COVID-19 Knowledge, Attitudes and Practices (KAP) Survey October 2020 (Round 5) Northwest Syria Analysis

CONTEXT

As of 7 December, there were 17,527 confirmed cases of COVID-19 in northwest Syria (NWS), including 8,334 recoveries and 221 fatalities.¹ Reports from the United Nations Office for the Coordination of Humanitarian Affairs (OCHA) indicate that the majority of newly confirmed cases in NWS, 1618 (9.23%), were among health care workers, and 747 (9.63%) cases were among community health workers and other staff working in health facilities (4.26%). Moreover, 1,596 (9.63%) cases were reported from internally displaced person (IDP) camps.¹

In April 2020, REACH began a series of monthly knowledge, attitudes, and practices (KAP) surveys with the goal of informing the communications response in light of the COVID-19 pandemic. REACH observed high levels of COVID-19 knowledge among survey respondents in the first round of data collection, which was conducted in late April as communication efforts and curfews were well under way. Greater wariness of COVID-19 was seen among attitudes and practices responses, especially among female respondents. In the second and third rounds of data collection, which were conducted in late May and late June respectively, knowledge remained high while attitudes and practices had shifted to less cautious in relation to COVID-19 among both female and male respondents.

The fourth round of data collection began as a reset of the panel study, with new respondents, and an updated questionnaire, that was designed in consultation with a public health expert. The data indicated that knowledge of preventive practices remained fairly high, and attitudes reflected a higher degree of concern regarding potential COVID-19 infection. However, preventive practices such as social distancing (<22%) and wearing masks remain low (<30% in all situations).

Similarly, the fifth and latest round of data collection demonstrated that knowledge has been consistently high, while barriers to preventive action have been an issue. Attitudes reflected a higher degree of concern regarding potential COVID-19 infection and respondents reported taking

additional preventive measures and wearing masks more often in different scenarios (while going to a friend's house, when shopping, going to work, etc.). All previous factsheets can be found <u>here</u>.

METHODOLOGY

REACH conducted a fifth KAP survey in northwest Syria from 20 to 26 October 2020. A total of 1679 individual interviews were collected using non-probability sampling (Aleppo: 993 interviews; Idleb: 686 interviews). An in-depth explanation of the methodology of this survey can be found <u>here</u>.

As in previous rounds of data collection, the sample was calibrated against an existing household survey to increase its representativeness. More information about the particulars of this calibration can be found in Appendix B at the end of this factsheet.

Results are framed through a <u>Risk Communication and</u> <u>Community Engagement (RCCE) Action Plan</u> which was developed by the United Nations Children's Fund (UNICEF) for the northwest Syria COVID-19 response. The action plan includes source, message, channels, and target audience to guide messaging campaigns in northwest Syria. This action plan was examined to see where KAP survey data could inform messaging efforts, and as such messages are presented with corresponding analysis results.

LIMITATIONS

Due to the methodology used, findings are not statistically representative and should only be considered as indicative of the situation in assessed areas. The rapidly evolving context in the assessed areas, especially with regards to the COVID-19 situation, also means that findings are only indicative of the situation at the time the data was collected (20 to 26 October 2020).



* This heat map displays the relative density of surveys, using a color scheme ranging from cool (low density) to hot (high density). For this heat map, a weight generated from a generalized regression estimator was applied, and densities represent the weighted survey population. Applying a weight means that survey responses were adjusted to match the proportions of a pre-existing, representative dataset so that the survey more accurately represents the population of interest.

HEAT MAP OF WEIGHTED SURVEY AREAS

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🔅 RESULTS BY RCCE ACTION PLAN MESSAGE²

Message: Continue to stay at home and avoid social contact unless required to go outside.

• Recommendation: Target men and women with messaging about the importance of staying at home and minimising social interactions.

• A significantly larger proportion of respondents reported staying at home more than normal in round 5 (52%), 20 percentage points more than in round 4.

• The proportion of respondents who mentioned leaving the house (97%, 2 percentage points more than in round 4) was relatively high, while the proportion of respondents who tried to maintain distance when outside remained low (24%, 3 percentage points more than in round 4).

• While the proportion of respondents who attended a large gathering reduced by 4 percentage points (53% in round 4 and 49% in round 5), it still reflects a relatively high level of social interaction.

• Recommendation: Focus messaging on the need to refrain from physical greetings as a preventative measure.

• Across both rounds 4 and 5, 50% of respondents reported greeting someone with a handshake or a hug, while the practice of washing hands has reduced by 3 percentage points (from 63% in round 4 to 60% in round 5)

Message: Wear face masks regularly when interacting in public and indoor spaces.

• Recommendation: Focus messaging on mask wearing as a preventive measures to reduce transmission in public spaces, targeting Idleb.

• Overall in NWS, 63% of respondents reported using face masks as a COVID-19 preventive measure, 7 percentage points more than in round 4. In Aleppo the percentage was higher (69% in round 5 and 65% in round 4). The percentage was lowest in Idleb with 60% reporting wearing a mask as a preventative measure in round 5, 7 percentage points more than in round 4.

• Mask wearing increased between round 4 and 5 dramatically, as did access to masks. For instance, 61% of respondents reported wearing masks while out shopping (13 percentage points more than in round 4), 22% when visiting friends, relatives, or neighbors in their house (10 percentage points more than in round 4), and 62% when going to the hospital or health center (data does not exist for round 4).

• Recommendation: Encourage use of mask alternatives if access prevents uptake of preventative measures.

• Sixty per cent (60%) of respondents reported that they had a mask in round 5 (14 percentage points more than in round 4), and those that did not have masks said it was possible to use an alternative such as scarves (56%) or a homemade mask (17%).

Message: If you have fever, cough, and difficulty breathing, share information with your health provider and seek medical assistance.

• Recommendation: Increase messaging around the possibility of asymptomatic viral infections.

 The proportion of respondents with knowledge of whether COVID-19 symptoms will always manifest was low, with 52% reporting that all infected cases show symptoms (5 percentage points more than in round 4), while 45% reported that not all cases show symptoms (4 percentage points less than in round 4).

• Respondents most commonly identified fever, cough and sneezing as COVID-19 symptoms across both rounds 4 and 5. In round 5, difficulty breathing, loss of appetite and loss of taste and smell were also identified as symptoms (no data exists for previous round), with an emphasis on difficulty breathing (4% in round 4 and 57% in round 5).

• Recommendation: Increase messaging on the importance of seeking medical assistance.

• Twenty-eight per cent (28%) of respondents in round 5 reported that they would call a doctor or medical professional if experiencing COVID-19 symptoms (2 percentage points less than in round 4). Similarly, 18% said they would go to a doctor's or clinic (3 percentage points less than in round 4). In addition, 55% said they would go to a hospital (6 percentage points more than in round 4).

Message: Stigma can be heightened by insufficient knowledge about how COVID-19 is transmitted and treated, and how to prevent infection.

• Recommendation: Highlight messaging on how much more effectively the virus can spread through contact with infected surfaces, and not just through contact with infected persons.

• Sixty-nine per cent (69%) of respondents believe that COVID-19 is generating discrimination against specific groups of people, 7 percentage points more than in round 4.

• Based on the survey, the group most likely to face discrimination related to COVID-19 is COVID-positive persons, indicating insufficient knowledge of other factors leading to COVID-19 transmission.

• Many respondents reported that COVID-19 can be transmitted through contact with infected people, and then through the air (87%, and 84% in round 5). Physical contact with contaminated objects was the third most commonly reported way of COVID-19 transmission; identified by 57% of the respondents (3 percentage points more than in round 4).

Message: Addressing myths can lead to the takeup of proven preventative measures.

• Recommendation: Understand the source of myths related to COVID-19 and identify ways to demystify the virus for all populations.

• The most popular myth respondents had heard for transmission prevention was drinking boiled herbs such as anise (reported by 55% of respondents in both rounds). In addition, 45% of respondents identified eating and drinking specific foods to boost immunity as a common myth as well (43 percentage points more than in round 4).

• Recommendation: All populations should be targeted through social media messaging and through health workers on proven prevention measures about the dangers of trusting common myths, such as drinking boiled herbs and eating certain foods to boost immunity.

• Social media is the most common source of receiving COVID-19 information, as reported by 97% of the respondents. However, the most trusted source of information was health workers at health facilities (65%, a 5 percentage points' increase from round 4).



🚯 FACTORS INFLUENCING SOCIAL DISTANCING - VIGNETTE EXPERIMENT

Scenarios measure perceptions of respondents in response to different hypothetical situations. As such, they should be interpreted as perceptions only, and not as certain outcomes. The following messages are based on the results of the vignette scenarios, which are hypothetical situations introduced in the methodology section above and further described in Appendix B below.

Key findings for risk and behavior change communication:

• Encouraging everyone to wear their masks increases the likelihood that more people will abide by mask-wearing regulations. When people see their neighbours wearing masks, they are more likely to wear a mask themselves. Mandating mask wearing through a fine and at business premises also encourages people to wear mask.

• People are less likely to leave the house if they think they are getting a cold or falling sick.

 Young people were the most likely to wear masks and leave their house, regardless of the proposed scenario. Overall, age was a more important determinant of movement than gender.

Scenario 1

Scenario 1 asked respondents about the likelihood that individuals would wear a mask based on different contexts in the next week, varying age (24 years old vs. 58 years old) and gender (male / female). The contexts were: required by authorities under a fine, worn by the majority of neighbours, and required by business owners upon entering their premises. A sample scenario went as follows: "Imagine that a woman is 24 years old and owns a mask, how likely is she to wear it next time she leaves the house if it was required by authorities under a fine? Within the space of a week, how likely is she to leave her house to visit family or friends?"

Results

The model suggests that younger people are two percentage points more likely to wear masks when leaving the house than older people, regardless of the context.

There were no significant differences between men and women when looking at the likelihood of whether they would wear a mask.

Compared to a scenario in which masks were worn by the majority of neighbours, a person was 16 percentage points more likely to wear a mask if required by authorities under a fine. People were 15 percentage points more likely to wear a mask if required by business owners than if worn by neighbours and one percentage point more likely to wear a mask if required by authorities than if it was required by businesses on their premises. Average marginal effects indicated that people were 15 percentage points more likely to wear a mask if worn by neighbours (p value: 0.00; 95% CI: -0.20, -0.11). The effect of other contexts (required to wear a mask under a fine and required by business owners on their premises) was not substantially different when comparing one context to the other.

Therefore, results from the experiment show that neighbours wearing a mask is more likely than other contexts in influencing behavior of people considering whether or not to wear a mask.

Scenario 2

Scenario 2 looked at the likelihood that individuals would leave their house in the next week based on the status of their health (healthy, or feel like they are getting a cold), age (22 years old / 47 years old), and gender (male / female). A sample scenario went as follows: "Imagine that A man is 47. He feels like he might be getting a cold. During the week, how likely is he to leave the house to visit family or friends?"

Results

The model suggests that younger people are 7 percentage points more likely than older people to leave the house in the next week, regardless of the status of their health. Average marginal effects indicated younger people were 7 percentage points more likely to leave their house overall when compared to older people (p value: 0.00; CI: -0.11, -0.03).

The feeling of catching a cold deterred people from leaving their house by 37 percentage points more than if they were healthy. Further, average marginal effects indicated that the likelihood that someone would leave their house if they had a cold was 36 percentage points less than if they were healthy (p value: 0.00; CI: -0.40, -0.32).

More information on modeling methodology is available in Appendix B; summary probability and average marginal effect tables for both vignettes can be found in Appendix A.

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Endnotes

The complete northwest Syria KAP dataset is available here.

- 1. Syrian Arab Republic: COVID-19 Response Update No. 13 9 December 2020 World Health Organization (WHO) and the Office for the Coordination of Humanitarian Affairs (OCHA), in collaboration with humanitarian partners.
- 2. Respondents could select multiple answers so total may be greater than 100%.

CONTACT

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Appendix A - Results Tables

Vignette 1

Table 1: Model Predicted Probabilities - Vignette 1

Gender	Age	Context	Probability
Male	Younger	Required by authorities under a fine	.9217377
Female	Younger	Required by authorities under a fine	.9357674
Male	Younger	Worn by the majority of neighbours	.7344464
Female	Younger	Worn by the majority of neighbours	.773812
Male	Younger	Required by business owners upon entering their premises	.9077903
Female	Younger	Required by business owners upon entering their premises	.9241144
Male	Older	Required by authorities under a fine	.917853
Female	Older	Required by authorities under a fine	.9325282
Male	Older	Worn by the majority of neighbours	.7732598
Female	Older	Worn by the majority of neighbours	.8083729
Male	Older	Required by business owners upon entering their premises	.9103488
Female	Older	Required by business owners upon entering their premises	.9262568

Table 2: Average Marginal Effects - Vignette 1

Factor	AME	SE	z	р	Lower	Upper
Age -older vs. younger	.0116602	.0184704	0.63	0.528	0245412	.047861
Context -Worn by neighbours	1533044	.0241341	-6.35	0.000	2006064	106002
Context -Required by businesses	009726	.0187118	-0.52	0.603	0464005	.026948
Gender - female vs. male	.0224943	.0185621	1.21	0.226	0138867	.058875

Table 3: Predicted Probabilities - Vignette 1

Factor	Probability
Gender	
Male	.8613492
Female	.8838436
Age	
Younger	.867451
Older	.8791112
Context	
Required by authorities under a fine	.9274762
Worn by the majority of neighbours	.7741718
Required by business owners upon entering their premises	.9177502

Vignette 2

Table 1: Model Predicted Probabilities - Vignette 2

Gender	Age	Condition	Probability
Male	Younger	Good health	.8977293
Male	Older	Good health	.8739184
Male	Younger	Cold	.5834431
Male	Older	Cold	.4603671
Female	Younger	Good health	.8990285
Female	Older	Good health	.8754781
Female	Younger	Cold	.5868976
Female	Older	Cold	.4639045

Table 2: Average Marginal Effects - Vignette 2

Factor	AME	SE	z	р	Lower	Upper
Age - older vs. younger	0735669	.0205359	-3.58	0.000	1138166	033317
Condition- good health vs. cold	3636673	.0205091	-17.73	0.000	4038645	323470
Gender - female vs. male	.0024655	.0204924	0.12	0.904	0376988	.042629

Table 3: Predicted Probabilities - Vignette 2

Factor	Probability
Gender	
Male	.7008313
Female	.7032969
Age	
Younger	.7411631
Older	.6675962
Condition	
Perfect Health	.8863641
Cold	.5226967

Appendix B - Methodology

Calibration Methodology

Respondents for the survey were recruited through a non probability sample. The survey was then calibrated using a generalized regression estimator. Calibration increases the weight of some respondents and decreases the weight of other respondents in reference to a preexisting, representative dataset so that the survey more accurately represents the population of interest.

The survey was calibrated on four variables: gender, age, governorate, and community size. Several other variables, namely shelter status and number of household members working, were considered but the survey proportions for these variables were judged acceptable.

Three categories for age were utilized: 18 - 34, 35 - 59, and 60 and older. Communities were categorized as large (> 20,000 inhabitants), medium (20,000 - 2,000 inhabitants), and small (<2,000 inhabitants). Estimates for gender, age, and population were taken from the Water, Sanitation and Hygiene (WASH) June 2020 survey. Government and community size estimates were taken from the Population task force June 2020 data.

After calibration, the survey proportions for the calibration variables (gender, age, governorate, and community size) exactly matched the estimated population proportions. Proportions were also compared to several benchmark variables: proportions for marital status and displacement status (internally displaced person (IDP) vs. host community) were within three percentage points of population estimates and proportions for chronic illness were within five percentage points. The code for the calibration is available upon request.¹

Analysis Methodology

Similar to the survey in previous rounds, an experimental section of vignettes was also included. Vignettes are very short, hypothetical scenarios which were presented to respondents to gauge their responses to various COVID-19 situations. Each respondent was randomly assigned to answer one scenario for two different types of vignettes.

Analysis was conducted using proportion tests of significance between weighted samples for each round. Regressions were also run looking at significant predictors for outcomes. These statistical tests were considered exploratory and contextual; while the results informed the factsheet, they are not presented numerically. Because the vignettes section of the survey was a randomized experiment, these results are presented as a series of regressions and average marginal effects, that were calculated using STATA 16.0.

Factorial survey experiments (vignette experiments) are a wellestablished method of inferring causal relationships between factors (expressed as variations in vignettes) and respondents perceptions or judgments. In a context where respondents' answers are likely to be influenced by social desirability bias (i.e. respondents might be tempted to over-report their likelihood of practicing social distancing), factorial experiments minimize bias by inquiring about the action of a hypothetical individual instead of the action of the respondent.²

The results of the factorial survey experiments were estimated with logistic regression models. The independent variables for vignette 1 were gender of the character in the vignette (female vs. male), context in which people were required to wear a mask (required by authorities under a fine, worn by the majority of neighbours, required by business owners upon entering their premises), and age of the character in the vignette (older, i.e. 58 years old in the vignette vs. younger, i.e. younger than 24 years old in the vignette). The independent variables for vignette 2 were gender of the character in the vignette (female vs. male), type of health in the vignette (good health vs. feeling like they have a cold), and age of the character in the vignette (older, i.e. 47 years old in the vignette vs. younger, i.e. 22 years old in the vignette). The dependent variable in vignette 1 was the respondent's response as to how likely the character was to wear a mask, while in vignette 2 it was the respondent's response as to how likely the character was to leave the house to visit family/friends within the space of a week. Responses were binned into very likely/likely vs. neutral/unlikely/very unlikely. Logistic regressions represent the log odds that the respondent selected very likely/likely as their response compared to the log odds that the respondent selected neutral, unlikely, or very unlikely as their response, controlling for each independent variable.

The average marginal effects (AME) were then estimated for all independent variables. For a binary, independent variable such as gender, the AME approximates the difference between the average predicted probability for all combinations of independent variables that include female (e.g. predicted probability for 25 yr. old female in a scenario where there is no curfew, predicted probability for 55 yr. old female in a scenario where there is a flexible curfew, etc.) and the average predicted probability for all combinations of independent variables that include male.

Logistic regressions fitted for data collected by two separate data collection teams working on NES and one data collection team in NWS to ensure that results were comparable. Receiver operating characteristic (ROC) curves were examined for all logistic regressions and area under the curve (AUC) was calculated. Goodness-of-fit testing was also conducted, and logistic regressions with interactions for all independent variables were examined, but the inclusion of interactions had no significant effect on AME.

^{1.} For background information on using generalized regression estimators to calibrate survey data see Thomas Lumley, Complex Surveys: A Guide to Analysis Using R, p. 135 – 165. For an overview of approaches to weighing non probability samples see Carina Cornesse et.al., "<u>A Review of Conceptual Approaches and Empirical Evidence on</u> <u>Probability and Nonprobability Sample Survey Research</u>," Journal of Survey Statistics and Methodology, February 2020, p. 4–36. For a less technical introduction see Andrew Mercer, Arnold Lau, and Courtney Kennedy, "<u>For Weighing Online Opt-in Samples.</u> <u>What Matters Most?</u>" Pew Research Center, January 2018.

^{2.} Ulf Liebe et. al provide an overview of the use of factorial experiments in development contexts in "<u>Using Factorial Survey Experiments to Measure Attitudes, Social Norms,</u> and Fairness Concerns in Developing Countries," Sociological Methods & Research, October 2017. For an example from the Syrian context, see The World Bank's "<u>The</u> Mobility of Displaced Syrians: An Economic and Social Analysis" pages 221 – 225.