

ASSESSING POPULATION KNOWLEDGE, ATTITUDES AND PRACTICES

Knowledge, attitudes and practices (KAP) towards dietary salt can include population views and habits related to salt use, including:

- Knowledge of salt: How much salt is eaten by individuals each day? What is the recommended level of salt to eat each day? Is eating too much salt an issue? Where does most of the salt come from in the diet?
- Attitudes towards salt: How concerning are levels of salt in food, and why? Are individuals trying /taking responsibility to reduce the amount of salt they eat? Who is responsible for reducing the amount of salt eaten – individuals, food companies or the government?
- Salt-related practices: How often is salt added when cooking? How often are salt or high-salt sauces (e.g., ketchup, mustard) added at the table? Do individuals eat salty snacks on a regular basis? How would individuals reduce the amount of salt they eat?

Methods to Assess KAP

Standalone Survey

As part of the development phase of a salt reduction strategy, KAP surveys can be conducted with a representative sample of the target population. Standalone KAP surveys can be combined with assessing sources of salt and measuring salt intake, again with a representative sample of the population. Ideally, key questions used should be similar across all Eastern Mediterranean countries, allowing for comparison across the region and complementary policies.

Incorporate Questions into Existing Surveys

KAP can also be assessed via smaller-scale surveys and focus groups. A multistep approach can work well: KAP can be addressed by simple questions incorporated into existing surveys (e.g., as is done in the NCD STEPs surveys) and followed up with more targeted efforts and more detailed or complex questions. Qualitative focus groups can provide important detailed information, while observational studies are valuable tools for validation of self-reported data

When to Conduct a KAP Survey

KAP surveys should be conducted prior to implementing an intervention, to provide baseline data which can then be used to monitor and evaluate the success of the intervention.

WHY IS IT IMPORTANT TO MEASURE KAP?

It is necessary to understand the population patterns of intake of dietary salt, views and habits related to dietary salt, and knowledge of the impact of salt on health. This can be used as a monitoring and evaluation tool i.e. to assess how KAP alters as the result of a salt reduction intervention. Assessing KAP towards dietary salt amongst the public, food industry and policy makers can be a valuable tool to guide the design and promotion of appropriate programmes.

KAP can also help reveal any variations in views regarding salt consumption, dependent on age, sex, ethnicity or socioeconomic group. Data gained can help guide the development of interventions, for example, a public education or awareness campaign to raise awareness of high salt foods, particular food habits, labelling, or as a tool to engage the food industry in reformulation to reduce levels of salt in their products.

KAP assessments may show that those being surveyed are aware of their salt intake and are actively trying to reduce how much salt they eat, but this does not necessarily translate to population behaviours and impact at population level. If KAP are strong, yet salt intake is also high, there is still a need for a salt reduction policy.

Qualitative components can be incorporated into KAP surveys if the stakeholder wishes to obtain some in depth views/ information about the status of salt intake and gain insights about the problem that have not been studied so far.

Who Should Conduct the KAP Survey?

Interviews can be conducted by institutional staff, research staff, students or contracted temporary field staff. Partnerships can be formed with local universities to coordinate survey planning, protocol writing and determining sample size, whilst allowing the students to aid in data collection. It is also possible to contract external consultants, if costs allow.

Training must be provided to those administering the KAP or similar questionnaires and surveys, to ensure that they have full understanding of the questions to be asked and the questions that require one or more answers. They must be trained not to lead answers from participants in the questionnaire/survey but instead to ask the questions and give explanation on the context of the question only, if asked. Those administering the survey must be able to read and write, speak local languages and be aware of local cultures and contexts. Photocards should be supplied to those administering questionnaires to enable them to provide examples and aid participants to answer questions. Field supervisors are required to check over forms for completeness before data analysis begins.

Conducting a KAP survey

Following an adapted version of previous WHO guidance, the following steps should be followed when conducting a KAP survey [1].

Review Existing Information

Determine the existing information, if any, available on population KAP in the country, by reviewing published research and reports, determining if national level surveys have already taken place and through key informant interviews with governmental staff, e.g., Ministry of Health. This information will help define the aims of a KAP survey.

Define Aim of Survey

It is likely that the survey will help form the development of a salt reduction programme, by acquiring key information unique to the particular region. For example, is street food a popular feature of the food environment in the country? If so, it is necessary to assess how often survey participants consume street food.

Target Population and Sample Size

It is necessary to gather views that would be representative of the target population (where target population can refer to anything from a community to the national population). Depending on the aims of the KAP survey, when selecting the sample, it is necessary to account for:

- Demographics – sex, age, religion, ethnicity, area of country (urban, rural)
- Socio-economic background – income level, employment status
- Other characteristics – education level, known medical conditions

Therefore, stratified sampling is recommended.

Develop Survey Protocol

To guide the implementation of the survey, develop a survey protocol covering:

- Research questions – this may be the first KAP survey in the country and therefore the research question would simply refer to gathering baseline data. If previous studies (small or large scale) have been carried out in the country however, form research questions based on the results of these studies e.g., were any knowledge, attitudes or practices not covered in previous work, such as how often do individuals eat outside of the home?
- Survey aims - what data will be collected and how will the results be used?
- Target population - is the survey intended to be representative of the population, or is the aim to gain data on a specific community?
- Data collection methods – annex all questionnaires used in the protocol
- Data management and storage – how will confidentiality be ensured? How will data be stored securely (e.g., locked filing cabinets, secure servers)?
- Ethics applications and obtaining local authority permissions – as the survey involves human participation, ethical approval will be required. How will permission be obtained from the local authorities of the areas the survey will take place in?
- Gaining participant consent – how will written consent be obtained and recorded?
- Budget – required for field staff and/or consultants, supplies e.g., questionnaires, computers for data entry and analysis, costs for ethical approval if applicable, travel, dissemination.
- Timeline – ideally the survey would be carried out within one calendar year, avoiding religious and national holidays and adverse weather conditions which could affect the safety of field staff. Will participants be interviewed on the weekend to capture those who work during the week? How long will it take to train the interviewers? How many days will be required for data entry and analysis?
- Dissemination – Further to using the data to inform salt reduction strategy and programme development, a report can be created or results published in a peer-reviewed journal

The WHO STEPS survey data collection instrument provides a template for KAP surveys [2].

Piloting

To ensure the questionnaire is fit for purpose, pilot it with a sub-sample of the participants (10-20) to test participant understanding of the questions and that the questions follow a logical order. During piloting, time the interview – ideally, KAP interviews would last no longer than one hour. Revise the questionnaire based on piloting.

It is also important to pilot the questionnaire with interviewers to test their understanding of question context. If they do not understand the questions, then they will not be able to explain the questions to participants, if asked.

Data analysis

Following FAO guidance, the following steps should be followed to analyse the data gathered from the survey [3]:

- Data cleaning and entry
 - Field supervisors should check KAP questionnaires to ensure they are complete and legible. Where errors or missing information are identified, the supervisor should check first with the interviewer. If necessary, the survey participant may need to be contacted for clarification or the interview may need to be repeated.
 - Data can be entered and analysed into analysis software, such as SPSS or STATA, or into an Excel spreadsheet.
- Summarising sociodemographic characteristics
 - Summarising the profile of survey participants, using descriptive statistics, will help put the results in context.
 - Identify gaps in knowledge, attitudes and practices

Gaps to identify include:

- Gaps in knowledge – compare the percentage of people who gave the correct answer to the percentage of people who did not
- Gaps in attitudes – compare the percentage of people who gave the desired/positive response with the percentage who gave a negative/noncommittal response
- Gaps in practices – compare the percentage of people who have optimal/desired practices to those who do not

The following thresholds can support decision making regarding a need for an intervention [4]:

Intervention	Percentage of participants with 'correct' KAP
Urgently required	≤70%
Should be considered	71-89%
Not needed or difficult to justify	≥90%

Example KAP Studies in Lebanon

- Assessment of the knowledge, attitudes and practices of Lebanese shoppers towards food labeling: The first steps in the Nutri-score roadmap [5]
- Knowledge, Attitudes, and Practices Related to Dietary Supplementation, before and during the COVID-19 Pandemic: Findings from a Cross-Sectional Survey in the Lebanese Population [6]

References

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3. Guidelines for Assessing Nutrition-related Knowledge, Attitudes and Practices. Rome: Food and Agriculture; 2014 (<http://www.fao.org/3/i3545e/i3545e05.pdf>)
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6. Mohsen H, Yazbeck N, Al-Jawaldeh A, Bou Chahine N, Hamieh H, Mourad Y, Skaiki F, Salame H, Salameh P, Hoteit M. Knowledge, Attitudes, and Practices Related to Dietary Supplementation, before and during the COVID-19 Pandemic: Findings from a Cross-Sectional Survey in the Lebanese Population. *International Journal of Environmental Research and Public Health*. 2021; 18(16):8856