

## **Appendix 1: Question batteries and question by question specifications**

### **Washington Group short question set**

#### **Core Questions:**

##### **Introduction**

The next questions ask about difficulties you may have doing certain activities because of a HEALTH PROBLEM.

##### **A. Objective**

The purpose of the introduction is to get the respondent to focus on difficulties they may have that are the result of some physical or mental health problem. Since persons living in developing countries may not have access to Western medicine which would provide a diagnosed 'condition', the term problem was substituted. However, condition can be used interchangeably with the term problem if that facilitates the respondent understanding the context. We are interested in establishing difficulties that occur within a health context rather than those caused by a lack of resources.

##### **B. Definitions**

Health refers to the general condition of the body or mind with reference to soundness, vitality, and freedom from disease.

Problem refers to the respondent's perception of a departure from physical, mental or emotional well-being. This includes specific health problems such as a disease or chronic condition, a missing limb or organ or any type of impairment. It also includes more vague disorders not always thought of as health-related such as senility, depression, retardation, drug dependency, accidental injuries, etc.

### Questions

1. **Do you have difficulty seeing, *even if wearing glasses*?**
  - a. **No - no difficulty**
  - b. **Yes – some difficulty**
  - c. **Yes – a lot of difficulty**
  - d. **Cannot do at all**

Alternative wording for proxy respondent:

- 1) **Does {person} have difficulty seeing, *even if wearing glasses*?**
  - a. **No - no difficulty**
  - b. **Yes – some difficulty**
  - c. **Yes – a lot of difficulty**
  - d. **Cannot do at all**

## A. Objective

The purpose of this item is to identify persons who have vision difficulties or problems of any kind even when wearing glasses (if they wear glasses). They can have a problem seeing things close up or far away. They may not be able to see out of one eye or they may be only able to see directly in front of them, but not to the sides. Any difficulty with vision that they consider a problem should be captured.

## B. Definition/s

Seeing refers to an individual using his/her eyes and visual capacity in order to perceive or observe what is happening around them.

## C. Instructions

Two versions of the questions are provided; one for self-respondents and one for proxy respondents. A proxy respondent (i.e. a close family member) may be needed if the respondent is not able to answer for themselves. Note if the person is wearing glasses and make sure that they understand that the question refers to difficulties they may have while they are wearing their glasses.

The answer categories are set up so that the respondent can indicate 'yes', 'no' or that they cannot do it easily. However people aren't always sure how much difficulty is considered to be enough for a 'yes' answer. So they usually qualify their 'yes' with comments about their experience such as 'yes', I have a little problem or 'yes sometimes', or, when the problem is very serious, they indicate 'Oh, yes, a lot'. These

answer categories try to capture that process. They may have to be repeated for the first one or two questions in order for the respondent to get familiar with the choices.

**2. Do you have difficulty hearing, *even if using a hearing aid*?**

- a. No- no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Cannot do at all**

Alternative wording for proxy respondent:

**2) Does {person} have difficulty hearing, *even if using a hearing aid*?**

- a. No- no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Cannot do at all**

**A. Objective**

The purpose of this item is to identify persons who have some hearing limitation or problems of any kind with their hearing even when using a hearing aid (if they wear a hearing aid). They can have a problem hearing only when they are in a noisy environment, or they may have problems distinguishing sounds from different sources. They may not be able to hear in one ear or both. Any difficulty with hearing that they consider a problem should be captured.

B. Definition/s

Hearing refers to an individual using his/her ears and auditory (or hearing) capacity in order to know what is being said to them or the sounds of activity, including danger that is happening around them.

C. Instructions

Two versions of the questions are provided; one for self-respondents and one for proxy respondents. A proxy respondent (i.e. a close family member) may be needed if the respondent is not able to answer for themselves. Note if the person is wearing hearing aids, make sure that they understand that the question refers to difficulties they may have even while they are wearing their hearing aids.

Instructions relative to the answer categories are the same as for question 1.

**3. Do you have difficulty walking or climbing steps?**

- a. No- no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Can not do at all**

Alternative wording for proxy respondent:

**3) Does {person} have difficulty walking or climbing steps?**

- a. No- no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Can not do at all**

#### A. Objective

The purpose of this item is to identify persons who have some limitation or problems of any kind getting around on foot. It may or may not contribute to difficulty in doing their daily activities. They can have a problem walking more than a block, or short or long distances, or the problem can be that they can't walk up or down steps without difficulty. They may not be able to walk any distance without stopping to rest or they may not be able to walk without using some type of device such as a cane, a walker or crutches. In some instances they may be totally unable to stand for more than a minute or two and need a wheelchair to get from place to place. Difficulties walking can include those resulting from impairments in balance, endurance, or other non-musculoskeletal systems. Any difficulty with walking (whether it is on flat land or up or down steps) that they consider a problem should be captured.

#### B. Definition/s

Walking refers to an individual using his/her legs in such a way as to propel themselves over the ground to get from point A to point B. The capacity to walk should be without assistance of any device or human. If such assistance is needed, the person has difficulty walking.

### C. Instructions

Two versions of the questions are provided; one for self-respondents and one for proxy respondents. A proxy respondent (i.e. a close family member) may be needed if the respondent is not able to answer for themselves. Note if the person is using an assistive device or has a person to help them with this function, it is highly likely they have difficulty with walking.

Instructions relative to the answer categories are the same as for question 1.

#### **4. Do you have difficulty remembering or concentrating?**

- a. No – no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Cannot do at all**

Alternative wording for proxy respondent:

#### **4) Does {person} have difficulty remembering or concentrating?**

- a. No – no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Cannot do at all**

## A. Objective

The purpose of this item is to identify persons who have some problems with remembering or thinking that contribute to difficulty in doing their daily activities. They can have a problem finding their way around, or the problem can be that they can't concentrate on what they are doing, or they may forget where they are or what month it is. They may not remember what someone just said to them or they may seem confused or frightened about most things. Any difficulty with remembering, concentrating or understanding what is going on around them that they or family members (if the family member is the respondent) consider a problem should be captured. We do not intend to capture difficulties remembering or concentrating because of common everyday situations such as high workload or stress, or as a result of substance abuse.

## B. Definition/s

Remembering refers to an individual using his/her memory capacity in order to recall what has happened around them. It means the individual can bring to mind or think again about something that has taken place in the past (either the recent past or further back). In connection with younger people, remembering is often associated with storing facts learned in school and being able to retrieve them when needed.

Concentrating refers to an individual using his mental ability to accomplish some task such as reading, calculating numbers, learning something. It is associated with



focusing on the task at hand in order to complete the task. It is the act of directing ones full attention to one subject or to focus without distraction on one thing.

### C. Instructions

Two versions of the questions are provided; one for self-respondents and one for proxy respondents. A proxy respondent (i.e. a close family member) may be needed if the respondent is not able to answer for themselves. This is particularly true if the respondent has severe problems with remembering or concentrating.

Instructions relative to the answer categories are the same as for question 1.

### **Additional Questions:**

- 5. Do you have difficulty (with self-care such as) washing all over or dressing?**
- a. No – no difficulty**
  - b. Yes – some difficulty**
  - c. Yes – a lot of difficulty**
  - d. Cannot do at all**

Alternative wording for proxy respondent:

- 5) Does {person} have difficulty (with self-care such as) washing all over or dressing?**
- a. No – no difficulty**
  - b. Yes – some difficulty**

**c. Yes – a lot of difficulty**

**d. Cannot do at all**

A. Objective

The purpose of this item is to identify persons who have some problems with taking care of themselves independently. Washing and dressing represent tasks that occur on a daily basis and are very basic activities.

B. Definition/s

Washing all over refers to the process of cleaning one's entire body (usually with soap and water) in the usual manner for the culture. The washing activity includes cleaning hair and feet, as well as gathering any necessary items for bathing such as soap or shampoo, a wash cloth, or water.

Dressing refers to all aspects of putting clothing or garments on the upper and lower body including the feet if culturally appropriate. Gathering clothing from storage areas (i.e. closet, dressers), securing buttons, tying knots, zipping, etc., should be considered part of the dressing activity.

C. Instructions

Two versions of the questions are provided; one for self-respondents and one for proxy respondents. A proxy respondent (i.e. a close family member) may be needed if the respondent is not able to answer for themselves. Note if the person is using an

assistive device or has a person to help them with this function, it is highly likely they have difficulty with self-care.

Instructions relative to the answer categories are the same as for question 1.

**6. Because of a physical, mental or emotional health condition, do you have difficulty communicating, (for example understanding others or others understanding you)?**

- a. No – no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Cannot do at all**

Alternative wording for proxy respondent:

**6) Because of a physical, mental or emotional health condition, does {person} have difficulty communicating, (for example understanding others or others understanding {him/her})?**

- a. No – no difficulty**
- b. Yes – some difficulty**
- c. Yes – a lot of difficulty**
- d. Cannot do at all**

A. Objective

The purpose of this item is to identify persons who have some problems with talking, listening or understanding speech such that it contributes to difficulty in doing their daily activities. They can have a problem making themselves understood, or the problem may be that they can't understand people who talk to them or try to communicate with them in other ways

#### B. Definition/s

Communicating refers to a person exchanging information or ideas with other people through the use of language. They may use their voices for their exchange or make signs or write the information they want to exchange. Communication can be interrupted at numerous places in the exchange process. It may involve mechanical problems such as hearing impairment or speech impairment, or it may be related to the ability of the mind to interpret the sounds that the auditory system is gathering and to recognize the words that are being used. The intention is not to include communication problems due to non-native or unfamiliar language.

#### C. Instructions

Two versions of the questions are provided; one for self-respondents and one for proxy respondents. A proxy respondent (i.e. a close family member) may be needed if the respondent is not able to answer for themselves. This is particularly true if the respondent has severe problems with communicating. Difficulties due to the fact that the language spoken is not one's mother tongue should be excluded when rating this question.

Instructions relative to the answer categories are the same as for question 1.

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**Extended question set: Question by question specifications**

This purpose of this annex is to indicate what is intended by each question in the in the extended set. Interviewers should use this information when respondents request clarification about specific questions and should refrain from offering their own interpretations. [Note: In instances where the extended questions represent WHO-DAS questions, WHO-DAS specifications were used.]

**Vision**

**Do you have difficulty seeing and recognizing a person you know about 7 meters (20 feet) away?**

Alternative wording for proxy respondent:

**Does {person} have difficulty seeing and recognizing a person {he/she} knows about 7 meters (20 feet) away?**

The respondent should answer this question taking into account any assistive device (glasses or contact lenses) she may be using. The question refers to “seeing and recognizing a person” under normal circumstances. One would not be expected to recognize a person on a foggy or stormy day for example.

**Do you have difficulty seeing and recognizing an object at arm's length or in reading?**

Alternative wording for proxy respondent:

**Does {person} have difficulty seeing and recognizing an object at arm's length or in reading?**

The respondent should answer this question taking into account any assistive device (glasses or contact lenses) he/she may be using.

### **Hearing**

**Do you have difficulty hearing someone talking on the other side of the room in a normal voice?**

Alternative wording for proxy respondent:

**Does {person} have difficulty hearing someone talking on the other side of the room in a normal voice?**

By "normal" voice we mean speaking at a typical volume, not speaking loudly or shouting. Any hearing aid should be taken into account.

**Do you have difficulty hearing what is said in a conversation with one other person in a quiet room?**

Alternative wording for proxy respondent:

**Does {person} have difficulty hearing what is said in a conversation with one other person in a quiet room?**

This refers to hearing in a quiet room with no background noise. Any hearing aid should be taken into account.

### **Remembering and Concentrating**

**Do you have difficulty concentrating on doing something for ten minutes?**

Alternative wording for proxy respondent:

**Does {person} have difficulty concentrating on doing something for ten minutes?**

This question is intended to determine the respondent's rating of difficulty with concentration for a short period, defined as 10 minutes. Generally, respondents have no problem understanding this item. If clarification is requested, however, respondents should be encouraged to think about their concentration in usual circumstances, not when they are preoccupied by a problem or in an unusually distracting environment. They may be cued to think about concentration while

doing work tasks, reading, writing, drawing, playing a musical instrument, assembling a piece of equipment, etc.

**Do you have difficulty remembering to do important things?**

Alternative wording for proxy respondent:

**Does {person} have difficulty remembering to do important things?**

This is a question about memory for matters of day to day importance. It does not refer to memory for irrelevant content nor does it refer to memory for detailed information from the past. Respondents should consider how well they remember to do things that are important to them or to their family. If note taking, electronic reminder systems or verbal cueing from personal assistants is *usually* in place as a memory aid, performance should be rated with this help taken into consideration.

Communicating

**Do you have difficulty generally understanding what people say?**

Alternative wording for proxy respondent:

**Does {person} have difficulty generally understanding what people say?**



The respondent should consider his/her usual mode of communication (i.e. spoken language, sign language, with an assistive device such as a hearing aid) and overall, rate the degree of difficulty in understanding the messages of others.

All situations encountered in the past 30 days by the individual should be considered, such as:

- when others speak quickly
- with background noise
- with distractions

Difficulties due to the fact that the language spoken is not one's mother tongue should be excluded when rating this question.

**Do you have difficulty starting and maintaining a conversation?**

Alternative wording for proxy respondent:

**Does {person} have difficulty starting and maintaining a conversation?**

Both starting and maintaining conversation should be rated. If a respondent states that they have more trouble with starting than maintaining a conversation (or vice versa), they should average the amount of difficulty experienced with both activities to determine the final difficulty rating. Conversation includes use of whatever is the usual mode of communication (spoken, written, sign language, gesturing). If assistive devices are used by the respondent for communication, the

difficulty rating provided should take into account conversation while using those devices, assuming they are usually present. The respondent should consider any and all other factors of relevance to them in starting and maintaining a conversation such as hearing loss, language problems (as after a stroke), stuttering, anxiety or any other factor *related to a health condition*.

**Do others generally have difficulty understanding you?**

Alternative wording for proxy respondent:

**Do others generally have difficulty understanding {person}?**

The respondent should consider his/her usual mode of communication (i.e. spoken language, sign language, with an assistive device such as a hearing aid) and overall, rate the degree of difficulty he/she experiences when trying to communicate with others.

Difficulties due to the fact that the language spoken is not one's mother tongue should be excluded when rating this question

**Mobility**

**Do you have difficulty moving around inside your home?**

Alternative wording for proxy respondent:

**Does {person} have difficulty moving around inside {his/her} home?**

This item refers to moving from room to room, and within rooms, using assistive devices or personal help that is usually in place. If the respondent lives in a house with multiple floors, this question also includes getting from one floor to another as needed. This will give a good idea of a person's mobility. A person who has problems moving inside the house is likely to have problems outside as well.

**Do you have difficulty going outside of your home?**

Alternative wording for proxy respondent:

**Does {person} have difficulty going outside of {his/her} home?**

This question seeks information about:

- mobility aspects of getting out of the home
- emotional or mental aspects of leaving the home (depression, anxiety, etc.)

For this question, "home" means the respondent's current dwelling, which might be a house, apartment, or nursing home.

**Do you have difficulty walking a long distance such as a kilometer [or equivalent]?**

Alternative wording for proxy respondent:

**Does {person} have difficulty walking a long distance such as a kilometer [or equivalent]?**

Distances should be converted into local system of measurement where necessary.

**Do you have difficulty using your hands and fingers, such as picking up small objects or opening or closing containers?**

Alternative wording for proxy respondent:

**Does {person} have difficulty using {his/her} hands and fingers, such as picking up small objects or opening or closing containers?**

This includes using hand, fingers and thumb to handle objects, picking up, manipulating and releasing them, such as required to lift coins off a table or turn a dial or knob.

## **Self Care**

**Do you have difficulty washing your whole body?**

Alternative wording for proxy respondent:

**Does {person} have difficulty washing {his/her} whole body?**

This question refers to washing one's entire body in the usual manner for the culture.

If respondents report that they have not washed their bodies in the past 30 days, interviewers should ask whether this is due to a health condition. If respondents report that it is due to a health condition, then the item should be coded "5" for extreme/cannot do. On the other hand, if respondents report that it is not due to a health condition, then the item should be coded "N/A" for not applicable.

**Do you have difficulty getting dressed?**

Alternative wording for proxy respondent:

**Does {person} have difficulty getting dressed?**

This question is intended to include all aspects of dressing the upper and lower body. Activities such as gathering clothing from storage areas (i.e. closet,

dressers) and securing buttons, tying knots, etc., also should be considered when making the rating.

**Do you have difficulty feeding yourself?**

Alternative wording for proxy respondent:

**Does {person} have difficulty feeding {himself/herself}?**

This item refers to both feeding oneself (i.e. cutting food, getting food or drink from plate or glass to mouth) and swallowing (both food *and* drink). It also includes mental/emotional factors contributing to difficulty eating such as anorexia, bulimia, or depression. This question does not refer to meal preparation. If the respondent uses non-oral feeding (e.g.. tube feedings), this question refers to any difficulties experienced in self administering the non-oral feeding (e.g. feeding pump set up and cleaning).

**Do you have difficulty staying by yourself for a few days?**

Alternative wording for proxy respondent:

**Does {person} have difficulty staying by {himself/herself} for a few days?**

The intent of this question is to determine any difficulty staying alone for an extended period and remaining safe. If the individual did not experience this situation in the past 30 days, “not applicable” is the correct rating.

It is important for interviewers to probe responses of “none” for this question. This will help differentiate situations that were experienced without difficulty (in which case “1” is correct) from situations not experienced at all (in which case “N/A” is correct).

## **Additional Questions**

### **Learning**

**Do you have difficulty analyzing and finding solutions to problems in day to day life?**

Alternative wording for proxy respondent:

**Does {person} have difficulty analyzing and finding solutions to problems in day to day life?**

This item refers to a complex activity involving many mental functions. If respondents are unsure, ask them to think about a problem they encountered in

the past 30 days. Once a problem is identified, respondents should be asked to consider how well they:

- identified that a problem existed
- broke it down into manageable parts
- developed a list of possible solutions
- determined pros and cons of each solution
- determined the best solution given all considerations
- executed and evaluated the chosen solution
- selected an alternate solution if the first choice was not successful

**Do you have difficulty learning a new task, for example, learning how to get to a new place?**

Alternative wording for proxy respondent:

**Does {person} have difficulty learning a new task, for example, learning how to get to a new place?**

Learning a new route is offered *as an example* in this question however, respondents should not limit themselves to only this situation. If further clarification is requested or if the interviewer feels the respondent is having difficulty answering, the interviewer may ask the respondent to think about a situation in the past month where learning something new was required, such as learning a task at work (such as a new procedure or assignment), or a new activity (cooking, learning a language, a new sport).



When making the rating, respondents should consider how easily new information was acquired, how much assistance or repetition they needed in order to learn and how well what was learned was retained.

### **Interpersonal Interactions**

**Do you have difficulty dealing with people you do not know?**

Alternative wording for proxy respondent:

**Does {person} have difficulty dealing with people {he/she} does not know?**

This item refers to interactions with strangers in any situation, such as:

- shop keepers
- service personnel
- asking someone for directions

When making the rating, respondents should consider both approaching such individuals, and interacting successfully with them to obtain their desired outcome.

**Do you have difficulty maintaining a friendship?**

Alternative wording for proxy respondent:

**Does {person} have difficulty maintaining a friendship?**

This includes:

- staying in touch
- interacting with friends in customary ways
- initiating activities with friends
- participating in activities when invited

If respondents report that they have not engaged in friendship-maintenance activities in the past 30 days interviewers should ask whether this is due to a health condition. If respondents report that it is due to a health condition, then the item should be coded “5” for extreme/cannot do. On the other hand, if respondents report that it is not due to a health condition, then the item should be coded “N/A” for not applicable.

**Do you have difficulty getting along with people who are close to you?**

Alternative wording for proxy respondent:

**Does {person} have difficulty getting along with people who are close to {him/her}?**

The respondent should consider those relationships that he or she defines as close. These may or may not be family relationships.

**Do you have difficulty in making new friends?**

Alternative wording for proxy respondent:

**Does {person} have difficulty in making new friends?**

This includes:

- seeking opportunities to meet new people
- following up on invitations to get together
- social and communication actions to make contact and to develop a friendship

On occasion, participants will report that they have not engaged in friendship-making activities in the past 30 days. In this case, interviewers should ask whether this is due to a health condition (as defined by the WHODAS II). If respondents report that it is due to a health condition, then the item should be coded “5” for extreme/cannot do. On the other hand, if respondents report that it is not due to a health condition, then the item should be coded “N/A” for not applicable.