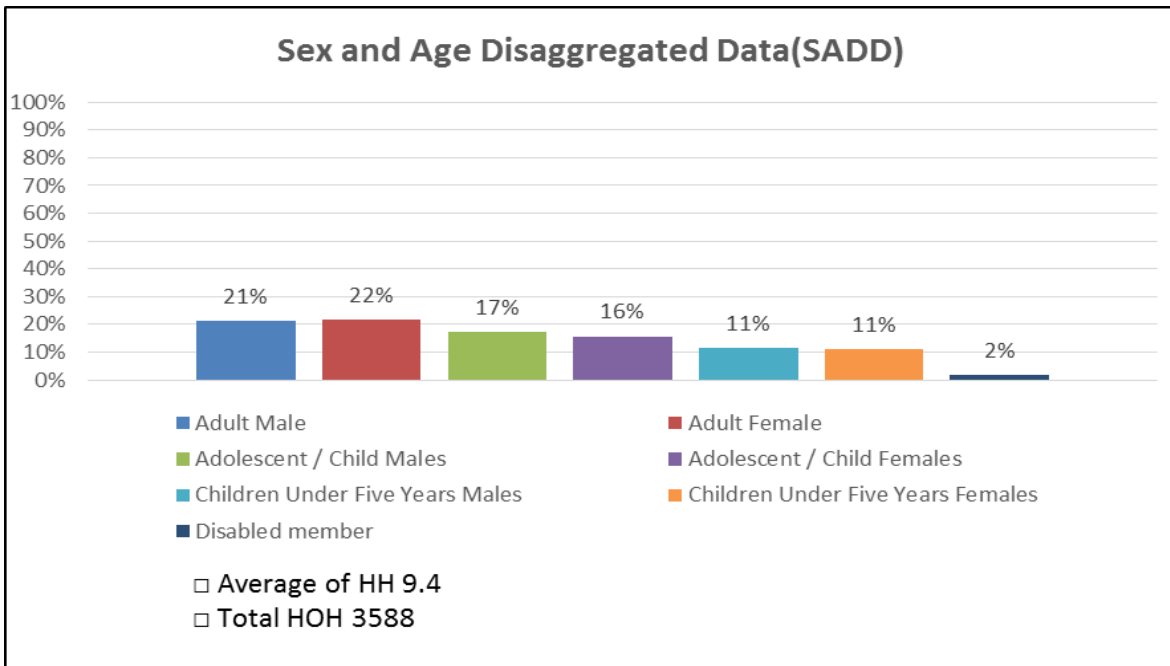


Figure 2: Sex and Age Disaggregated Data (SADD) (%)

The average family size overall for the locations sampled is 6.6, and average of 10.8 for collective shelters with head of households being primarily male, 94% and 6% female, with no rate of child-headed households reported.

Disabled, elderly and/or pregnant females

The number of disabled, elderly and/or pregnant females was also collected. A total of 2% members of the household reported overall for the locations sampled.

Water

Within the access to water sources the most common main water source is ‘piped water supply’, cited at 84% overall for the locations sampled. The second most common water source is ‘protected wells’ cited at 6%. Figure 3 summarizes the main water sources as reported by households.

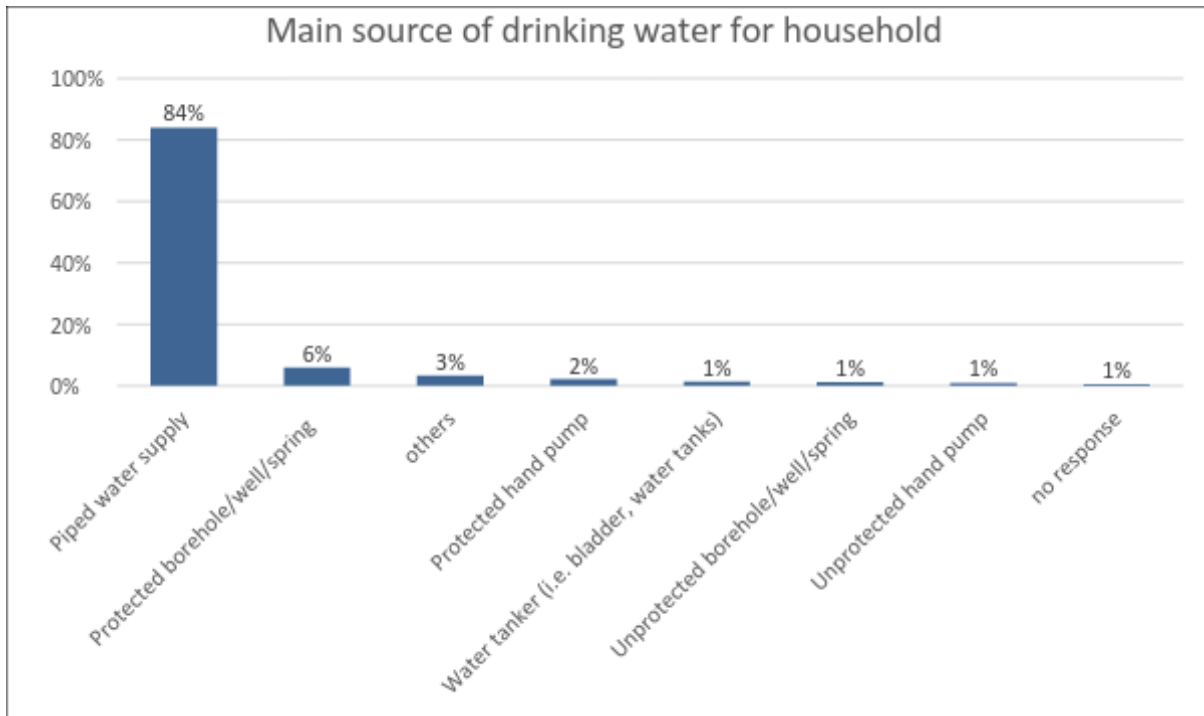


Figure 3: Main Water Source

Table 2: Main Water Source (%) by INGO and Overall

Main source of drinking water for household				
Label	%WV I	%NR C	%Save the Children	% overall
Piped water supply	83%	94%	75%	84%
Protected borehole/well/spring	1%	0%	17%	6%
others	5%	4%	0%	3%
Protected hand pump	1%	0%	6%	2%
Water tanker (i.e. bladder, water tanks)	3%	1%	0%	1%
Unprotected borehole/well/spring	3%	1%	0%	1%
Unprotected hand pump	3%	0%	0%	1%
no response	0%	0%	2%	1%
Open water sources (i.e. canals, ponds, rivers)	1%	0%	0%	0%
Borrowing water from neighbours	0%	0%	0%	0%
Do not know	0%	0%	0%	0%

Water collection responsibility

Water collection responsibility was found to be held mainly by males overall for the locations sampled by 54% of the households. In particular, water collection responsibility amongst females is 35%. Households did report Adolescent and Child, under 18 years old, being responsible for water collection by 4%. For those

households that reported Adolescent and Child, under 18 years old responsible for data collection, the following issues and concerns with this task including risk of accidents (with cars), too heavy to carry and tiring, along with water points being too far away from shelters.

Daily water collection, distance to water source and time taken to collect water

89% households reported collecting 'over 50 litres of water' daily overall for the locations sampled. 7% of household reported collecting between '25 – 50 litres' daily. Additionally, 3% of households reported collecting 'less than 25 litres' daily.

8 % of households reported the distance to the main water source as 'less than 100 metre' overall for the locations sampled, 3% of household reported the distance to the main water source was '100 – 500 metres'.

60% of households reported the time taken to collect water, including queuing and travel time, as 'less than 15 minutes' overall for the locations sampled, 29% of household reported 'more than an hour'.

Availability and physical status of water source

The availability of the main water source was reported as 'inconsistently available (no regular schedule or not available daily)' overall for the locations sampled by 88% of the households, with the remainder reporting as 'Consistently available' was cited by 12% of households.

The physical status of the main water source was reported as 'partially functioning/need to repair' overall for the locations sampled by 64% of the households, with 30% reporting 'functioning well/no damages' and 3% reported 'not functioning'.

Type and condition of water container used for water collection and storage

The most common type of water container used for water collection and storage was reported as 'water tank' overall for the locations sampled by 76% of households. Additionally, 'narrow-neck e.g. jerry can' was selected in 21% of households.

The most common condition of the water container used for water collection and storage, as observed by the data collectors, was reported as 'clean and covered, with lid' overall for the locations sampled by 63% of households. Containers that were 'clean and uncovered, no lid' were reported in 24% of households.

Water treatment practices and rationale for treating water

The most common water treatment practice reported 42% of the households reporting 'no treatment', using 'chlorine tablets' reported by 27%, followed by 16% reported 'stand and settle', 11% reporting drinking water that was 'already treated', 2% cited for both 'boiling' and 'filtering'.

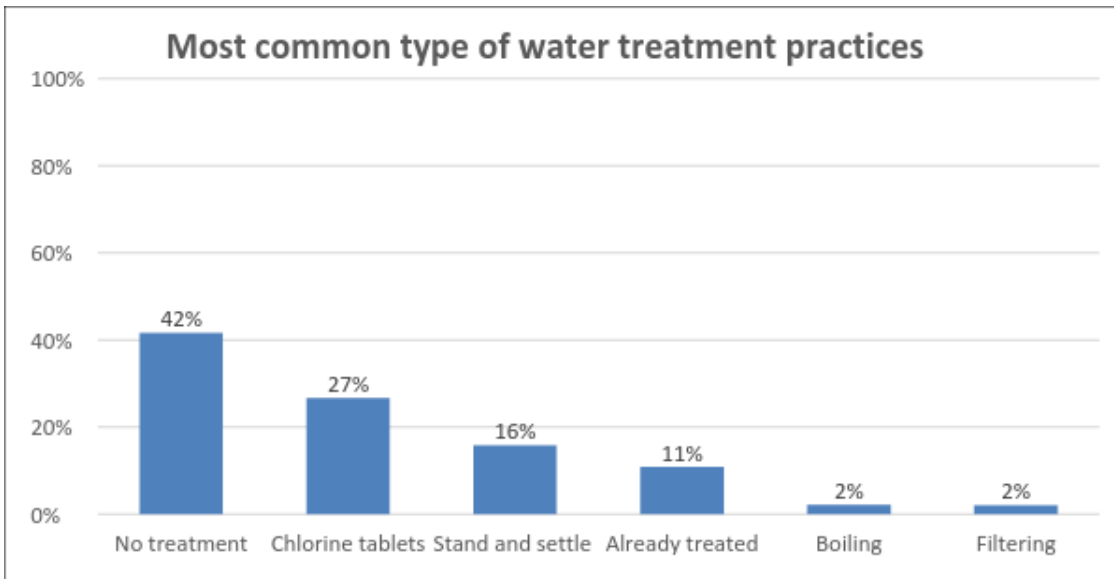


Figure 4: Most Common Water Treatment Practices

Amongst those that reported practicing water treatment, 58% of sampled households, the most common reasons for treating water was ‘to kill bacteria and parasites’, overall for the locations sampled in Kirkuk in 30% of households. The next most common reasons for treating water were ‘to make or keep water safe for drinking’ as reported by 20% of households, followed by ‘improve taste/odour/colour’ as reported by 13% of households.

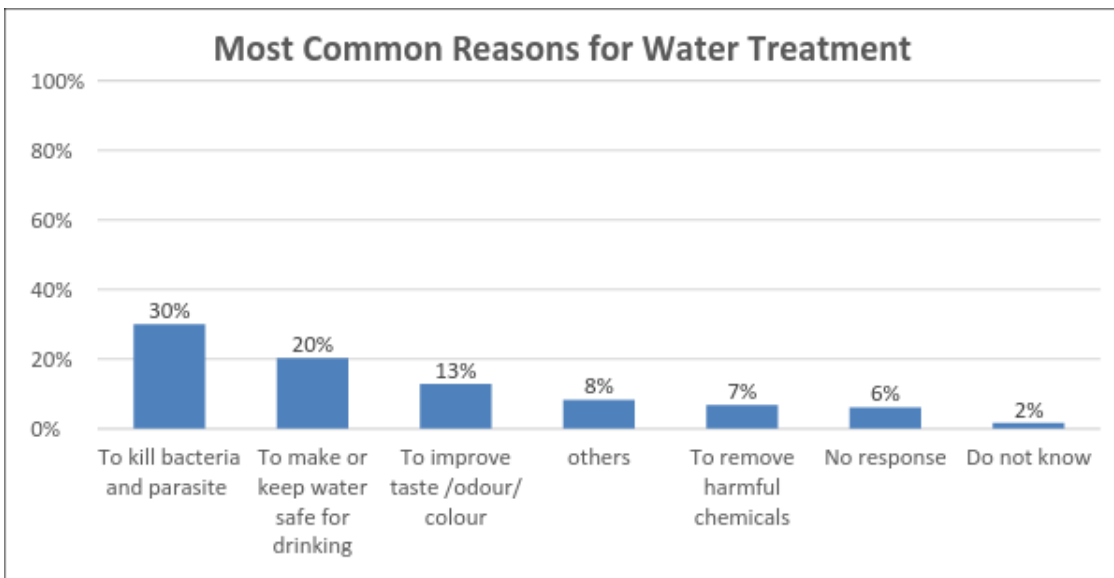


Figure 5: Most Common Reasons for Water Treatment

Water management committees (WMC) existence, training and level of activeness

Water management committees (WMC) were reported as not existing in 82% households overall for the locations sampled, 11% cited that their main water source have WMC. Additionally, ‘no training’ for WMCs was cited at 40%, with households responding that 60% do not know, 53% reported that they do not know ‘active and holding meetings regularly’ and 40% reported no.

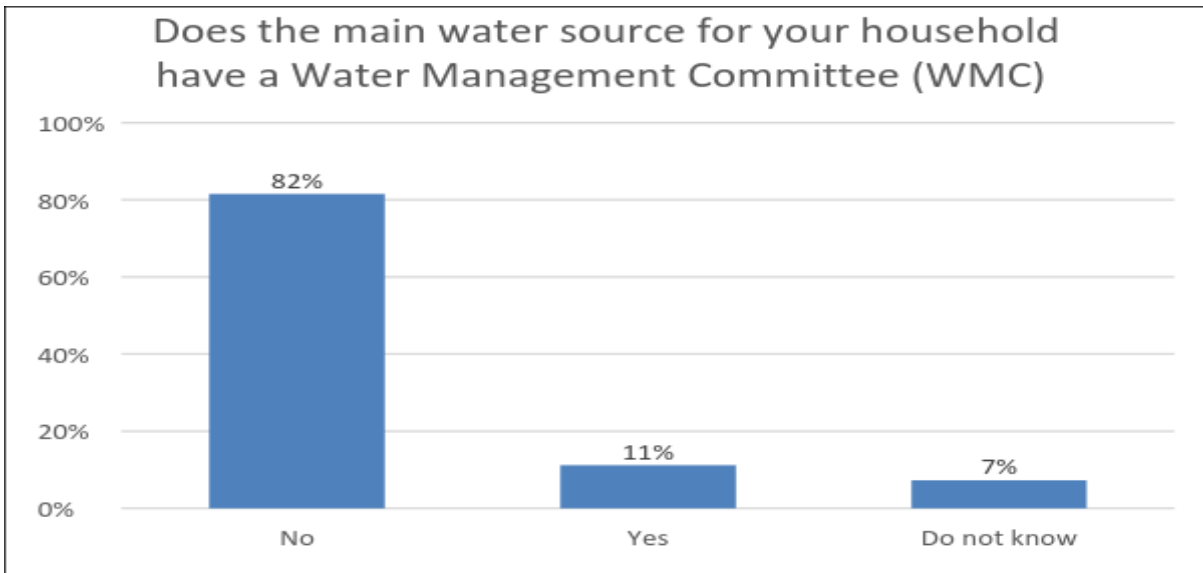


Figure 6: Existence of a Water Management Committee for Main Water Source

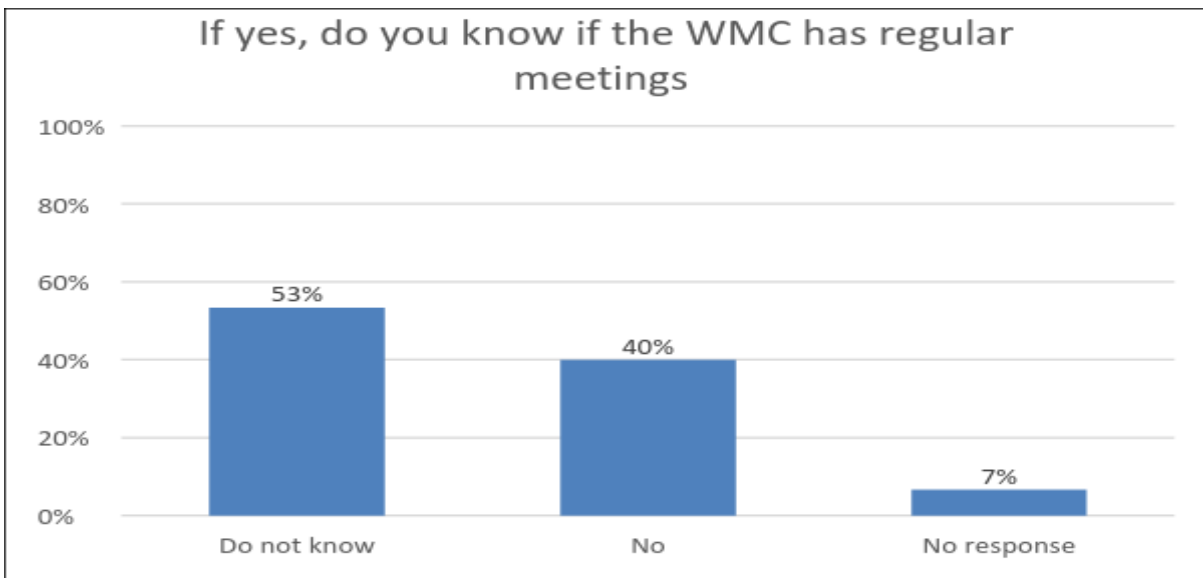


Figure 7: Knowledge of WMC meeting regularity

Figures 6 and 7 outline the existence, training and level of activeness of WMCs.

Sanitation and Waste

Common defecation practices

The most common defecation practices by respondents was the use of ‘latrines (individual)’ cited at 81% overall for the locations sampled, followed by 13% reported using ‘latrines (communal)’ and 6% ‘near house or shelter’.

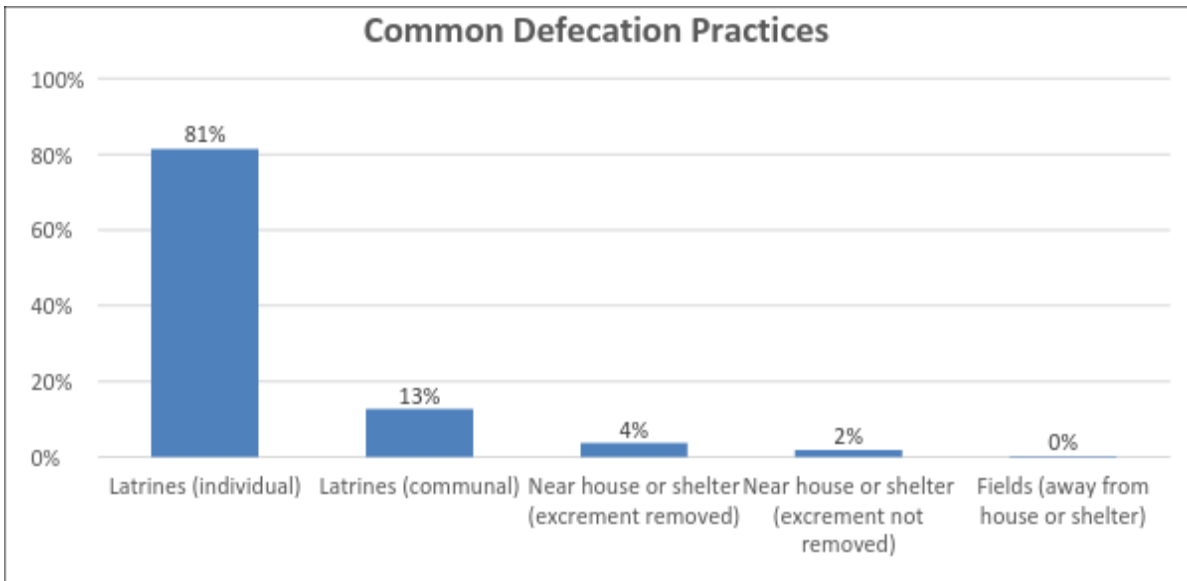


Figure 8: Most Common Defecation Practices by Respondents

In particular, for children under five, 35% of households reported the most common defecation practice as the use of ‘latrines (individual)’ overall for the locations sampled. This was followed by the use of ‘nappies or diapers’ with 31% households reporting and 11% using ‘latrines (communal)’. In particular, reported open defecation practices with 6% of children under five defecating ‘near house or shelter, excrement removed’ and 2% of children under five defecating in ‘fields, away from house or shelter’.

Access and usage of latrines

Access to latrines was cited at 83% for ‘latrine (individual)’, 24.7% for ‘latrine (individual)’ and 15% for ‘latrine (communal)’ overall for the locations sampled. ‘No latrine access’ was reported at a rate of 3%. The most common type of latrine, by those that cited access to a latrine, 97% of sampled households, was a ‘pour flush latrine’, reported by 82% households overall for the locations sampled. This was reported for using ‘pit latrine (fixed or permanent)’ cited by 12% of households and ‘pit latrine (temporary)’ cited by 5% of households.

For those that cited access to a latrine, 92% reported latrines not being adapted for disabled, elderly and/or pregnant females overall for the locations sampled.

Additionally, 76% reported latrines not being adapted for children or as ‘child friendly’ overall for the locations sampled.

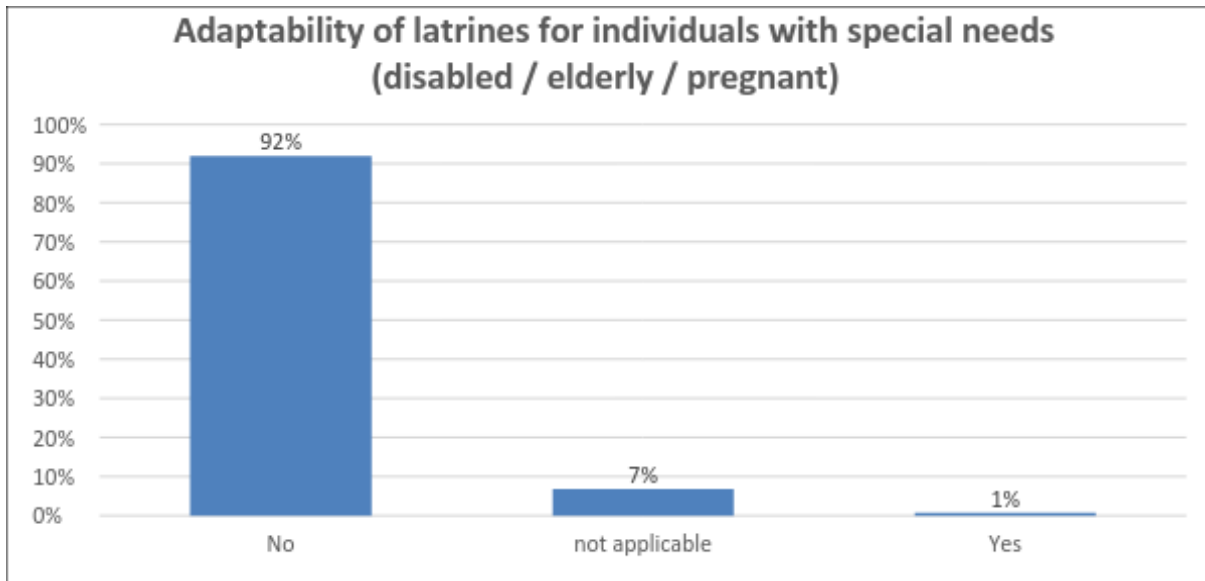


Figure 9: Adaptability of Latrines for Individuals with Special Needs

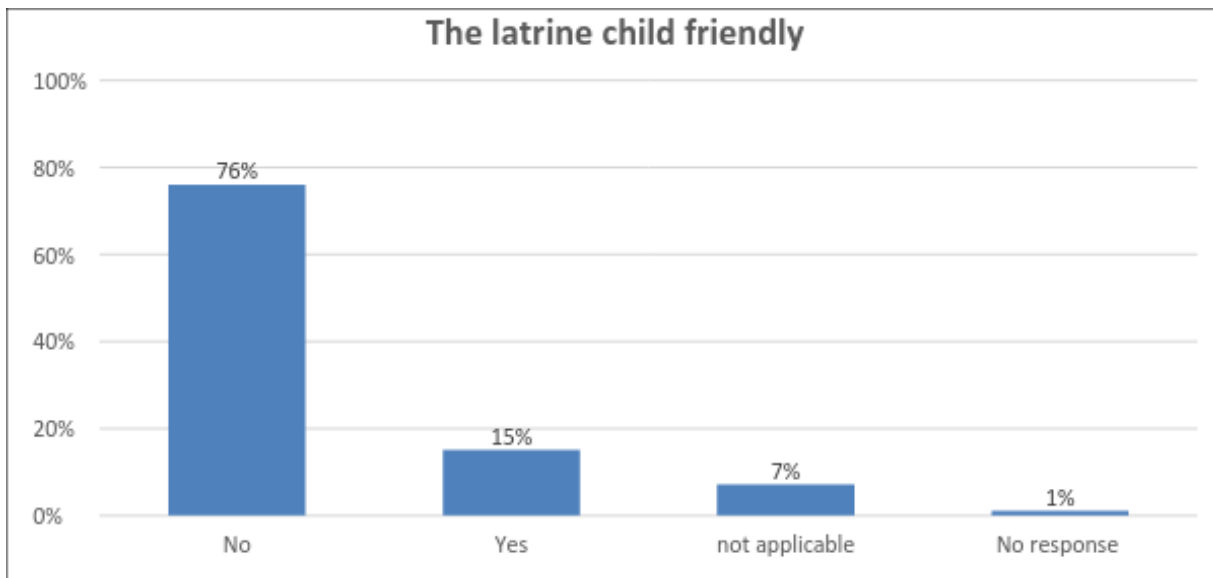


Figure 10: Child Friendliness of Available Latrines

Figures 9 and 10 outline the adaptability of latrines for vulnerable groups.

Hand washing facilities

Of the households that reported access to a latrine, 97% of the sampled households, 71% cited the absent of a functioning hand washing facility near the latrine overall for the locations sampled, 29% cited the availability of functioning hand washing facility near the latrine, among them 20% cited that a child friendly facility.

Access and usage of bathing showers

Access to bathing showers was reported by 75% of households as ‘individual’ and by 9% of households as ‘communal’ overall for the locations sampled, 16% of household reported no access to bathing showers.

For those that cited access to bathing showers, 89% reported the bathing showers not being adapted for disabled, elderly and/or pregnant females overall for the locations sampled. Additionally, 72% reported the bathing showers not being adapted for children or as ‘child friendly’ overall for the locations sampled, and 19% reported that bathing showers being adapted for children or as ‘child friendly’.

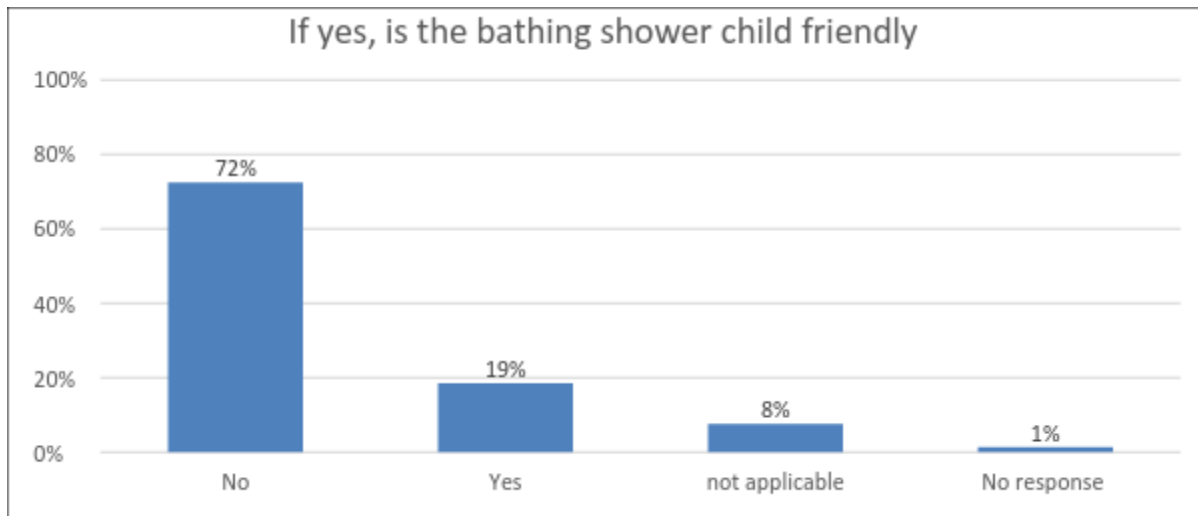


Figure 11: Adaptability of Bathing Showers for Children

Physical status of latrines and bathing showers

The physical status of the latrines was reported as ‘partially functioning/need to repair’ overall for the locations sampled by 62% of the households, with 27% reporting ‘functioning well / no damages’, ‘not functioning’ reported by 10% of households overall in the locations sampled.

The physical status of the bathing showers was reported as ‘partially functioning/need to repair’ overall for the locations sampled by 61% of the households, with 29% reporting ‘functioning well / no damages’ and 7% cited ‘not functioning’ of households overall in the locations sampled.

Solid waste disposal practices and stagnant water

37% of households were observed by the data collectors to have ‘significant presence (within 50m)’ of solid waste in or around the shelter overall for the locations sampled. There were reports of ‘no significant presence (> 100m)’, and 29% cited ‘moderate presence (within 100m)’.

The most common solid waste disposal practice was cited as use of ‘burning’ by 35% of households, 27% reported practicing ‘existing waste management system (i.e. garbage collection)’, followed by ‘open pit, uncovered and not buried’ by 25% of households overall in the locations sampled.

The level of satisfaction of the solid waste disposal system was cited as ‘dissatisfied’ for 42% of households overall for the locations sampled, and 13% of households reported ‘satisfied’ with the existing solid waste disposal system.

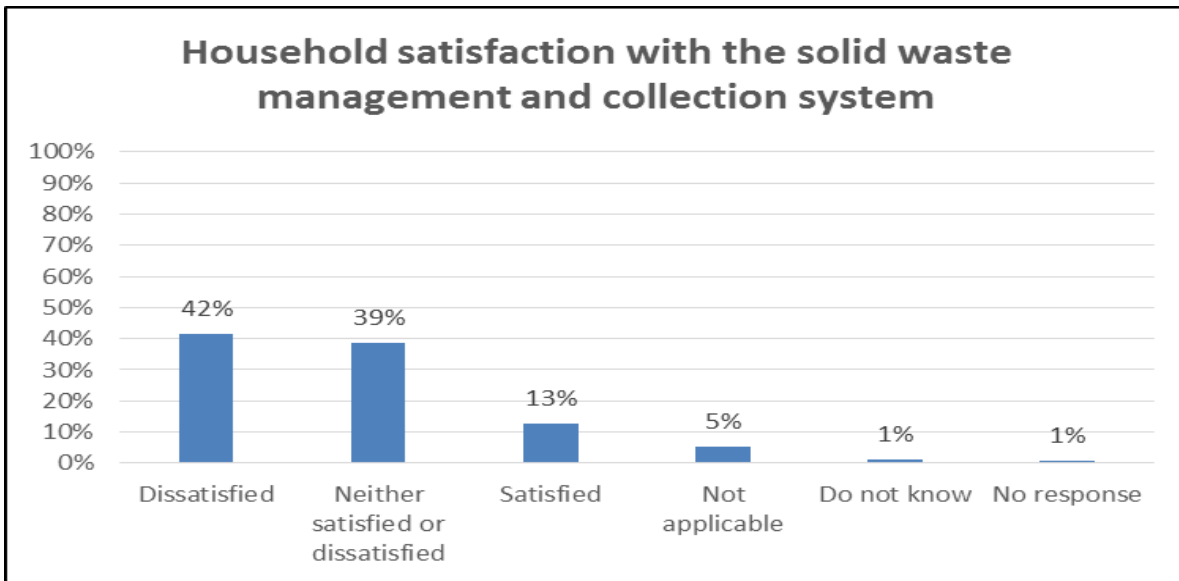


Figure 12: Level of Satisfaction with the Solid Waste Management System

Of the households that reported ‘dissatisfaction’ with the solid waste management system, 42% of the sampled households, 39% cited the main reason as ‘service is not available / does not exist’, and 31% households reported ‘service not frequent enough or sufficient’ overall for the locations sampled.

35% of households were observed by the data collectors to have ‘no significant presence (> 100m)’ of stagnant water around the shelter overall for the locations sampled. There were reports of ‘significant presence (within 50m)’, where 29% of households were observed to have stagnant water around the shelter.

Hygiene Knowledge and Practice

Hand washing practices

The most common times for hand washing was cited as ‘prayer time’ by 22% of respondents overall for the locations sampled. This was followed by 18% for ‘after defecation or latrine use’, ‘after eating’, ‘before eating’ respectively, 13% cited ‘before food preparation’, 5% for ‘after handling children/infant faeces’ and 4% of respondents cited for ‘before breastfeeding infants.’

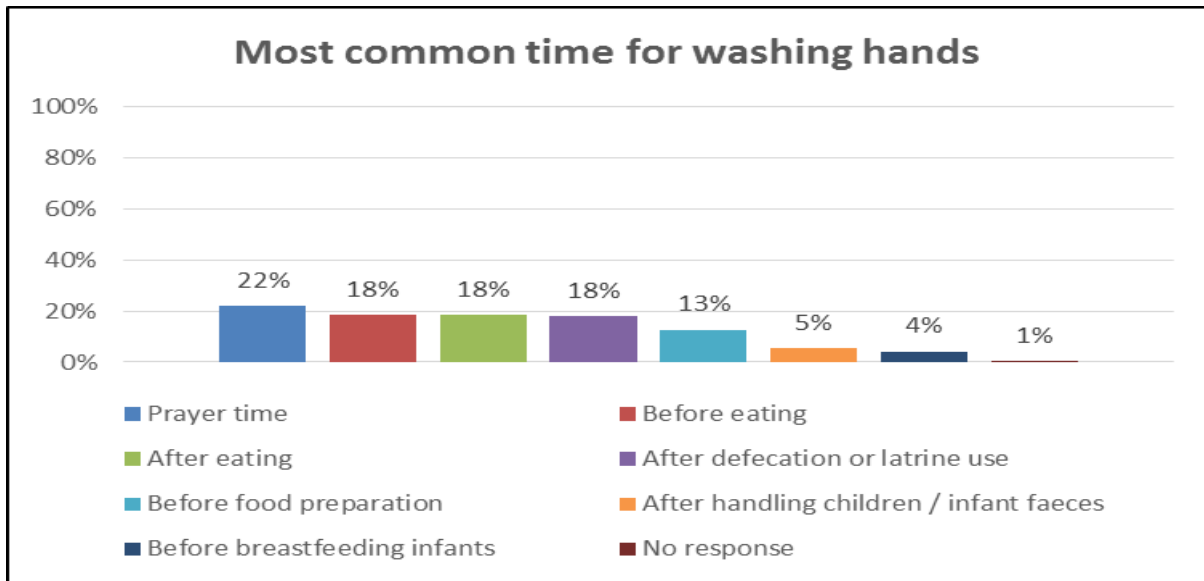


Figure 13: Most Common Times for Hand Washing (%)

It is important to note that out of the five most critical times for hand washing¹⁴, that at least three of these were cited by 59% of respondents.

The main reasons cited for practicing hand washing was reported as ‘to get rid of dirt’ by 76% of respondents overall in the locations sampled. In particular, ‘Soap, shampoo or laundry detergent’ were cited as the most common hand washing agent as reported by 90% of households overall in the sampled area.

Hygiene messaging

Of the households reported that most effective way of receiving hygiene messages, 31% of the sampled households cited ‘cleaning campaign’, followed by ‘hygiene promoters/household visits’ reported by 19% and 42% of households reported that ‘posters or flyers’ is the least effective way of receiving hygiene messages overall for the locations sampled.

¹⁴ Before food preparation, before eating, before breastfeeding infants, after defecation or latrine use and after handling children / infant faeces

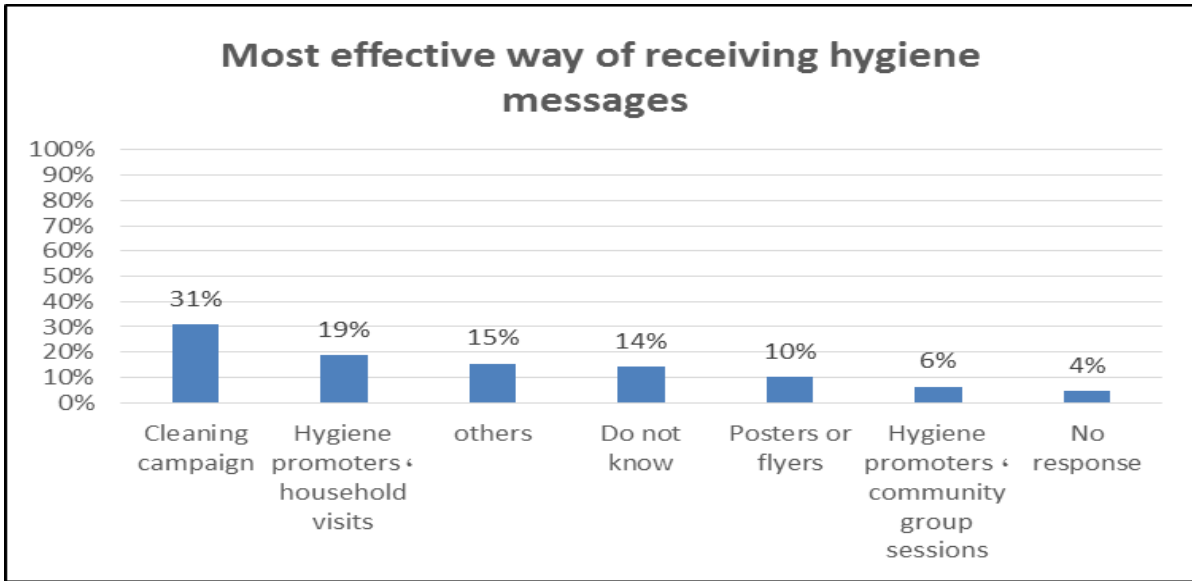


Figure 14: Most Effective Way of Receiving Hygiene Messages

Disease prevention and treatment

Household most common diseases experienced was reported as ‘not applicable’, by sex and age, by 35% of the households overall for the locations sampled. In particular, for children under five, it is important to note the reporting of ‘diarrheal diseases (within the last 2 weeks)’ was reported by households at a rate of 26% for males and 34% for females. ‘Skin diseases (within the last 2 months)’, by sex and age, was reported by 19% of the households.

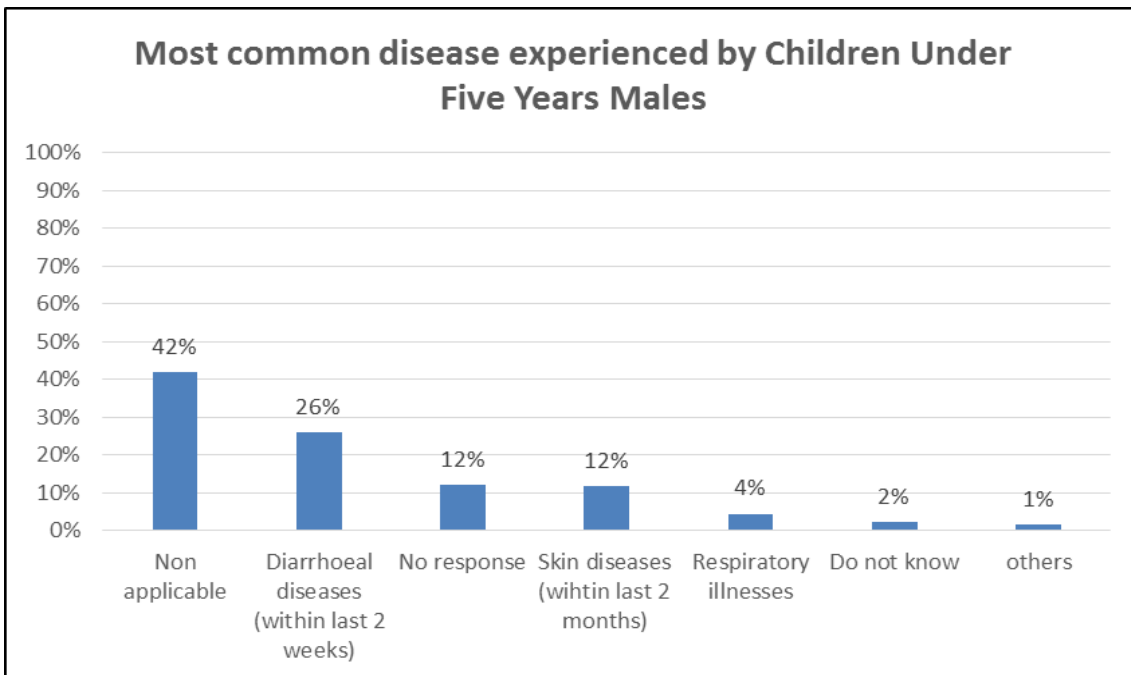


Figure 15: Most Commonly Experienced Disease of Boys Under Five Years

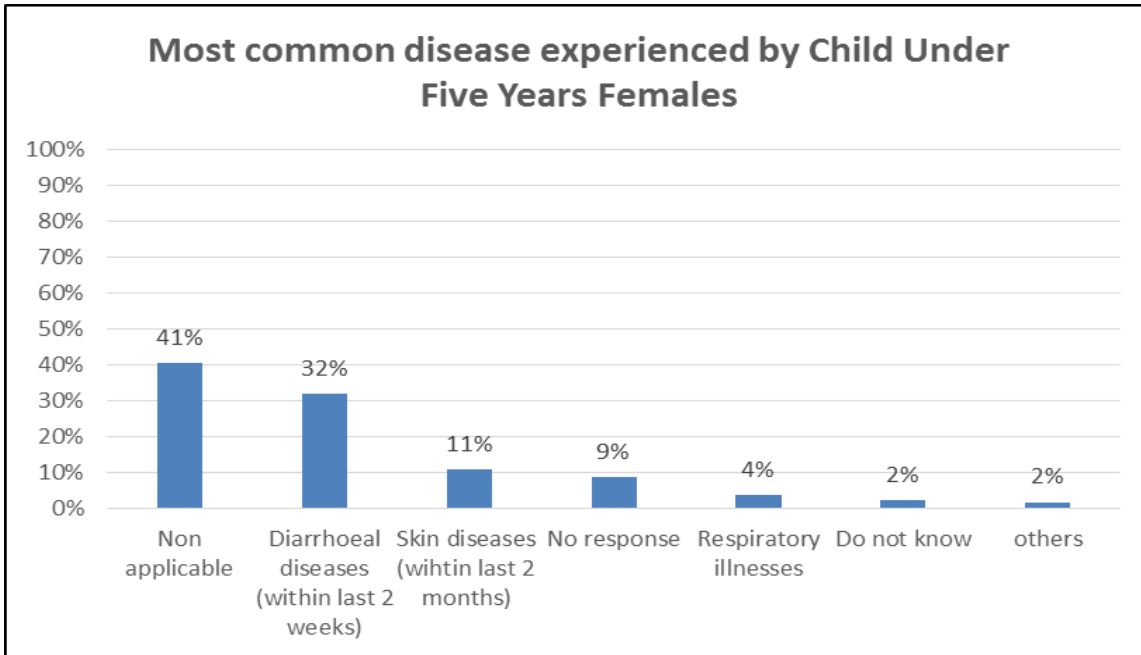


Figure 16: Most Commonly Experienced Disease of Girls Under Five Years

Figures 15 and 16 highlight the most common diseases for children under five.

Households reported the most common methods used to prevent diarrhea, with 26% citing ‘hand washing with soap’, 19% ‘drinking clean water’, 10% ‘proper personal hygiene’, ‘proper household hygiene’, ‘eating well cooked food’ respectively and 8% cited ‘use of latrine/no open defecation’ overall for the locations sampled.

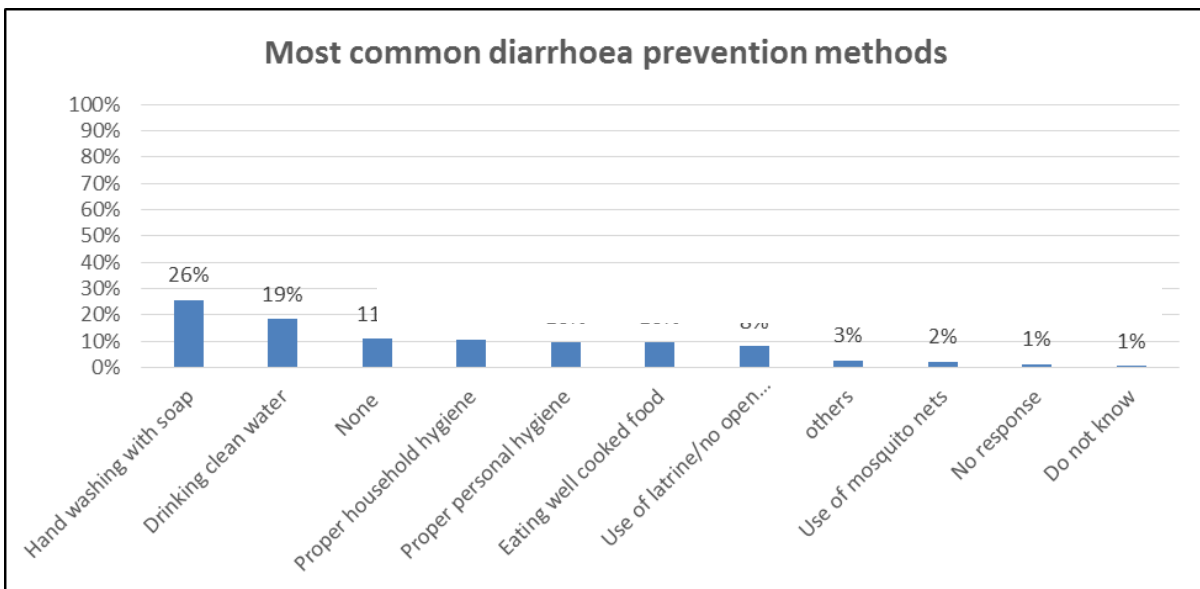


Figure 17: Most Common Diarrhea Prevention Methods

Households also reported the most common diarrhea treatment methods, with 43% seeking ‘medication from a health center/clinic’ and 31% using ‘herbs or traditional medicine’ overall for the locations sampled.

DISCUSSION OF KEY FINDINGS AND RESULTS

Following is a discussion of the key findings and results based on issues / gaps highlighted from quantitative data collection based on a comparison with key project indicators. This includes specific recommendations on the need for additional qualitative data and triangulation required using secondary data sources for the particular aspects highlighted.

Household demographics

Household characteristics

It is important to note that 55% of the sampled households reported having children under 18 years old. As organisations that places a high focus on children, particularly during emergencies, NRC, SC and WV should utilise this information to ensure child appropriate and focused WASH programming to support their involvement and participation in the response. Additionally, adult females compose 22% of the sampled households, further supporting the need to ensure that vulnerable groups, such as, females and children are specifically address, as together, these groups compose 77% of the sampled households. FGDs with females and children would help to better understand the specific needs faced by these groups to ensure that future WASH programming adequately responds to their needs.

Water

Access to water sources

The key concern raised for access to water sources was found in Kirkuk, as 84% of households cited their main water source to be 'piped water supply'. As previously stated, all INGOs is not currently operational in all areas included in the sample size in Kirkuk governorate, however, will use this data for assessment purposes.

Water collection responsibility

Water collecting responsibility was found to be held with female and adolescents and children, 5 – 17 years, by 39%. It would be quite useful to better understand the challenges faced by adolescents and children to provide increased support to these particular cases. As mentioned previously, some of the key challenges are the safety and security of those responsible for water collection, however, the use of a FGD with adolescents and children and the households involved could help to better understand the specific needs faced by these groups to ensure that future WASH programming adequately responds to their needs.

Daily water collection, distance to water source and time taken to collect water

The key concern for daily water collection was found in WV's locations , as 6% of households reported collecting 'less than 25 litres' daily, despite having 89.4% of household reporting access to 'piped water supply'. Based on a household size of 6.6, this each member would have access to less than 3.7 litres per person per day (on average) or what is has been defined as survival needs for water intake (drinking and food) per Sphere standards. Additionally, 10% of households in WV's locations, 5% in NRC's locations and 6% in SC's locations reported collecting between '25 – 50 litres' daily, which on average would mean that each member would have access to approximately 5 litres per person per day. It is important to note that the minimum Sphere standard of 'at least 15 litres per day per person' includes water for drinking, cooking, personal hygiene etc. and that in most locations, water for drinking, cooking and personal and domestic hygiene is being supplied directly within other available facilities i.e. latrines, hand washing facilities, bathing showers and laundry etc. and is most likely not directly figured into what has been reported by households sampled. However, it would be useful to better understand why locations within WV, NRC, and SC locations are reporting such low rates of daily water collection, particularly as the three INGOs are the one's of the primary providers of water for these locations.

Distance to water source cited is almost in line with minimum Sphere standards of ‘maximum distance from any household to the nearest water point is 500 metres’ with 88% for all locations sampled.

Time taken to collect water is almost also in line with minimum Sphere standards of ‘no more than 30 minutes’ including queuing and travel time for 65% of household, except for the locations sampled in WV’s locations, with 50% , NRC with 26% and SC with 10% of households reporting collection time as ‘more than 30 minutes’. As previously stated, the three INGOs is not currently operational in all areas included in the sample size in Kirkuk governorate, however, will use this data for assessment purposes.

Availability and physical status of water source

The key concern regarding the availability of the water source found as 88% of households reported this to be ‘inconsistently available’. Additionally, 64% of households reported the physical status of the water source as ‘partially functioning / need to repair’. It would be useful to better understand why locations within Kirkuk governorate are reporting issues with the availability and physical status of the water source, particularly, as the three INGOs are the ones of the primary providers of water for these locations. In the case of Kirkuk governorate, these discrepancies are understandable, as the three INGOs are not currently operational in all areas included in the sample size, however, will use this data for assessment purposes.

Type and condition of water container used for water collection and storage

The use of ‘water tank’ by 76% and ‘narrow-neck e.g. jerry can’ by 21% that are ‘clean and covered, with lid’ demonstrates good hygiene practice across the locations sampled in the all locations. The only discrepancy is the reporting by 24% of households using containers that were observed to be ‘clean and uncovered, no lid’, 13% of households using containers that where observed to be ‘dirty’ and would be useful to better understand why these type of containers are being used through FGDs with households in the locations sampled.

Water treatment practices and rationale for treating water

The key concern regarding water treatment practices was found in all locations, with 42% of households reporting ‘no treatment’. This combines the need for hygiene promotion to promote behaviour change coupled with access to water treatment options for these households. As previously stated, the three INGOs are not currently operational in all areas included in the sample size, however, will use this data for assessment purposes.

The rationale cited by the households that reported water treatment, 58% of the sampled households, demonstrates good understanding of the importance of treating water and reinforces good hygiene practice.

Water management committee (WMC) existence, training and level of activeness

It appears that overall an increased focus on refresher training of existing water management committees (WMC) could help to further increase level of activeness. It would be useful to hold FGDs with both members and non-members of the WMC to better understand the specific needs faced by these groups to ensure that future WASH programming adequately responds to their needs.

Sanitation and Waste

Common defecation practices and access and usage of latrines

The common defecation practices reported by households in the locations sampled were quite in line with what was reported in terms of access and usage of latrines. In all governorates sampled, ‘latrines (individual)’ are the most commonly used for defecation and are also indicated as being accessible.

The key concern regarding defecation practices was found in WVs locations, with 14% of household reporting that children under five are defecating ‘near house or shelter (excrement removed)’. This raises many issues related to the health status and condition of this particular vulnerable group, as well as, protection issues. A FDG with the caregivers of children under five would help to better understand the specific needs faced by this group to ensure that future WASH programming adequately responds to their needs, particularly as WV is not currently operational in all areas included in the sample size, however, will use this data for assessment purposes.

Additionally, the adaptability of the accessible latrines for vulnerable groups, such as, disabled, elderly and/or pregnant females and children was found very limited. A FDG with members of these groups and their caregivers (where applicable) would help to better understand the specific needs faced by this group to ensure that the future WASH programming adequately responds to their needs.

Hand washing facilities

Hand washing facilities appear to be somewhat accessible near latrines, in addition to being considered adapted for children. Of particular concern as only 29% of households reported hand washing facilities near latrines, despite the three INGOs being one’s of the primary providers of sanitation in the locations sampled. A FDG with caregivers and children would help to better understand why in some of the locations sampled hand washing facilities are not considered to be ‘child friendly’.

Access and usage of bathing showers

In all locations sampled, ‘bathing showers (individual)’ are the most common used accessible for personal hygiene. Gender separation of bathing showers was reported by 7% of households, however, could be useful to carry out KIIs and FGDs to better understand if these pertain to shared or individual facilities and to identify if there are any specific needs faced by either males or females to ensure safety and protection in the use of these facilities.

Additionally, the adaptability of the accessible bathing showers for vulnerable groups, such as, disabled, elderly and/or pregnant females and children was found very limited in all locations. A FDG with members of these groups and their caregivers (where applicable) would help to better understand the specific needs faced by this group to ensure that future WASH programming adequately responds to their needs.

Physical status of latrines and bathing showers

The key concern regarding the physical status of the latrines and bathing showers as ‘partially functioning / need to repair’ was found in all locations, with 62% of households reporting this for latrines and 61% of households reporting this for bathing showers. It would be useful to better understand why locations within all locations are reporting issues with the physical status of latrines and bathing showers, particularly as the three INGOs are one of the primary providers of sanitation for these locations. In the case of Kirkuk governorate, these discrepancies are understandable, as the three INGOs are not currently operational in all areas included in the sample size, however, will use this data for assessment purposes.

Solid waste disposal practices and stagnant water

In all locations sampled, the type of solid waste practice varied along with the level of satisfaction of the available service. The use of ‘existing waste management system (i.e. garbage collection’ demonstrates good solid waste disposal practices across the locations sampled in the NRC locations by 51% and WV locations by 22%. The key concern for solid waste practices are the issues cited in SC, with 56% of households practicing ‘burning’ and 27% using an ‘open pit, uncovered and not buried’. 42% of these households reported ‘dissatisfaction’ with the available solid waste disposal system particularly, as 39% of these

households reported that the ‘service is not available / does not exist’. Additionally, in SC locations, households were observed to have the highest rates of solid waste in or around the shelter and stagnant water, i.e. ‘significant presence (within 50 m). This combines the need for hygiene promotion to promote behaviour change coupled with access to solid waste disposal and drainage options for these households. KIIs and FDGs with the locations sampled in Kirkuk governorate would be useful to better understand how future WASH programming could adequately respond to their needs, particularly as the three INGOs are not currently operational in all areas included in the sample size, however, will use this data for assessment purposes.

Hygiene Knowledge and Practice

Hand washing practices

As previously mentioned, the most common times for hand washing was cited as ‘prayer time’ by 22% of respondents followed by 18% for ‘after defecation or latrine use’, ‘before eating’ ‘after eating’, 13% for ‘before food preparation’, 5% for ‘after handling children/infant faeces’ and 4% at ‘before breastfeeding infant’ overall for the locations sampled. This highlights the need for increased hygiene promotion and clarity on the critical times for hand washing, as opposed to the most common times for hand washing or as currently practiced by respondents sampled. Additionally, it is well recognised that due to religious beliefs and cultural practices of the households in the locations sampled that hand washing for ‘prayer time’ and ‘after eating’ are common, that these do not constitute any of the five critical times for hand washing directly related to faecal oral transmission routes related to disease prevention. Specific hygiene promotion sessions should be conducted focused on hand washing and the critical times for washing hands to ensure that knowledge level of the affected population is able to support current practice.

The rationale cited by the households that reported hand washing as a common practice, demonstrates good understanding of the importance of hand washing and reinforces good hygiene practice. This coupled with the finding that ‘soap, shampoo or laundry detergent’ was cited as the most common hand washing agent further in 90% of households further demonstrates that good hygiene practices do exist in relation to washing hands.

Hygiene messaging

It is interesting to note the methods cited as most effective and least effective, included ‘cleaning campaign’ at 31% and ‘posters and flyers’ at 42%, respectively. FDGs with all locations sampled would be useful to better understand how future WASH programming could adequately respond to improving delivery methods for hygiene messages.

Disease prevention and treatment

In all governorates sampled, the households reported a low rate of morbidity for adult males and females. However, of particular concern were the rates at which the reporting of ‘diarrhoeal diseases (within the last 2 weeks)’ for children under five, at a rate of 26% for males and 32% for females. This was reported by households at a rate of 30% for males and 42% for females in NRC locations, 32% for males and 36% for females in WV locations and 16% for males and 18% for females in SC locations. Additionally, ‘skin diseases (within last 2 months)’ were reported at a rate of 11.5% and ‘respiratory illnesses’ at a rate of 4% for children under five. It is important to note that SC and NRC locations reported the highest rates of ‘skin diseases (within last 2 months)’ amongst adolescent and children (5 – 17 years) at rates of 22% and 21%, respectively. It would be useful to triangulate this data with the records from the local health centres / clinics in the catchment area through KIIs along with WHO’s regularly published ‘Early Warning and Disease Surveillance Bulletin’ for Iraq.

The common methods cited by the households to prevent diarrhea demonstrates moderate understanding of the importance of good hygiene practices in relation to health status and conditions. This included 26% of households citing ‘hand washing with soap’, 19% ‘drinking clean water’, 10% ‘proper personal hygiene’, 10% ‘eating well cooked food and 10% ‘proper household hygiene’. Additionally, practices related to most common diarrhea treatment methods also demonstrated good understanding of the importance of properly treating diarrhea for most of the households sampled. However, in SC, NRC and WV locations, 40%, 29% and 23% of households, respectively, reported the use of ‘herbs or tradition medicine’. A FDG with households in the locations sampled would be useful to better understand this practice and ensure that hygiene messaging is able to influence behaviour change for diarrhea treatment methods for future WASH programming.

RECOMMENDATIONS

The key recommendations from this KAP survey report focus on a broader objective to be achieved by the WASH programming currently being implemented by NRC, SC and WV as follows:

- Conduct KIIs and FGDs based on issues / gaps in the quantitative data within the coming weeks based aspects highlighted in the Discussion of the Key Findings and Results of this report
- Based on quantitative and qualitative data collected, develop short briefing sheets on the key findings and results for specific locations i.e. camp and non-camp settings for NRC, SC and WV locations
- Develop a response plan for the findings from Kirkuk governorate to respond to the identified needs in the locations where the three INGOs are not currently operational
- Develop a continuous monitoring framework to collect key indicators for WASH projects, on a quarterly basis with a representative sample size. This can be carried out in coordination with other WASH partners with activities in complementary operational areas
- Advocate the national WASH Cluster to establish a technical working group focused on data collection through technology to further support the establishment of a continuous monitoring framework to collect key WASH indicators amongst all WASH partners in country on a systematic basis, using an agreed upon methodology, including a representative sample size to better understand the needs of the affected population in real-time
- Increase the involvement and participation of children of different ages in the current response, particularly looking at issues plaguing children in emergencies, such as excreta disposal, hygiene messaging etc.¹⁵

DISSEMINATION

The report will be disseminated to the country office and relevant stakeholders in country, with a copy to be annexed in any upcoming donor reporting, as reference in the development of future programme proposal. Additionally, a two page KAP survey report brief will be developed based on these findings for sharing with relevant stakeholders. Further documentation and briefing sheets will be developed following qualitative data collection for specific locations i.e. camp and non-camp settings for NRC, SC and WV locations.

¹⁵ Refer to Save the Children’s 2014 Scoping Study on Emergency WASH for Children. <http://www.elrha.org/wp-content/uploads/2015/02/2014-10-11-Emergency-WASH-for-Children-Final.pdf>

CONCLUSION

This KAP survey report provides the basis for understanding coverage, access and usage of water and sanitation facilities and how to best address any identified ‘risky’ hygiene practices that could adversely affect the public health of the affected population at the locations sampled, while at the same time measure the progress of NRC, SC and WV WASH programme through the use of a continuous monitoring system to assess needs into the future.