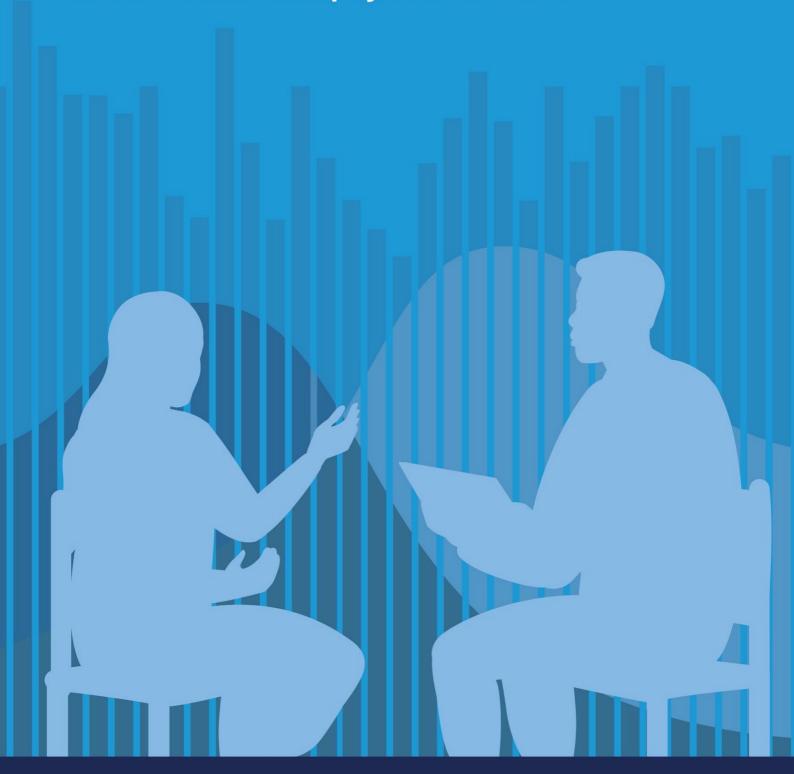
Verbal Autopsy Standards

Manual for the Training of Interviewers on the Use of the 2022 WHO Verbal Autopsy Instrument





Verbal Autopsy Standards

Manual for the training of interviewers on the use of the 2022 WHO Verbal Autopsy Instrument

V1.0



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This manual has been informed by the manuals from: Sample Vital Registration with Verbal Autopsy (SAVVY); SmartVA; and the Child Health and Mortality Prevention Surveillance initiative (CHAMPS).

https://www.measureevaluation.org/resources/publications/ms-07-26-ob.html

² https://www.healthdata.org/data-tools-practices/verbal-autopsy

³ https://champshealth.org/

Acronyms

CDC Centers for Disease Control and Prevention

CHAMPS Child Health and Mortality Prevention Surveillance initiative

CRVS Civil Registration and Vital Statistics

ICD International Classification of Disease

MCCOD Medical certificate of cause of death

SAVVY Sample Vital Registration with Verbal Autopsy

SAMRC South African Medical Research Council
Swiss TPH Swiss Tropical and Public Health Institute

VA Verbal autopsy

VARG Verbal Autopsy Reference Group

WHO World Health Organization

About this manual

This manual and its resources are the products of the effort by an expert working group led by the WHO, consisting of researchers, data users, and government agencies for the development of a standardised and simplified verbal autopsy (VA) instrument. The 2022 WHO VA instrument is intended to allow for simple and inexpensive identification of causes of death in places where no other routine system is in place, and it will serve the needs of countries' civil registration and vital statistics (CRVS) systems for non-medically certified deaths. This instrument can also be used in research and disease specific prevention and control programmes, for example by helping to provide an estimate of the proportion of all deaths in a given population that are likely to be attributable to a specific preventable cause. The application of the 2022 VA instrument in CRVS and other routine data collection systems and research settings, will facilitate the compilation of a large database that is needed to make further improvements to the VA instruments and refine the automated algorithms used for assigning causes of death from VA.

This manual has been produced to assist those who are responsible for the training of VA interviewers on the aspects of data collection in the context of CRVS systems, using the electronic version of the 2022 WHO VA instrument.

The purpose of this manual is to provide guidance to trainers in applying appropriate training methods in order to produce competent and reliable VA interviewers. The manual includes detailed instructions for 15 training sessions that involve lectures, class discussions, group exercises, role plays, and field practice with the supervision of VA interviews in a community. Generally, training of interviewers will tend to be conducted by VA supervisors, who are usually senior members of the district- or province-level health management team. This manual is part of a set of resources and tools and should be used in conjunction with the respective accompanying PowerPoint slides and training curriculum, the VA Field Interviewer Manual, the Manual for the training of master trainers and supervisors on the use of the 2022 WHO VA Instrument, and with the ODK for VA: A Quick Guide.⁴

⁴ All materials are available separately for download at https://www.who.int/standards/classifications/other-classifications/verbal-autopsy-standards-ascertaining-and-attributing-causes-of-death-tool.

Feedback on the manual, suggestions for amendment, translations, the methods used, and results obtained in evaluations of the performance of persons trained to use VA should be sent to verbalautopsy@who.int. In such a way this feedback can contribute to the continuous improvement of the material.

About training

Training for the VA interviewers will cover the following: (1) the importance of VA for assigning causes of death for non-medically certified deaths; (2) the roles and responsibilities of VA interviewers; (3) procedures, principles and communication techniques for conduct of VA interviews; (4) description of every question included in the VA questionnaires; (5) how to collect information using an electronic device; (6) troubleshooting and common challenges; (7) supervisory procedures; and (8) VA data storage and transmission.

The WHO VA training package for the training of interviewers includes the following:

- Training manual guidance for the trainers on class work, smartphone/tablet computer exercises and role-play training cases as well as field practice.
- Accompanying PowerPoint slides for each session as a training delivery method for participants. Please note that the training slides are not a substitute for the training manuals, where guidance for the trainers can be found.⁵
- VA Field Interviewer Manual describes the questions and possible responses to each question in detail. This manual should be provided to both trainers and all trainees.

Training should include as much role-playing of interviews as possible. For this to be effective, different scripts must be prepared in advance of the training, such that different interview flows are experienced and anticipated problems during VA interviews with difficult respondents can be illustrated. The manual provides training cases examples, but more will need to be locally developed to reflect and highlight specific local issues. Training cases can be developed from pre-existing anonymised VA data or developed from physicians that have experience reviewing VAs.

Sample PowerPoint slides to accompany this training manual are available at the WHO VA standards website: https://www.who.int/standards/classifications/otherclassifications/verbal-autopsy-standards-ascertaining-and-attributing-causes-of-deathtool.

It is recommended that training is conducted by two trainers for a class containing 20–25 participants. Eength of training depends on the familiarity with the VA process, the 2022 WHO VA instrument and electronic data collection. The duration of the interviewers' initial training course for those with minimal to no experience, should be of a minimum of seven days. Additionally, training should be conducted shortly before the start of field activities. The manual provides an example of a training schedule for VA interviewers, and suggested durations for each training session are also provided throughout the manual. However, the schedule and duration of activities may vary by country and site, and the suggested schedule should be adapted accordingly.

For trainees with prior experience in VA related aspects and for re-training purposes, managers and trainers can refer to the training curriculums that outline the objectives, learning methods and duration of training sessions. These curriculums can aid in identifying the essential training components, making it easier to develop a targeted training program that covers all the necessary topics.

By the end of the training, participants are expected to:

- Explain the concept and purpose of VA within the CRVS system.
- Clearly describe the purpose of VA for generating cause of death data.
- Describe the roles and responsibilities of VA interviewers within a routine data collection system to assess causes of death occurring in a community.
- Explain how the deaths that need a VA interview will be identified from the death notification and reporting systems, as appropriate for the country.
- Describe and apply all the procedures and techniques that are required for the conduct of a VA interview.
- Understand, explain, and ask correctly and consistently all the questions included in the 2022 WHO VA instrument.
- Be confident in the use of tablets or smartphones for the administration of VA, including how to edit information and save the completed questionnaires.
- Conduct to a good standard a VA interview in the community using electronic data collection devices.

This is optimal and may differ by country, but it is recommended to not be greater than 25 participants per two trainers.

Criteria for training participants

It is recommended that VA interviewers should have the following minimum qualifications:

- Have completed at least secondary school;
- Good working knowledge in the relevant local language(s) and the language of the VA questionnaire;
- Be trusted and accepted by the community; where possible, with the involvement of the local community in their selection.

In addition, an ethical recruitment process should seek to engage interviewers with diverse personal characteristics in terms of gender, age, ethnicity, and religion.

Evaluation of training

The interviewers must be evaluated to determine whether they are capable of interviewing effectively and what, if any, additional support they require at the start of data collection.

The training manual includes an example of a pre-/post- training test (Appendix A), and a checklist for the assessment by VA supervisors of interviewers' performance (used in the role plays of session 13 and during field practice in session 14). The accompanied supervision checklists filled in for and by each of the training participants can be collected at the end of activities to help trainers assess the level of knowledge and skills gained in the VA process.

Post-training performance evaluation(s) would be an important addition to the use of a written pre-/post-test method of evaluating the quality of the training (and the acquisition of knowledge by trainees). Participants can be given a formal assessment at the end of training and some form of certification provided to each successful interviewer. This should be decided and implemented by each country individually.

Preparing for training

This training manual will help you to learn the knowledge and practice the skills needed to become a trainer of VA interviewers. In addition, there are some guidelines provided in this manual that should be followed in order to facilitate the training efficiently.

The key to an effective training session is preparation. If you are prepared in advance, your confidence will be apparent to the trainees. No amount of classroom technique or speaking skill can overcome the handicap of not knowing your subject matter.

Studying the training materials in advance of the session

It is very important to read and study all the training materials well in advance of the session. Do not be concerned about your presentation during your initial reading of these materials; concentrate instead on understanding the concepts and operations that are covered. If you do not understand a particular part, reread the portion that covers that part or search for added information in the manuals. If necessary, ask your supervisor for assistance. Before training begins, be certain that you understand all aspects covered in this manual and every aspect of the roles and responsibilities of interviewers.

Practice the training sessions in advance

Read portions of the materials aloud, following the schedule, and begin to concentrate on your presentation and the types of questions the trainees are likely to ask. You may find it helpful to make notations and marks in the manual to help you during the actual training.

Practice the training sessions in front of a mirror or of a small group of friends, and time your presentations. This will give you a chance both to find out if you are speaking loudly and clearly, and to assess how long it takes to cover the various parts of the training. This will also give you a chance to practice referring to the materials as you speak. Using the materials during this practice will keep you from fumbling during the training. If possible, it is also best to train using the PowerPoint slides that will be used during training.

It is important to try and think about possible questions that may be asked during training and try to prepare for them in advance as much as possible by noting important sections in the materials and knowing the topics covered thoroughly. However, there will always be some questions that are unexpected. In these situations, you should contact your supervisor with any unusual or difficult questions that you receive during training so that the supervisor can share the answers with the other trainers.

Know the training participants

If possible, arrange name cards for yourself and each participant, especially during the first days of training. At the first training session, have each participant write their name on a name card. Once everyone is seated, make a quick seating chart for your own reference. The seating chart will help you to call on trainees during training and help you remember their names.

Define basic class rules

Do not allow participants to drink, eat or smoke in the training room during training sessions. Require that all cell phones be turned off during training. Brainstorm with the class other rules they think should be followed for the training to run smoothly.

Inform participants of the time and duration of training breaks and the location of nearby bathrooms and eating facilities, as well as any necessary emergency procedures.

Cover all the material included in this manual

Do not omit anything unless you are instructed to do so by your supervisor. This ensures that all participants will receive the same training in the use of the 2022 WHO VA instrument.

Stand up when conducting the training

In doing so, you will gain in two ways. First, you will have better control of the class, because you can see each participant and the signals of frustration or boredom. Second, your voice will carry better with less effort on your part.

Speak clearly and convincingly

Make sure that every participant in the room can hear you clearly without difficulty. Read at a normal rate of speed. Speaking too quickly or slowly will lose the attention of the class.

The information from the manual can be a bit technical. Ask for feedback from participants on any areas they do not understand. Whenever possible, relate the training material to the local context and ask for the participants to reflect on how VA applies to their reality.

Vary the tone of your voice

If your tone of voice is too level or constant, participants will have a hard time staying focused on what you are saying. Identify key words in each sentence and try to give them emphasis when speaking.

Maintain eye contact with your trainees

Look up from your reading at the end of each paragraph, and whenever you reach the end of an important topic. Look at the trainees' expressions. If someone looks confused or unsure, stop to ask if anyone has a question. Make a mental note to watch those who look confused or uninterested to see if their performance during the exercises demonstrates an understanding of the material. As you gain experience, you'll master keeping eye contact while talking or reading.

Keep the training upbeat

This manual will instruct you in which topics you should cover and in what order. However, merely reading a manual aloud does not make for an effective training session. You must keep the training sessions upbeat and interesting. It is important to watch out for signs that reflect how well the participants are learning, and how well you are holding their attention. Signs to watch for include participants' engagement in discussions, their answers to questions, and their own questions to you. If trainees show signs of boredom or fatigue, take a short break, ask questions, or find other ways to keep trainees engaged.

Use the APC method of asking questions

Ask, Pause, Call. Ask a question; pause while all the participants think about the answer; then choose a participant to give an answer.

Keep the class discussions focused

Class participation is key to effective learning, but it must be applied wisely. Do not let the participants' eagerness deviate the session too far off the topic or schedule. The following techniques will be helpful to control the class without harming the participants' willingness to participate in class discussions.

- If a participant asks a question about a point covered in a later session, tell him/her to hold the question since you will be covering it later. If the question is not covered, go back to it at the end of training, and try to find the answer in the training materials or get the answer from your supervisor.⁷
- If a discussion gets out of hand, interrupt the discussion. Tell the participants that you must end the discussion because there is still a lot of material to cover and continue with the training. If a participant persists in pursuing a point, ask him/her to see you during a break, lunch, or after class. Remember that you are working on a schedule. You must make every effort to complete the training in the time allocated.

Bring variation to the class's discussions and exercises

To keep the trainees' attention and reinforce the instructions, it is recommended that you call on participants to participate in sessions' activities. Be sure to call on participants by name and try not to call frequently on the same participants. Do not rely on the same participants volunteering their opinions; try to bring the more reserved participants into discussions to see if they are following the training. Some people do not speak in class because they are shy, while others may not speak up because they do not understand the topic. It is the trainer's job to try and draw out those who do not understand — so that you can clarify the topics that are confusing them.

Keep sessions' activities structured around small groups of participants

Small groups work best with around five people per group maximum — big enough to have a range of opinions and small enough for everyone to have space to contribute. Groups with more than six people usually lead to one or two very disengaged participants.

Encourage the participants to learn

Always acknowledge a correct answer by saying something positive such as, "right", "good", "correct" or "okay", etc. If a participant's answer is more than a few words long or is complicated — repeat the correct answer, referencing the training materials, after acknowledging the answer given by the participant. Acknowledge incorrect answers by being tactful. Do not embarrass a participant but try to guide him/her to the correct answer. Repeat

⁷ The supervisor of master trainers or VA supervisors will tend to be a VA coordinator or manager at a higher administrative level.

whatever part of the answer is correct to be supportive and try to rephrase the question to give hints. Sometimes, calling directly on a person who looks confused may cause them embarrassment, and they may deny that there is any problem.

Remember that the trainees may not always answer exactly as worded in the manual, but the answer should contain the most important information. An answer worded slightly differently than the manual's wording is not incorrect, and you should encourage participants not to read answers directly from the manual. Having participants express concepts in the manual in their own words increases their understanding.

If you do not know an answer, admit it

Do not fumble around for an answer, or worse, give the wrong one. Never bluff. Look up the answer with the help of the class. If the question is not covered in your materials, tell the class that you will give them the answer after you speak to your supervisor.

Use the list of participants

Use the list of participants as an attendance sheet during class. Mark the list to indicate which participants did and did not attend the training each day.

If a participant is no longer interested, write down, "will not attend" next to the name of that participant, including any reason given for the participant's departure, and notify your supervisor. The supervisor may be able to arrange a replacement in time for training. If a replacement participant is selected at the beginning of training, add the name of the replacement participant to the bottom of the list of participants.

Logistics for verbal autopsy training

The following logistical requirements should be considered and prepared in advance for the training.

Training site

Consider the numbers of participants and the types of activities throughout the training. The training site should be equipped with sufficient desk or table space and have enough seating for all the participants. There should be enough space for participants to break out into small groups for role-play activities, as well as an adequate and comfortable space to view

PowerPoints and contribute to plenary discussions. Additionally, the training site should meet the following requirements:

- Have some type of restroom facilities, either on-site or nearby, and available for use during training.
- Have eating facilities nearby or inform the participants in advance that they must make arrangements for lunch by themselves.
- Be well ventilated, and heated or cooled as weather requires.
- Be quiet and free of distractions.
- Be centrally located to limit travel by all participants.

Potential training sites include: schools (including colleges or vocational training centres), community or recreation centres, clubs or lodge meeting halls, libraries, post offices or government offices.

Every day before the start of the training day, arrange the seats and tables so that each participant can easily see and hear you, as well as see the materials that you'll be using and presenting during training.

Equipment requirements:

- Overhead projector or multimedia for the presentation of PowerPoint slides;
- Laptop for the presentation of PowerPoint slides;
- Tablets/smartphones (Android devices) and respective accessories⁸ one for each participant with ODK Collect installed and the 2022 WHO VA questionnaires loaded;
- USB cables;
- Flip chart paper for class lectures and exercises;
- Binders or folders for course materials;
- Notebooks for the participants;
- Marker pens, pencils, and erasers (for trainers and participants).

Including access to charging facilities. The implementing team should also ensure that chargers provided are adequate to the local energy sources available to interviewers.

Course materials/resources for participants:9

- Training schedule;
- PowerPoint slides;
- VA Field Interviewer Manual (copies for all participants);
- Paper versions of 2022 WHO VA questionnaires (should be translated into local language).¹⁰

Preparing the training room for the training session

Several days before the training session, make sure you have all the needed materials. Before trainees arrive on the first day of training:

- Place the VA Field Interviewer Manual at each participant's seat, along with a notebook, pen, pencil, and eraser.
- See that the lighting and the ventilation are adequate.
- Check the locations of water fountains, rest rooms, and lunch facilities.

Training itself can be an opportunity for the generation of future resources - videos of VA training sessions (e.g., role plays) can be recorded which can assist future capacity building efforts.

Sample paper versions of the 2022 WHO VA instrument in PDF format developed by the VARG are available at the WHO VA standards website: https://www.who.int/standards/classifications/other-classifications/verbal-autopsy-standards-ascertaining-and-attributing-causes-of-death-tool.

Template training agenda

Date	Time		Duration	
Day 1	08:30 - 09:30	Session 1	Orientation and introductions	60'
	09:30 - 10:10	Session 2	Mortality surveillance and the importance of civil registration and vital statistics systems	40'
	10:10 - 10:55	Session 3	Verbal autopsy and the 2022 WHO VA instrument	45'
	10:55 - 11:35	Session 4	Responsibilities, activities and tasks of the VA interviewer	40'
	11:35 - 12:05	Session 5a	Preparing for the VA interview	30'
	12:05 - 13:05		LUNCH BREAK	60'
	13:05 - 14:05	Session 5b	Preparing for the VA interview	60'
	14:05 - 15:05	Session 6a	Principles for the conduct of successful and ethical verbal autopsies	60'
	15:05 - 15:20		TEA BREAK	15'
	15:20 - 15:50	Session 6b	Principles for the conduct of successful and ethical verbal autopsies	30'
	15:50 - 16:15	Session 7a	The 2022 WHO VA questionnaires and the VA Field Interviewer Manual	25'
Day 2	08:30 - 09:30		Review day 1/answer any questions	30'
	09:00 - 09:35	Session 7b	The 2022 WHO VA questionnaires and the VA Field Interviewer Manual	35'
	09:35 - 10:55	Session 8a ¹¹	VA interview — administering the VA questionnaire for the death of a child aged under 4 weeks	80'
	10:55 - 11:10		TEA BREAK	15'
Day 2 (cont.)	11:10 - 12:30	Session 8b	VA interview — administering the VA questionnaire for the death of a child aged under 4 weeks	80'

Training cases for interview practice and role play need to be locally developed — if available, cases can be drawn from existing VA interviews (e.g., from HDSS, SAVVY or other VA efforts). Example(s) provided on the session.

Date	Time		Duration	
	12:30 - 13:30		LUNCH BREAK	60'
	13:30 - 14:50	Session 9a	VA interview — administering the VA questionnaire for the death of a child aged 4 weeks to 11 years	80'
	14:50 - 15:05		TEA BREAK	15'
	15:05 - 16:25	Session 9b	VA interview — administering the VA questionnaire for the death of a child aged 4 weeks to 11 years	80'
	16:25 - 16:40		Review of the day	15'
Day 3	08:30-09:00		Review day 2/answer any questions	30'
	09:00 - 10:20	Session 10a ¹²	VA interview — administering the VA questionnaire for the death of a person aged 12 years and above	80'
	10:20 - 10:35		TEA BREAK	15'
	10:35 - 11:55	Session 10b	VA interview — administering the VA questionnaire for the death of a person aged 12 years and above	80'
	11:55 - 12:35	Session 11a	General instructions on the use of electronic devices	40'
	12:35 - 13:35		LUNCH BREAK	60'
	13:35 - 13:55	Session 11b	General instructions on the use of electronic devices	20'
	13:55 - 15:10	Session 12a	Use of electronic devices for the collection of data for the 2022 WHO VA instrument	75'
	15:10 - 15:25		TEA BREAK	15'
Day 3 (cont.)	15:25 - 16:25	Session 12b	Use of electronic devices for the collection of data for the 2022 WHO VA instrument	60'
	16:05 - 16:50	Session 12c	Use of electronic devices for the collection of data for the 2022 WHO VA instrument	45'
	16:50 - 17:00		Review of the day	10'

Training cases for interview practice and role play need to be locally developed — if available, cases can be drawn from existing VA interviews (e.g., from HDSS, SAVVY or other VA efforts). Example(s) provided on the session.

Date	Time		Training session	Duration
Day 4	08:30 - 09:00	-	Review day 3/answer any questions	30'
	09:00 - 10:15	Session 13a	Practising the conduct of VA interviews	75'
	10:15 - 10:30		TEA BREAK	15'
	10:30 - 12:30	Session 13b	Practising the conduct of VA interviews	120'
	12:30 - 13:30	•	LUNCH BREAK	60'
	13:30 - 15:00	Session 13c	Practising the conduct of VA interviews	90'
	15:00 - 15:15		TEA BREAK	15'
	15:15 - 16:45	Session 13d	Practising the conduct of VA interviews	90'
	16:45 - 17:00		Review of the day	15'
Day 5	08:30 - 09:00		Review day 4/answer any questions	30'
	09:00 - 09:40	Session 13e	Practising the conduct of VA interviews	40'
	09:40 - 09:55		TEA BREAK	15'
	9:55 - 12:30	Session 14a ¹³	Field practice of VA interviews using electronic devices	125'
	12:30 - 13:30		LUNCH BREAK	60'
	13:30 - 16:45	Session 14b	Field practice of VA interviews using electronic devices	195'
	16:45 - 17:00		Review of the day	15'
Day 6	08:30 - 09:00		Review day 5/answer any questions	30'
	09:00 - 12:00	Session 14c	Field practice of VA interviews using electronic devices	180'
	12:00 - 13:00	•	LUNCH BREAK	60'
Day 6 (cont.)	13:00 - 15:40	Session 14d	Field practice of VA interviews using electronic devices	160'
	15:40 - 16:10		Review of the day	30'
Day 7	08:30 - 09:00		Review day 6/answer any questions	30'
	09:00 - 10:00	Session 15	Course evaluation and closing	60'

¹³ Duration of the session accounts for 15 minutes of tea break.

Verbal Autopsy Standards | The 2022 WHO Verbal Autopsy Instrument

SESSION 1 Orientation and introductions

OBJECTIVES

Introduction of trainers and participants; and introduction of training objectives, schedule, and methods. Administration of pre-/post-test.

MATERIALS

PowerPoint slides; flip chart/board; and copies of the pre-/post-test for all participants (Appendix A).

60 min

Directions

- 1. Welcome the participants and introduce yourself.
 - According to what is appropriate to the local context, conduct a dynamic to set the class at ease, and introduce participants to each other. For instance:
 - Instruct the participants to interview another for two minutes by asking questions on: name; where they come from; where they work; any experience in VA or civil registration; and/or any curious fact or information they would like to share. The participants can be invited to make a brief 30 seconds introduction of who they interviewed.
- 2. Introduce the participants to the rationale and objectives of the training, providing a highlevel overview of topics being covered for the duration of the training.
- 3. Go over the training schedule (PowerPoint slide/printouts), times for coffee and meal breaks, and any other housekeeping items (e.g., class roles, logistics, etc).

- **4.** Brainstorm and agree with the group on the ground principles and procedures the group wants to follow during training to create the best learning environment (e.g., arriving on time, no smoking, eating or talking on mobile phone during sessions, etc.). Record these on a flip chart.
- 5. Address how the PowerPoint slides will be used during the training sessions for presentation of the course material; and that each training session will include interactive activities to practice the content learned.
- **6.** Inform that pre- and post-training tests will be administered before and after the training to assess the effectiveness of the training.
- 7. Distribute a copy of the pre-/post-test to each participant and give instructions on how to correctly fill out the questionnaire (e.g., entering the name at the top of the page, ticking the box "Pre-test", etc.). Give 20 minutes for the participants to complete the test.
 - If using unique IDs, prepare and distribute unique IDs to each participant to be used during the pre-/post-tests.
- **8.** Collect the pre-/post-tests when the participants have finished. Do not provide participants with the answers to the test, as the same test will be administered at the end of training.

SESSION 2

Mortality surveillance and the importance of civil registration and vital statistics systems



OBJECTIVES

Provide participants with an understanding of the importance and usefulness of mortality data, and a brief overview of the operations of CRVS systems. The aim is for participants to understand the broader context into which VA will be integrated and why it is needed; in a way to be ready to answer community questions about VA.



MATERIALS

PowerPoint slides; flip chart/board; and process flow chart of VA integration within the national CRVS system.

40 min

Directions

- 1. Start by addressing the objectives of the session.
- 2. According to the "Text" and using PowerPoint slides, introduce the class to mortality surveillance, CRVS systems and how VA can be integrated within a CRVS system.
- 3. Carry out Activities 2.1 and 2.2 with the class.
- 4. Before terminating, clarify any questions and doubts the participants may have.



NOTE FOR TRAINERS: As applicable, the session should be adapted to reflect the national strategy for the integration of VA in the CRVS system and the processes for notification, registration, and certification of deaths.

Text: Mortality surveillance, civil registration and vital statistics systems

Birth and death information is very important as it helps us understand the size and age distribution of populations. Importantly, it helps us understand *how many deaths, where and what people are dying from*.

Mortality data is important to plan essential services for the population and to know where to allocate resources to health programmes. To monitor progress and assess the impact of interventions, we need accurate, comprehensive, and timely data on specific, major causes of death in the population.

Most countries have a mortality surveillance system, and in most, death registration is mandatory. Health workers who attended the person just before death or who are aware of the circumstances of the death are required to report certain data to public health authorities, such as name, age at death, and cause of death.

Mortality surveillance involves continuously and actively identifying all deaths that take place soon after they happen. Death reporting from key informants is often part of a CRVS system, which also records information on births, migrations, marriages and divorces. Governments compile this information to calculate vital statistics.

How can deaths be notified and registered?

A variety of methods can be used and combined in different configurations to best suit a country's context and needs. For deaths that occur outside health facilities, the traditional method relies on families coming forward to register vital events at a civil registration office — which tends to generate low notification and registration rates. To help achieve high notification and registration of death rates, active case-finding methods can be used. These can include community members with established formal roles in the reporting/notification of vital events, which can comprise any of the following: community leaders, authorities or chiefs; persons responsible for issuing burial permits and/or for overseeing the process of burials or cremations; religious leaders; community key informants; community volunteers; community outreach workers; or workers from surveys or surveillance systems. Other methods, such as SMS on mobile phones to notify events from the community to the

registration authority or health facilities, or proxy procedures such as review of burial permits issued are also possible — depending on the specific context.

Multi-sectorial and collaborative approaches are recommended to maximise the chances of achieving universal vital events registration. An example of a hybrid approach could combine the utilisation of reporting from health facilities, burial authorities and the use of a community key informant system with formal roles in the identification, reporting or notification of deaths — if legally mandated.

Ideally, the determination of a cost-effective and sustainable method for routine identification and notification of all deaths is established by the relevant national authorities (e.g., a National CRVS Policy and Coordinating Committee which includes the Ministry of Health).

Confusion often arises with the meaning of death reporting, notification, certification, and medical certification of cause of death. These are clarified below:

- Notification Is the capture and transmission of minimum information needed on the fact of death, that is issued on a CRVS authorised notification form by a designated agent or official of the CRVS system.
- Registration Is the act of formally registering a death at a civil registration office.
 The issuance of a death notification form is not enough to register the vital event. This form must be sent to where the validation and registration of the vital event takes place usually, the civil registration office.
 - The cause of death information may be part of the civil registration of death or it
 may be collected as a supplemental statistical item. Cause of death information is
 best collected from the physician or medical attendant at death, from the coroner
 or the medical examiner who handled the body.
- Certification Is the issuance by the Civil Registrar of a legal document that proves the fact of death, usually in the form of a death certificate.
- Medical certification of cause of death Is the completion of a medical certificate of
 cause of death (MCCOD) by a medically trained person, listing the immediate,
 intermediate, and underlying causes of death in accordance with the WHO
 International Classification of Disease (ICD) certification standards.

Many countries lack complete CRVS systems, and many deaths occur at the community level without a physician to ascertain a cause of death (Figure 1 and 2). In a well-functioning CRVS system, each death has both death registration information as well as cause of death information.

The data on age, sex and cause-specific mortality is essential for making evidence-based health policies and plans. In this training, we present a methodology called verbal autopsy (VA), which can help countries obtain the information needed on non-medically certified community deaths to strengthen CRVS systems and provide critical health data for decision makers.

Fig. 1. Number of registered births and deaths by WHO region, 2020.¹⁴

	Global	AFR	EMR	EUR	AMR	SEAR	WPR
Number of births	126 423	36 067	16 045	2 708	11 670	36 327	23 607
Number of registered births	90 574	15 950	11 006	2 661	11 154	28 326	21 476
Percentage of registered births	72%	44%	69%	98%	96%	78%	91%
	Global	AFR	EMR	EUR	AMR	SEAR	WPR
Number of deaths	47 749	9 285	3 701	2 592	5 173	13 762	13 236
Number of registered deaths	29 463	921	2 033	2 535	4 718	8 390	10 866
Percentage of registered deaths	62%	10%	55%	98%	91%	61%	82%

^{*}Based on most recent data available from 133 countries; all numbers of births and deaths are in thousands.

31

Source: SCORE for health data technical package: global report on health data systems and capacity, 2020.

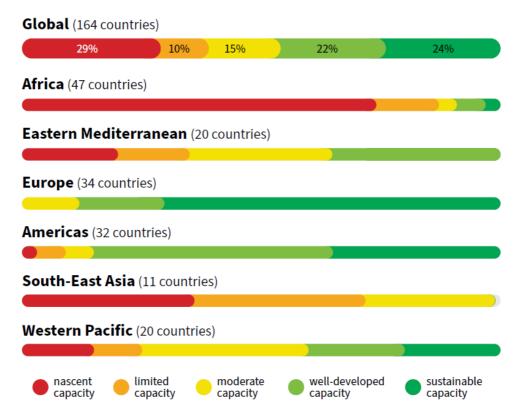


Fig. 2. Certification and reporting of causes of death by WHO region, 2020.¹⁵

Integration of verbal autopsy in civil registration and vital statistics systems

In the context of introduction and integration of VA in CRVS systems, in principle VAs should only be conducted for deaths that have been notified or registered — having either been assigned an official notification, registry number or unique ID. This is important to avoid duplication of records and problems in data linkage with the CRVS system.

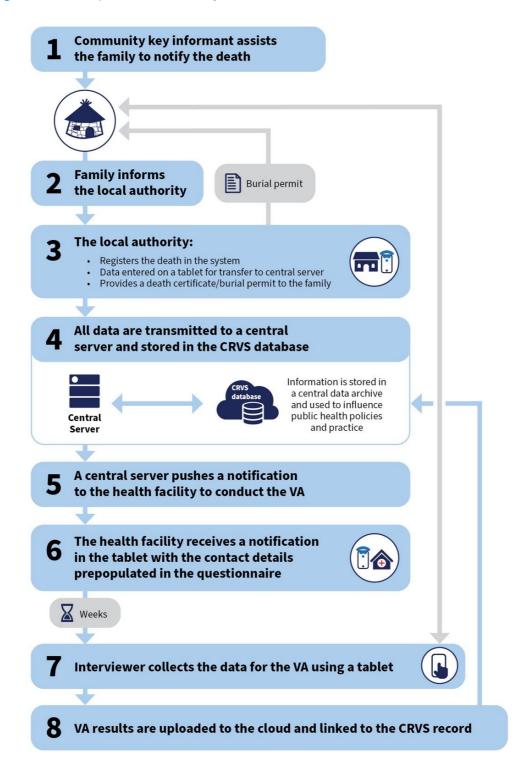
¹⁵ Source: SCORE Dashboard - Count births, deaths and causes of death.

How can deaths for VA be identified?

Two scenarios are possible in the implementation of VA in CRVS systems: a) VAs are conducted in a representative sample of the population; b) VAs are conducted for all non-medically certified deaths. WHO recommends that deaths with a MCCOD should not be duplicated with a VA, except for quality control purposes and in research contexts. Both scenarios involve a system that processes and flags eligible deaths before VAs are scheduled and conducted.

Once deaths have been processed by the civil registration system, a VA supervisor receives information on cases assigned for VA, most likely from health facilities. Where VAs are conducted for all non-medically certified deaths, death notifications can be used to trigger the scheduling of VAs and official registration of the deaths. Information on cases for VA will contain facts of death information, such as name, age, sex, date of death, location and notification serial number or civil register or personal ID number for the deceased. Figure 3 shows potential layouts of the application of VA in the context of CRVS systems.

Fig. 3. Potential VA processes in a CRVS system. 16



Source: de Savigny, Don et al. "Integrating community-based verbal autopsy into civil registration and vital statistics (CRVS): system-level considerations." Global health action vol. 10,1 (2017): 1272882. doi:10.1080/16549716.2017.1272882.

Activity 2.1



Directions

- 1. Ask the questions below to the class and discuss what the participants know about the operations of the national CRVS system.
- 2. Write participants' answers on a board or on a flip chart.
- Review and familiarise the participants with the country's death notification process/forms, death certificates, burial permits and MCCOD forms.
- **4.** Review with the class a process flow chart of how VA is integrated within the national CRVS system.



Questions for the class

- "What are your experiences with the national CRVS system? What have you used it for?"
- "Where can CRVS systems get information on deaths and causes of death?"



Notes for trainers

It is likely that not all the participants will fully appreciate the wide use and value of CRVS systems. By exploring everyday experiences of the individual participants (through births, deaths, and marriages) and moving on to a wider discussion on the use of this data for statistics, administrative purposes and health programming and planning, the appreciation of the system can become more apparent. While also providing the context for VA. If participants have direct knowledge or experience in areas outside the personal use of the system, they should be encouraged to share them.

Mortality data for CRVS systems may come from:

 Health center and hospital staff reporting on deaths which have occurred (possibly including cause of death information in the form of a MCCOD);

- Police or coroner (commonly used for non-natural deaths);
- Funeral homes or authority issuing burial permits;
- Community level key informants (e.g., religious authorities reporting deaths for which they conduct ceremonies, community leaders keeping local lists of inhabitants, community health workers);
- Active (mortality) surveys (e.g., counting new graves at a community's burial site);
- Health and Demographic Surveillance Systems and Sample vital registration systems (with or without VA) linked to the CRVS system.



Directions

- Break participants into three groups and allocate them into "neonate", "child" and "adolescent and adult" groups.
- 2. Ask each of the following questions at a time to each of the groups.

 Have each group write down their answers on a flip chart.
- 3. Promote a discussion about the results in a plenary.
- **4.** Ask whether the other groups agree or not with the group's responses, and what other information they might add.
- 5. Discuss any points missing from participants' responses



Questions for each of the groups

- "What do we mean by cause of death? What are the common causes of death for this age group in your communities?"
- "Why is it important to have accurate information on causes of death? What are the consequences if mortality data is incomplete or inaccurate?"



Notes for trainers

Have a list of common national causes of death and refer any additional important causes that participants did not mention. Highlight to the class, "risk factors" (e.g., hypertension, smoking, alcohol consumption, etc.) that participants may have mistakenly identified as causes of death. Discuss and clarify the difference between causes of death and risk factors.

Address how cause of death information can be used to:

- Allocate resources effectively identifying most important needs and problems, i.e., the diseases that many in the population are dying from.
- Assess whether efforts and programmes to reduce deaths due to a particular cause are working.

• Understand cause of death trends over time.

Ideally, a country should have a well-functioning civil registration system, where every death is captured by the civil registration organisation and cause of death is certified by a medical practitioner according to international standards for all deaths.

In a given country or region of a country there may be socio-economic factors, including disparities in the availability or accessibility of essential services that may adversely affect a CRVS system's capability of capturing and evaluating the cause of every death. In settings where most deaths occur outside hospitals, CRVS systems are often struggling to detect all deaths and reliably ascertain a cause of death to the community events. In settings where only deaths that occur in health facilities are registered with the civil registration organisation, civil registries are incomplete with potentially only information on a small subset of the population.

Furthermore, people that die at health facilities tend to have a different mortality profile. This makes it challenging for health planning to make well-informed decisions in the effective allocation of health resources towards the diseases of greatest concerns. It is therefore important to ensure that community deaths are reported to the civil registration organisation and that reliable cause of death information is collected; VA is the most applicable tool to collect such information.

SESSION 3

Verbal autopsy and the 2022 WHO verbal autopsy instrument



OBJECTIVES

Provide an overview of the VA process and the 2022 WHO VA instrument. The aim is for participants to understand the purpose of VA and the importance of standardisation/ consistency in using the 2022 WHO VA instrument.



MATERIALS

PowerPoint slides and flip chart/board.

45 min

Directions

- 1. Start by addressing the objectives of the session.
- 2. According to the "Text" and using PowerPoint slides, introduce what is VA and the 2022 WHO VA instrument.
- 3. Carry out Activity 3.1 with the class.
- 4. Before terminating, clarify any questions and doubts the participants may have.

Text: Verbal autopsy and the 2022 WHO verbal autopsy instrument

The main purpose of VA is to describe the causes of death at the population level for deaths which occur in the community, and for which there is no medical certification of the cause of death.

VA is a two-stage process (Figure 4). **The first stage** involves an interview with family members or other caregivers of a deceased. The interview is done using a standardised structured questionnaire that elicits information on the signs, symptoms, medical history, health care use and the circumstances leading to death. During the VA interview, information from any available medical records is also collected to assist in assigning the cause of death. Assigning causes of death from such information is based on the premise that VA respondents can accurately recall the details of the various symptoms and events that occurred during the period leading to death. Another factor determining the quality of VA interviews is the ability of VA interviewers to collect sensitive information from respondents. VA interviewers must know the VA instrument as well as have good communication skills.

In field practice, it is recommended that the questionnaire is implemented in the electronic format, using smartphones or tablets. Paper forms in PDF format are available, however, these are not ideal for data collection and their use should be restricted to training purposes.



NOTE FOR TRAINERS: Clarify that later there will be sessions exploring in more depth the structure of the VA questionnaire and communication techniques for leading VA interviews.

The second stage involves the interpretation of the information collected during the interview for assigning the cause of death. Two main types of methods can be used to interpret VA data and determine the probable cause of death:

- Automated methods using computer algorithms
- Physician reviews

The accuracy of both these methods depends on the accuracy of information collected from the VA interview. With computer algorithms, the responses provided during a VA interview can be processed in an automated way to identify likely causes of death, without input from a physician. This is done using software that implements one of several logical algorithms that combine VA data with "training data" to identify causes of death that are consistent with the VA data. The training data describe the typical relationship between each VA symptom and each cause of death. The algorithms apply those relationships to the specific set of symptoms associated with a particular death to identify the most likely causes of death that are consistent with those symptoms.

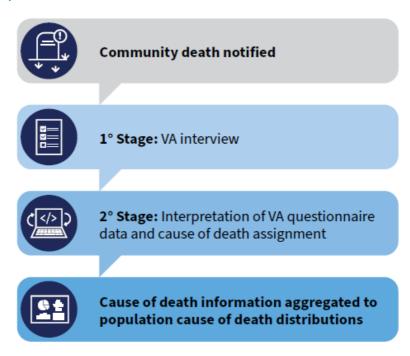
Physician reviews of the responses obtained during the VA interview are similar to when a physician questions a patient and draws conclusions from the answers. Physicians review the VA interview data and assign a cause of death based on their clinical judgement. The process typically involves the work of at least two physicians who have been trained in VA coding, independently assessing individual questionnaire data, with assignment of cause of death done by a consensus review or by a third physician. This method is usually not considered the best use of busy and limited physicians' time, particularly in large-scale applications.

The automated computer programmes have been shown to be efficient and reasonably accurate. However, it is advisable for physician review to be carried out in a sub-sample of VAs to assess the quality of the performance of VA interviews and the accuracy of assignment of causes of death by automated methods.



NOTE FOR TRAINERS: Remember, this information is just used to give the participants an idea of how information from the VA interviews will be used to determine cause of death. VA interviewers and supervisors do not need to learn how to conduct these procedures. Interviewers are only involved in conduct of VA interviews; supervisors are engaged in supporting the data collection process and performing quality control and assurance.

Fig. 4. The VA process.



Limitations and value of VA

- Imperfect method compared with medical certification of cause of death.
- Generates data that are reliable at the population level, but not necessarily at the
 individual level. Its primary purpose is to help estimate cause of death statistics on a
 population level for public health decision-making.
- Medically certified cause of death has legal status at the individual level; VA cause of death data does not have similar legal status.
- Necessary in populations where MCCODs are not available.
- Strict confidentiality and data security are required.

The 2022 WHO verbal autopsy instrument

The 2022 WHO VA instrument was designed specifically for routine use in CRVS systems, and to allow for the automated assignment of causes of death using computer algorithms.

The development of the instrument has been informed by field testing and based on the compiled experience and evidence from the most widely used VA procedures. This resulted in a simplified and practical instrument that has the following main components:

- Three standardised simplified structured VA questionnaires for three age groups:
 under four weeks; four weeks to 11 years; and 12 years and above;
- Short list of causes of death of public health importance that can be assigned from the analysis of the questionnaires' data.

Preferably, data for the 2022 WHO VA instrument should be electronically collected using a mobile device (tablet or smartphone), to then facilitate the assignment of cause of death through the use of a computer programme. Presently, the 2022 WHO VA instrument is designed to be compatible with the following computer programmes to determine causes of death: InSilicoVA, InterVA-5, and Tariff 2.0. Overall, these methods have been evaluated and found to give reliable estimates of mortality at population-level for most major causes of death of public health concern.



Directions

- **1.** Ask the following questions to the class and discuss what the participants know and have learned about VA procedures.
- 2. Write participants' answers on a board or on a flip chart.



Questions for the class

- "Does anyone have experience with VA? Please share your experience."
- "How does VA differ from the traditional medical-certification of causes of death?"



Notes for trainers

If someone has experienced the conduct of a type of VA, as applicable, point out the differences between the VA conducted and the one now being implemented.

For instance, some "VA" interviews may be very informal using an openformat, others may focus on specific age-groups, specific diseases, types of death, etc. The 2022 WHO VA instrument is a standardised structured questionnaire aimed at understanding the most probable causes of death for vital statistics purposes. Therefore, it does not include very detailed questions on all causes of death or socio-demographic information. Instead, it contains the minimum number of questions necessary to determine the most common causes of death.

SESSION 4

Responsibilities, activities and tasks of the verbal autopsy interviewer

OBJECTIVES

Clarify the role of the VA interviewer, and address the key activities, tasks and responsibilities. Introduce the materials required for the VA interviewer work.

MATERIALS

PowerPoint slides; flip chart/board; and VA interviewer's materials for all participants (including the VA interviewer checklist — an example is provided in Appendix B).

40 min

Directions

- 1. Start by addressing the objectives of the session.
- 2. According to the "Text" and using PowerPoint slides, describe the activities, tasks and responsibilities of the VA interviewer.
- 3. List the materials required for the conduct of a VA interview.
- 4. Carry out Activities 4.1 and 4.2 with the class.
- 5. Before closing the session, clarify any questions and doubts the participants may have.



NOTE FOR TRAINERS: The session should be adapted to reflect the roles of the VA interviewer as specified by the programme's strategy for VA.

Text: The verbal autopsy interviewer — responsibilities, activities and tasks

The primary role of a VA interviewer is to visit the families and caregivers of a deceased to conduct VA interviews and complete the respective VA questionnaires. VA interviewers work closely with leaders as well as members of the community in their assigned area. They are responsible for ensuring that the leaders, members of the community, and the households they visit are well informed about the purpose of VA and its activities. The interviewers should also advocate in the communities on the importance of registering births and deaths, and of notifying appropriate public authorities when a death occurs.

The procedures of VA require high quality of work to generate reliable data for cause of death assignment. In order to do the best possible job, the VA interviewer must:

- Maintain regular contact (as per local arrangements) with the VA supervisor to receive VA interview assignments; update work status; discuss and solve any problems and challenges encountered; and to submit electronic VA interview data (if internet access is unavailable).
- Ensure to have an adequate supply of the required materials to conduct VA interviews.
- Contact the families or caretakers of the deceased, identify the best respondent(s) and
 arrange the best time (VA should be scheduled at an appropriate time which is
 convenient for both the respondent(s) and the interviewer) and place (private and
 quiet) for the conduct of the VA interviews.
- Conduct the interviews through informed consent; in a sensitive and ethical manner.
- Submit completed interviews from the electronic device used in data collection to ODK
 Central, if/when internet is available.
- Keep an up-to-date log book of all VA interviews that have been assigned and conducted.
- Maintain good relations with the community.
- Support and encourage community participation in civil registration and VA activities.
- Practice self-care and manage stress; strive for continuous self-improvement by regularly consulting the VA Field Interviewer Manual.



NOTE FOR TRAINERS: Emphasise to participants that interviewers must not give interpretations, opinions, or counselling on individual cause(s) of death.

VA interviewer activities and tasks should be listed in a VA interviewer checklist (see example in Appendix B); made to assist the interviewers in performing high-quality interviews. The VA interviewer should review the checklist each time before VA work. The VA supervisors should then review the checklists with the interviewers to help solve any problems.



NOTE FOR TRAINERS: Inform the participants that more detailed information about how to conduct each of these specific tasks will be discussed in the following sessions.

Materials required to conduct verbal autopsy interviews

VA interviewers should be provided access to the materials listed below in order to perform their duties. They are required to always keep these materials with them when working in the field. Also, to prevent loss, damage, or any unauthorised person from seeing recorded VA information, interviewers need to make sure that the materials and passwords are secured in an approved location by the VA supervisor — when the electronic devices are not being used for interviews. Completed VA questionnaires should always be submitted to ODK Central or returned to the office by the interviewer. The following is a list of materials and job aids that a VA interviewer should have:

- Tablet or smartphone (fully charged and working) with ODK Collect installed, and with the 2022 WHO VA questionnaires loaded;
- Tablet or smartphone accessories (as applicable);
- VA interviewer checklist (Appendix B);
- VA Field Interviewer Manual;
- Paper versions of the 2022 WHO VA questionnaires in English and/or in the local language;¹⁷
- VA interviewer reporting log book (example provided in Appendix C);

PDF versions of the 2022 WHO VA instrument are provided for training or questionnaire review purposes only for the interviewers to become well familiarised with the VA instrument. The embed skip patterns of the WHO VA instrument are too complex for data collection with the paper versions of the instrument; only electronic data collection is recommended.

- VA informed consent letters or forms (an example script is provided in Appendix D; see
 Session 5 for information on how the consent process should be administered);
- Calendar of local historical events, and year-of-birth calculator. The calendar of
 historical events is a list of locally recognised events and their dates, used to help
 people determine a deceased person's approximate date of birth or age when his or
 her exact date of birth is unknown; whereas the year-of-birth calculator is a table that
 can be used to determine the exact year a person was born, if only the person's age is
 known;
- Identification card (ensuring to wear it where it can be seen during VA interviews);
- Pen/pencil and eraser;
- Blank paper for notes/notebook.



NOTE FOR TRAINERS: Go through the list of materials that each VA interviewer is required to have — hold them up as you introduce each item. These materials should be at each participant's seat during training.

VA interviewers need to check these materials when received, and need to notify the supervisor immediately if anything is missing, defective, or printed illegibly.

VA interviewers should also be mindful of the local dress code. VA interviewers should dress appropriately for working with members of the community, according to local cultural practices and wear comfortable clothing adequate for the weather conditions.



Directions

- 1. Split the class into three-to-four groups.
- 2. Write on a board/flip chart or show the relevant PowerPoint slide the "VA interviewer's tasks", as listed below.
- **3.** Ask the groups to re-arrange the activities in the correct order that the interviewer should conduct them.
- **4.** Ask each of the groups to write down their responses on the flip chart/board.
- 5. Provide only a short time for the participants to do this.
- **6.** To clarify the correct order of interviewer tasks, show the VA interviewer checklist (Appendix B). Have the participants read through the checklist, discuss and clarify any doubts.



"VA interviewer's tasks" (for the class to reorder)

1. Conduct the interview 2. Select the best respondent 3. Obtain informed consent 4. Introduce yourself to the household 5. Visit the respondent at the agreed time 6. Thank the respondent for the participation 7. Obtain location information of VA case from supervisor 8. Schedule the interview



Notes for trainers

Correct order of activities: 1. Obtain location information of VA case from supervisor; 2. Introduce yourself to the household; 3. Select the best respondent; 4. Obtain informed consent; 5. Schedule the interview 6. Visit the respondent at the agreed time; 7. Conduct the interview; and 8. Thank the respondent for the participation.



Directions

- Ask the participants to consider the different activities and tasks of the VA interviewer and identify any challenges and difficulties they can anticipate.
- **6.** Write participants' answers on a board/flip chart.
- **7.** Brainstorm with the participants how they might deal with these challenges.



Notes for trainers

Address these challenges throughout the training course to demonstrate how subsequent lessons have addressed the concerns over the potential challenges.

It is likely that challenges will fall into categories. For instance, logistics (e.g., locating households, tablet/smartphone not operating properly, best respondent not available); interview challenges (e.g., respondent giving contradictory answers); and emotional distress challenges (e.g., asking personal and difficult questions during a grieving period).

SESSION 5

Preparing for the verbal autopsy interview

OBJECTIVES

Learn the procedures the VA interviewer must follow for the conduct of VA interviews. Participants should understand how VA interviewers acquire the list of VA cases; liaise with relatives of the deceased, respond to their concerns about VA, and explain the principles of informed consent to obtain their agreement to be interviewed; schedule a VA interview; and handle potential problems.



MATERIALS

PowerPoint slides and flip chart/board.

90 min

Directions

- 1. Describe the objectives of the session.
- 2. According to the "Text" and using PowerPoint slides, describe the procedures that the VA interviewer must follow and the activities that must be conducted for the VA interview.
- 3. Carry out Activities 5.1, 5.2, 5.3 and 5.4 with the class.
- 4. Before closing the session, clarify any questions and doubts the participants may have.

Text: Preparing for the verbal autopsy interview

The art of interviewing develops with practice, but there are certain basic principles and steps that must be followed to conduct a successful VA. It is essential that VA interviewers take an ethical approach throughout the whole VA process.

Step 1: Acquire the list of VA cases from the supervisor.

To avoid duplication of data on the number of estimated death cases in a given jurisdiction by a given exposure/disease, the VAs should only be conducted for deaths that already have an official notification number, registry number or another unique ID. Cases for VA will be identified through an appropriate strategy suitable to the country/local setting. Once death cases have been assigned for VA, the supervisor provides a list with information on the households of recently deceased individuals to be visited for the scheduling and conduct of VA interviews.

It is the interviewer's responsibility to ensure that s/he has a list of VA cases from the supervisor before leaving to conduct the interviews.

When will VA interviews be conducted?

The time period between the date of death and the date of the VA interview has important implications for the quality of information collected. Long recall periods are likely to impair a respondent's ability to remember and report relevant information, whereas if a VA interview is conducted too close to the death, it may cause distress and impact the willingness and ability to engage in an interview and facilitate accurate information for VA.

Therefore, the period between death and VA interview should be long enough to provide time for mourning, and short enough for people to recall details on the circumstances leading to death. The usual mourning period is 1–3 months in most cultures and people generally can recall the events leading to death up to 12 months. So, it is recommended that a VA interview should be completed within four weeks to twelve months after a death.

It is also important to be mindful of not visiting families on other sensitive dates (birthday, death anniversary, religious holidays, or local traditions) at which time it may be inappropriate to conduct the VA interview.

Step 2: Prepare and have all the equipment and materials required to conduct the VA interviews.

Before visiting the bereaved households on the appointed day, the interviewer must first make sure to have all the equipment and materials, as previously specified in the manual and in the VA interviewer checklist (Appendix B).



NOTE FOR TRAINERS: Remind participants that before leaving to conduct interviews, the interviewer must confirm that the tablet/smartphone is operational and has enough battery to last through the planned VA interview(s).

Step 3: Make contact with the household – greet the members of the household and ask to speak with the head of the household.¹⁸

In some instances, prior contact and scheduling of the VA appointment may be possible directly by the VA interviewer, or through a local key informant/community representative. Such contact could be used to sensitise the household about the intention to conduct the VA interview and schedule a convenient appointment. Scheduling an appointment in advance is also likely to give the opportunity for respondents to be more emotionally prepared for the VA.

When first making contact, the interviewer should first introduce himself/herself and convey condolences for the death that occurred in the household, according to local sociocultural practices. In some contexts, a token gift of condolence might be essential to gain access to the family and respondent(s).

The interviewer should ask to speak with the head of the household, that person's spouse, or another appropriate adult relative who can give permission to conduct the VA; and who can

Step 3 should be adapted according to local sociocultural practices and the implementing programme's procedures.

either answer questions related to the deceased or introduce the primary caregiver of the deceased.

Step 4: Identify an appropriate respondent.

The respondent is the main person who will provide information about the deceased. The interviewer must identify the primary caregiver (usually a family member) who was with the deceased in the period leading to death. This is the individual most likely to know about the deceased person's signs and symptoms during the period just before death. The educational status and communication skills of potential respondents may also be considered while identifying the most appropriate respondents.

It is often assumed that the person who makes daily decisions for the household or this person's spouse is the person who should be interviewed. This is not necessarily so. For example, a male reference person may not know the signs and symptoms of an illness suffered by a woman in the household. The respondent who provides information about the deceased can also be a witness to a sudden death or accident. The VA interviewer must determine who was with the deceased and caring for the person in the period leading to death. Generally, a good respondent is a person who:

- Was present during the illness and the time of death;
- Was involved in any type of care for the deceased during the illness and at the time of death;
- Knew the deceased very well;
- Knew the habits and lifestyle of the deceased.

Generally, children should not be interviewed. In the case of a child's death, the mother will tend to be the best respondent. In the case of an adult death, good respondents can be the spouse, a sibling, or even a neighbour if they had significant interaction during the illness period. Whereas, for maternal deaths the best respondents tend to be sisters, mothers, mothers-in-law or other close female relatives or neighbours of the deceased.

Although there may be need to take information from neighbours or other members of the same community, as far as possible responses should be collected only from members of the household of the deceased.

It is not uncommon for a VA respondent to require assistance from other household or family member(s) in answering the VA questions. This is entirely acceptable. Similarly, if during a VA interview, the respondent recognises that another person would be better at answering certain questions, the interviewer may interview another respondent.

Ideally, if interview setup guidelines are followed there should be one primary respondent and no multiple respondents providing contradicting information for the same question(s). The reality is that group responses are a natural feature of community life and unavoidable in some contexts. Reasonable flexibility should be applied in such situations. In situations where the interviewer has challenges integrating information from multiple respondents, the following should be applied:

- The interviewer should follow existing guidelines for the conduct of the interview in a
 private quiet location with the identified primary respondent; ask the additional
 people present to leave the location if their input is not needed for answering the VA
 questions.
- In case it is not possible to conduct the interview in privacy with the primary respondent, the interviewer should attempt to get consensus on the answers from the multiple respondents.
- If consensus is not achievable within reasonable time, the interviewer should record the final response from the identified primary respondent.

Ideally, a VA interview should be completed in one sitting. At times when a VA interviewer may have to conduct more than one household visit to complete the VA, efforts should be made to keep the same primary respondent and to finish the VA interview within the minimum possible number of visits. When it is not possible to interview a reliable respondent, the interviewer should arrange to visit the household on another day when the appropriate respondent will be available.

Step 5: Gain the trust and cooperation of the respondent.

The interviewer should try to build a rapport with the respondent before discussing the circumstances that led to the death of the deceased. To make a good impression, the interviewer must conduct in a professional, sensitive, and friendly manner. For example, if culturally appropriate, the interviewer may ask about the respondent's work, or inquire about the respondent's family.



NOTE FOR TRAINERS: Highlight that VA is a community-based system, and it is essential to have the support and participation of the local community. Without their cooperation the system cannot work. Relationship with the community will depend largely on how well the interviewer establishes a relationship with the members of each household visited.

Step 6: Inform the respondent about the purpose and process of VA and obtain informed consent.¹⁹

Voluntary participation informs the VA process. The VA interviewer invites potential respondents to an interview, who have the individual right to decide whether to participate or not; and to withdraw consent during the interview. The interviewer must administer informed consent before initiating the VA interview, and in accordance with the local implementation of VA — obtain oral or written consent from the respondent(s) for participation in the VA.

If available, the interviewer should offer to the respondent a VA informed consent letter/form (example of an informed consent letter is provided in Appendix D). Assuming there is at least one literate member of a household, this will help the relatives of a deceased understand the VA system and its activities. Electronic VA data collection allows the interviewer to record respondent's oral consent, by checking a "yes" or "no" on the tablet/smartphone.



NOTE FOR TRAINERS: Share with the participants how the implementing team plans to document consent withdrawal during the course of an interview (e.g., could be documented on the VA informed consent letter/form).

When informing potential respondents, it is important for the VA interviewer to first determine if the respondent already has some knowledge and experience with VA. If the respondent has a previous experience of VA, the interviewer should ask about that experience, inform of any differences in the process, and reassure if the respondent is anxious about being interviewed again. Through the informed consent process, the respondent should be clearly informed about:

¹⁹ The informed consent process as here described should be adapted according to country's guidelines and the implementing programme's process in place.

- The intention, purpose and scope of content of the VA interview;
- The approximate length of time the interview will take;
- The possibility of feeling discomfort when talking about bad experiences and the right to stop, withdraw consent and quit the interview at any stage of the interview process;
- The strict confidentiality of all information that is shared;
- The lack of direct personal benefits from participation. However, VA helps to improve
 the identification and measurement of preventable and treatable causes of death at
 population level, which in turn helps governments and health providers care for
 people;
- The potential risks (e.g., emotional distress and stigma) of participating in a VA interview;
- Whether and how results will be shared with respondents and the community, as mandated by the country;
- Any available counselling services for respondents and their families;
- Contacts for more information in case the respondent has questions later.

Most people will be cooperative. Before agreeing to be interviewed, the respondent may ask questions about the interview and why they should participate. Some people may be suspicious about why the government is collecting information on the deaths of their relatives. Others may be sceptical about how the information they provide could be important to their country, communities, or families. The interviewer must be knowledgeable about the VA process, in order to be able to give clear and straightforward responses. For example, the interviewer must understand what civil registration is, why VA interviews are conducted and how the information collected benefits the participants and the community.

The confidentiality of responses must be stressed. If a respondent hesitates to cooperate because of confidentiality concerns, the interviewer should provide appropriate assurances and a comprehensive explanation. For example, clarify that no individually identifiable data will ever be shared outside the context of the VA interview. Information identifying individuals will be removed for data analysis and when sharing the findings (e.g., in a report on the proportion of causes of death for national and sub-national use).



NOTE FOR TRAINERS: Highlight to that a well-explained purpose from a friendly and competent interviewer will increase the cooperation from a respondent and will find very few cases of refusal.

Step 7: Schedule the VA interview.

Once all the questions from the respondent are answered, the interviewer should ask if the respondent is willing to take part in the interview. If the respondent is comfortable with carrying on the interview and if the conditions are suitable (i.e., a quiet and private location that ensures the absence of disruptive factors), the VA interview can be conducted at the same moment.

If the respondent wishes to conduct the interview at some other time or if the interviewer finds the present situation not suitable for the conduct of the interview, the VA interview should be scheduled to another date. If the respondent refuses the interview, the VA Interviewer should thank the respondent and conclude the session.

Ideally, the VA interviews should be conducted in a private location, where the interviewer and respondent(s) can be alone, and where the respondent(s) feel comfortable sharing information. As mentioned, the VA interviewer will often encounter other household members present during the interview. In cases where complete privacy is not possible, the interviewer should, in consultation with the main respondent, try to limit the number of other people present.



Directions

- Have the participants pair up and practice with one another the steps the interviewer must follow in preparation for the VA interview (step 1 — step 7).
- 2. Each pair should practice twice to give the opportunity for each participant to play the role of interviewer and respondent. Give them 15 minutes for this.
- 3. Have one of the pairs demonstrate the role play for the whole class.
- **4.** Once the participants have finished, discuss in a plenary how the interviewer followed the steps leading up to the conduct of the VA interview.
- Discuss what was done right, what was done wrong and what could have been done better or differently.
- Ask the participants to describe how it felt to be an interviewer; how it felt to be a respondent.



Directions

 Ways of expressing condolences vary from place to place or from community to community. Facilitate a plenary discussion with the participants on appropriate local sociocultural practices when conveying condolences to be reaved families in the context of VA.



Questions to guide the discussion

- "What are the recommended ways of expressing condolences in your community?"
- "What are the things to avoid while offering condolences in your community?"
- "What aspects do all the discussed forms of expressing condolences have in common?"



Directions

- Write down the "Categories for the class", listed below, on a board or flip chart. Alternatively, show the relevant PowerPoint slide.
- For time efficiency, the "Categories for the class" could be pre-written before the class on the board or flip chart.
- **8.** Split the class into the groups according to the three "categories for the class".
- 9. Ask the "Questions for the class" (listed below).
- **10.** Have the participants write down the responses on the board/flip chart, under each of the categories.
- **11.** Discuss in a plenary the responses, ensuring participants have gained a clear understanding of the importance of following the 7 steps, how to uphold them, and adequately conduct VA interviews.



Categories for the class

- Characteristics of the respondent/setting;
- Interviewer's conduct during a VA interview;
- Interviewer's conduct after a VA interview.



Questions for the class

- "What kinds of problems/challenges can arise from these categories?
 Give specific examples for each of them."
- 2. "To what steps do they relate to? What could be the consequences of these problems?"
- 3. "How can these problems be prevented?"



Notes for trainers

Trainers should incentivise the participants to anticipate all kinds of problems that can arise from the conduct of the interviewer and/or

respondent. It is important to emphasise through the generated discussion that the VA involves a standard questionnaire, and that the interviewer should not ask questions that are not included in the VA questionnaire. The interviewer should abstain from providing opinions on signs, symptoms, treatment or cause of death; restricting the interview to the questions included in the 2022 WHO VA questionnaire. In general, the interviewer should be respectful and adopt an active listener approach during the VA interview.

The discussion should terminate with the class having a consensus on procedures the interviewer must take to avoid identified problems.



Directions

- 1. Split the class into groups (not more than five people per group).
- 2. Show to the class a PowerPoint with the "Potential objections to participation in the VA that might be voiced by respondents".
- **3.** Have each of the groups respond to one of the questions/problems listed below, giving to each group a few minutes to come up with a response.
- **4.** After the group's response, discuss in plenary the response and other potential responses.
- **5.** After all the participants have shared their opinions, add any additional potential responses that the participants did not mention.



Potential objections to participation in the VA that might be voiced by respondents (for the class)

- "Why is the government implementing this VA system?"
- "Who will benefit from VA? Will I or my family receive any monetary benefit?"
- "Is this really a good use of government money? Would it not be better to use the money to buy medication for the local dispensary?"
- "Why do you need to ask so many questions and take up so much of my time?"
- "How do I know that the information that I give will be kept confidential?"



Notes for trainers

See below potential answers. It is recommended that these are adapted to the local context with information and examples that the trainees can better relate with.

Why is the government implementing this VA system?

The government is implementing this system to monitor what is causing the death of people in the community. This is necessary because such information is not well captured by other sources. The information collected in VA interviews will help the government to plan better for the needs of the people in terms of healthcare services and other development programmes, and to help identify problems that policymakers and programme coordinators can work to resolve.

You and your family will benefit from the improved health care services that can result from the information collected. For example, outbreaks of diseases and premature deaths due to preventable diseases can be detected, and appropriate intervention measures can be implemented to prevent further deaths.

As long as information collected is accurate, the VA system should allow local and national authorities to take steps to improve the health and wellbeing of you and your family.

• Who will benefit from VA? Will I or my family receive any monetary benefit?

The data that are collected from households will be used by the government and other organisations for planning, policymaking, development, social services, and healthcare services in the community. VA should therefore help improve those services. The government is not able to pay you directly for your participation, but in time the community should receive better public and healthcare services as a result of improved planning.

 Is this really a good use of government money? Would it not be better to use the money to buy medication for the local dispensary?

Certainly, more funds are needed for all aspects of the health system. The information we are asking you to provide, however, will help save lives and money. Health planners will have a much more accurate picture of the health problems affecting the community, and so can know which services and medications are most needed. This data collection is being conducted

with the most cost-effective measures possible. Without this information, it is difficult for the government to plan and adopt appropriate policies that will benefit the communities. This should lead to an improvement in the health care delivered by the health system.

Tip: If possible, use a local example of how VA data has been used for the benefit of the community (e.g., a clinic being built because of VA).

• Why do you need to ask so many questions and take up so much of my time?

Every effort has been made to minimise the duration of the interview and to reduce inconvenience as much as possible. In the VA interview, we need to ask questions that can be used by a computer programme or by a physician to make a decision about the most likely cause of death. Sometimes the cause of death may seem obvious, but it is often necessary to ask many questions to have sufficient information to reliably determine the most probable cause of death. We need to ask these questions to make sure we do not miss anything and make the right assessment.

• How do I know that the information that I give will be kept confidential?

As a member of the VA system, I have signed a pledge not to share any PERSONALLY IDENTIFIABLE information that is collected, and all employees of the central office are required to store all information that is provided in strict confidence. Your PERSONAL information will be added WITHOUT YOUR PERSONAL IDENTITY to the information from all the other households, and used to generate health statistics and reports for district and national use. Only anonymised information will be made available to the general public.

SESSION 6

Principles for the conduct of successful and ethical verbal autopsy interviews



OBJECTIVES

Learn the ethical principles and communication techniques to help administer the VA questionnaire in a sensitive and successful manner.



MATERIALS

PowerPoint slides and flip chart/board.

90 min

Directions

- 1. Describe the objectives of the session.
- 2. According to the "Text" and using PowerPoint slides, describe the principles and guidelines interviewers should follow to conduct VA interviews.
- 3. Carry out Activities 6.1, 6.2 and 6.3 with the class.
- Before terminating, clarify any questions and doubts the participants may have.



NOTE FOR TRAINERS: The section on communication techniques should be adapted to reflect the most respectful ways of engaging and communicating with respondents according to local sociocultural norms and practices, which may differ by gender and age.

Text: Principles for the conduct of successful and ethical verbal autopsy interviews

A VA interview can be challenging to conduct as it involves the collection of highly sensitive and personal information from respondents. For a successful interview, the interviewer must strictly follow ethical principles and apply communication techniques for a sensitive interview.

Ethical principles for verbal autopsy

1. Protection of privacy and confidentiality

It is ESSENTIAL that the information obtained during VA interviews remains strictly CONFIDENTIAL. VA interviewers are not permitted to discuss, gossip, or show their records or completed VA questionnaires to anyone who is not an authorised officer in the VA system.

When initiating contact with potential respondents, the interviewer must explain that information obtained will not be used for any legal purpose, and that the personally identifiable portions of information obtained will be kept confidential and will be used only to compile statistics — without revealing the name of the respondent or of the deceased.

The VA interviewer must personally make all entries on the VA questionnaires. On no occasion should an interviewer allow any unauthorised person to fill in any part of a VA questionnaire. It is also important to not leave VA materials in an unsecured location, where unauthorised people may have access to them. All VA material should always be stored in a locked container.



NOTE FOR TRAINERS: The issue of confidentiality needs to be strongly emphasised. If there are country guidelines/confidentiality agreements for staff doing VA, then these should be addressed and discussed. The issue of confidentiality can be particularly sensitive around the use of tablets and smartphones to collect data. Respondents need to feel confident that the data will not be shared with others.

2. Honesty and high conduct of work

The VA interviewer must never take any "shortcuts" in the conduct of VA interviews or submit falsified work to the supervisor under any circumstances. Fake data has no value. As VA data is used at an aggregated level, by collecting falsified data, an interviewer is also weakening the data collected by others.

3. Preventing emotional and moral distress

VA interviews can cause emotional and moral distress for respondents, by recalling the circumstances that led to the death of a close family member or friend. Emotional distress in this context has been associated to emotions such as grief, helplessness, guilt, frustration, anxiety, and anger. For instance, VA can give rise to frustration or anger if respondents perceive that the burdens of VA outweigh its benefits.^{20,21}

Potential risks and burden for respondents relate primarily to psychological (e.g., emotional trauma) and social (e.g., stigma) risks, and they may extend from individuals to families and communities. For example, a region that has been identified with high HIV or COVID-19 burden might become stigmatised and cause people to avoid the area. Additionally, the VA process involves considerable time costs and invasion of privacy of bereaved families. Emotional distress and confusion over the use of VA information can affect the integrity of the data collected. Following the ethical principles throughout the whole VA process and answering the questions of the respondent can help to mitigate these concerns.

The extent of distress depends on many factors such as the circumstance of death; the timing of interview since death; the characteristics of the deceased and respondent (e.g., age and relationship to the respondent); the culture of bereavement; and the interviewing and counselling skills of the interviewer.

To minimise its burdens and potential risks, use of VA should be conducted in coordination and collaboration with local community and should seek the empowerment of communities so that the process of generating mortality data does not impose practices that conflict with

Hinga, A., et al. The ethical implications of verbal autopsy: responding to emotional and moral distress. BMC Med Ethics 22, 118 (2021). https://doi.org/10.1186/s12910-021-00683-7.

Chandramohan, D., et al. Editorial: Ethical issues in the application of verbal autopsies in mortality surveillance systems. Tropical Medicine & International Health, 10: 1087-1089. (2005)https://doi.org/10.1111/j.1365-3156.2005.01510.x

traditions. Such collaboration can be achieved through communication and consultation with communities to establish partnerships during the design stage of VA and throughout the data collection process. The community engagement process should seek to adhere to local customs, such as funeral and bereavement rituals that require gift/token giving as an acknowledgement to real loss; a demonstration of sympathy; respect for cultural norms; and to compensate respondents for time spent and the potential distress inherent from relieving the circumstances that led to the death of a loved one. There should be a mechanism for referring respondents in distress to appropriate counselling. Given the potential for emotional distress, the VA informed consent letter (Appendix D) should include a list of contacts of local professional health and social care services available to respondents and their families.

Additionally, interviewers can inquire from respondents about their existing emotional support network (e.g., talking with a trusted family member or friend; social support groups such as religious groups, etc.) and encourage it.

To protect bereaved families from further feelings of helplessness it is also important that population-level VA data is shared and used for the public health benefit of local communities where data collection occurs.

Other strategies to prevent or manage emotional distress during VA include careful introduction to the VA process before starting the interview and compassionate communication techniques for sensitive interviews (see the sub-section below).

For the interviewers to be able to manage potential impacts of participation by VA respondents, it is important that they are able to manage their own emotional responses during the conduct of VA interviews. Related to witnessing and feeling responsible for respondents' distress and seeing socioeconomic challenges of grieving families, VA interviewers have been commonly reported to experience emotional and moral distress, in association to feelings of sadness, guilt, helplessness and anxiety. Impacts of high levels of emotional and moral distress can result in high staff turnover, burnout, and compassion fatigue.

It is very important that supervisors remain vigilant of signs of distress among the VA interviewers. There should be measures in place to prevent or minimise the emotional impact on the interviewers; implementing teams should have in place protocols to address emotional distress amongst VA Interviewers. Measures should include scheduled debriefings with the supervisor for self-care and processing of distress; and bonding sessions between

interviewers should be promoted to share experiences, discuss ethical challenges, and provide support to one another. It may be helpful for VA interviewers and/or supervisors to undergo specialised certified training on grief counselling to capacitate them with skills to effectively deal with the physical, social, and emotional challenges they may routinely encounter.²²

Communication techniques for the verbal autopsy interview

To conduct a VA defined as successful, the interviewer must be familiar with how to properly communicate and engage with respondents during VA interviews. An interview to gather information on the circumstances of death of a close family member might be a sensitive issue for respondents, and the interviewer should demonstrate a good understanding of how grief and trauma can affect respondents during VA.

If the interview is not conducted in a respectful and pleasing manner it might not only reduce cooperation from the respondent, but it might also hurt a respondent's emotional wellbeing. Building a good rapport with respondents and the community, will help be reaved family members and friends feel more comfortable speaking about the death of a loved one.



NOTE FOR TRAINERS: Before addressing the following recommendations for communication techniques, discuss with the class: "What can be considered a successful VA interview? What do you think are some general rules or techniques that can be applied to conduct a successful interview?" This will help capture the concentration and engagement of the participants, while also allowing to combine local understandings with the general definition and principles; and to identify and correct any misconceptions.

Detailed information on dealing with emotional distress can be found within the CHAMPS Guidance on ethical issues (website: https://champshealth.org/).

General recommendations

- While it is recognised that more than one respondent might contribute to the
 interview, try to make use of a quiet, private location (i.e., without presence of anyone
 the bereaved respondent(s) might be uncomfortable with) in accordance with local
 practices; mute or turn off cell phones.
- Be Polite. Death is a sensitive issue, so it is important to consider the respondents' emotions. The interviewer must try to put the respondents at ease.
- The interviewer should not provide opinions, suggest answers, or make assumptions.
- The interviewer must always pay very close attention to the respondent. It is important to demonstrate that one is listening and to be aware of the respondents' emotions.
 - The interviewer can use reinforcement (e.g., "this is useful information") or repeat answers to demonstrate that is paying close attention.
- In case of emotional distress, the interviewer should refer respondents to locally available professional health and social care services.
- Non-verbal communication is also very important. Below are some general guidelines
 that should be adapted according to local cultural norms and practices that may differ
 by gender and age of the respondent and the interviewer.
 - Sit at the same level as the respondent(s).
 - Maintain appropriate body language (e.g., eye contact) when administering the interview.
 - Avoid looking at a watch or giving any impression of being in a hurry.
 - Avoid crossing the arms and try to keep an open body posture.
 - Be prepared to communicate information in different ways; show compassion without judgement and nod one's head to encourage responses and indicate understanding.
- The interviewer should avoid frequent interruptions, as they break the flow of the interview and distract the respondent. Instead, the interviewer should write down important questions to ask later.
- To conclude the interview, the interviewer should give thanks for the respondent(s)'
 time and sharing of valuable information; and inform whether and how results will be
 shared with respondent(s) and the community, as mandated by the country.

How to ask questions

- Questions should be asked in a polite and neutral tone and worded exactly as on the questionnaire.
- It is important to read the questions slowly and clearly so that respondents understand. If not understood, the questions should be patiently repeated again, slowly and clearly.
 - Example of probe: "Perhaps I did not make myself clear. Let me read again."
 - For multiple choice questions, each answer choice should be read slowly and carefully.
- Respondents might not understand technical phrases or terms. If the terminology in the VA questionnaire is not clear to the respondent, the VA interviewer can provide a clarification by using simple words in the local language.
 - To be able to provide clarification for the respondents, the interviewer must know the meaning of each and every question included in the VA questionnaire; aids such as pictures may help the interviewer understand unfamiliar terminology.²³
 - o In providing any clarifications, the interviewer needs to ensure that the meaning of any of the VA questions is not altered.²⁴ The VA interviewer should be well familiarised with local terminology of signs, symptoms, and causes of death.

Examples of reference media (including images, videos and audio) that can be used for better understanding of medical terminology used in the VA questionnaire during interviewers' training, will be accessible through the WHO VA standards website: https://www.who.int/standards/classifications/other-classifications/verbal-autopsy-standards-ascertaining-and-attributing-causes-of-death-tool.

For local language translations, implementing teams are encouraged to develop a glossary of VA medical terms used in the relevant local language(s).

How to get adequate answers

- For each answer received, the interviewer should ask himself/herself: "Does that completely and clearly answer the question I have just asked?". If not, the interviewer should repeat the question, and use probes and clarifications (as indicated in the "Question by Question Guide" that is in the VA Field Interviewer Manual).
- If unsure of an answer, the interviewer should politely ask the respondents to repeat the answer. If still unclear, the interviewer should ask the respondents to clarify and explain what is meant.
- The interviewer must not assume or anticipate a respondent's response. The interviewer must wait for the respondent to finish talking before entering the data.
- Sufficient time must be given for respondents to answer each question. VA questions
 involve the recall of events and details, so the respondents should be relaxed and have
 enough time to think and give a thorough answer.
 - For questions where respondents may give multiple responses, the interviewer should allow respondents to hear all the answer options and think about the question before recording the answer.
- The interviewer should not show any surprise, approval, or disapproval of a respondent's answer by the tone of voice or facial expression. Respondents may tend to give answers that they think will please the interviewer. It is therefore very important that while showing compassion, the interviewer remains neutral towards the subject matter of the interview.
- If a respondent does not know the answer to a question or looks uncomfortable with the question, the interviewer may try to "probe" to get an answer. This means asking other questions similar to the subject to try and help the respondent remember certain events.
 - The interviewer's own judgement should be used when probing. Remember, this is a very sensitive time for respondents, and we do not want to upset them further.
 - For example, if a respondent cannot remember who delivered the baby in the home, the interviewer might try "probing" by asking: "Who was in the room at the time of delivery?"

- If a respondent gives long and elaborate answers that drift away from the specific question asked, the interviewer must tactfully listen and steer back to the original question.
- During the interview, respondents may have difficulty in remembering or providing details, and this may give rise to various inconsistencies in the facts provided. In such a situation, the VA interviewer should assume that the inconsistencies are unintentional and ask for clarification.
 - Inconsistencies must not be pointed out in a rude or condescending way, as it may be embarrassing or insulting to respondents.
 - Once any inconsistencies have been clarified, the interviewer should go back in the questionnaire and correct responses as needed.

Activity 6.1



Directions

- 1. Have the participants pair up in groups of two.
- 2. Have the pairs discuss the questions listed below.
- 3. Lead a discussion in a plenary with all the groups.
- **4.** Write the responses on the board or on flip chart. Discuss any points missing from participant responses.



Questions for the class

- "What is ethical conduct in VA? What is a 'successful VA'?"
- "Why is it important for interviewers to be respectful and sensitive during VA interviews?"
- "What might be some impacts of grieving on the VA interview?"
- "In what ways can interviewers help respondents feel more comfortable during the VA interview?"



Notes for trainers — Possible answers

- "What is ethical conduct in VA? What is a 'successful VA'?"
 - An ethical conduct for a successful VA involves honesty and high conduct of work ensuring collection of sound information; protection of respondent(s) and deceased's privacy and confidentiality; protecting respondents from risk of emotional distress, referring to support sources as appropriate; and managing self-care.
 - As well as addressing global principles, address local definitions of what success and ethical conduct in VA is.
- "Why is it important for interviewers to be respectful and sensitive during VA interviews?"
 - Interviewers are likely to encounter different types of mourning. The interviews are, most of the times, conducted with a vulnerable

family member of someone who has recently died. For example, a parent's loss of a child, or the passing of the main income earner of a family can result in a very difficult time for the family. If the interviewer is not respectful and compassionate during the VA, it may risk causing or aggravating respondents' emotional distress.

- The way an interviewer conducts and how s/he leads an interview may have impacts on the ability to conduct further VA interviews by affecting the community's acceptance of the interviewer's work and may even compromise VA activities in the community.
- "What might be some impacts of grieving on the VA interview?"
 - Respondents may feel uncomfortable answering certain questions.
 - Respondents may get angry with certain questions or by the length of the questionnaire.
 - o Respondents may get sad, frustrated, upset and/or offended.
 - o Respondents may change their mind about participation.
- "In what ways can interviewers help respondents feel more comfortable during the VA interview?"

Adapt the suggestions below according to local sociocultural norms and practices.

- By being patient not rushing through questions, and not rushing or interrupting respondents, even if a respondent hesitates or is quiet for a while.
- By allowing respondents to talk about the events freely, even if the response strays slightly from the questionnaire's question.
- o By being neutral and non-judgmental.
- By sitting at the same level as the respondents.
- By maintaining eye contact or avoiding eye contact, according to best local cultural practices.
- By nodding the head, encouraging speech, and listening attentively to the respondents.

Activity 6.2



Directions

- Split the class in groups according to the "Situation scenarios" described below.
- 2. Open a PowerPoint slide with the "Situation scenarios" or distribute printouts for the participants.
- 3. Give each group of participants one of the scenarios to practice in pairs. Instruct the participants to practice both roles as interviewer and respondent, and to **practice probing** when dealing with the case scenarios.
- **4.** Have some of the groups act out the four situation scenarios for the class.
- **5.** Follow the acts with a plenary discussion over the different solutions that the groups came up with.



Situation scenarios

Below are presented some situations that the interviewers are likely to encounter. Discussing how the situations should be handled, will prepare interviewers for when such situations may occur during a real interview.

Situation 1: Respondents contradict each other

"The VA interviewer goes to a household where a woman has died. The woman's sister is identified as the best respondent on information about the labour, and her husband as the best respondent about the journey to the hospital. As the interview goes on, the respondents seem to have difficulties answering some of the questions, and often glance at each other as if waiting for the other to answer first. Some of their responses are contradictory. For example, when asked about care-seeking, the sister says that the first thing the family did when they noticed the woman was unwell was to call a traditional healer. But the husband says that the first thing they did, was to seek transportation to take her to the hospital."

Situation 2: Multiple respondents or disruptive factors

"The interviewer goes to a household where a newborn died. Several people, including family members and friends of the family are standing around in front of the house. The interviewer introduces himself/herself and the reason for the visit; asks to speak with the person(s) who know the most about the circumstances of the baby's death. The mother says she can talk about the baby's death and invites the interviewer into the house. Several people also follow the interviewer into the house."

Situation 3: Respondent's emotional distress

"The VA interviewer is interviewing a woman about the death of her husband, who died two months before the interview. The VA interview has been going well, with the woman remembering the events without difficulties. As the interviewer asks questions about the time closer to the death, she slows in her responses and begins to cry. She tries to control herself but cannot stop crying showing signs of extreme grief and distress."

• Situation 4: Interviewer's emotional distress

"The interviewer is feeling responsible for the distress experienced by respondents during VA interviews, cannot stop remembering disturbing details, feeling very sad with the suffering experienced by the families.

Seeing on a daily basis, difficult socioeconomic challenges and the poor health of visited bereaved families in the community (e.g., visiting families where a child is sick; where a rape has occurred; where food is lacking) is bringing feelings of helplessness, powerlessness and frustration. The "how are you's" no longer feel genuine, the interviewer feels constantly on edge, alone/isolated and drained most of the time, and is having trouble sleeping. Both simple daily work and life tasks feel like never-ending chores, motivation levels have dropped levels below minus and the interviewer doesn't feel like s/he will ever be able to keep up with the demands of the role which are eating away at the self-confidence. The interviewer hasn't spoken to anyone about these issues and feels near a breaking point.



Notes for trainers

Based on the ethical principles and communication techniques for VA, as much as possible, participants should determine how to manage these situations by themselves. This is important to build confidence for dealing with similar situations in the field. If participants struggle — provide them with small suggestions or ask questions that will guide them back to the right track.

Activity 6.3



Directions

1. Discuss with the class, potential strategies to revolve the following problems/issues that may occur during a VA interview



Problems/issues to discuss with the class

- Respondent demonstrates fear to speak one's mind.
- Respondent is reluctant to think it through.
- Respondent appears to not understand the question.
- Respondent is distracted/has lost motivation to carry through the interview.



Notes for trainers — potential answers:

- Respondent demonstrates fear to speak one's mind Interviewer should try to gain the trust of the respondent by reassuring of the VA ethical principles, including the confidentiality of the interview.
- Respondent is reluctant to think it through Interviewer should reassure the participant and explain the importance of contributing individual cause of death information for valid population level cause of death information.
- Respondent does not understand question Interviewer should repeat the question, slowly and clearly, and explain using some local phrases or examples.
- Respondent is distracted/has lost motivation to carry through the interview — Interviewer should try to motivate the respondent by reinforcing the importance of the VA interview. For better focus, the interviewer can try to address any distracting factors (e.g., find a quieter locating for the VA); inform the respondent of the estimated duration/time left for the conduct of the VA; or find with the respondent if they should find another more appropriate time for the VA.

SESSION 7

The 2022 WHO verbal autopsy questionnaires and the Verbal **Autopsy Field Interviewer Manual**

OBJECTIVES

The participants should become familiarised with the different types of VA questionnaires, their structure, and general instructions for completing the 2022 WHO VA questionnaires. Introduce the participants to the VA Field Interviewer Manual.

MATERIALS

PowerPoint slides; flip chart/board; VA Field Interviewer Manual (copies for all participants); and copies of the paper versions of the 2022 WHO VA questionnaires for the three age groups for all participants.

60 min

Directions

- 1. Start by addressing the objectives of the session.
- 2. Distribute to the participants the paper versions of the 2022 WHO VA questionnaires and the VA Field Interviewer Manual. According to the "Text" and using PowerPoint slides, introduce the types of VA questionnaires, their general structure, and rules of administration; review the contents of the VA Field Interviewer Manual.
- 3. Give sufficient time for the participants to familiarise themselves with the VA Field Interviewer Manual and the general structure of the three VA questionnaires.
- Before terminating, clarify any questions and doubts the participants may have.

Text: The 2022 WHO verbal autopsy questionnaires and the Verbal Autopsy Field Interviewer Manual

The 2022 WHO VA instrument has been specifically designed to collect information about the deceased from caregivers and family members using a tablet or smartphone through ODK Collect. The information included on the questionnaire will then be analysed by computer programmes or medical professionals to determine the probable cause of death.

The information collected and analysed ranges from symptoms and signs preceding death to the use of health services. Most of the questions allow for responses with a simple yes or no answer, multiple choice, or a duration in some instances.

The instrument is designed for all age groups, including maternal and perinatal deaths; and also, deaths caused by injuries.

A set of sample/paper questionnaires by key age groups shows the design and structure of the instrument as a guide to the user, being especially useful for training purposes.²⁵ There are three different paper questionnaires, each specific to an age group:

• Sample VA questionnaire 1: death of a child aged under four weeks

Sample VA questionnaire 1 is designed to determine causes of early neonatal deaths, late neonatal deaths, perinatal deaths, and stillbirths. In addition to a "signs and symptoms noted during the final illness" list, the questionnaire contains questions concerning the history of the pregnancy, delivery, the condition of the baby soon after birth and the mother's health.

• Sample VA questionnaire 2: death of a child aged four weeks to 11 years

Sample VA questionnaire 2 is designed to assign the major causes of post-neonatal child mortality (i.e., starting from the fourth week of life), as well as causes of death that may be seen through 11 years of age. Questionnaire 2 includes all the common

Paper forms can be found in the WHO VA standards website: https://www.who.int/standards/classifications/other-classifications/verbal-autopsy-standards-ascertaining-and-attributing-causes-of-death-tool.

sections and questions described above, as well as questions related to causes of death in children aged four weeks to 11 months.

• Sample VA questionnaire 3: death of a person aged 12 years and above

Sample VA questionnaire 3 is designed to identify all major causes of death among adolescents and adults (i.e., starting at age 12), including deaths related to pregnancy and childbirth. Questionnaire 3 includes a section for all female deaths, in addition to the above-mentioned common sections and questions.

The sample paper questionnaires follow the same structure of the electronic WHO VA questionnaire. The key difference between them is that while in the electronic questionnaire, the questions are shown according to the skip pattern embedded in the electronic questionnaire; in the paper questionnaires, the interviewer must interpret the skip instructions under each question to follow the skip patterns relevant to responses (e.g., (Id10013) [Did the respondent give consent?] (If the answer is No then skip to the end)).

General structure of the verbal autopsy questionnaires

The layout of the questionnaire and the flow of the interview with the WHO VA instrument is guided by "skip patterns" (i.e., when an answer to a specific question results in bypassing or "skipping" other irrelevant questions). It is important to confirm the presence or absence of the symptoms included in the VA questionnaire for cause of death assignment and differentiation between causes. The use of sequence of questions facilitates the collection of information on the details of the sequence of events that led to death. The skip patterns allow the collection of only relevant information in a sequence of related questions for a sign/symptom (Figure 5); are employed to facilitate the use of the VA instrument and allow for the three questionnaires to follow the same general structure. The skip patterns are driven by:

- Age;
- Sex;
- Maternal or perinatal death;
- Symptoms/signs;
- Other relevant features of symptoms and signs requiring more detailed information (e.g., duration, timing, severity, and location).

Fig. 5. Extract from the question-by-question guidance from the VA Field Interviewer Manual showing a sequence of questions guided by skip patterns related to a newborn's ability to cry.

(Id10104) Did the baby ever cry?

Crying is a sign of breathing. If a baby cried at birth, it indicates that the baby was alive at birth. In some instances, the baby may not cry but still there may be a visible breathing effort, but this may be difficult to observe. Hence the reliance on the cry at birth, to signify breathing, and therefore life. There is a separate question on breathing later in this section. This question only pertains to crying.

This is an important filter question, as a negative response will point towards a stillbirth. Stillbirth refers to babies born with no signs of life at or after 28 weeks of gestation. Fetal death before 28 weeks is regarded as abortion or miscarriage.

If "NO/DK/Ref", skip to Id10377. If "YES", proceed with the next question.

(Id10105) Did the baby cry immediately after birth, even if only a little bit?

The timing of the first cry is indicative of whether the baby's health was affected by events during the pregnancy, labour, or delivery. Probe carefully whether the baby cried immediately after birth, and if so, record the response as "YES". In some instances, there may have been some delay (from one to several minutes) between birth, and the first cry. In such a case, record the response as "NO", and proceed with the next question.

(Id10106) How many minutes after birth did the baby first cry?

This question is relevant for both potential responses to the previous question. If the answer to Id10105 was "YES", then this question aims to confirm the timing. If the baby cried immediately, record as "0" (zero) minutes. However, if the cry was delayed, then the time it took between birth and the first cry is a helpful indicator to assess whether the baby died from events that occurred during labour or delivery. Probe carefully to find out the time and record in minutes.

A valid response is between 0–60 minutes. If the respondent can't recall the exact time interval between the birth and the first cry, prompt, and record according to what is medically relevant to capture: if baby cried approximately within 5 minutes (interviewer to enter 4 minutes); or if baby cried approximately after more than 5 minutes (interviewer to enter 6 minutes). For "don't know", enter "99". For "refused to answer", enter "88". If the respondent states that the baby never cried, revert to Id10104 and enter the correct response.

(Id10107) Did the baby stop being able to cry?

A baby that cried at birth may become weak and stop crying later on. This is an indicator for some causes of neonatal deaths. Probe carefully to get the true response.

The questionnaires are divided into several sections and sub-sections. The general structure of the three questionnaires is the same, sharing the same sections, whereas some of the sub-sections vary between the questionnaires. The following sections and sub-sections are included in the questionnaires:

- Preset HIV-Malaria mortality and season (the project office may make this question hidden to the interviewers in the electronic format)
- 2. Information on the respondent and background about interview
- 3. Information about the deceased and vital registration
 - a. Information on the deceased
- 4. Open narrative (text field)
 - a. Check list of additional items to record in the narrative open space
- 5. History of injury/accidents
- 6. Medical history associated with final illness
- 7. Health history
 - a. Duration of illness
 - **b.** General signs and symptoms associated with final illness
 - c. Signs and symptoms associated with pregnancy, labour, and childbirth in women
 - d. Neonatal and child history, signs and symptom
 - e. Health service utilization
 - f. Civil registration numbers
 - g. Death certificate with cause of death.

Section 1 collects information about the prevalence of malaria and HIV in the area where the deceased lived and whether death occurred in the rainy or dry season. This information is essential for selecting the appropriate algorithm used by some software for assigning the cause of death. In most settings this information will be pre-completed by study staff or supervisors.

Section 2 collects information about the respondent, consent if required in certain contexts and time the VA interview was started.

Section 3 contains key identifying and socio-demographic information of the deceased, including:

- Name, sex and age of the deceased;
- Time, place and date of death;
- Marital and employment status of the deceased;
- Civil registration data that would allow to link cause of death with the civil registration system.

If background information about the deceased is already known, some information from Section 3 may be completed before the interview and loaded onto the tablet/smartphone in advance. This includes information such as the name, sex, as well as information included in a burial permit (as applicable) or death notification. In case of discrepancies between official records and respondent's accounts, the interviewer should contact the VA supervisor.

Data related to the civil registration of the death (sub-section 3b.), is intended to gather information regarding the status of registration of the deceased in the civil registration system; and to know whether the deceased has a national identification card number (if available) and to link the deceased to the national civil registration database. In accordance with local laws and customs, if the deceased is under a certain age, it may be appropriate to collect the ID information of one of the parents.

Except for information on the sex and age of the deceased, rules for privacy protection must be ensured for information contained in this section. Information collected through the VA system must remain strictly confidential and must only be shared with authorised agents. Interviewers and supervisors are responsible for maintaining confidentiality and are not permitted to discuss VA case histories, gossip about it, or show records to anyone who is not an authorised officer in the VA system.

Section 4 is an open narrative text field, in which the respondent is asked to describe the sequence of events leading to death. The open narrative should be recorded thoroughly by hand or by audio recording. This section is particularly useful for quality control and for providing important additional information for the cause of death assignment. To note, this section is also important in order to complete the checklist of some indicators (section 6a) that are required for assigning causes of death using Tariff 2.0. Accordingly, it is highly recommended that this section be completed, and responses recorded. Considering the time

taken to manually enter information from the respondent and the challenges of including all relevant information relayed, it is best if the open narrative is audio recorded. To enable audio recording, the user should simply change the type of question from text to audio in the XLS form. Note that if audio recording is taken, this information should be included within the informed consent letter/form with the respondent being informed and agreeing to the audio recording. At the end, the interviewer should summarise what the respondent said in order to ensure the correct information was understood and recorded.

Section 5 provides essential information on the history of known past or present diseases that would give clues to the causes of death.

Section 6 provides essential information for assigning the cause of death due to accidental and intentional injuries.

Section 7 contains several sub-sections that collect information required for assigning causes of death. Sub-sections:

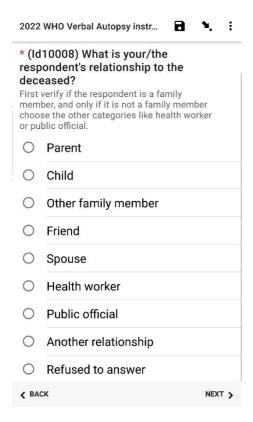
- 7a) Questions to determine the duration of the final illness;
- **7b)** Questions on symptoms and signs that are relevant for all deaths;
- 7c) Questions on symptoms and signs specific to maternal deaths;
- 7d) Questions on symptoms and signs relevant for neonatal and child deaths;
- **7e)** Questions about the utilisation of health services;
- 7f&7g) Fields for recording information from the legal death certificate from civil registration authorities and from a MCCOD if these are available.

Question types

Close-ended questions

- Questions with listed responses that get answered by simply checking and clicking on the appropriate response(s). Figure 6 presents an example.
- Most of the questions in the VA questionnaire are close-ended.

Fig. 6. Example of a close-ended question from ODK Collect.



Open-ended questions

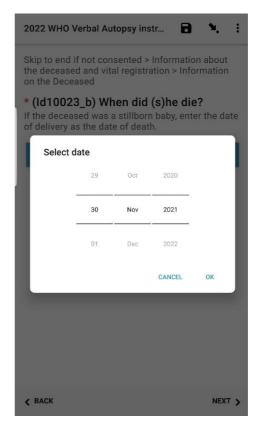
- Questions that require writing-in of text or numbers to be completed. Figure 7 provides two examples.
- ODK Collect has a calendar and time widget to specify dates and times.
 - o Interviewer should never leave spaces empty for this type of question.

Most of the specific questions about symptoms and signs have sub-questions about their duration, timing, severity, and location. Entry level questions (e.g., did s/he have a cough) are always asked, while sub-questions may be asked depending on response to the respective entry level question.

There are many skip patterns throughout the questionnaire, and the tablet/smartphone will skip to the relevant section/question automatically. The embedded skip patterns allow the interviewer to avoid asking irrelevant questions.

Fig. 7. Example of two open-ended questions from ODK Collect; one for entering text and the other for entering date.







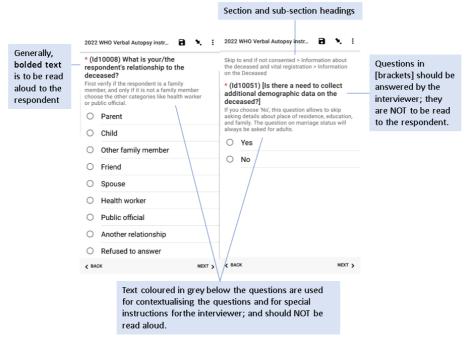
NOTE FOR TRAINERS: Explain to the participants that all the applicable questions from the 2022 WHO VA questionnaires are necessary for the optimal performance of the computer programmes' assignment of cause of death. Therefore, the interviewer must ask all the questions and obtain all the answers from the respondent according to the VA questionnaire. The information collected in the socio-demographic and health-service use sections of the questionnaire may need to be adapted, depending on the needs of the implementing organisations.

General instructions for completing verbal autopsy questionnaires

- The interviewer must fill in the VA questionnaire during the interview. Questionnaires should never be completed before or after an interview has taken place and should not be completed by anyone other than the trained designated VA interviewer.
- By entering the deceased's age at death or dates of birth and death in the tablet/smartphone, it automatically determines which type of VA questionnaire should be used.

- o If the deceased is aged under 28 days (four weeks), it will show questions from the Stillbirth and Neonatal VA questionnaire; if the deceased is between 28 days and 11 years, it will show questions from the Infant and Child VA questionnaire; and if the deceased was 12 years or older, it will show questions from the Adolescent and Adult VA questionnaire.
- The interviewer proceeds with interviewing the respondent, asking all questions as they appear on the screen, regardless of personal opinion as to their relevance; and entering the correct information for each according to respondent's response.
 - In the sample paper forms, the interviewer must cover all the sections and subsections in the questionnaire (as described in the following lessons) according to questions' relevancy by following the listed skip instructions.
- In ODK Collect, if the text is in **bold** it indicates that it should be read aloud to the respondent (Figure 8).
- In ODK Collect, if the text on the questionnaire is in grey or in [brackets], it should be considered an instruction or question to the VA interviewer and should not be read aloud to the respondent (Figure 8).
- The interviewer should take notes, writing down additional relevant information in the blank spaces of a VA paper form or in a separate notepad.
- If required, the interviewer may take a short break during the interview, for example to take notes, if the respondent is feeling distressed or to handle any disruptions to the interview.
- The interviewer must ensure that the questionnaire is 100% complete before leaving the household.
- With few exceptions, VA interviews should be completed in a single visit with the respondent.
- The interviewer should inform the household that once the VA interviews are reviewed,
 there may be a small chance of the household being contacted again for any clarification.
- Mistakes in filling in the VA questionnaires do occur in the field. When such happens, it
 is important to annotate in a notepad the number of the question and the information
 that needs correction and give it to the VA supervisor.

Fig. 8. Two question examples showing how to read the VA questionnaire in ODK Collect. The format of the text specifies how the questionnaire should be administered (as it appears on smartphones/tablets).



The Verbal Autopsy Field Interviewer Manual

The *VA Field Interviewer Manual* should be used as a guide or reference for VA interviewers; being periodically reviewed or referred to when a question/issue arises. The manual contains:

- Description of the essential features of the 2022 WHO VA questionnaires.
- Brief explanation of the various aspects that need to be taken into consideration for implementing the VA interview.
- Question by question instructions to complete each of the VA questionnaires for the three age groups — questions, expected responses and skip patterns are explained to facilitate understanding of the questions, and to collect information in a standard manner.



NOTE FOR TRAINERS: Take the participants through the different sections of the VA Field Interviewer Manual.

SESSION 8

Verbal autopsy interview administering the questionnaire for the death of a child aged under 4 weeks

OBJECTIVES

Learn how to conduct a VA interview using the 2022 WHO VA questionnaire for deaths of children aged under four weeks. By the end of the session, participants should become familiarised with the questionnaire and gain a good understanding of each section and questions included in the VA neonatal questionnaire.

MATERIALS

PowerPoint slides; flip chart/board; copies for all participants of the paper versions of the 2022 WHO VA instrument for the death of a child aged under 4 weeks (if applicable, translated versions); VA Field Interviewer Manual (copies for all participants)

160 min

Directions

- 1. Start by informing that training sessions 8-10 will focus on how to administer the VA questionnaire through the in-depth review of each paper-based VA questionnaire for the three age groups — starting with the questionnaire for the death of a child aged under four weeks.
- 2. Review with the participants how to administer the neonatal VA questionnaire, using the "Question by Question Instructions" contained in the Appendix of the VA Field Interviewer Manual.

- For participants to remain engaged, it is important to involve them in the review of the questions.
- The trainers should provide an overall introduction to each section of the VA neonatal questionnaire, and then have the participants review each of the questions included in each section, using either METHOD A or METHOD B, as described in Activity 8.1.²⁶
 - To help assess the level of class understanding of a question and respective answer options following the review of a VA question, before moving on to the next VA question, trainers can direct participants to raise their hands or show coloured "flags/cards" to indicate whether there is: understanding; no understanding; or partial understanding/issues to address (e.g., adaptations to local context).
- Data collection instruments are translated or adapted for local use, even if administered in English, as lay language differs across English speaking regions. Activity 8.1 should also be used as an opportunity to carefully review with the class, the accuracy of the translation of the neonatal VA questionnaire. Translation issues should be reported to the supervisors to be resolved locally; issues identified with the standard questionnaire (i.e., that are applicable beyond the country) can be reported via email to: who.va.issues@swisstph.ch.
- **3.** Facilitate a discussion with the class, addressing the following aspects:
 - Questions/terms that might be difficult to describe to respondents;
 - Questions and/or responses that are not clear;
 - How to use the open narrative to complement the structured sections of the questionnaire;
 - Sensitive issues to discuss with respondents;
 - Health records that might be available.
- 4. Carry out Activity 8.2 with the class.
- 5. Before terminating, summarise the purpose of each of the sections reviewed and clarify any questions and doubts the participants may have regarding the sections or any of the question included in the neonatal VA questionnaire.

Suggestion for selection of methods — choose method B for greater number of class participants or for retraining sessions.



NOTE FOR TRAINERS: Questions reviewed should include all that might be asked during an interview about the death of a child aged under four weeks. During the review, highlight that not all questions will be asked during an actual interview, due to embedded skip patterns.



NOTE FOR TRAINERS: It is recommended that trainers take note of the VA questions that generate the most challenges for participants. Such feedback can be used to improve training methodology, and to direct capacity building to where its most needed.

Activity 8.1



Directions

Review with the class how to administer the neonatal VA questionnaire, using either **METHOD A** or **METHOD B**.

METHOD A:

- Using the VA Field Interviewer Manual and following the correct order in which VA questions are asked for the death of a child aged under four weeks, have each of the participants read aloud the description of one of the questions, from each of the questionnaire's section.
- 2. Discuss the use of different local terms/expressions for diseases and symptoms referred to in the VA questionnaire.
- **3.** Review, discuss and confirm translations with the class. Take note of any identified issues with the translations that need to be submitted for correction.
- **4.** Allow the participants to ask any questions they may have between the review of each questionnaire question.
- **5.** Ensure that everyone understands the reviewed question and expected responses before moving on to the next one.

METHOD B:

- Break the class into small groups (4–5 participants each). Instruct the groups to use the VA Field Interviewer Manual to review each of the questions included in the VA neonatal questionnaire's sections before discussion in the plenary.
- 2. Rotationally, ask one of the groups to explain one and each of the questions and expected responses.
- **3.** Discuss the use of different local terms/expressions for diseases and symptoms referred to in the VA questionnaire.
- **4.** Review, discuss and confirm translations with the class. Take note of any identified issues with the translations that need to be submitted for correction.

- 5. Allow the participants to ask any questions they may have between the review of each questionnaire question.
- **6.** Ensure that everyone understands the reviewed question and expected responses before moving on to the next one.



Notes for trainers

The trainers should introduce and review each section of the neonatal VA questionnaire. If applicable, media files can be shown to aid understanding on how the open narrative should be best conducted and of symptoms and conditions referred to in the VA neonatal questionnaire.

Activity 8.2



Directions

Before practicing with an electronic device, it is recommended that participants first practice the conduct of VA interviews using the paper forms. The focus of the activity is to build familiarity with the questions. Later sessions will focus on other interviewing skills.

An example of a training case ("Training Case A") is given for the participants to practice role play. A **minimum of two training cases per pair of participants is needed**. The additional training case(s) should be locally developed — to reflect or highlight specific local issues. Training cases can be developed from pre-existing real VA data or developed from physicians that have experience reviewing VAs.

- **1.** Have the participants pair up to play the roles of interviewer and respondent.
- 2. Distribute copies of the training cases for neonates or display the relevant PowerPoint slides.
- **3.** Within each pair, the interviewer should ask the questions using the paper form; while the respondent, should reply and improvise according to the information provided in the training case.
- **4.** Once one interview round is over, the participants change roles so that both have a chance to practice administering the interview using the paper form; and to experience how it feels to be a respondent (i.e., to be interviewed).
- Having the opportunity to practice both roles, trainees are better able
 to understand the experience of answering very difficult questions
 (generates more empathy; helps drive home the importance of good
 interviewing and following ethical principles).
- 5. Once the pairs have played out the training cases, facilitate a class discussion focusing on the understanding of the questions, valid

responses, how to capture information through the open narrative and on the flow of the neonatal questionnaire.



Notes for trainers

Ensure that the pairs practice how to enquire and record information on the open narrative. Stress the importance of cross-checking information given in the open narrative with the other sections of the questionnaire. Highlight that in some instances, respondents state some critical information in the open narrative, which may not be captured in any of the other sections of the questionnaire.

Training Case A

Details of interview	
Date of interview	28/09/2017
Starting time	10:00
Name of interviewer	John Kissassunda
Details of deceased	
Name	Kiluanji Kia Henda
Sex	Male
Date of birth (DOB)	09/06/2017
Date of death (DOD)	10/06/2017
Age (if DOB and/or DOD not known)	-
Details of respondent	
Name	Samantha Van-Dunem
Age	29 years
His/her relationship to decedent	Mother

Situation: Interviewer goes to a household where a newborn baby has died, for a pre-planned VA interview. Several people are standing in front of the house. Interviewer introduces himself/herself and the motive behind the visit and asks to speak with the mother of the child. House visitors are curious and want to stay for the interview.

Case description: The deceased baby was born at home from a normal vaginal delivery, almost two weeks after the expected delivery date. During labour, the mother had fever and the liquor was greenish. The

baby was born very large, limp and blue, without movement/reflexes, and did not cry immediately after birth.

The grandmother, who assisted the delivery, managed to resuscitate the baby. However, the baby was lethargic and breathed with difficulty — drawing in the lower chest wall while breathing in and making a "grunting sound" when breathing out. No bulging of the fontanelle was present. The mother had arranged for transportation to the health facility for the next day, but in the morning the mother found the baby had died.

SESSION 9

Verbal autopsy interview administering the questionnaire for the death of a child aged 4 weeks to 11 years

OBJECTIVES

Learn how to conduct a VA interview using the 2022 WHO VA questionnaire for deaths of children aged four weeks to 11 years. By the end of the session, participants should become familiarised with the questionnaire and gain a good understanding of each section and questions included in the WHO 2022 child VA questionnaire.



MATERIALS

PowerPoint slides; flip chart/board; copies for all participants of the paper versions of the 2022 WHO VA instrument for the death of a child aged 4 weeks to 11 years (if applicable, translated versions); and VA Field Interviewer Manual (copies for all participants).

160 min

Directions

- 1. Start by addressing the objectives of the session.
- Review with the participants how to administer the child VA questionnaire, using the "Question by Question Instructions" contained in the Appendix of the VA Field Interviewer Manual.
 - For participants to remain engaged, it is important to involve them in the review of the questions.

- The trainers should provide an overall introduction to each section of the child VA questionnaire, and then have the participants review each of the questions included in each section, using either METHOD A or METHOD B, as described in Activity 9.1.²⁷
 - To help assess the level of class understanding of a question and respective answer options following the review of a VA question, before moving on to the next VA question, trainers can direct participants to raise their hands or show coloured "flags/cards" to indicate whether there is: understanding; no understanding; or partial understanding/issues to address (e.g., adaptations to local context).
- Data collection instruments are translated or adapted for local use, even if administered in English, as lay language differs across English speaking regions. Activity 9.1 should also be used as an opportunity to carefully review with the class, the accuracy of the translation of the child VA questionnaire. Translation issues should be reported to the supervisors to be resolved locally; issues identified with the standard questionnaire (i.e., that are applicable beyond the country) can be reported via email to: who.va.issues@swisstph.ch.
- **3.** Facilitate a discussion with the class, asking for the following aspects:
 - Questions/terms that might be difficult to describe to respondents;
 - Questions and/or responses that are not clear;
 - How to use the open narrative to complement the structured sections of the questionnaire;
 - Sensitive issues to discuss with respondents;
 - Health records that might be available.
- 4. Carry out Activity 9.2 with the class.
- 5. Before terminating, summarise the purpose of each of the sections reviewed and clarify any questions and doubts the participants may have regarding the sections or any of the questions included in the child VA questionnaire.

Suggestion for selection of methods — choose method B for greater number of class participants or for retraining sessions.



NOTE FOR TRAINERS: Questions reviewed should include all that might be asked during an interview about the death of a child aged 4 weeks to 11 years. During the review, highlight that not all questions will be asked during an actual interview, due to embedded skip patterns.



NOTE FOR TRAINERS: It is recommended that trainers take note of the VA questions that generate the most challenges for participants. Such feedback can be used to improve training methodology, and to direct capacity building to where its most needed.

Activity 9.1



Directions

Review with the class how to administer the child VA questionnaire, using either **METHOD A** or **METHOD B**.

METHOD A:

- Using the VA Field Interviewer Manual and following the correct order in which VA questions are asked for the death of a child aged 4 weeks to 11 years, have each of the participants read aloud the description of one of the questions, from each of the questionnaire's section.
- 2. Discuss the use of different local terms/expressions for diseases and symptoms referred to in the questionnaire.
- **3.** Review, discuss and confirm translations with the class. Take note of any identified issues with the translations that need to be submitted for correction.
- **4.** Allow the participants to ask any questions they may have between the review of each questionnaire question.
- **5.** Ensure that everyone understands the reviewed question and expected responses before moving on to the next one.
- **6.** Conclude by asking the participants to identify and list the key differences between the neonate and the child questionnaire.

METHOD B:

- 1. Break the class into small groups (4–5 participants each). Instruct the groups to use the *VA Field Interviewer Manual* to review each of the questions included in the child VA questionnaire's sections before discussion in the plenary.
- 2. Rotationally, ask one of the groups to explain one and each of the questions and expected responses.
- **3.** Discuss the use of different local terms/expressions for diseases and symptoms referred to in the questionnaire.

- **4.** Review, discuss and confirm translations with the class. Take note of any identified issues with the translations that need to be submitted for correction.
- **5.** Allow the participants to ask any questions they may have between the review of each questionnaire question.
- **6.** Ensure that everyone understands the reviewed question and expected responses before moving on to the next one.
- **7.** Conclude by asking the participants to identify and list the key differences between the neonate and the child questionnaire.



Notes for trainers

The trainers should introduce and review each section of the child VA questionnaire. If applicable, media files can be shown to aid understanding of how the open narrative should be best conducted and of symptoms and conditions referred to in the child VA questionnaire.

Activity 9.2



Directions

Before practicing with an electronic device, it is recommended that participants first practice the conduct of VA interviews using the paper forms. The focus of the activity is to build familiarity with the questions. Later sessions will focus on other interviewing skills.

An example of a training case ("Training Case A") is given for the participants to practice role play. A **minimum of two training cases per pair of participants is needed**. The additional training case(s) should be locally developed — to reflect or highlight specific local issues. Training cases can be developed from pre-existing real VA data or developed from physicians that have experience reviewing VAs.

- 1. Have the participants pair up, asking one to play the role of interviewer and the other of respondent.
- **2.** Distribute copies of the training cases for children or display the relevant PowerPoint slides.
- **3.** Within each pair, the interviewer should ask the questions using the paper form; while the respondent, should reply and improvise according to the information provided in the training case.
- **4.** Once one interview round is over, the participants change roles so that both have a chance to practice administering the interview using the paper form; and to experience how it feels to be a respondent (i.e., to be interviewed).
- Having the opportunity to practice both roles, trainees are better able
 to understand the experience of answering very difficult questions
 (generates more empathy; helps drive home the importance of good
 interviewing and following ethical principles).
- 5. Once the pairs have played out the training cases, facilitate a class discussion focusing on the understanding of the questions, valid

responses, how to capture information through the open narrative and on the flow of the children VA questionnaire.



Notes for trainers

Ensure that the pairs practice how to enquire and record information on the open narrative. Stress the importance of cross-checking information given in the open narrative with the other sections of the questionnaire.

Training Case A

Details of interview	
Date of interview	Date of interview
Starting time	Starting time
Name of interviewer	Name of interviewer
Details of deceased	
Name	Name
Sex	Sex
Date of birth (DOB)	Date of birth (DOB)
Date of death (DOD)	Date of death (DOD)
Age (if DOB and/or DOD not known)	Age (if DOB and/or DOD not
	known)
Details of respondent	
Name	Name
Age	Age
His/her relationship to decedent	His/her relationship to decedent

Situation: The interviewer is visiting a household where a seven month old girl died. The VA interview had already been pre-scheduled with the deceased's mother. The interview is proceeding slowly as the mother transpires to be nervous and hesitates to give answers. However, as the husband arrives home and joins in the VA interview, she becomes more receptive and more easily answers the questions.

Case description: The deceased child had been feeling well until five days before death, when it was noticed that the child was having "on and off" episodes of strong belly pain. During these episodes, some of which woke the child from sleep, she cried and pulled her legs up toward her chest while lying on her back. The parents describe how they palpated her belly during some of the episodes and it felt rigid — they did not notice any

mass on the belly. At the time, they suspected that she might be having discomfort related to excessive intestinal gas. She ate and drank normally without vomiting.

The next day, she had two bowel movements, and the stools were reddish in colour. With the first bowel movement, the redness seemed to be present in a small amount and only on the outside of the stool; with the second bowel movement, the amount of redness increased. The mother attributed the stool discoloration to beet consumption. The episodes of abdominal pain continued, associated with crying, and between the episodes, the child behaved normally. From the third day: the bowel movements appeared to consist almost entirely of blood; she seemed very pale; and was sweating heavily. The child experienced no fever throughout the illness period. The parents wanted to take her to the hospital, but as there was flood in the area, no transport was available. On the fifth day, Diya became unconscious and passed away.

SESSION 10

Verbal autopsy interview administering the questionnaire for the death of a person aged 12 years and above

OBJECTIVES

Learn how to conduct a VA interview using the 2022 WHO VA questionnaire for deaths of people aged 12 years and above. By the end of the session, participants should become familiarised with the questionnaire and gain a good understanding of each section and questions included in the VA questionnaire for the death of a person aged 12 years and above.

MATERIALS

PowerPoint slides; flip chart/board; copies for all participants of the paper versions of the 2022 WHO VA instrument for the death of a person aged 12 years and above (if applicable, translated versions); and VA Field Interviewer Manual (copies for all participants).

160 min

Directions

- 1. Start by addressing the objectives of the session.
- Review with the participants how to administer the adolescent and adult VA questionnaire, using the "Question by Question Instructions" contained in the Appendix of the VA Field Interviewer Manual.

- For participants to remain engaged, it is important to involve them in the review of the questions.
- The trainers should provide an overall introduction to each section of the adolescent and adult VA questionnaire, and then have the participants review each of the questions included in each section, using either METHOD A or METHOD B, as described in Activity 10.1.²⁸
 - To help assess the level of class understanding of a question and respective answer options following the review of a VA question, before moving on to the next VA question, trainers can direct participants to raise their hands or show coloured "flags/cards" to indicate whether there is: understanding; no understanding; or partial understanding/issues to address (e.g., adaptations to local context).
- Data collection instruments are translated or adapted for local use, even if administered in English, as lay language differs across English speaking regions. Activity 10.1 should also be used as an opportunity to carefully review with the class, the accuracy of the translation of the neonatal VA questionnaire. Translation issues should be reported to the supervisors to be resolved locally; issues identified with the standard questionnaire (i.e., that are applicable beyond the country) can be reported via email to: who.va.issues@swisstph.ch.
- 3. Facilitate a discussion with the class, asking for the following aspects:
 - Questions/terms that might be difficult to describe to respondents;
 - Questions and/or responses that are not clear;
 - How to use the open narrative to complement the structured sections of the questionnaire;
 - Sensitive issues to discuss with respondents;
 - Health records that might be available.
- 4. Carry out **Activity 10.2** with the class.
- 5. Before terminating, summarise the purpose of each of the sections reviewed and clarify any questions and doubts the participants may have regarding the sections or any of the questions included in the adolescent and adult VA questionnaire.

Suggestion for selection of methods — choose method B for greater number of class participants or for retraining sessions.



NOTE FOR TRAINERS: Questions reviewed should include all that might be asked during an interview about the death of a person aged 12 years and above. During the review, highlight that not all questions will be asked during an actual interview, due to embedded skip patterns.



NOTE FOR TRAINERS: It is recommended that trainers take note of the VA questions that generate the most challenges for participants. Such feedback can be used to improve training methodology, and to direct capacity building to where its most needed.

Activity 10.1



Directions

Review with the class how to administer the adolescent and adult VA questionnaire, using either **METHOD A** or **METHOD B**.

METHOD A:

- 1. Using the VA Field Interviewer Manual and following the correct order in which VA questions are asked for the death of a person aged 12 years and above, have each of the participants read aloud the description of one of the questions, from each of the questionnaire's section.
- 2. Discuss the use of different local terms/expressions for diseases and symptoms referred to in the questionnaire.
- **3.** Review, discuss and confirm translations with the class. Take note of any identified issues with the translations that need to be submitted for correction.
- **4.** Allow the participants to ask any questions they may have between the review of each questionnaire question.
- **5.** Ensure that everyone understands the reviewed question and expected responses before moving on to the next one.
- **6.** Conclude by asking the participants to identify and list the key differences between the three questionnaires: the neonatal, the child, and the adolescent and adult VA questionnaires.

METHOD B:

- 1. Break the class into small groups (4–5 participants each). Instruct the groups to use the *VA Field Interviewer Manual* to review each of the questions included in the adolescent and adult VA questionnaire's sections before discussion in the plenary.
- 2. Rotationally, ask one of the groups to explain one and each of the questions and expected responses.
- **3.** Discuss the use of different local terms/expressions for diseases and symptoms referred to in the questionnaire.

- **4.** Review, discuss and confirm translations with the class. Take note of any identified issues with the translations that need to be submitted for correction.
- 5. Allow the participants to ask any questions they may have between the review of each questionnaire question.
- **6.** Ensure that everyone understands the reviewed question and expected responses before moving on to the next one.
- 7. Conclude by asking the participants to identify and list the key differences between the three questionnaires: the neonatal, the child, and the adolescent and adult VA questionnaires.



Notes for trainers

The trainers should introduce and review each section of the adolescent and adult VA questionnaire. If applicable, media files can be shown to aid understanding of how the open narrative should be best conducted and of symptoms and conditions referred to in the adolescent and adult VA questionnaire.

Activity 10.2



Directions

Before practicing with an electronic device, it is recommended that participants first practice the conduct of VA interviews using the paper forms. The focus of the activity is to build familiarity with the questions. Later sessions will focus on other interviewing skills.

An example of a training case ("Training Case A") is given for the participants to practice role play. A **minimum of two training cases per pair of participants is needed**. The additional training case(s) should be locally developed — to reflect or highlight specific local issues. Training cases can be developed from pre-existing real VA data or developed from physicians that have experience reviewing VAs. Have the participants pair up, asking one to play the role of interviewer and the other of respondent.

- 1. Have the participants pair up, asking one to play the role of interviewer and the other of respondent.
- 2. Distribute copies of the training cases for adolescent and adults or display the relevant PowerPoint slides.
- **3.** Within each pair, the interviewer should ask the questions using the paper form; while the respondent, should reply and improvise according to the information provided in the training case.
- Once one interview round is over, the participants change roles so that both have a chance to practice administering the interview using the paper form; and to experience how it feels to be a respondent (i.e., to be interviewed).
- 4. Having the opportunity to practice both roles, trainees are better able to understand the experience of answering very difficult questions (generates more empathy; helps drive home the importance of good interviewing and following ethical principles).
- **5.** Once the pairs have played out the training cases, facilitate a class discussion focusing on the understanding of the questions, valid

responses, how to capture information through the open narrative and on the flow of the adolescent and adult VA questionnaire.



Notes for trainers

Ensure that the pairs practice how to enquire and record information on the open narrative. Stress the importance of cross-checking information given in the open narrative with the other sections of the questionnaire.

Training Case A

Details of interview	
Date of interview	Date of interview
Starting time	Starting time
Name of interviewer	Name of interviewer
Details of decedent	
Name	Name
Sex	Sex
Date of birth (DOB)	Date of birth (DOB)
Date of death (DOD)	Date of death (DOD)
Age (if DOB and/or DOD not known)	Age (if DOB and/or DOD not
	known)
Details of respondent	
Name	Name
Age	Age
His/her relationship to decedent	His/her relationship to decedent

Situation: The interviewer is visiting for the first time the household of the deceased's brother. The deceased lived alone, and the brother took care of him during the period of illness. The brother agreed to participate in the VA interview.

Case description: Mr Gika had been well until three months before death, when he started having decreased energy, poor appetite, and weight loss. In the first week of illness, he started complaining of feeling a bit feverish, of being extremely tired all the time and of difficulty breathing, which prevented him from engaging in his usual activities. Worried, he went with his brother to the town's hospital where some tests were made, and he was given some unspecified medication to take. Despite the medication, fever got worse, and a few days after he had an episode of vomiting. The

brother does not know if there was blood in the vomit. He had an unwitnessed fall, claiming that he had felt generally weak and had tried to sit down but fell backward and struck his head, without loss of consciousness. He was found on the floor by his brother and was unable to stand up. His brother tried to convince him to go to the health facility, but Mr Gika refused.

His brother recalled that he started having headaches, but no neck stiffness. Two months before death, Mr Gika rapidly developed an altered mental status, being increasingly agitated and confused, and having difficulties formulating sentences. This was quickly followed by loss of the control of the movement of his arms and legs; and then he fell into a coma. The brother described how he tried to care for his brother the best he could, but one day he came to see his brother and he found him dead in bed.

Mr Gika had a history of hypertension and diabetes. He drank alcohol occasionally and had not smoked tobacco in 30 years — but had previously smoked one pack of cigarettes per day for 20 years.

SESSION 11

General instructions on the use of electronic devices

OBJECTIVES

Learn to use and operate tablets/smartphones: parts, functions, and interface; routine care; and how to troubleshoot frequent problems.



MATERIALS

PowerPoint slides; flip chart/board; and tablets/smartphones for all training participants (loaded and operational with the 2022 WHO VA instrument and ODK Collect).

60 min

Directions

- 1. Start by addressing the objectives of the session.
- 2. Distribute the tablets/smartphones to the participants.
- 3. Carry out Activities 11.1 and 11.2 with the class to review the basic functions and key operations of the electronic devices that VA interviewers will be using.
- 4. Before terminating, clarify any questions and doubts the participants may have regarding the operation of the electronic device.



NOTE FOR TRAINERS: Give sufficient time for the participants to familiarise themselves with the electronic devices. Participants need to be very familiar with the electronic device to feel comfortable operating the device in the field.

Activity 11.1



Directions

- Review, showing and demonstrating to the participants, the different parts of the tablet/smartphone, functions, and basic operation of the device. Focus on how these features will be used during data collection.
- **12.** Allow the participants to identify the parts/buttons on the tablet/smartphone and practice its use.
- **13.** Provide instructions on how to charge and take care of the electronic device, including productivity tips (e.g., turning off settings that are not needed to prolong battery life).
- **14.** Discuss any issues and concerns the participants may foresee in the use of the tablet/smartphone for data collection.
- 15. Answer any questions that participants may have.



Notes for trainers

Remind participants of the importance of ensuring the device is fully charged when preparing for the conduct of VA work. A good practice is to have the devices fully charged in the evening in preparation for the next day's work. The implementing team should also ensure that chargers provided are adequate to the local energy sources available to interviewers.

Activity 11.2



Directions

- Ask participants what they think some common problems will be with the use of the electronic devices and take note of these in the flip chart/board.
- 2. List on the flip chart the issues below in case they were not mentioned by the respondents:
- Device does not turn on;
- Screen does not respond to touch;
- Device overheats;
- Device performs very slowly.
- **3.** Discuss with the participants how to overcome the common problems, and allow them to practice:
- Pressing and holding the wake/sleep button;
- Connecting the electronic device to a power adaptor;
- Performing a soft reset;
- Safely removing the SD card.
- **4.** Share with the participants who they should contact in case none of the strategies above work to fix the problem(s) with the electronic devices. This should be discussed and organised locally at the planning stages of the VA implementation.

SESSION 12

Electronic data collection with the 2022 WHO verbal autopsy instrument

OBJECTIVES

Learn how to operate the devices to administer, collect, edit and save data for VA through ODK Collect; and how to send remotely the completed questionnaires to a central database (e.g., ODK Central) or upload them into a computer. Understand the functioning of the skip patterns embedded within the questionnaire for the three different age groups. By the end of the session, participants should be confident in using an electronic device to conduct a VA interview through ODK Collect.

MATERIALS

PowerPoint slides; flip chart/board; tablets/smartphones for each of the training participants (loaded and operational with the 2022 WHO VA instrument and ODK Collect); connector to view smartphone/tablet from projector's screen (if available).

180 min

Directions

- 1. Start by addressing the objectives of the session.
- 2. According to the "Text" and using PowerPoint slides, review with class the use of electronic devices and ODK for the collection of data for the 2022 WHO VA instrument.
- 3. Carry out Activities 12.1 and 12.2 with the class.
- 4. Before terminating, clarify any questions and doubts the participants may have.

Text: Using the electronic data collection platform

ODK is an open-source mobile data collection platform.²⁹ It enables users to fill out forms offline and send form data to a central server when a network connection is available. Once on the server, the data can be viewed, downloaded, and reviewed/edited. ODK has three main components:

- **ODK Collect**³⁰ –an Android application that allows for the collection of data through smartphones and tablet devices. It is a powerful replacement for paper forms. It also allows the transfer of collected data to ODK Central.
- ODK Central³¹ –works as the ODK server, replacing ODK Aggregate. It manages user accounts and permissions, stores form definitions and allows connection from ODK Collect for form download and form submission upload.
- DK Briefcase³² –allows data to be transferred from ODK Collect to a laptop/desktop. It
 can function as an alternative to ODK Central for collating data, where there is no
 Internet connectivity.

General instructions on using the ODK Collect for the collection of data for the 2022 WHO VA instrument are included below.



NOTE FOR TRAINERS: For training purposes countries can request the use of a WHO-ODK Central server. This would enable the practice of submitting the 2022 WHO questionnaire into ODK Collect and the upload onto the server of completed VA interviews.

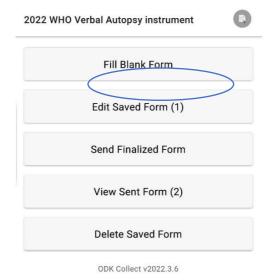
²⁹ https://getodk.org/

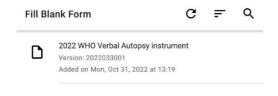
³⁰ https://docs.getodk.org/collect-intro/

³¹ https://docs.getodk.org/central-intro/

ODK Briefcase has been deprecated recently, but it will still work with ODK Central for the next couple of years at least. It is still the unique solution to download and export data from a single device to a laptop.

Starting ODK Collect and opening the 2022 WHO verbal autopsy questionnaire





- 1. Turn on your Android device.
- Touch/press on the ODK Collect icon to open the ODK Collect application.
- 3. In the main screen, there are five options: "Fill Blank Form", "Edit Saved Form", "Send Finalized Form", "Get Blank Form", and "Delete Saved Form".
- 4. Tap on the "Fill Blank Form" option.
- Touching "Fill Blank Form", launches and displays all the forms that have been loaded in ODK Collect.
- 6. Tap the loaded file "2022 WHO Verbal Autopsy Instrument" form to open the VA questionnaire.

Completing the verbal autopsy questionnaire

2022	WHO Verbal Autopsy instr
> Gen	o end if not consented > Health history eral signs and symptoms associated inal illness
A mor an exp abdor	10200) Did (s)he have a more than ally protruding abdomen? The than usual protruding abdomen presents as pansion of the whole abdomen. A protruding men is different from an abdominal mass that is as a localised enlargement in the abdomen.
\circ	Yes
\circ	No
\circ	Doesn't know
\circ	Refused to answer
Pr	revious question Next question
∢ BAC	K NEXT >
2022	WHO Verbal Autopsy instr
Skip > Ger	to end if not consented > Health history neral signs and symptoms associated final illness
Skip > Ger with * (Id brea aid id be obtained by the skip) * (Id brea aid id be obtained by the skip) * (Id brea aid id be obtained by the skip) * (Id brea aid id	to end if not consented > Health history neral signs and symptoms associated
Skip > Ger with * (Id brea aid id be obtained by the skip) * (Id brea aid id be obtained by the skip) * (Id brea aid id be obtained by the skip) * (Id brea aid id	to end if not consented > Health history meral signs and symptoms associated final illness I10159) Did s/he have any difficulty athing or breathlessness? thing difficulties are an important feature that dentification of the cause of death, and can be be served in the form of struggling to breath or
Skip > Ger with * (Id brea aid id be obtained by the skip) * (Id brea aid id be obtained by the skip) * (Id brea aid id be obtained by the skip) * (Id brea aid id	to end if not consented > Health history neral signs and symptoms associated final illness 110159) Did s/he have any difficulty athing or breathlessness? thing difficulties are an important feature that dentification of the cause of death, and can observed in the form of struggling to breath or no out of breath.
Skip > Ger with * (Id brea Breat aid ic be ob feelin	to end if not consented > Health history neral signs and symptoms associated final illness I10159) Did s/he have any difficulty athing or breathlessness? thing difficulties are an important feature that dentification of the cause of death, and can observed in the form of struggling to breath or no out of breath. Yes
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Skip > Gel with * (Id brea Breat aid id id be ob feelin	to end if not consented > Health history neral signs and symptoms associated final illness I10159) Did s/he have any difficulty athing or breathlessness? thing difficulties are an important feature that dentification of the cause of death, and can observed in the form of struggling to breath or ng out of breath. Yes No Doesn't know
Skip > Gel with * (Id brea Breat aid id id be ob feelin	to end if not consented > Health history meral signs and symptoms associated final illness I10159) Did s/he have any difficulty athing or breathlessness? thing difficulties are an important feature that dentification of the cause of death, and can observed in the form of struggling to breath or ng out of breath. Yes No Doesn't know Refused to answer

- Enter data into the questionnaire, swiping from right-to-left with your finger to get to the next questions; or swiping from left-to-right to go back to a previous page for checking contents or making changes.
- Enter data for all the questions, as they appear on screen.
- Single touching/tapping on the radio button or checkbox will mark a response.
- Double touching/tapping will remove the response selected. This feature can be used for correcting the mistakes made during an interview.

Editing and saving the verbal autopsy questionnaire

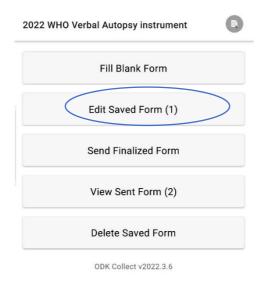
 As mentioned, if anything has been wrongly entered, edits can be made

- by going back to a previous page (swiping from left-to-right).³³
- The VA questionnaire may be saved after any question, by clicking on the icon.
- The questionnaire can also be saved after completing any question and pressing the "back button" on the electronic device and tapping on "Save Changes" from the dialog box.



- At the end of an interview, a
 message will pop up saying "You
 are at the end of ENTER FORM
 NAME." You will be asked to name
 this file.
- Ensure to touch the "Save Form and Exit" button to properly save the completed VA questionnaire.

The editing of responses in ODK must be reserved only to correcting information that was wrongly recorded by the interviewer - i.e., the interviewer must not change the answer(s) that were provided by the respondent.



To review and make edits, once the form has been completed:

- Go to the ODK Collect main screen and select "Edit Saved Form".
- A list of completed VA forms will appear; choose the data submission form to be reviewed.
- 3. Navigate through the list of VA questions, identify the question(s) to be reviewed, and make the necessary correction(s) if anything has been wrongly entered.
 - The entire questionnaire is accessible by scrolling up and down.
- **4.** To make an edit touch on the desired question to open it in full screen, then correct the answer and touch on the icon.
- 5. To come back to the entire questionnaire and continue the review, touch on the icon.

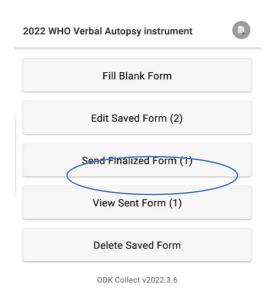
Sending the completed verbal autopsy questionnaire

Once the VA interviews have been completed, the information needs to be uploaded to a database for analysis and storage. There are two methods of data transfer: online — through the Wi-Fi or cellular network; or offline — by uploading the data to a computer.

There are various ways in which the electronic devices can be set up for online transfer of completed VA interviews. The electronic devices can be set up to allow the option of review and to then send the data manually to ODK Central; or to automatically send completed VA interviews when internet connection is available. Alternatively, the electronic devices can be

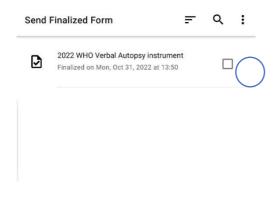
configured to hide the option to edit the records, and/or to hide from interviewers the option to send finalised forms (e.g., only supervisors via password would be able to send data). The chosen method of data transfer must be communicated to the VA interviewers.

General instructions on how interviewers can send completed VA interviews from ODK Collect to ODK Central are included below.



Online method

- Make sure the device is accessing the Internet, either via a Wi-Fi connection or a data plan on a cellular service.
- **2.** Open ODK Collect and select "Send Finalized Form", from the main screen.



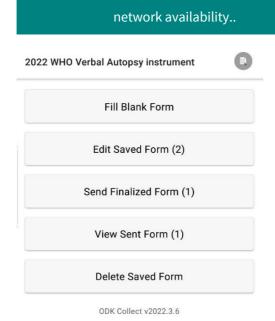
- This will display all the forms that have been collected (in our case, for our demonstrative purposes, only one).
- 4. Touch the box next to the completed questionnaires to select the forms that are to be uploaded to ODK Central.
- 5. Touch "Select All/Clear All" to check or uncheck all forms.
- **6.** Touch on the "Send Selected" button to send the forms.



- 7. Once the forms have been uploaded into ODK Central, a "Upload Results" message will appear saying data was sent successfully (or not, depending on the Internet connection).
- 8. Touch "OK" to continue.



NOTE FOR TRAINERS: Instruct participants that if there is an error when trying to send completed VA questionnaires to ODK Central, the data connection should be switched off, and after a few seconds, switched on



In the main menu, all the buttons will now display how many "saved forms" there are, and how many "finalised forms" have been sent.

again. Doing this helps refresh network settings, which is affected by

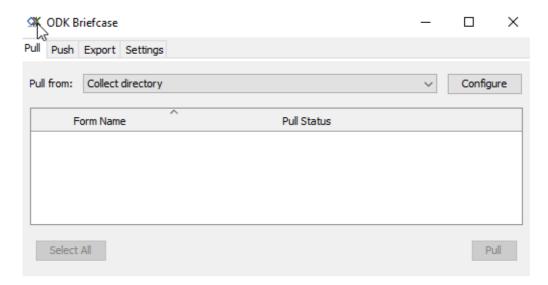
If using the offline method: the smartphone/tablet needs to be connected to a computer via a USB cable, so that VA information can be transferred from ODK Collect and saved on a local computer using ODK Briefcase. Below, instructions on transfer of the files using ODK Briefcase:³⁴

- Connect the Android device to a computer using a USB cable and choose to mount it as a Media device.
- 2. Browse the android device to the "odk" directory.
- 3. Copy the complete odk directory to the computer.
- **4.** Open ODK Briefcase and in the main menu of the "Pull" tab choose "collect Directory" (as shown in Figure 9).
- 5. Click on "Configure" and choose the "odk" folder on your Android device.

More detailed information can be found on the web page: https://docs.getodk.org/briefcase-using/.

- 6. Select the form and then click the "pull" button on the bottom right.
- 7. Now the data can be exported to csv via the Export Tab or pushed to a Central server via the push button.

Fig. 9. Main menu of "Pull" from ODK Briefcase for transferring completed VA forms.



Activity 12.1



Directions

- Demonstrate on the screen of a tablet/smartphone and ask the participants to follow on accordingly on their own respective tablet/smartphone.
- **16.** Practice: turning "on" the electronic device; opening ODK Collect; opening a blank VA form; answering different types of questions; editing; saving; and sending the completed questionnaire.
- **17.** Instruct the participants on any additional practical considerations for data collection (e.g., if using cellular network how to check data bundles and available credit).
- **18.** Clarify any questions the participants may have. Note to participants that in the following activities they will have opportunities to practice more with the electronic devices by themselves.

Activity 12.2



Directions

An example of a training case for each of the three age groups ("Training Cases A, B and C"), is given for the participants to practice. It is recommended that the additional training cases needed are locally developed — to reflect or highlight specific local issues.

- 1. Have the participants pair up, asking one to play the role of interviewer and the other of respondent.
- 2. Distribute copies of the exercises for neonates, children, and adolescent and adults to each pair of participants; or display relevant PowerPoint slides.
- 3. Within each pair, the interviewer should ask the questions and operate the tablet/smartphone; the respondent should reply and improvise according to the information provided within the training case.
- 4. Once the interview is over, the participants change roles so that both have a chance to practice administering the interview using an electronic device for each of the three age groups minimum of two exercises of an age group per pair of participants.
- **5.** Once the pairs have completed the exercises, facilitate a class discussion focusing on challenges encountered and any participants' concerns.



Notes for trainers

Address with the participants that the primary objectives of this exercise are to get a) participants familiarised with the operation of tablets/smartphones and ODK Collect to conduct an interview and collect VA data; b) a good understanding of how the skip patterns work within the VA questionnaire. Thus, at this stage the focus is not on all the steps required to conduct sensitive interviews or the communication techniques that should be employed.

Training Case A

Details of interview	
Date of interview	Date of interview
Starting time	Starting time
Name of interviewer	Name of interviewer
Details of deceased	
Name	Name
Sex	Sex
Date of birth (DOB)	Date of birth (DOB)
Date of death (DOD)	Date of death (DOD)
Age (if DOB and/or DOD not known)	Age (if DOB and/or DOD not
	known)
Details of respondent	
Name	Name
Age	Age
His/her relationship to decedent	His/her relationship to decedent

Case description:

- Mrs Ruby was pregnant for ten months and had attended antenatal care only once.
- She was trying to deliver at home with assistance from her mother-inlaw.
- She was having labour pains for more than 24 hours but was unable
 to deliver the baby. Then she started to have bleeding from her
 vagina, and she felt that the baby was no longer moving in her
 abdomen.
- When she was brought to the local health centre, she was referred to the district hospital, where the attending physician told her that the baby had died, and she needed an operation to deliver the baby.
- She did not know what kind of operation she had but she was told the baby had died.
- She stayed in the hospital for seven days after the operation.

Training Case B

Name of interviewer	
Details of decedent	
Name	Jean Milleaux
Sex	Male
Date of birth (DOB)	
Date of death (DOD)	08/05/2017
Age (If DOB and / DOD not known)	-
Details of respondent	
Name	Koyo Milleaux
Age	38 years
His/her relationship to decedent	
Name of interviewer	Ava Sorieul
Details of decedent	
Name	Jean Milleaux

Case description:

- According to mother, the child had always been small and weak for his age.
- The child had "on and off" fever and persistent cough for the past week and a half.
- Four days before death, his health deteriorated as he started vomiting, having difficulty breathing, and having loose stools 4-5 times a day. There was no blood in the stool or in the vomit.
- Before death, he was taken to a local private doctor and medicines were given. The doctor did not provide any information regarding what was affecting the child.
- The mother was instructed to prepare and give a home-made oral rehydration solution to the child.
- There was no improvement on the fever, coughing, vomiting or diarrhoea and the child died soon after.

Training Case C

Details of interview	
Date of interview	Date of interview
Starting time	Starting time
Name of interviewer	Name of interviewer
Details of decedent	
Name	Name
Sex	Sex
Date of birth (DOB)	Date of birth (DOB)
Date of death (DOD)	Date of death (DOD)
Age (if DOB and/or DOD not known)	Age (if DOB and/or DOD not
	known)
Details of respondent	
Name	Name
Age	Age
His/her relationship to decedent	His/her relationship to decedent

Case description:

- Mr Ademire was a diagnosed hypertensive for the past 30 years. He was on medications which he did not consume regularly.
- He had a persistent productive cough with yellow coloured sputum for the past three years. His brother does not think there was any no blood in the sputum, but he is not sure.
- He always used to be breathless in early mornings and lacking strength.
- He was a smoker for the past 50 years (used to smoke locally made cigars every day).
- He had no recent history of fever.
- For the last four months he had "on and off" chest pain, which
 increased when walking to town, for which he was taken to the health
 facility. He was given some medication, which again he did not take
 as he was supposed to.
- Mr Ademire lived with his younger brother's family and was found dead in one morning on his bed. Mr Mukhi thinks his brother died of old age.

SESSION 13

Practising the conduct of verbal autopsy interviews

OBJECTIVES

Review all the steps necessary to conduct a VA interview from start to finish through role plays. By the end, participants should be prepared to confidently conduct VA interviews in the field using electronic devices.

MATERIALS

PowerPoint slides; flip chart/board; tablets/smartphones for all training participants (loaded and operational with the 2022 WHO VA instrument and ODK Collect); copies for all participants of the VA informed consent letter (Appendix D); copies for all participants of the VA accompanied supervision checklist (Appendix E); and the VA Field Interviewer Manual (copies for all participants).

415 min

Directions

- 1. Start by addressing the objectives of the session.
- 2. Review the key contents of training sessions 5 and 6: Preparing for the VA interview; and principles for conduct of successful and ethical VA interviews.
 - Note that the aim is for participants to understand both how to operate an electronic device **AND** how to conduct the VA in an ethical and sensitive manner.

- While reviewing content from previsions sessions, use as inputs the conclusions that
 emerged from the activities and plenary sessions, especially those related to
 interviewer behaviour and attitudes, and those things that appeared conflicting or that
 should be done better to strengthen interviewers' skills. For example, things that
 should be avoided when offering condolences or possible objections that respondents
 may have to the VA.
- This requires that the trainer(s) synthesise the relevant aspects of such discussions and use it as review and feedback material.
- 3. Carry out Activity 13.1 with the class.
- 4. Before terminating, clarify any questions and doubts the participants may have.

Activity 13.1



Directions

An example of a training case for each of the three age groups ("Training cases A, B and C"), is given for the participants to practice role play. It is recommended that the additional training cases needed are locally developed — to reflect or highlight specific local issues.

Note for trainers: To facilitate understanding and effective participation in the role-play, it is recommended that before proceeding to the exercise with the subgroups an ideal role play is either acted out or replayed to demonstrate modelled practices of the different roles. The trainer(s) can conduct a simulation of the role play, preferably with a real interviewer and supervisor or with others that can appropriately represent the intended practices and behaviours; or display a video of a model role play.

- 1. Split the class into small groups of 3–4 participants.
- 2. Distribute copies of the training cases to the groups or display relevant PowerPoint slides.
- **3.** Within each group, assign each participant to a role as: an interviewer, supervisor, or a respondent.
- **4.** Review the **VA** accompanied supervision checklist (Appendix E), which contains they key aspects under which interviewer performance and skills should be assessed. Go over in detail on how the checklist should be filled to review the performance of VA interviewers.
- 5. Instruct the participants to get into the character and simulate what an actual interview will be like, from start to finish, imagining likely different scenarios that interviewers will encounter.
- **6.** Within each group:
- Interviewer Acts out approaching the household, establishing rapport with the family, identifying the best respondent; and conduct of the VA interview operating the tablet/smartphone while applying

- ethical principles and making use of adequate communication techniques.
- Supervisor Observes and takes notes on the VA accompanied supervision checklist (Appendix E), regarding: VA interview steps followed; use of communication techniques; the way the interviewer handled challenges; and any other observations regarding the conduct of the interviewer and operation of the tablet/smartphone.
- Respondent Acts out the role, answering interview questions and improvising according to the information provided in the training case.

Note for trainers: It is key that the characteristics and behaviours to be trained with each character are highlighted, so that participants are clear on their role.

- **7.** Give everyone 15 minutes to review the training case, before the conduct of the role play.
- **8.** Once an interview is completed, within each group the supervisor(s) give(s) feedback to the interviewer based on the filled "accompanied supervision checklist". Other members of the group acting the role of respondent(s) also provide feedback on the exercise making observations or recommendations for the improvement of the performance of the interviewer and supervisor.
- 9. At the end of the round of role plays, discuss with the class:
 - "How was it being the VA interviewer?"
 - "As a respondent how did it feel answering the VA questions?"
 - "What were the supervisors' feedback?"
 - "What were the challenges encountered? What ways were identified to improve the conduct of the VA interview?"
 - "How could the challenge to the VA interview (e.g., emotional distress) presented in the case scenario be best addressed?"
- 10. Repeat again the process but have the participants within each group change roles with a different training case so that each participant

has a chance to be both a VA interviewer, respondent, and supervisor.



Notes for trainers

This activity is about putting into practice most of what has been learned so far and providing opportunities for the participants to practice the conduct of a VA interview from start to finish using a tablet/smartphone. It is very important that trainers identify with the class what steps an interviewer could take to address the challenging situations depicted in each training case.

Ensure that the participants practice how to enquire and record information on the open narrative. Stress the importance of cross-checking information given in the open narrative with the other sections of the questionnaire.

It is important to stimulate the participants to impersonate each character in natural ways. For instance, for respondents you may suggest that:

- The respondent gets upset;
- The respondent refuses to answer some questions;
- The respondent decides to stop the interview midway through;
- The respondent starts deviating from the interview to talk about unrelated things to the VA.

Suggestion for trainers: Participants could summarise in one word each roleplay; taking note on the whiteboard/flip chart. At the end, trainers could go over all the "descriptions" and in plenary identify the main findings according to the different roles (interviewer, supervisor, respondent), highlighting positive aspects, and jointly finding solutions for the negative ones.

Training Case A

Details of interview	
Date of interview	Date of interview
Starting time	Starting time
Name of interviewer	Name of interviewer
Details of decedent	
Name	Name
Sex	Sex
Date of birth (DOB)	Date of birth (DOB)
Date of death (DOD)	Date of death (DOD)
Age (if DOB and/or DOD not known)	Age (if DOB and/or DOD not
	known)
Details of respondent	
Name	Name
Age	Age
His/her relationship to decedent	His/her relationship to decedent

Situation: The interviewer is doing a VA interview, planned 10 days ahead, with the mother of a deceased newborn at her home. The VA interview has been going well, with the mother remembering the events with little trouble. As the interviewer asks questions about the time closer to death, the mother slows in her responses and begins to cry.

Case description: The baby was born at seven months of pregnancy and died on her first day of life. It was a traditional birth attendant who assisted the vaginal delivery. The mother does not know the baby's weight at birth, but she was smaller than average size at birth. The baby did not cry or move immediately after birth; the birth attendant wiped the baby and resuscitated, then the baby cried. The baby's suckling was poor. Besides the size, the baby seemed normal - there were no apparent injuries or bruises, and her breathing was even. The mother does not know if the baby had a fever. As the baby stopped being able to suckle, developed yellow discoloration of the eyes and looked less alert — both the baby and the mother were taken to the hospital in a van. But on the way to the hospital, the baby died.

The mother had regular antenatal check-ups at the village clinic. She received two doses of injections, vitamins, and iron tablets. At the sixth

month of her pregnancy, she had noted swellings at ankles and her face was puffy. The physician had informed that her blood pressure was slightly elevated and advised to rest.

Training Case B

Details of interview	
Date of interview	Date of interview
Starting time	Starting time
Name of interviewer	Name of interviewer
Details of deceased	
Name	Name
Sex	Sex
Date of birth (DOB)	Date of birth (DOB)
Date of death (DOD)	Date of death (DOD)
Age (if DOB and/or DOD not known)	Age (if DOB and/or DOD not
	known)
Details of respondent	
Name	Name
Age	Age
His/her relationship to decedent	His/her relationship to decedent

Situation: The interviewer is visiting a household where a two-year-old boy died. The interviewer had to visit the household several times to explain the VA procedure and to set a time for the interview with the mother about the death of her child. The interview has been going well, with the mother remembering symptoms and events with little trouble. With questions about the time closer to the death, the mother gets stressed and asks, why she must answer all these questions. Mother describes feeling helpless, not knowing what to do to help her child.

Case description: Fifteen days before death, fever and vomiting developed in the child. The vomiting resolved after two days, but fever continued and worsened. On the fourth day of illness, cough developed. His mother gave him some home remedy, but on the seventh day of illness, without improvement, the parents brought him to a health facility. The child was given some medication, but the child's appetite decreased and the fever although gone for a few days, was back soon after. The mother reports that the child was urinating infrequently, and his urine

was very smelly. Four days after the visit to the health facility, the cough worsened, and fast breathing developed. Mother noted that few days before death, Bryce started vomiting again, developed diarrhoea and it could be seen the ribs being pulled in as her child breathed in. During the course of the interview, the interviewer learns that the child had a history of recurrent "pneumonia" that had lasted for at least five months despite both medical and traditional treatment.

Training Case C

Details of interview	
Date of interview	Date of interview
Starting time	Starting time
Name of interviewer	Name of interviewer
Details of deceased	
Name	Name
Sex	Sex
Date of birth (DOB)	Date of birth (DOB)
Date of death (DOD)	Date of death (DOD)
Age (if DOB and/or DOD not known)	Age (if DOB and/or DOD not
	known)
Details of respondent	
Name	Name
Age	Age
His/her relationship to decedent	His/her relationship to decedent

Situation: The interviewer arrives at a household where she is told by the mother-in-law of the deceased, that for a VA interview permission will be needed from the husband of the deceased, and that he has gone to the field and will be back in an hour. Finally, the husband arrives and agrees to be interviewed, however, he says he was not with his wife at the time of her death. His wife went to her mother's place when she was six months pregnant, and he was visiting her once a month. He received a message from his mother-in-law that his wife died just before giving birth, and he does not know what exactly happened. What should the interviewer do?

Case description: Mrs Susanne was pregnant for eight months at the time of her death and had attended antenatal care only once — when she was five months pregnant. She was having swelling around her ankles since

she was six months pregnant. She also told her mother a few times that she had headache and blurred vision.

On the day of her death, she suddenly had two episodes of convulsion, and following the second episode she became unconscious. While arranging to take her to the nearby hospital, her condition became worse, and she died. She had no fever, and the baby was still in her womb.

SESSION 14

Field practice of verbal autopsy interviews using electronic devices

OBJECTIVES

Conduct VA interviews with respondents for the three age groups in the field using electronic devices. Class review and discussion of the interviews' process, challenges encountered and ways to overcome these.

MATERIALS AND PREPARATIONS

Selected sites and VA cases for which to conduct the field practice interviews; PowerPoint slides; flip chart/board; tablets/smartphones for all participants (loaded and operational with the 2022 WHO VA instrument and ODK Collect); copies for all participants of the VA informed consent letter (Appendix D); copies for all participants of the VA accompanied supervision checklist (Appendix E); and the VA Field Interviewer Manual (copies for all participants).

660 min

Directions

Preparatory work:

The session requires that the trainers select cases for VA interviews with antecedence. These are sensitive interviews, and the sites and cases must be selected appropriately.

These should be deaths identified in the community through local reporting systems, allowing for an appropriate grieving period.

 The communities and respective families should be contacted through the appropriate mechanism (country-specific), and the interviews should be arranged in advance. In all

other ways, the VA interviews should be undertaken as a "routine VA" is expected to be carried out.

During class/Before field practice:

- 1. Start by addressing the objectives of the session.
- 2. Review all the procedures required to conduct a VA interview using a tablet/smartphone, including:
 - All the steps that should be followed for a VA interview;
 - VA ethical principles and communication techniques.
- **3.** Allow time for the participants to review the *VA Field Interviewer Manual* and clarify any doubts and questions the participants may have regarding the VA process, VA questionnaires or use of the tablet/smartphone.
- **4.** Divide the class into small groups (maximum of four participants). Instruct the groups that while one participant acts as an interviewer, the other(s) act as supervisor(s), observing the interview process and assessing the interviewer's performance in the VA accompanied supervision checklist (Appendix E).
- 5. Stress the importance that during the VA interviews, the interviewer must not be interfered with by any of the team members, except when it is necessary to handle a compromising situation for the respondent.
- **6.** Assign a sufficient number of VA cases per group, in a way that each participant has a chance to act as an interviewer and supervisor.
- 7. Before the groups head out to conduct the field interviews, make sure the participants have the following:
 - Tablet/smartphone (charged, loaded and operational with the 2022 WHO VA questionnaire);
 - VA informed consent letters (Appendix D);
 - VA accompanied supervision checklists (Appendix E);
 - Information on location of households of VA cases;
 - Pen, pencil, eraser, and notepad.

After field practice:

8. Carry out Activity 14.1 with the class.



NOTE FOR TRAINERS: Each of the groups should be accompanied by one of the trainers, a supervisor or someone with a manager role to help supervise and coordinate the field interviews.

Activity 14.1



Directions

- Facilitate an open forum for participants to reflect on the experiences and discuss freely any challenges, questions, concerns, and improvements.
- 2. Orient the plenary discussion based on the annotations made on the VA accompanied supervision checklists (Appendix E).



Questions to guide the discussion

- "What was it like to be the interviewer?"
- "What was it like to be the supervisor?"
- "What were the supervisors' feedback?"
- "What were the difficulties in the conduct of the interviews?"
- "What ways were used to resolve the problems/challenges?"
- "What could have been done differently/improved?"

SESSION 15 Course evaluation and closing

OBJECTIVES

Evaluation of the training course, delivery of the closing remarks and distribution of the training certificates.

MATERIALS

Copies of the pre-/post-test (Appendix A) for all training participants; copies of the end of training feedback form (Appendix F) for all training participants; and training certificates (as applicable).

60 min

Directions

- 1. Inform the class that the training has come to an end, and that a pre-/post-test and end of training feedback form (see Appendices A and F, respectively) will be completed to evaluate the training as a whole.
- 2. Instruct participants to put away all class notes and training materials.
- 3. Remove any flip chart pages from the walls that may contain hints for the test's responses.
- Distribute a copy of the pre-/post-test (Appendix A) to each participant and give instructions on how to correctly fill out the questionnaire (e.g., entering the name at the top of the page, ticking the box "Post-test", etc.).
- 5. Collect the pre-/post-tests when the participants have finished.

- 6. Hand out a copy of the end of training feedback form (Appendix F) to each participant. Ask participants to fill out the form and add any suggestions they have for improving future trainings.
- 7. Give an opportunity for participants to share thoughts and reflections about what training meant, their desires, commitments, and thoughts on how they will use what they have learned.
- 8. Collect the end of training feedback forms when the participants have finished.
- 9. Deliver the closing remarks for the training.
- **10.** If applicable, the session should terminate with the attribution of training certificates to the participants.

Appendix A: Pre-/Post-Test

Name (first an	d last)/ID:	Date:
Pre-Test		
Post-Test		

1. What is the main purpose of verbal autopsy (VA)? [Circle one response option]

- a. To increase death registration in low- and middle-income countries.
- **b.** To determine the most probable cause of death where medical certification is lacking.
- **c.** To determine the immediate cause of death for health facility deaths.
- **d.** To locate deaths in the community based on reports by community leaders.

2. What does VA involve? [Circle all response options that apply]

- **a.** Interview with relative or caregiver of a deceased person.
- **b.** A standardised questionnaire on signs and symptoms during the illness that lead to death.
- **c.** Interpretation of interview data by physicians or automated algorithms to assign a cause of death.
- **d.** Medical certification of cause of death by a single physician.

3. What three age groups correspond to the 2022 WHO VA questionnaires? [Circle all response options that apply]

- a. Under 1 year old.
- **b.** Under 4 weeks.
- c. 1 year to 5 years old.
- d. 4 weeks to 11 years old.
- e. 5 years to 18 years old.
- f. Above 18 years old.
- g. Twelve years old and above.

4. What are the roles of the VA interviewer? [Circle all response options that apply]

- **a.** Identify the appropriate respondents for the interview.
- **b.** Explain the purpose of the interview and obtain informed consent from the respondent.
- c. Conduct the VA interview and ensure that all information remains confidential.
- **d.** Inform the respondent on the cause of the death of the deceased person.
- e. Report progress, discuss and solve problems with the supervisor.

5. Who is responsible for the ethical conduct of VA activities? [Circle one response option]

- **a.** Interviewer, supervisor, coordinator.
- **b.** Respondent.
- **c.** Head of household.
- d. All of the above.

6. What are the roles and responsibilities of the VA supervisor? [Circle all response options that apply]

- a. Making sure VA interviewers are well trained and prepared to conduct VA interviews.
- **b.** Supervising and coordinating field operations.
- **c.** Analysing VA data to determine the causes of death.
- d. Answer any questions VA interviewers may have regarding data collection.
- **e.** Have knowledge of effective communication techniques for leading sensitive interviews.

7. Circle which statement(s) are TRUE.

- a. A VA interview should be conducted as soon as possible.
- **b.** When contacting a household for the first time, the interviewer should convey condolences for the death that occurred according to local social practices.
- **c.** When the VA interviewer obtains consent for a VA it means that the respondent is obligated to answer questions even if they feel uncomfortable.
- **d.** Being sensitive when the interviewer visits the home, means joining the bereaved family in mourning.
- **e.** To avoid refusals in participation, the interviewer should omit from the respondents the potential risks associated with a VA interview, such as emotional distress and stigma.
- **f.** Participation in a VA interview does not bring any direct personal benefits to the respondents.

8. Who is the best respondent for a VA interview? [Circle one response option]

- a. The head of the household.
- **b.** The caregiver who was present during the illness and/or the time of death.
- c. The mother-in-law.
- d. The deceased's best friend.

9. When giving feedback to VA interviewers, which of the following should NOT be done? [Circle one response option]

- **a.** Ask the interviewers to discuss how they think they performed before the supervisor begins giving feedback.
- **b.** Only provide negative feedback so that the interviewers do not become overconfident and neglectful.
- **c.** Ask the interviewers how they think they could overcome some of the difficulties that they experienced.

10. Circle which statement(s) correctly refer to supportive supervision.

- a. Supervisor is like a policeman that needs to focus on finding faults with interviewers.
- **b.** Helping interviewers improve their own work performance continuously.
- c. Carried out in an authoritarian way.
- **d.** Feedback should be given depending on the supervisor's available time.
- e. Promote and facilitate the development of problem-solving skills of interviewers.

Answers to pre-/post-test

- **1.** b
- 2. a; b; c
- 3. b; d; g
- **4.** a; b; c; e
- **5.** a
- 6. a; b; d; e
- 7. b; f
- 8. b
- **9.** b
- **10.** b; e

Appendix B: Verbal autopsy interviewer checklist

BEFORE THE INTERVIEW

	materia	

A.		Identification card;
B.		Smartphone/tablet operational, fully charged and with ODK Collect and VA instrument installed;
C.		VA informed consent letters in sufficient numbers for scheduled interview(s) (if
		applicable);
D.		VA paper questionnaire copies (for back up);
E.		Question by question guides (VA Field Interviewer Manual);
F.		Calendar of local historical events, and year-of-birth calculator;
G.		Pen/pencil, eraser and notebook/blank paper for notes.
House	ehold lo	cation information
A.		Identify the address and location information for assigned interview(s)/respondent(s).
B.		Meeting(s) arranged with community leader(s) or other community member(s) (as necessary).
AT TH	IE HOUS	SEHOLD
Befor	e the in	terview
A.		Inform household member of the reason for the interview.
B.		Show household member your personal identification.
C.		Identify an appropriate respondent.
D.		Arrange another visit if the best respondent(s) is not available or if the time is
		inconvenient.
E.		Gain the trust and cooperation of the respondent(s).
F.		Review terms for informed consent with respondent(s):
		☐ Intention, purpose and scope of content of the VA interview;
		☐ Approximate duration of interview;
		□ Possibility of feeling some discomfort when talking about bad
		experiences;
		□ Strict confidentiality of shared information;
		☐ Lack of direct personal benefits from participation. However, VA helps
		better health measurement at population level;
		☐ Right to stop, withdraw consent and quit the interview at any stage;

		□ Whether and how results will be shared on the community level, as legally mandated by the country.
During	g the in	terview
A. B. C.		Complete all questions on questionnaire and enter all required information. Read all questions slowly exactly as written on the VA questionnaire. Give the respondent sufficient time to think over a question and give a response; ensuring that the respondent understood the question and the given response is valid.
D. E.		Record open narrative thoroughly (by hand or by audio recording). Answer any questions the respondent(s) ask.
F.		Do not provide opinions, make assumptions, or demonstrate any surprise, approval, or disapproval.
G.		Be polite and mindful of the emotions of respondent(s).
After t	he inte	rview
A. B. C.		Mark the VA form as finalised and save the form in ODK Collect. If using online methods: Select the respective finalised form and send the finalised form to the central server through ODK Collect. If using offline methods: Deliver the electronic device to the supervisor so that collected data is transferred to a computer.
SUPER	RVISOR	AND TEAM MEETINGS
A.		Discuss checklist and any problems with supervisor; report and discuss challenges and suggestions for improvement.
В.		Develop strategies for corrective action to address any problems.

Appendix C: Verbal autopsy interviewer reporting log book

Interview	er's name/c	ode:			
# VA cases	s assigned:				
# VA inter	views cond	ucted:	#	VA interviews p	ending:
				61.1	
Name and unique ID ³⁵	Location / Address	Date of initial visit to household (dd/mm/yy) ³⁶	Scheduled date(s) for VA interview (dd/mm/yy)	Status of VA interview and questionnair e submission ³⁷	Comments (e.g., reasons for pending or unsuccessful interviews and any data collection problems)

³⁵ Death notification number, death registration number or another unique ID.

Date of initial visit and of VA interview may coincide.

VA interview - conducted/not conducted; and Submission of VA form — sent or delivered/not sent or not delivered (as applicable).

Appendix D: Verbal autopsy informed consent letter³⁸

My name is Mr/Mrs	, I work for [institution/country], to collect
information on cause of death happeni	ng in the community.

I am very sorry to hear that a member of your household has passed away. Please accept my sympathies. For the purpose of improving health care, we are collecting information on all recent deaths in this area.³⁹ I would like to invite you to participate in an interview as a main caretaker of [the deceased's name], about the circumstances leading to his/her death.

Many countries do not have good information on what diseases or injuries cause death. This information is important for decisions about how to improve health services. There will not be any direct personal benefits and you will not be paid for taking part in this interview.

Whatever information you provide will be kept strictly confidential. If you agree to participate, we will interview you about the past health of the deceased. The interview will last approximately 30–60 minutes and may be much shorter. We will be using a smartphone/tablet to record all information.

You are free to decide not to participate in the interview. You might feel some discomfort or emotional distress recalling some details and/or events related to the death. We understand that this is a sad and difficult time and you may not want to talk about the person and the event. We would very much appreciate your participation in this effort. Even if you agree at first to take part, you are free to change your mind at any time and to quit the interview. You can choose not to answer any individual question or all of the questions. If you want to stop, you just need to tell the interviewer that you want to stop the interview. No one will be mad at you and you will not suffer any consequences of any kind. However, we hope that you will participate in this survey since the results will help the government improve services for people.

Please understand that no data will be published linking your name to your answers, so no one will be able to connect the information shared back to you or your family. The information will be used for official purposes only and will not be divulged to individuals. However, if you wish to understand the results of this interview, or if you have any questions at a later date, please contact:

[Country/Administrative Unit VA contact]

Note that if audio recording of the open narrative section is taken, this information should be included within the informed consent letter/form with the respondent being informed and agreeing to the audio recording.

³⁹ Should be adapted to each setting.

Appendix E: Verbal autopsy accompanied supervision checklist

For each interviewer and accompanied interview: mark each item completed by the interviewer (yes or no); and assess the interviewer's performance. Performance can be graded from 0–2 (0=non-satisfactory; 1=average; 2=good). For any issues observed, record comments in the respective column, and suggestions for the interviewer in the box at the bottom. Discuss with the interviewer what was done correctly and what needs improvement.

Before the start of VA interview	0	1	2	Comments
Interviewer identified the best respondent(s).				
Interviewer established a good level of rapport with respondent(s).				
Interviewer obtained privacy for the conduct of the VA interview.				
Informed consent process	0	1	2	Comments
Described the interview objectives and process to the respondent(s).				
Explained clearly that participation is voluntary.				
Explained clearly that information will be kept confidential.				
Informed about the risks and benefits of participating in VA.				
Informed whether and how VA results will be shared on the community level, as legally mandated by the country.				
Gave the respondent a chance to ask questions and answered all questions.				
Obtained informed consent.				
In case of multiple respondents, each respondent consented to participate and is of the age of majority.				

Interview process — Interviewer behaviour	0	1	2	Comments
Maintained direct engagement and appropriate verbal and non-verbal communication with respondent(s). Respected the sensitive nature of the				
interview. Attentive and responsive to signs of emotional distress.				
Answered questions raised by the respondent.				
Did not provide opinions, made assumptions, or demonstrated any surprise, approval, or disapproval.				
Interview process — Questionnaire use	0	1	2	Comments
Asked and documented responses for all appropriate questions.				
Read the questions slowly exactly as written in the VA questionnaire.				
Did not influence or guide respondent(s) to responses.				
Gave the respondent sufficient time to think over a question and give a response; ensuring that the respondent understood the question, and that the given response was valid.				
Recorded the open narrative adequately.				
Demonstrated a good understanding of the questions and familiarity with the VA questionnaire.				
Use of mobile device did not stall interview process. (If it did, annotate the estimated length of delay, under the "Comments column")				
After the interview	Yes	5	No	Comments
Addressed any remaining questions or concerns of the respondent(s).				
Reviewed the questionnaire to make sure it is complete.				

Uploaded the interview data to the server (if applicable).

Operational considerations	Yes	No	Comments
Interviewer uses smartphone/tablet device			
case and carries the electronic device in			
protective bag.			
Electronic device was more than 75% charged			
prior to the start of the interview.			
Interview was completed prior to the			
depletion of battery charge.			
Interviewer has all VA interviewer materials			
needed to conduct the interview.			
COMMENTS & SUGGESTIO	ONS FOR	CORR	ECTIVE ACTION:

Appendix F: End of training feedback form

Please answer every question, circling your response option and/or giving responses when asked as specific as possible.

How would you rate your satisfaction with the training content?
Very Dissatisfied Dissatisfied Neutral Satisfied Very Satisfied
How effective was the overall format of the sessions? Please elaborate on your response.
Very Poor Poor Fair Good Very Good
How do you rate the materials used in the training (e.g., handouts, PowerPoint slides supplementary materials)? Please elaborate on your response.
supplementary materials)? Please elaborate on your response.
supplementary materials)? Please elaborate on your response.

Very Dissatisfied | Dissatisfied | Neutral | Satisfied | Very Satisfied

5.	The length of training was:
	Too short Perfect Too Long
6.	After the training, do you feel confident in being able to conduct a VA interview with the 2022 WHO VA instrument using the electronic questionnaire? Please elaborate on your response.
	Not Confident Confident
7.	What suggestions do you have for any future trainings?
8.	What recommendations do you have to help the facilitators improve their training methods?

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9.

ny other comment(s).						

