
Manual for conducting Verbal Autopsy (VA)

*Adapted in part from MANUAL OF INSTRUCTIONS FOR RGI SUPERVISORS
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This manual is meant for RGI SUPERVISORS to be used for their training and as a reference material for conducting Verbal Autopsy (VA) in the field under SRS. It provides guidelines for carrying out interviews with informants at households reporting death.

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List of abbreviations

ANC	Ante Natal Care
AYUSH	Ayurveda, Yoga and Naturopathy, Unani, Siddha and Homoeopathy
CRS	Civil Registration System
COD	Cause Of Death
DCO	Directorate of Census Operations
DES	Department of Economics and Statistics
HIV	Human Immunodeficiency Virus
HYS	Half Yearly Survey
ICD, ICD-10	International Classification of Diseases and related health problems, second edition, 10th revision
IMNCI	Integrated Management of Neonatal & Childhood Illnesses
MCH	Maternal Child Health
ORGI	Office of Registrar General of India
QA	Quality Assurance
SRS	Sample Registration System
TB	Tuberculosis
TBA	Traditional Birth Attendant
TT	Tetanus Toxoid
VA	Verbal Autopsy
WHO	World Health Organization

Chapter 1. Introduction to SRS

This section introduces Sample Registration System (SRS) and its working, role of supervisors, introduction to verbal autopsy principles and processes.

The Sample Registration System (SRS) is a large-scale demographic survey for providing reliable annual estimates of Infant mortality rate, birth rate, death rate and other fertility and mortality indicators at the national and sub-national levels. Initiated on a pilot basis by the Office of The Registrar General (ORGI), India in a few selected states in 1964-65, it became fully operational during 1969-70 with about 3700 sample units.

The last baseline survey was done in the year 2014 and comprised of 8857 sample units (4,963 rural & 3,894 urban) covering 8.4 million population spread across all States & Union territories (Source: SRS Statistical Report 2014).

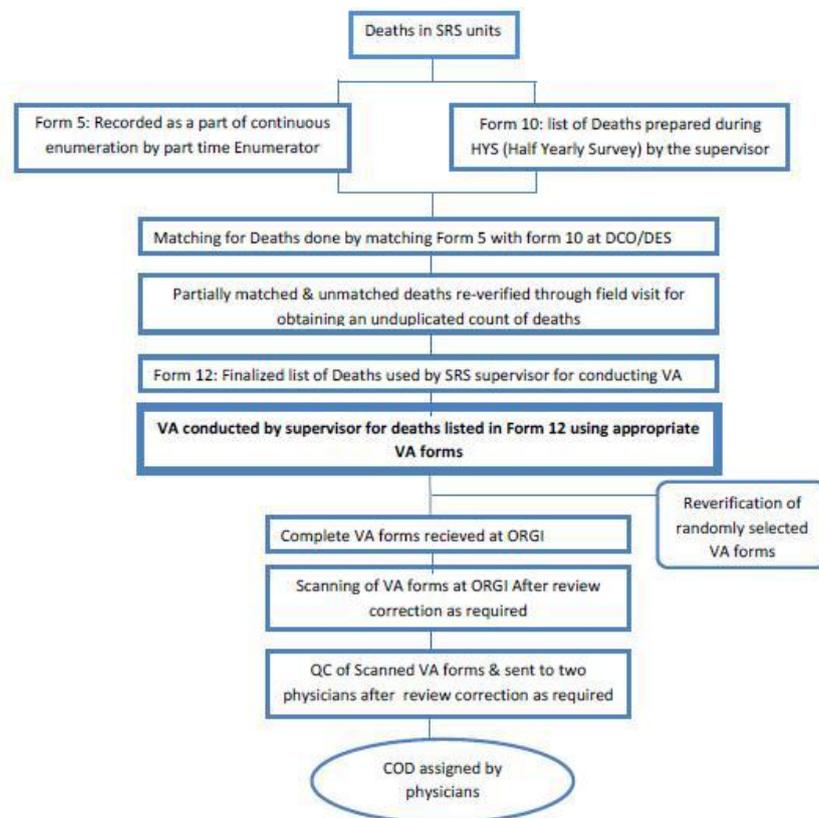


Figure 1: SRS processes

selected sample units by resident part time enumerators, generally Anganwadi workers & teachers, and an independent survey every six months by SRS supervisors. The data obtained by these two independent functionaries are matched. The unmatched and partially matched events are re-verified in the field and thereafter an unduplicated count of births and deaths is obtained.

The finalized list of deaths to be used by the SRS supervisor for conducting VA is included as Form 12. For all the deaths, Verbal Autopsy (VA) is carried out by the supervisor. This process has been demonstrated through Figure 1.

1.1 Role and responsibilities of supervisors

- Your primary role is to visit families with deaths and conduct verbal autopsy interviews.
- For this, in addition to filling in the appropriate VA form, you must also tell the households you visit about the purpose of SRS and the importance of registering births and deaths under Civil Registration System(CRS).
- You will need to plan dates for visiting all the families with deaths as per Form 12 to conduct interviews; conduct verbal autopsies scheduled for that day and location and ensure that for all deaths, VA is carried out and forms are filled.
- It is important that the VA information remains confidential (no discussion, gossip, or showing completed VA forms to any unauthorized personnel). Fill in the VA forms by yourself only.
- This data is of paramount value and is used by physicians to derive causes of death. Thus, the detailed narratives must be filled legibly or recorded in a quiet place to prevent background noise from compromising the quality of narratives. One should never take “shortcuts” or submit falsely cooked information for sake of completing VA forms. Such fake data are of no use and instead dilute the value of other data, which has been collected properly.
- As the quality of data is very important, random selection and reverification of VA forms is carried out to ensure correctness and utility.

Experience in India and other countries have shown that trained non-medical surveyors such as you can collect information on the symptoms and signs of illness preceding death. You will need to provide a good description of the symptoms and signs at onset of illness and during illness including events prior to death of deceased person. The signs and symptoms preceding death are collected using verbal autopsy forms.

This manual provides guidance on how to conduct a good verbal autopsy interview, how to write a good narrative of events preceding the death and question wise instructions for completing the VA forms.

These have been supplemented through actual examples of narratives for better understanding. Several examples have been provided in this manual. Please go through these examples and enrich your understanding about VA.

1.2 Verbal Autopsy

Since Medical Certification of Cause of Death (MCCD) is limited in India (<23%) due to lack of health facilities, especially in rural areas with shortage of medical personnel and facilities, data on country's mortality patterns is deficient. While efforts are underway to increase its coverage, each approach has its limitations. Thus, complimentary approaches are needed to capture all vital events. To meet this requirement and obtain reliable cause of death(COD), verbal autopsy (VA) was introduced in the SRS.

VA is a two-step procedure

- 1) Data collection: Interview of next of kin or other caregivers to collect information using standardized questionnaire that elicits information on signs, symptoms, medical history and circumstances preceding death
- 2) COD assignment: Methods include
 - Physician review of VA data
 - Computerized algorithms

Principles of VA

- Requires recognition of symptoms for various diseases (not always possible for adult deaths)
- Based on recall by relatives of symptoms/ illness prior to death
- Based on reporting symptoms to the interviewer
- Recent experiences suggest the utility of gathering information from medical documents if available within the household as it supports VA



Verbal autopsy has been introduced in SRS because:

- It is feasible and practical
- It gives good cause of death information
- It has been used successfully earlier in India, China, Tanzania and other countries

Verbal autopsy (VA) is a **questionnaire**

- administered to **caregivers or family members** of deceased persons
- to elicit **signs and symptoms and their durations**, and other pertinent information about the decedent
- in the **period before death**

1.3 VA activities

The Part-Time Enumerator (PTE) does continuous recording of birth/death events. S/he needs to inform households with deaths that VA process would be carried out for the deceased, and they should keep details of the death (medical records).

The supervisors carry out Half Yearly retrospective Survey (HYS) every six months. For all the deaths in their assigned area, they do data collection of the circumstances, symptoms and signs of illness and narrative in VA forms. Randomly, VA forms from SRS units are re-sampled and visited, so as to provide training inputs and method correction. After VA, these forms are uploaded on a platform and allocated to physicians for coding (Figure 2). If two physicians provide the same code for Cause Of Death(COD), it is considered final.

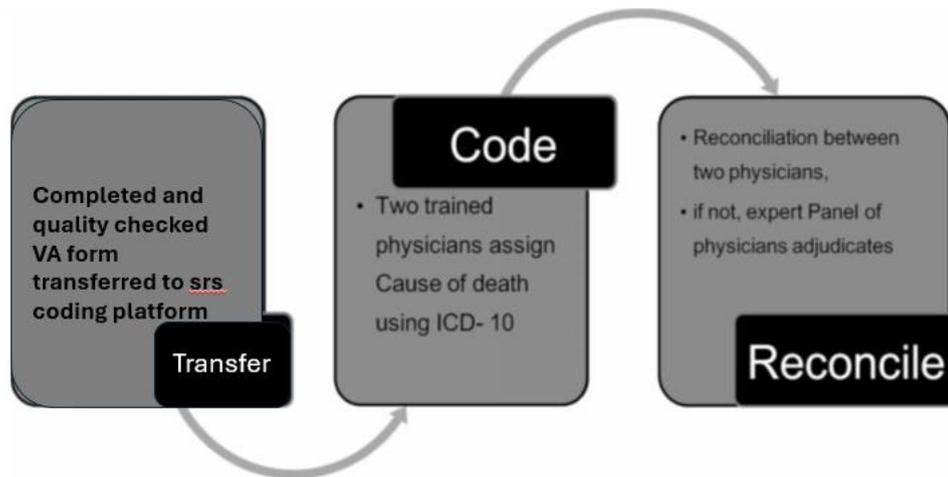


Figure 2: COD assignment from VA data

Chapter 2: Verbal Autopsy (VA) forms

This section introduces VA forms used in Sample Registration System (SRS) and their structure.

Four separate VA forms (10A, 10B, 10C and 10D) are available to collect detailed information on neonatal, child, adult and maternal deaths, respectively. Separate forms help in keeping the interviews focused on the signs and symptoms specific to each defined age group. Therefore, the selection of which form to fill out depends on the age and sex of the deceased individual (Figure 3):

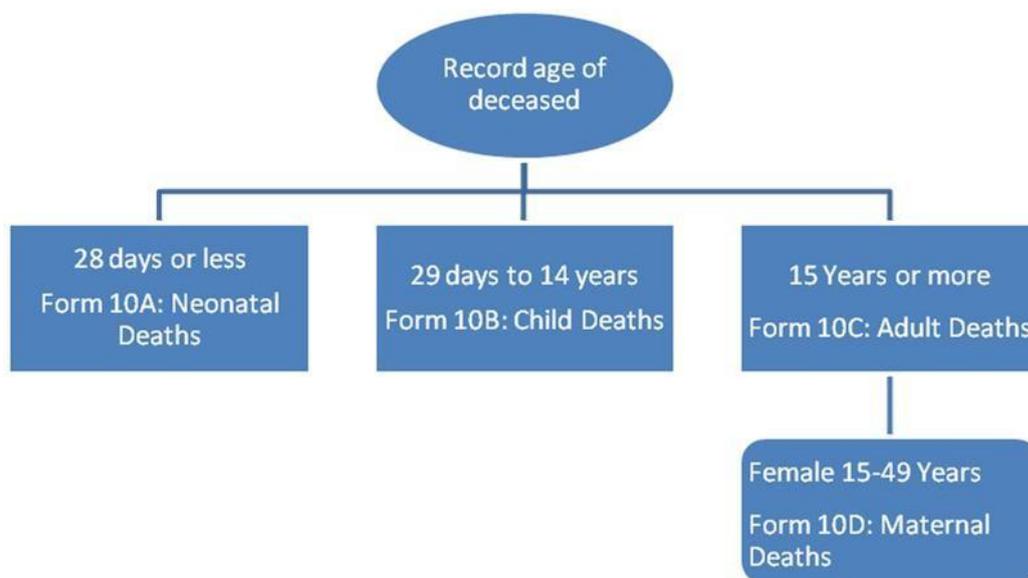


Figure 3: selection of VA form

2.1 . General structure of VA forms

Section 1 is a structured questionnaire, which includes general information on the respondent and deceased.

Section 2 is a structured questionnaire used to probe the signs and symptoms that led to death including the 10 symptoms, risk factors and past history as applicable.

Section 3 is the written narrative of the events, sign and symptoms that lead to the death. It is important to use the six actions for a good narrative and Symptoms list, included in this manual, to write a structured and useful narrative.

In short, this will include information on the events surrounding the death, the key symptoms and probing details for each symptom, and any medical information from hospital reports, tests, or diagnoses.

The VA forms are divided into several sections. Some of these sections are common to all three types of VA forms and have the same general structure, while other sections are specific to certain forms.

The general structure of all three forms includes:

Identification details (in HINDI or ENGLISH only)

- On selecting the household, you get the option of selecting the member for which VA form is to be filled.

On selecting the member, you are directed to the type of VA form.

- SRS Unit No, year and whether its the 1st HYS or 2nd HYS details and head of the household are auto-filled.

- Name of mother of the deceased needs to be filled in form 10A and 10B.



In **Section 1**, we ask for details of respondent (Q1-7).

Here one needs to fill the name of the respondent, relationship with the deceased, age, sex, education and religion. We also ask details of the deceased (Q8-15). Here we also need to fill sex, age of deceased, relationship with the head of the household, date of birth, death, address, place of death. and the cause of death according to the respondent.

In addition to general questions which are common to all forms, each form contains sections and questions that are specific to the circumstances of the death.

For example,

- A section on the condition of a deceased child's mother during and after pregnancy and events during birth is included only on the neonatal form (Form 10A).
- A question on history of injuries/accidents are included only in form 10A and B i.e. upto 15 years.
- A section on past history of diseases and risk factors such as tobacco, alcohol and diet are found in the adult form(10C).

Each VA form contains a series of questions for illness in the period before death including symptoms, their duration etc. These questions are different for each form and are explained in detail later in this manual under the relevant chapters for each form.

All forms end with narrative which is the mainstay of Cause Of Death(COD) assignment.

***Form 10D** is a continuation of Section 2 from Form 10C for adult deaths, and is only for maternal deaths between the ages 15-49. This section asks about the events, signs and symptoms leading to the maternal death.

Chapter 3. Conducting a good interview (VA) for good quality data

This section provides guidance on conducting a good interview (VA) for obtaining good quality data. Specifically, it talks about selecting appropriate respondents and tips for getting good VA data namely, rapport building, selecting appropriate environment for the interview, good communication skills and getting good information and answers.

The household needs to be approached appropriately. We need to introduce ourselves sensitively and show respect for their loss and bereavement. *A professional and compassionate manner* helps to build trust with the family. While visiting the household of the deceased, *people/children* from the neighborhood may gather as you arrive, because they are interested in what you are doing or want to be present during the visit. You need to manage this carefully to ensure the VA occurs in privacy.



Building rapport is important by creating a comfortable environment and a relationship of trust to make the verbal autopsy interview easier. You need to answer any queries and *reassure confidentiality*. You should make it clear that the information is being collected solely to help understand deaths in India in order to design strategies for better health access.

Before the interview, it will help respondents feel at ease if you have a brief casual conversation. You can ask about household members, the respondent's occupation, or anything that seems appropriate and shows that you are interested in the family. Use simple local language and ask questions politely in the form of a conversation.

Keep in mind that death is a sensitive issue, and pay attention to respondents' emotions. It may be difficult for respondents to answer questions about loved ones who have died; thus, the interviewer needs to balance sensitivity with following through and asking all relevant questions.



3.1 Selecting Appropriate Respondent

The respondent is the main person who will provide information about the deceased. There may be several people in the household with information about the death of the woman.

It is important to determine who will be the *best respondent(s)*.

- The primary caregiver (usually a family member) who was with the deceased in the period leading to death or a witness to a sudden death or accident are likely to remember easily recognizable symptoms and signs of illness preceding death.
- Usually, the head of the household or the spouse of the head of the household is preferred to be your respondent. For deaths of infants and children, the mother is almost always the best respondent. They are likely to have been present during illness and care prior to the death or participated in making key decisions.

People often assume that the person who makes daily decisions for the household or the deceased person's spouse is the person who should be interviewed. This is not necessarily so. For example, a male may not know the signs and symptoms of an illness suffered by a woman in the household. You should try to determine who was with the deceased and caring for the person in the period leading to death. Generally, children should not be interviewed.

- *Different people may have attended to the deceased at different times.* In this case, obtaining additional information from other family members and

neighbors is also helpful and this can be done one at a time or together, depending on the circumstances.

- At times, *the best respondents may not be present*, either because they are not at home or have moved. If these people are unavailable when you first visit the household, try to make an appointment to return when they will be at home. If they are away from the area or will not be available for some time, then you should ask to speak to the eldest family member or relative that is at home (they should be at least 18 years of age). If this is not possible, then you should ask for the eldest non-relative that is a permanent member of the household (18 years of age or older). Sometimes others will still be able to provide all the necessary information, but if not, it may be necessary to return at another time or find the respondents.

Selecting an appropriate Respondent Case

Study 1

Supervisor named XXX visited an urban sampling unit in YYY for enquiring about deceased elderly woman aged 68 years named Smt ZZZ. On reaching her household, she found the household members were away for the last month and their house was locked. The family was likely to return after another month only. The supervisor tactfully enquired details from a close neighbor and found Smt. ZZZ died at AAA hospital due to her battle against Breast Cancer.

Case Study 2

A supervisor named AAA visited a rural sampling unit in a village of BBB district to enquire details of deceased Smt. CCC, 42 years. The sister-in-law and wife of brother-in-law were available. They revealed that Smt. CCC was on some drugs, losing hair and was advised bone marrow transplant from cancer hospital. The exact nature of disease and cancer site was not known to either of respondents' at this visit. The supervisor enquired about the husband of the deceased and found he was away for work. Shri AAA took mobile phone number of husband of

Smt. CCC and booked an appointment with him. On interaction with him, it was found Smt. CCC suffered from blood cancer and was on treatment from two hospitals- XXX and YYY. She was not doing well before death.

Acceptable respondents, in order of preference, are as follows:

- 1. Head of the household or that person's spouse**
- 2. Either parent (preferably the mother) in case of a child's death**
- 3. Eldest family member or close relative of the deceased (at least 18 years of age)**
- 4. Eldest non-relative permanent resident of the deceased person's household (at least 18 years of age).**

However, if a respondent insists that she or he does not wish to talk to you, do not argue. Instead, if there is no one else available in that household who can talk to you, ask the person for another day or time when she or he would be available to participate in the interview.

3.2 Tips for good VA data

3.2.1 Advance Preparation

We need to be familiar with the *language* spoken in the household. Going through the SRS VA form before the interview helps in being thorough with the questions and helps in the interview for asking appropriate questions. Having a thorough knowledge of locally used terms (synonyms) (locally used) for symptoms/signs of illness is very helpful.

3.2.2 Selecting appropriate environment for the interview

It is best to conduct the interview in a private location where you and the respondent can be alone. However, your visit might attract attention from other family members, neighbours and others. These situations can reduce the quality of the information, either by distracting the respondent or by reducing privacy. Interviews are best

when conducted with just a few people at a time – too many respondents can lead to confusion or even disagreement.

You can try to:

- *Suggest moving to another location* to find some privacy for the interview
- *Ask to reschedule the verbal autopsy* and return at a time that is more convenient for the respondent, and when s/he can make arrangements to be alone.
- *Politely request bystanders to leave.* You can remind local people that the family has undergone a bereavement and needs privacy to talk about difficult circumstances.
- In cases where complete privacy is not possible, try to limit the number of other people present.
- If it appears that different family members have different views on the circumstances leading to the death, it may be easier to interview them one at a time rather than together. However, In this case, give preference to people who were direct witnesses to the reported events and ensure that overall narrative is consistent.

3.2.3 Good Communication Skills

Effective communication will help establish rapport and gain comprehensive information.

Some examples of good communication skills include:

- *Active listening.* Show that you are paying attention to what respondents say by nodding your head, and making occasional responses such as “mmm” or “I see”.
- *Maintaining eye contact* with respondents to show that you are listening and taking what they say seriously.



- *Encouraging speech in the narrative part.* Some respondents will be naturally quiet or brief in their responses. Ask follow-up questions when necessary such as “Can you tell me a little more about that?” or “Please explain.”
- *Not rushing.* Give the respondent time to think through the question or try to remember the details. Moving quickly from one question to another can make people nervous and miss an opportunity to get appropriate information.
- Give time to the respondent to tell the story of the illness: be a good listener
- Avoid frequent interruptions

Handling upset or angry Respondents

- *Tearful and upset respondents.* An interview might bring up upsetting memories. Allow the person to collect their thoughts and pause the interview to give them time to cry or compose himself or herself. If the respondent is too upset, then the verbal autopsy should be stopped. See if you can find someone in the household to comfort the respondent. Attempt to reschedule the interview for continuation of the verbal autopsy at another time, or interview others instead.
- *Angry outbursts.* There may be disagreements between household members about the care of the deceased. Some respondents might blame the health care system and express their anger at you. While you must let the person express their anger, you need to explain to them that through VA documentation, it could help in provide positive learnings which could mitigate negative experience in future for all concerned.

3.2.4 *Getting Good Information and answers*

Sometimes respondents do not want to answer certain questions. There can be many reasons for this, including distrust of the verbal autopsy process, not wanting to look bad if the respondent feels they did not make good decisions at the time of the death, or avoiding painful memories. You can try to overcome this by:

- *Probing.* Think of follow-up questions such as “what happened next” or “can you tell me a little more about that” to encourage answers. Also, asking other questions similar to the subject material would help the respondent remember

certain events better. For example, if the respondent cannot remember who delivered the baby in the home, you might try “probing” by asking “who was in the room at the time of delivery”. Use your judgement of the situation when probing as we do not want to upset them further.

- *Returning to questions later.* For some respondents, it can take a little longer to build rapport. If a respondent skips some questions you can try to ask them again at the end of the interview when the person feels more comfortable then.
- Assess whether your question has been understood. If not, repeat the question.
- Allow the respondent to answer the question as best as he/she can. Most of the questions are closed-ended which means there is usually only one answer that can be given. There are some questions where the respondent may give multiple responses. For these questions, if needed, allow the respondent to hear all the answer choices and think about the question before recording their answer.

In the end, it’s about learning from experience. Not all verbal autopsies will go well. It is important to reflect on the process after *each VA interview* to learn from the experience and improve your skills. VA interviewing takes practice and improves with effort

Chapter 4 . Narrative history of events leading to death

This section talks about how to record narrative history of events leading to death utilizing the list of key symptoms for deaths and review of available documents for filling VA narrative.

The critical section (section 3) of the VA forms is an open-ended narrative of the events leading to, and causing, the death of the individual. In the space provided, you need to write a history as narrated by the respondent, which is a “story” about what led to the death and is not a medical history. This might be a sequence of symptoms of disease and the deceased person’s health in general prior to death or might be the events that caused the death. Don’t be anxious to find the cause of death but concentrate on obtaining and recording the history of illness preceding death in sufficient detail. Local terms of common illnesses should be written as stated. Your objective is to gather complete and reliable information on circumstances/ events, symptoms and signs leading to death. Put emphasis on obtaining a clear “story” that can be provided in writing to someone else.

It has been seen that the narratives often include a tentative cause of death given by respondent. However, the supervisors are not very sure about what questions and details could be asked to get more information about the condition. This symptom list is designed to address the same. This data is of paramount value and is used by physicians to derive causes of death. Thus the narratives must be filled legibly and in detail. One should never take “shortcuts” or submit falsely cooked information for sake of completing VA forms. Such fake data are of no use and instead dilute the value of other data, which has been collected properly. As the quality of data is very important, random selection and reverification of VA forms is carried out to ensure correctness and utility.

You should use the attached list of key symptoms to obtain the story. The list has been prepared using questions from The 2016 WHO Verbal Autopsy instrument available from <http://www.who.int/healthinfo/statistics/verbalautopsystandards>. These key symptoms are the main symptoms a person may show before death. This

key symptoms list is mainly to be used for adults(form 10C) in order to obtain a good narrative.

While the forms for neonates(form 10A) and children(form 10B) contains questions on symptoms that are relevant for each age group, a symptom list for the same has also been compiled from the forms for emphasis (Table 2). It is important to use the findings from questions in the narrative to get details on the findings including the chronology. Breath sounds are very important for neonates and children. A demonstration video of the same can be seen at weblink <https://youtu.be/l9WtapUR9GM>. Video from minutes 10.20 to 12.20 demonstrates chest indrawing, nasal flaring and grunting.

The key symptoms comprise of symptoms as well as symptom complexes (for example: urinary complaints) and have been divided across four sections to facilitate history taking. This division is primarily for the purpose of convenience rather than technical and pathological accuracy and doesn't necessarily indicate the system responsible for death. Feel free to include local terms in the sheet for facilitating narrative as in India, language may differ across states and districts. Once finalized, keep a laminated copy of the same in the field with you for obtaining appropriate narratives. Also, a soft copy/picture of the same could be stored in your mobile.

4.1 Table 1: List of Symptoms/symptom complexes for Adult Deaths

No	Symptom	Duration	Pattern/location	Severity	Associated with
Section I: General symptoms					
1.	Fever	Days	Continuous, on & off or only at night	Low/high grade; Presence till death	Night sweats; Severe headache; mental confusion
2.	Weight loss	Months, years	Rapid (in 2-3 months)	Severely thin or wasted	Lumps in mouth, neck, armpit or groin
3.	Oedema/ Swelling	Days	Face, legs, feet (one/both)	Localized or generalized	Urinary symptoms; Faster heart beats
4.	a) Skin yellowishness (Jaundice)	Days	Palms, eyes, nail beds	Looked pale	
	b) Skin rash	Days	Face, trunk or abdomen, extremities, everywhere	Skin flaking off in patches; Whitish rash in mouth/tongue	Sores/ulcers with clear fluid or pus; Ulcer(pit) on foot
Section II: Chest and heart symptoms					
5.	Chest pain	Minutes, hours, days	Spread to other body parts	Sudden or gradual	Precipitated by exertion
6.	Cough	Days, months	Pain at chest or sides(chest wall)	Mild/severe/very severe; Productive (sputum); blood	Breathing sound (Wheeze)
7.	Difficulty, fast breathing or Breathlessness	Days, months, years	Continuous, on & off	Unable to carry out daily routines	Breathless while lying flat

No	Symptom	Duration	Pattern/ Location	Severity	Associated with
Section III: Abdominal & urinary complaints/symptom complexes					
8.	a) Pain/mass in abdomen b) Abdominal distension	Hours, days, weeks, months	Whole abdomen, Upper/lower abdomen	Mild/severe; Developed slowly/rapidly	Bleed from the nose, mouth or anus
9.	a) Diarrhoea or Vomiting b) Difficulty/pain with swallowing solids, liquids	Days		Presence of blood/blackish colour; Presence till death	Sunken eyes/dehydration
10.	Urinary problems	Days, months, years		Frequency/ stopped urinating Or blood in urine	Burning sensation
Section IV: Nervous system symptoms					
11.	Paralysis/stroke	Days, months	Right /Left/both sides, Lower/upper/ whole body, One leg/arm only	Onset during activity or sleep	Loss of sensations, memory, vision or speech
12.	Unconscious/ fits	Minutes, hours, days	Started suddenly, quickly (at least within one day); Unconscious immediately after the fit	Unconscious till death	Stiffness of the neck/ whole body; Unable to open the mouth

This symptoms list is mandatory to be used by SRS supervisors for VA among adults(form 10C) in order to obtain a good narrative.

4.2 How to use key symptom list

This is to be used by supervisor in the following manner.

- I. For each of the key symptoms mentioned by the respondent in the narrative, details need to be sought. For each symptom, details such as duration, pattern /location, severity and associated signs and symptoms need to be explored as per guidance provided by Table 1. These symptoms and details provide a basic set of questions for guidance during the narrative. Additional symptoms and details that emerge from the narrative must be noted including details.
- II. After noting these, the other symptoms from the same section must be asked for and ruled out. For example, if patient mentions chest pain, after seeking its details as in table 1, the other **symptoms from section II Chest and heart symptoms, namely cough and difficulty in breathing must be asked.**
- III. This should then be supported by questions from section I: General symptoms, namely Fever, Weight loss, Oedema/Swelling and Skin yellowishness/rash.

Sections	Symptoms
I: General symptoms	1. Fever 2. Weight loss 3. Oedema/Swelling 4. a) Skin yellowishness (Jaundice); b) Skin rash
II: Chest and heart symptoms	5. Chest pain 6. Cough 7. Difficulty, fast breathing or Breathlessness
III: Abdominal & urinary complaints	8. a) Pain/mass in abdomen b) Abdominal distension 9. a) Diarrhoea or Vomiting b) Difficulty/pain with swallowing solids, liquids
IV: Nervous system symptoms	10. Urinary problems 11. Paralysis/stroke 12. Unconscious/ fits

Using this symptoms list is crucial for obtaining a high quality narrative.

4.3 List of key Symptoms for Neonatal/Child Deaths(form 10A & B)

Section	Neonatal symptoms	Details	Child symptoms	Details
I: General	1a. Fever 1b. Body cold to touch	- duration	1. Fever	Duration; Chills/rigors
	2. Redness around, or discharge from, the umbilical cord stump		2. Lost weight/ become very thin	
	3. Yellow eyes or skin		3. Appeared pale/lack of blood	yellow eyes or skin
	4. Reddish areas of skin	skin rashes with pus	4. Skin disease or rash	all over the body
II: Chest	5. Cough		5. Cough	Duration; dry or with sputum/blood
	6. Breathing difficulty/fast breathing	a) Duration; b) in-drawing of the chest; c) Grunting; d) nostrils flared/widened with breathing	6. Breathing difficulty/fast breathing	a) in-drawing of the chest b) wheezing
III: Abdomen	7. Diarrhoea	Duration	7. Diarrhoea	Duration; Blood in the stools
	8. Vomiting		8. Vomiting	duration
			9. Abdominal pain/distention	
IV: Nervous system	9. Spasms or fits (convulsions)	unconscious or unresponsive	10. Spasms or fits (convulsions)	a) unconscious during the illness that led to death b) stiffness of the whole body /stiff neck

4.4 Six actions for a good narrative

- i. Ask respondent to tell about the illness or events leading to the death. Focus and note down all symptoms mentioned by respondent.**
- ii. For each of the key symptoms mentioned by the respondent in the narrative, details need to be sought. For each symptom, details such as duration, pattern /location, severity and associated signs and symptoms need to be explored as per guidance provided by table on key symptoms.**
- iii. After noting these, the other symptoms from the same section must be asked for and ruled out.**
- iv. This should then be supported by questions from section I: General symptoms.**
- v. Also gather any available medical document/information such as hospital discharge notes, death certificate, lab tests etc. Also note details such as name of the hospital, doctor etc.**
- vi. Review for coherence and time sequencing and briefly renarrate to the respondent for confirming the same and also to include any missing information**

In situations where the respondent is unable to give any symptoms in the narrative, read out all the symptoms from the list and note down each positive response. For all positive response, repeat the steps i.e.

- Ask details as provided in your key symptoms list
- Gather any available medical document/information such as hospital discharge notes, lab tests etc including details such as name of the hospital, doctor etc.
- Review for coherence/sequencing and briefly renarrate/confirm the same from respondent

4.5 Special cases

a) *Old age deaths*

Don't write just old age deaths. Ask for presence(history) of any of the key symptoms. Also, enquire for history such as fall, slips, accident, bed ridden or passing urine, stools in bed since some time. Especially for ages below 70 years, findings would generally be available.

b) *Deaths due to accidents*

In cases of accidental deaths, its important to ask additional questions to ascertain the nature of death. In case of poisoning, ask if it was by mistake(incidental) or accidental. For suicide, its important to know the mode such as hanging, drowning, burns etc. Details such as falling from another object, slipping or being pushed by another person are important.

At times it could be homicide and not accident. Details such as use of sharp object, gun or physical fighting are helpful in differentiating the COD. In many such cases, neighbours are able to tell additional details. Alternatively, the PTE might be knowing such information for her locality. However, asking neighbours (or using their knowledge which may be based on hearsay) about these sensitive things must be carried out with a realization that it has its own limitations. Thus after documenting the respondent's version and getting the form signed (If respondent refuses to sign, this also needs to be documented), you can add that neighbour or PTE provided additional details and document the same.

c) **In transport accident**, narrative must include the details regarding mode of transport of the deceased as explained below:

- Pedestrian(walking), on bi cycle or tricycle,
- Motorcycle, three-wheeler(ex auto rickshaw),
- Car or bus
- Pick-up truck/van or heavy transport vehicle

d) Locally prevalent diseases and disease terms

In case of locally prevalent diseases for specific states/districts, being mindful of the same is helpful. For ex. in case of fever in Malaria high prevalence(endemic) area, its necessary to rule out the associated symptoms. Also, certain local terms might be being used in such areas to describe such diseases. Ex. "Kaala Peeliya" is the terminology used for case of Hepatitis C in certain districts of Punjab. Awareness of the same can thus be helpful in seeking narrative. History of intravenous needles/syringe/drug use must be asked for in such cases.

4.6 Review of documents for filling VA narrative

Gather any available medical document/information such as hospital discharge notes, death certificate, lab tests etc.

From this, information to be included in narrative should be:

S.

No.	<i>Name of Document</i>	<i>Information to be noted/checked</i>
1.	OPD consultation/ hospitalization/ hospital discharge notes	- Hospital discharge summary/ diagnosis/cause of death - Also name of the hospital/ doctor etc.
2.	Lab tests	Any lab findings when available should be recorded

Also, any other documents such as immunization card or Antenatal care card if available could be utilized to note required information.

4.7 Documentation of VA narrative

The narrative should be preferably taken down as notes (rough version). After noting down symptoms and its details, narrating it again to the respondent might lead to some additional information or details for earlier information including sequence of events. Thus, a rough version would be more convenient to capture this information.

This when documented in the narrative part of the VA form would ensure that all information is included. However, it must be in patient's language including local terms without any additional modifications and interpretations by the interviewer. All negative symptoms need not be included.

In 2nd half of the narrative, it should mention about the medical documents pertaining to the deceased. You should write about the documents available and findings from the same. If no documents are available, you must write that "no documents" were available.

The patients while telling their story might also give a large amount of irrelevant information. It's not necessary to include this information. However, if related to health condition, it must be included. You could add additional pages to your narrative as needed. Also, if you are unable to decide if the information is important or irrelevant, kindly include it.

Chronology in Narratives and Enquiring about medical records and retrieving information

Case Study

Supervisor Smt. AAA visited an urban sampling unit in BBB within CCC city. The deceased name was Shri. XXX, aged 66 years, who died at YYY Hospital in October 2016. The respondent was his son named Shri. ZZZ. He shared that his father had long standing diabetes and raised blood pressure for the last ten years and also was on treatment for kidney disease from nephrology department of the hospital for the last two years. In July 2016, he was taken to YYY Hospital and was admitted under

endocrinology and surgery departments for treatment of skin infection in legs. He was admitted for ten days within the hospital. His records of discharge during admission in July, 2016 stated that deceased Shri. XXX had Right lower limb cellulitis, Diabetes Miletus (DM), hypertension , CKD-III (Chronic Kidney Disease) and L4-L5 PIVD (Prolapse Inter-Vertebral Disc).

He was started on insulin therapy after July 2016 and on 26th October, 2016 he was having fluctuation in sugar levels. His voice started changing and was taken to hospital in emergency department and was admitted for three days, was on hospital and then he died. The hospital did not give discharge certificate this time but handed only a piece that stated the death happened on 29th October 2016. The death certificate produced by Shri. ZZZ did not have any cause of death. Exact cause of death was not known.

4.8 Evaluation of VA narrative

The narratives would be evaluated using below criteria. Thus, you need to ensure that these aspects must be addressed while recording of VA narratives. The criteria are:

- **Length:** Minimum five lines must be recorded for any narrative.
- **Symptoms:** Minimum of three symptoms and its details must be included. If none are present, you must write down that none of the ten symptoms from the symptom list were present. Ensure that symptoms, which were not present must NEVER be recorded as being present. This spoils the narrative quality and prevents in deriving cause of death.
- **Time sequence:** A clear order of events must emerge from narratives. While certain symptoms and diseases would have been present from earlier, the events surrounding the actual death must be recorded with clarity.
- **Legibility:** The narrative must be legible and clearly written.
- **Medical documents:** Must write "no documents" or the documents available and findings.

Chapter 5. Filling Questions in VA forms

This section explains about the filling of questions in VA forms. It comprises of three sections- identification details and details of respondent and deceased, general information of the events leading to death and verbal autopsy narrative.

In this manual, the upper-case letter 'Q' indicates a question found in the symptom duration section of the forms. You may think that the number of questions is a bit more but its necessary since certain questions are needed to aid in deciding COD. Also, some complex questions are split into two thus making sure that we ask about only one indicator at a time. and thus not miss any important point (in combined questions, we many a times miss the 2nd question etc. Ex Address PIN.)

Most questions require you to record only one response. The questions allow for responses with a simple yes or no answer, multiple choices, or duration in some instances.

Some questions allow more than one answer. These responses are preceded by check boxes

(Check boxes are rectangular in shape and allow multiple boxes to be checked).

5.1.1 Identification details

All the data which can be retrieved from the database will already be filled in the form. This section needs to be filled in HINDI or ENGLISH only. The particulars available will be the SRS unit number, Identification codes, year and 1st HYS or 2nd HYS, full name of the Head of the Household, deceased and mother of the deceased. The head of household is the person who makes decisions for the household on a daily basis and who is a permanent resident of the household (spends the night at least six months out of the year). For neonates who died before being named will be addressed as "baby of (mother's name)", ex baby of Kuasar



The screenshot displays the VA-SRS mobile application interface. At the top, it shows the time 15:32, signal strength, and battery level at 85%. The app header includes 'VA-SRS', 'DASHBOARD', and 'LOGOUT'. Below the header, there are three tabs: 'SECTION 1', 'SECTION 2', and 'SECTION 3'. The main content area is titled 'Neonatal Death (28 days or less of age)'. It lists the following details:

SRS Unit Number	9911012002
ID Code of Deceased	0073011100
Unique Form No	107301110 0
Year	2022
HYS Period	2
Unit Name	Holambi Kalan
Name of Head	MOHD RAFIQ
ID Code of Head	007301034 3
Full Name of Deceased	NBD
Name of Mother of Deceased	KUASAR
ID Code of Mother of Deceased	007301034E

At the bottom, there is a section header 'Section 1 : Details of Respondant and Deceased' and a navigation bar with three icons: a list icon, a home icon, and a back icon.

Remaining details of the respondent and deceased will be needed to be filled and saved.

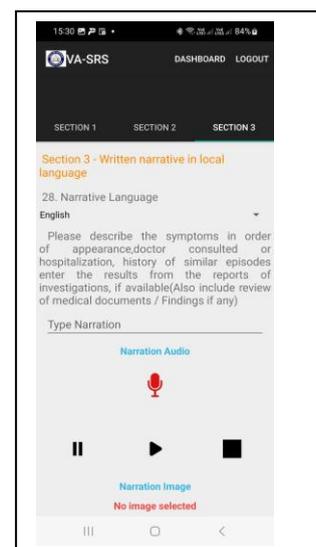
5.1.2 General description-

All the questions in this section needs to be completed by filling the boxes and then saved. In case of incompletely filled data, the screen will display “Partial Data of Section 2 Saved Successfully”.

5.1.3 Verbal Autopsy Narrative

This sections contains the history of the events, signs and symptoms leading to the death. It should be written in local language, including all local terms mentioned.

When writing the narrative, focus on recording details of the symptoms in your key Symptoms List. Take notes while the respondent is speaking, and write the full narrative immediately after the interview, to ensure that all details are captured with coherence and point is missing. The narrative can be written in text format and/or written in a paper followed by taking the image and uploading it in the app.



At the end of the interview

House address of the deceased is mentioned followed by rating the cooperation of the respondent.

- Good: Majority of questions were answered and required information was collected (>80%)
- Medium: Many questions were answered (50-80%)
- Poor: Respondent did not know much/didn't cooperate . Some questions were answered.(<50%)
- Mention the date of the interview in the dd/mm/yy format.

Before leaving the household, check the VA form that you have completed to make sure that every question in the form has been asked. If you find discrepancies, mistakes, or omissions, ask further questions and correct your form. It must be complete and accurate in all respects before you leave the household. When you are satisfied that everything is in order, thank the respondents and the family for their cooperation and willingness to be interviewed. You may again reassure them about the confidential nature of the interview and offer words of sympathy (if culturally appropriate) before you leave.

Form 10A: Verbal Autopsy form for Neonatal death (28 days or less of age)

Section 1: Details for respondent and deceased *Details of respondent*

Q1: First fill name of the respondent alongwith his identification code.

Q2: Then tick the box corresponding to relationship of respondent with the deceased. The form lists only the applicable codes.

Q3: Then enquire if the respondent lived with the deceased during the events leading to the death and tick the appropriate box.

Q4: Fill age of respondent in completed years

Q5: Tick the box corresponding to the sex of the respondent (Male/Female)

Details of deceased

Q6: Fill age of deceased in completed days. For deaths occurring within first day of birth, record it as 0 0.

Q7: Tick the box corresponding to the sex of the deceased (Male/Female). For newborns who died before being named, this information needs to be recorded with extra care as it cannot be cross-checked against name at a later stage.

Q8: Fill the house address of the deceased including details such as name of street/society/mohalla, and important landmark nearby such as any government establishment, school, temple, etc. House numbers must be asked for and recorded (if available). Write even the building owner's name and some descriptive information about the location of the household (ex . Third floor etc). If there is no street/house number, describe the location of the household as directions from a nearby landmark. These details are necessary so that you or resampling/QA team can locate the household at a later date. Also, ask and fill the PIN code of the area.

Q9: Fill the date of death of the deceased (dd-mm-yy). For situations where the respondent/family members are unable to recall the exact date, record the month and year only. Do check the date against some document from health centre/village records/part time enumerator with date of death if available.

Q10. Tick the box corresponding to place of death. The actual details and sequence of events would be recorded later through the narrative section.

Q11: Ask the respondent as to what does he/she think the person died of. Allow the respondent to tell the illness in his or her own words and record it verbatim using vernacular/local language/terminology. Even if the reason seems non logical/non-medical, do not try to interpret comments. If its said that nothing was present/i don't know and it was a sudden death, record it as such without seeking any further details. It might be stated that death was caused by magic or evil spirit, record the word they stated without modifying it to what you might think is a better word/explanation. If more than one cause of death is mentioned, write them all.

Section 2: Neonatal Death

Q12A/B: Ask if the deceased die from an injury or accident? If the answer is yes, go to 12B and tick the box corresponding to the kind of injury/accident which caused the death. Skip other questions and directly go to Q41 i.e. narrative If the answer is no, skip 12B and go to Q13.

Details of pregnancy and delivery

For this section, any medical documents if available would be very helpful and thus must be enquired for.

Q13. Ask if the child a single or multiple birth (twins etc) and tick the corresponding box.

Q14. Enquire as to where was the baby born and tick the corresponding box.

Q15. Enquire about who attended the delivery and tick the corresponding box. While untrained traditional birth attendants include the local dais etc, any non allopathic doctor including AYUSH/traditional medicine doctor would be included as '5". Any person who does not fit in the categories mentioned above may be recorded as Other

Q16. Ask and fill the duration (in months) of the pregnancy (Range 1-10 months).

Q17A. Ask if there were any complication during the pregnancy, or labour. If answer is no, skip to Q18.

Q17B Ask regarding the complication during the pregnancy, or labour. All options should be read to confirm as to what complication(s) occurred and tick all the applicable boxes. Operative delivery also includes episiotomy (cut using scissors to widen the birth canal followed by suturing) and instrument use (forceps/vacuum) apart from caesarean section.

Q18. Ask if the mother received 2 doses of tetanus toxoid during pregnancy and tick the corresponding box. Check the immunization card if available.

Details of baby after birth

Q19. Ask the respondent if after birth, the baby ever cried, moved or breathed?

Q20. Ask if there were any bruises or signs of injury on child's body after the birth.

Q21. Ask if the any body parts (ex Head, face, lips, back, limbs) were incompletely formed/ had visible malformations at birth? If present, describe the details in the narrative.

Q22. Ask about child's size at birth as compared to other children in the locality. Also fill birth weight of the baby in grams if the mother knows the exact birth weight or the records are available (Normal range is 2500 to 3900 grams).

Q23A. Ask if the baby started breathing/crying immediately after birth?

Q23B/C If yes, ask if after some duration, the child stopped breathing/crying. If yes, record after how many completed days after birth the child has stopped breathing / feeding?

Q24A/B/C. Was the baby able to suckle normally during the first day of life? If yes, was the normal suckling continued or it stopped? If yes, after how many days did the baby stop sucking?

Details of sickness at time of death

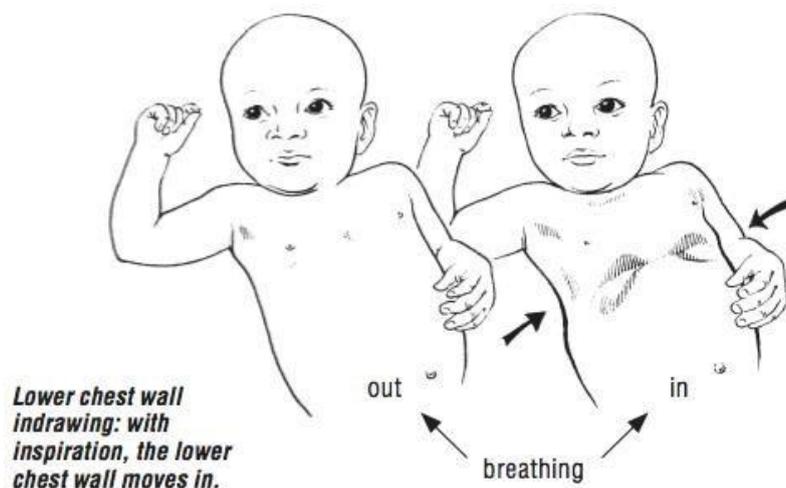
Q25. Ask the number of days between the baby dying and baby getting sick?

Q26A/B. Ask if fever was present? If yes, how many days did the fever last?

Q27A/B. Ask if any breathing difficulty was present including any abnormal sounds?
If yes, then ask for how many days?

Q28A/B. Ask if the child had fast breathing? The normal range is about 50 breaths in a minute. However, the respondent/mother is often able to tell it based on their judgement. If yes, for how many days?

Q29. Ask if the child had in-drawing of the chest i.e. on breathing in, the lower chest wall goes in.



Q30A. Ask if the child had a cough?

Q30B. Ask if the child made short sounds when breathing out (grunting), and occurs when an infant is having trouble breathing.

Q30C. Ask if the child's nostrils flared/widened with breathing?

Breath sounds are very important for neonates and children. A demonstration video of the same can be seen at weblink <https://youtu.be/l9WtapUR9GM>. Video from minutes 10.20 to 12.20 demonstrates chest indrawing, nasal flaring and grunting.

Q31A/B. Ask if the child had diarrhoea (frequent liquid stools)? If yes, for how many days were the stools frequent or liquid?

Q32. Ask if the child vomited?

Q33. Ask if the child had redness around, or discharge from, the umbilical cord stump?

Q34. Ask if child had any areas of skin which were reddish?

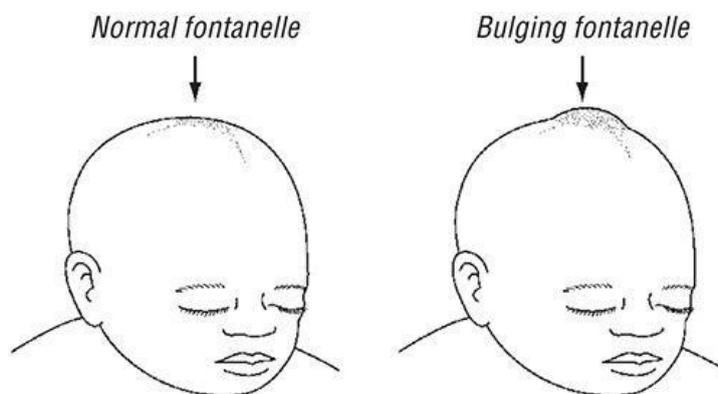
Q35. Ask if child had skin rashes with pus?

Q36. Ask if the child had yellow eyes or skin?

Q37. Ask if the child had spasms or fits (convulsions)?

Q38. Ask if the child became unresponsive or unconscious?

Q39. Ask if the child had a bulging fontanelle (describe)?



Q40: Ask if the child's body felt cold when touched?

After this, proceed to Section 3: Written narrative in local language and enter the code for narrative language code.

Form 10 B: Child death (29 days to 14 years)

Fill in the Identification details (in HINDI or ENGLISH only) as form 10A. Also section 1 is same as for Form 10 A. Only for question 6 i.e. age of deceased, unlike newborn form 10A where age is upto 28 days, here the age needs to be filled in completed years and months.

Section 2: Child death

Q13A/B. Ask if the child died from an injury or accident? If yes, ask regarding the kind of injury or accident and tick against the corresponding box. Then directly proceed to narrative.

Details of baby after birth:

Q14. Ask about child's size at birth as compared to other children in the locality.

Q15A. Ask if the baby was born premature (before 37 weeks of pregnancy).

Q15B. Ask and fill the duration (in months) of the pregnancy (Range 1-10 months).

Q16A. Ask if the child was breastfed?

Q16B. Enquire if the child was being breastfed during the illness that led to death and if the child stopped breastfeeding during the same?

Details of sickness

Some questions are similar to those asked for newborn form 10A

Q17. Ask the number of days between the baby dying and baby getting sick? Q18A/B/C Ask if fever was present? If yes, how many total days did the fever last? Also record if the fever was accompanied by chills/rigors?

Q19. Ask if the child had spasms or fits (convulsions)?

Q20. Ask if the child was unconscious during the illness that led to death?

Q21. Ask if the child developed stiffness of the whole body?

Q22. Ask if the child had a stiff neck (restricted neck movement, unable to bring down the chin to the chest)?

Q23A/B. Ask if the child had diarrhoea (frequent liquid stools)? If yes, for how many days were the stools frequent or liquid?

Q23C. Ask if there was blood in the stools?

Q23D. Ask if the child was given oral rehydration treatment (use local term) during diarrhoea?

Q24A/B/C. Ask if the child had a cough? If no, skip to Q25A. If yes, record the duration in completed days? Also enquire if it was dry or with sputum/blood?

Q25A/B Ask if any breathing difficulty was present including any abnormal sounds? If yes, then ask for how many days the child had breathing difficulty?

Q25C. Ask if the child had fast breathing? The normal range varies by age. However, the respondent/mother is often able to tell it based on their judgement.

Q25D. Ask if the child had in-drawing of the chest i.e. on breathing in, the lower chest wall goes in.

Q25E. Enquire if child had wheezing (whistling sound during expiration)?

Q25F. Ask if any antibiotics were taken?

Q26A/B/C. Ask if during the illness, did the child have any abdominal pain? Also, enquire regarding presence of abdominal distension?

Q27A/B. Ask if the child vomited? If yes, for how many completed days did s/he vomit?

Q28. Ask if the child had/developed yellow eyes or skin?

Q29: A/B Ask if the child had any skin disease or rash during the illness? If no, skip to Q30. If yes, ask if the rash was all over the body? Ask if it was measles (use local term such as khasra etc)

Q30: Ask if during the weeks before death, the child had lost weight/ become very thin?

Q31. Ask if during the weeks before death, did the child appeared pale/lack of blood?

Q32.A/B/C. Ask if the child kept getting ill repeatedly/frequently? If yes, record the number of times the child got sick in last 6 months? Ask about symptoms of these illnesses (Cough, Diarrhoea, Ear discharge, Chills etc) and check all that apply.

Q33A/B/C/D. Immunization history: Any immunization card /document/record if available from the family/local health worker is very helpful for this question and must be obtained where available. Ask if the child received BCG injection (normally given on left arm; develops scar mark).

Also ask if she received 3 DPT injections (usually administered on upper leg at a gap of atleast 4 weeks/one month). Ask if they received polio drops in mouth (including mass vaccination rounds).

Ask if injection for measles (use local term) was taken (usually after age of six/nine months)

After this, proceed to Section 3: Written narrative in local language and enter the code for narrative language code.

FORM 10 C: Adult death (15 years or older)

Fill in the Identification details (in HINDI or ENGLISH only) as form 10A/B. However, name of mother of deceased is not required. For section 1, details of respondent and deceased(Q1-Q5) are same as for Form 10 A/B. However, in question 6 i.e. age of deceased, unlike newborn form 10A where age is upto 28 days, or form 10B where the age needs to be filled in completed years and months, here age needs to be filled in completed years only. Another new question is:

Q8A/B: Ask if the deceased's work/occupation required him to live away from home? If yes, was it for more than three months in a year?

Section 2: Past History

Now we will ask question on chronic medical conditions that the deceased might have been diagnosed with by a medical professional (either allopathic, ayurvedic or homeopathic) and tick the appropriate response. Ask the respondent if the deceased suffered any of the following illnesses. Remember that yes will be selected only if the condition has been diagnosed by a doctor.

Q15. Hypertension

Q16. Heart disease

Q17. Stroke

Q18. Diabetes

Q19. Tuberculosis

Q20. HIV/AIDS

Q21. Cancer (For cancer, the site must be noted in the narrative.)

Q22. Asthma

Q23. Other chronic illness

Q24. Ask if the deceased's Record weight had changed by more than 2.5 kgs (visible thinning/fattening) over the last year?

Q25. Ask if the deceased was taking any medications regularly during the last five years? Up to three names of medicines can be noted in box. In case there are more medicines which are being taken regularly, note them in the narrative. The box needs to filled in Hindi or English only in the boxes provided.

Q26-Q29. Ask these questions about the deceased and record the responses.

Now, **repeat the same questions for the respondent.**

The response boxes need to be ticked as answered by the respondent.

Q26A/B/C. Ask if the deceased used to smoke tobacco (cigarette, bidi etc) within the last 5 years? If the response is yes, write the number of bidi and cigarettes smoked per day in the space provided. The respondent may not be sure of an exact number. In such cases, ask for an average number, and record it.

Q26D. Also ask if tobacco was smoked in any other form (ex: hookah, cigar etc: as applicable to the location/locality)

Q27A. Ask if the deceased used to chew smokeless forms of tobacco such as (gutkha/pan masala/khaini/betel nut etc: use local terms) within the last 5 years ?

Q27B. Also ask if s/he apply tobacco within the last 5 years ?

Q28A/B. Ask if s/he drank alcohol (use local term) during most weeks(1/day or more) in the last 5 years? If yes, ask the no of days/week, s/he used to drink. Also ask the type of alcohol which was consumed most commonly?

Q29. Ask if the deceased was pure vegetarian (no egg, fish, chicken/meat) for the last 5 years)?

Q26-Q29. Make sure that you have repeated and filled the same questions for the respondent also

Q30A/B/C. For female aged 15-49 years, ask if the death occurred while she was pregnant. Also confirm whether the death had occurred following delivery or abortion (upto 42 days). Female members from family/neighbourhood are likely to provide more accurate response to this question. If response is yes, continue to form 10D(maternal death) and fill the unique number of Form 10D here itself so that the forms can be linked later with ease.

After this, proceed to Section 3: Written narrative in local language and enter the code for the narrative language.

Form 10 D: Maternal death (females aged 15 to 49 years)

Fill in the Identification details (in HINDI or ENGLISH only) as form 10A/B/C.

However, name of mother of deceased is not required. Fill the unique number of Form 10D in Form 10C Q33 so that the forms can be linked later with ease.

For this section, any medical documents if available would be very helpful and thus must be enquired for.

Q2A/B Ask if the deceased had undergone antenatal checkups during the pregnancy. This is to be done through health personnel during pregnancy at hospital or through home visits and includes tetanus immunization, iron and folic acid tablets, etc.). If yes, ask about the number of times such checkups were received. Corroborate with documents if any available.

Q3. Ask about the number of days (approximately) between her delivery/abortion and death. This form 10D is to be filled only if this gap is upto 42 days. Else form 10C would suffice.

Q4. Ask as to where the delivery/abortion took place and tick the appropriate option.

Q5. Enquire about who attended the delivery and tick the corresponding box. While untrained traditional birth attendants include the local dais etc, any non allopathic doctor including AYUSH/traditional medicine doctor would be included as "5". Any person who does not fit in the categories mentioned above may be recorded as Other.

Q6. Ask if it was a caesarean delivery. Surgical incision through the walls of the abdomen and uterus for delivery of offspring is called a caesarean section or caesarean delivery

Q 7/8/9 Ask if she had excessive bleeding on the day of labour. Blood that "soaks a number of clothes or bandages" or "covers the floor" is a good way of knowing if there was too much bleeding. If present, ask if it was present at the beginning of labour pains, during labour (before delivering the baby) and after delivering the baby.

Q10. Ask if the women was in labour for unusually long duration (= 24 hours for first baby; = 12 hours otherwise). Tick the appropriate response.

Q11. Ask if it was a difficult delivery (ex more duration, pain, bleeding)

Q12. Ask if during delivery forceps or vacuum was applied.

Q13. Ask whether the woman had difficulty in delivering the placenta. The placenta

is the fleshy mass attached to the baby by the umbilical cord in the womb. The placenta normally comes out of the vagina within 30 minutes after the delivery of the baby. Tick the appropriate response.

Q14/15. Ask if she had fits or loss of consciousness during the pregnancy, during labour or after labour? Tick the appropriate response.

Q16. Ask if she had fever after the birth? Tick the appropriate response.

Q17. Ask if she had foul smelling discharge? Tick the appropriate response.

After this, proceed to Section 3: Written narrative in local language and enter the code for the narrative language.

Chapter 6: Workbook for "Manual for conducting Verbal Autopsy"

6.1 Sample narratives for review and evaluation

Now some sample narratives for review and evaluation are being provided. Some examples, have been provided for guidance. Other examples need to be reviewed as per the given format.

6.2 Evaluation of form 10A (Neonatal death: 28 days or less of age)

It has got 3 sections and findings as explained below should be used for narrative in form 10A.

- i) Details of pregnancy and delivery: prematurity or complications if present must be included in the narrative
- ii) Details of baby after birth: findings such as any injury/ malformation or breathing and feeding must be included in narrative
- iii) Details of sickness: of the nine key symptoms in form 10A, any which are found to be present while filling the form must be explored in further details through the narrative.

Section	Neonatal symptoms	Details
I: General	1a. Fever	- duration
	1b. Body cold to touch	
	2. Redness around, or discharge from, the umbilical cord stump	
	3. Yellow eyes or skin	
	4. Reddish areas of skin	skin rashes with pus
II: Chest	5. Cough	
	6. Breathing difficulty/fast breathing	a) Duration; b) in-drawing of the chest; c) Grunting; d) nostrils flared/widened with breathing
III: Abdomen	7. Diarrhoea	Duration
	8. Vomiting	
IV: Nervous system	9. Spasms or fits (convulsions)	unconscious or unresponsive

Narrative 1

Age in completed days: 18; Sex: female

According to respondent say that the child has low grade fever for about 2-3 days. Colour of her urine also became yellow and colour of her eye also change into yellow. Also loss of appetite. The child was crying continuously. At birth, child's size was smaller than usual and child was unable to suckle normally during 1st day of life. It was a home delivery without complications. The child was sick for about 10 days before death. Breathing difficulty lasted for 4 days (fast breathing 3 days). There was no chest indrawing and no diarrhoea or vomiting. On date 24/6/13 the child was admitted to nearby hospital and doctor confirmed that the child was suffering from jaundice. Treatment was done for 3 days, Doctor told that it was too late to save the child. And gradually the child was died on 28-06-13.

Length: Adequate (more than 5 lines)

Symptoms present:

- i) details of pregnancy and delivery: It was a home delivery without complications.
- ii) details of baby after birth: At birth, child's size was smaller than usual and child was unable to suckle normally during 1st day of life.
- iii) details of sickness: From 9 key symptoms: 3 were present fever, yellowishness of eye and urine, Breathing difficulty,

Symptom details: .

Fever: duration (2-3 days), severity (low grade); associated signs and symptoms: loss of appetite, crying

Since child was unable to suckle normally during 1st day of life, we need to explore if child was breastfeeding properly or was on external feeds/formula milk.

Breathing difficulty: duration (4 days), severity (fast);

Yellowishness of eye and urine: duration missing

Time sequence of symptoms: A reasonable sequence of events is provided

Medical consultation/documents: diagnosis provided by doctor has been mentioned but any details of treatment (ex phototherapy) documents or basis of diagnosis/ test results not mentioned.

Narrative 2

Age in completed days: 02; Sex: Male

The deceased aged 2 days died of immune deficiency. It was a normal delivery at 9 months at health centre without complications. After delivery the baby was suffering from sickness and was crying. He did not take milk properly. There were no visible malformations or bruises when he was born but his size was smaller than usual but stomach. The baby had high fever the first day' thinking that the fever will get better he was given medicine but it did not get better and so the baby died the next day on 04/11/13. He also had fast breathing and redness around birth cord.

Length: Adequate (more than 5 lines)

Symptoms present:

i) details of pregnancy and delivery: It was a normal delivery at 9 months at health centre without complications.

ii) details of baby after birth: was crying and did not take milk properly. There were no visible malformations or bruises when he was born but his size was smaller than usual but stomach.

iii) details of sickness: From 9 key symptoms: 3 were present fever, fast breathing and redness around birth cord.

Symptom details: .

Fever: duration (first day), severity (high grade); associated signs and symptoms: loss of appetite, crying

Since child did not take milk properly during 1st day of life, we need to explore if child was breastfeeding properly or was on external feeds/formula milk.

Breathing difficulty: duration (2 days), severity (fast);

Time sequence of symptoms: A reasonable sequence of events is provided (child died on 2nd day so limited time duration)

Medical consultation/documents: delivery was at health centre and medicines were taken but details of disease and treatment documents are not mentioned.

Narrative 3

Age in completed days: 06; Sex: Female

The respondent said that the baby was born at full nine months but weight was less (less than 2kg). The baby did not take breast after birth but had no abnormalities in breathing and was given formula milk at hospital. She was brought home after 4-5 days as treatment was expensive. She died just the next day. She had no problems in the skin or eyes. The respondent does not have any idea about the child died of.

Length:

Symptoms present:

i) details of pregnancy and delivery:

ii) details of baby after birth:

iii) details of sickness:

Symptom details: .

Time sequence of symptoms: :

Medical consultation/documents:

6.3 Evaluation of form 10B(Child death: 29 days to 14 years)

Form 10 B has got 2 sections and findings as explained below should be used for narrative in form 10B.

- i) details of baby after birth: findings such as small size, prematurity and breastfeeding must be included in narrative for Infants (<1 year of age)
- ii) details of sickness: of the ten key symptoms, any which are found to be present while filling the form must be explored in further details through the narrative.

Section	Child symptoms	Details
I: General	1. Fever	Duration; Chills/rigors
	2. Lost weight/ become very thin	
	3. Appeared pale/lack of blood	yellow eyes or skin
	4. Skin disease or rash	all over the body
II: Chest	5. Cough	Duration; dry or with sputum/blood
	6. Breathing difficulty/fast breathing	a) in-drawing of the chest b) wheezing
III: Abdomen	7. Diarrhoea	Duration; Blood in the stools
	8. Vomiting	Duration
	9. Abdominal pain/distention	
IV: Nervous system	10. Spasms or fits (convulsions)	a) unconscious during the illness that led to death b) stiffness of the whole body /stiff neck

Narrative 1

Age : 1 month; Sex: Male

The one month old baby suddenly got high fever with running nose continuously for 4 days. No medical treatment was provided to the baby. The baby had cough and breathing difficulties. Fast breathing and chest in drawing was also present. It was a full term baby of average size and breastfeeding was done after birth. The illness of the baby was guessed to have had pneumonia based on the symptoms.

Length: 5 lines

Symptoms present

i) details of baby after birth(for infants): It was a full term baby of average size and breastfeeding was done after birth.

ii) details of sickness: of the ten key symptoms, fever, cough breathing difficulty,

Symptom details: fever: high grade, sudden onset;
breathing difficulty: . Fast breathing and chest in drawing

Time sequence of symptoms: Not described in sufficient detail

Medical consultation/documents: diagnosis mentioned but not clear if it was done by doctor

Narrative 2

Age in years: 5; Sex: Male

As per the respondent the deceased was 5 years old boy who were suffering from blood cancer for last 1-2 years. He was taking treatment from GMC hospital. He was admitted in GMC several times. He was transfused blood many times. He was advised by the doctors GMC to take him to Mumbai as special treatment was not available in GMC Goa, He was normal before; did not showing any special symptoms. He was immunised for age. His whole skin became was very rough and loose. His stomach swelled in size and his body became very weak and thin except his stomach. He always had high fever. Last he was admitted in GMC for about 2 weeks. In the meanwhile he suffered a lot. Also had breathing problem in GMC and with then symptoms he expired in GMC.

Length: Adequate

Symptoms present: looseness and roughness of skin, weakness, abdominal swelling, fever, breathing problem

Symptom details: patient was suffering from blood cancer; was admitted and transfused blood multiple times. Onset of symptoms including those for blood cancer not described in detail. Occurred over many weeks. Also details preceding death (ex last 2 weeks are missing/unclear)

Time sequence of symptoms: A reasonable sequence of events is provided

Medical consultation/documents: Diagnosis and hospital consulted mentioned but some details of diagnosis and treatment could have been added

Narrative 3

Age in years: 8; Sex: Male

According to the respondent the boy was suffering from paralysis type disease since childhood. From appearances also it would be ascertained the paralysis. There was no fever or diarrhoea. There was some breathing difficulty with fast breathing and wheeze present. Legs hands and other organs were not working properly. Could not walk properly. In the last 3(Three) months the boy was suffering from some other associated diseases, like watering from mouth. The boy died at home.

Length:

Symptoms present:

Symptom details:

Time sequence of symptoms:

Medical consultation/documents:

Narrative 4

Female, 13 years

She had fever since 10-12 days. It was less earlier but increased later. She was not having stools for 3-4 days and so her stomach was paining. We took some medicines for fever from the local doctor. However, she often complained of headache and many times appeared confused and sleepy. Even during her periods, she complained of pain and cramps. Her appetite had decreased. At times, she would wake during sleep due to fever. She also had bodyache and weakness. One day she was running very high fever and was blabbering and then she died.

Length:

Symptoms present :

Symptom details:

Time sequence of symptoms :

Medical consultation/documents:

6.4 Evaluation of form 10C(Adult death: 15 years & above)

Three steps for using the List of Key Symptoms for Adult Deaths(form 10C)

- IV.** For each key symptoms in the narrative, **details need to be explored as per key symptom list.**
- V.** Then, **other symptoms from the same section** must be asked for and ruled out (ex, for chest pain, also ask about cough and difficulty in breathing).
- VI.** Then ask the **four key symptoms from section I: General symptoms** (namely Fever, Weight loss, Oedema/Swelling and Skin yellowishness/rash)

Narrative 1

Age in years: 64; Sex: Male

As informed by the respondent the deceased had been suffering due to senility problems for the last 4/5 years. He many times developed mild fever and was losing weight. A local traditional healer was consult and told that such a multi trouble are common symptoms of being old age. Medicine made of leaves and roots were given and his was weak. There was no improvement and felt very sick and became unconscious. He also complained of severe abdomen pain. He could not swallow when solid or liquid food stuff. He also could not control passage of urine and stool. Gradually, he died on 20/04/13.

Length: Adequate (more than 5 lines)

Symptoms: from 12 symptom list

Before death: unconscious (section IV: nervous system)
severe abdomen pain, (section III: Abdominal and urinary symptoms)
could not swallow when solid or liquid food stuff,
could not control passage of urine and stool
Earlier: fever, weight loss, (Section I: general symptoms)

Symptom details as per key symptom list: .

Fever: duration (many times for several weeks), severity (mild);

I) duration, pattern/location, severity and associated with

More details would have been helpful as explained in symptom list

II) symptoms from the relevant section

Going symptom wise, since unconscious is a symptom from section IV: nervous system, enquiry should have made for paralysis.

Similarly, symptoms from section III such as abdominal distension and diarrhoea, vomiting could have been enquired.

III) general symptoms

Lastly, general symptoms i.e. oedema and skin color, rashes could have been ruled out. It is possible that these might have been enquired and were not present but writing a line that no other key symptoms were present is of great help in diagnosis.

Time sequence of symptoms : A sequence of development and occurrence of symptoms is missing. It provides earlier symptoms and those that occurred before death.

Medical consultation/documents: yes, but diagnosis provided by local healer is unclear (senility). Whether they went to hospital for the final illness is not talked about. No

documents have been referred to

Narrative 2

Narrative of the verbal autopsy form of a 65 years old male was as follows:

“He was suffering from cough and breathlessness for last one month. He also occasionally used to have blood in the cough. He was diagnosed with tuberculosis from a nearby health centre and was taking treatment. He was also a chronic smoker and diabetic for last 25 years. Six months back he started developing swelling over face and both feet, for which he did not take any treatment. Three days back he suddenly become unconscious and was being taken to the hospital. He died on the way to the hospital.”

Length:

Symptoms present :

Symptom details as per key symptom list including

Step I) duration, pattern/location, severity and associated with

Step II) symptoms from the relevant section and

Step III) general symptoms :

Time sequence of symptoms:

Medical consultation/documents:

Narrative 3

Male, 55 years. According to respondent, he was a very active man and used to bicycle to work at ice factory. In 2009, he fell down on his way and was operated at safdargunj and a rod was inserted into his leg for supporting bones. In recent times, he had other injuries also including knee and braces were applied. Since then his activities were restricted. He also started drinking alcohol. His death occurred in 2015. A few months before that, he had reduced his food intake and didn't like regular food like roti. He asked for things like fruit juice, idli etc. His weight had reduced. We took him to family doctor and he said that he is having jaundice. In last few days, he was hardly eating and talking. On day of his death, he was talking for some time and then went into sleep and died.

Length:

Symptoms present :

Symptom details as per key symptom list including

Step I) duration, pattern/location, severity and associated with

Step II) symptoms from the relevant section and

Step III) general symptoms :

Time sequence of symptoms:

Medical consultation/documents:

Narrative 4

Male, 73 years

According to respondent, he was having kidney problem. He was a regular alcoholic. His appetite had decreased and weight was losing. Many times, His eyes and face appeared swollen in the morning since some time. He also had breathing problem. On day of his death, he was having breathing difficulty. He was taking treatment for this. However, he was angry and threw away the oxygen mask which he regularly used to apply for breathing difficulty. The breathing difficulty continued for some time and then he died.

Length:

Symptoms present :

Symptom details as per key symptom list including

Step I) duration, pattern/location, severity and associated with

Step II) symptoms from the relevant section and

Step III) general symptoms :

Time sequence of symptoms:

Medical consultation/documents:

Narrative 5

Narrative in the verbal autopsy form of an 80 year old male reads as follows:

“He used to have fever and cough sometimes. Patient fell suddenly ill on the morning of 24th April 2013 when one side of his body stopped moving. He was taken to a hospital where he was admitted for 7 days. On 15th November 2013, similar episode recurred but this time it was associated with loss of consciousness. He died while being taken to the hospital. He was suffering from diabetes and blood pressure for last 20 years. He also used to have fever and cough sometimes.”.

Length:

Symptoms present :

Symptom details as per key symptom list including

Step I) duration, pattern/location, severity and associated with

Step II) symptoms from the relevant section and

Step III) general symptoms :

Time sequence of symptoms:

Medical consultation/documents:

6.5 Evaluation of form 10D (Maternal death: females aged 15-49 years)

Narrative 1

Narrative of the verbal autopsy form of a 30 year old pregnant woman was as follows:
“She was in her last month of pregnancy and ASHA told her that she has high BP. One month back she suddenly started bleeding from vagina and also had abdominal pain. She was immediately taken to a hospital. In hospital, she continued to bleed from her vagina as well as from places where injection was given. Despite administration of blood and other medicine, she died one hour after admission.”

Length: 5 lines

Symptoms present: vaginal bleeding, abdominal pain, bleeding from injection site

Symptom details: Vaginal bleeding and abdominal pain: sudden in onset

Time sequence of symptoms: Described

Medical consultation/documents: taken to hospital and administered blood and medications. Documents not mentioned.

6.6 Medical Document Evaluation

From these sample OF HOSPITAL DISCHARGE summaries, tell what you will note in the narrative?(find out list of positive symptoms/ diagnosis

Summary 1

ADMISSION DATE : 3-4-04 DISCHARGE DATE : 7-4-04

AGE : 39 years SEX : female

FINAL DIAGNOSIS: Migraine, hypertension

HISTORY: This thirty-nine year old lady was admitted for investigation of headache. She had a sudden onset of bifrontal headache followed by collapse, possible right focal fitting. She was noted to be confused afterwards. At the local doctor's surgery she was noted to be hypertensive with a BP of 180/120. There was no associated fever, cough, nausea, vomiting, diplopia or focal weakness. There is no past history of migraine or other headache. She had a head injury at the age of eighteen but there had been no problems since then.

EXAMINATION: On examination she was noted to be obese. She had a blood pressure of 140/90 in both arms, pulse of 90/min and regular. She was afebrile. Auscultation of her heart sounds was normal and chest was clear. Abdominal examination was unremarkable. Cranial nerves were normal. Power and tone in upper and lower limbs were normal. There were no cerebellar signs. Sensation was normal.

INVESTIGATIONS: Due to the suspicion of a subarachnoid haemorrhage, contrast CT head scan was performed. This was normal. She then proceeded to a lumbar puncture which was normal and showed normal biochemistry. Full blood count did show some neutrophilia, normal coagulation profile. ECG was normal.

Summary 2

ADMISSION DATE : 18-3-04 DISCHARGE DATE : 20-3-04

AGE : 22 months SEX : male

FINAL DIAGNOSIS: Croup and chronic asthma

HISTORY: This patient is a 22 month old boy with a background of chronic persistent asthma, who was admitted with acute croup and an acute exacerbation of asthma. He has had a history of wheezing and coughing, occurring with exercise and also nocturnally. He has needed his Ventolin every one to two days. This episode of asthma was precipitated by upper respiratory tract infection which is still evident. Nil allergies, normal development and vaccinations are up to date.

PAST MEDICAL HISTORY: Chronic persistent asthma.

EXAMINATION: He was alert and his respiratory rate was 40/min. His heart rate was 150/min. He had moderate intercostal recession and audible inspiratory stridor and expiratory wheeze. On chest examination he had good air entry. ENT examination revealed tonsillitis and pharyngitis.

The ear examination was normal. Dual heart sounds were heard, no murmurs. Abdominal examination was normal. The impression was acute croup and an acute exacerbation of chronic asthma precipitated by URTI.

MANAGEMENT: He was admitted for observation and overnight monitoring and started on regular nebulised Ventolin and Pulmicort; and given oral Prednisone. His inspiratory stridor resolved overnight. He is for follow up at OPD in four weeks time.

