Supplemental file 2: Alterations made to the Igbo Roland Morris Disability Questionnaire (Igbo-RMDQ) during cross-cultural adaptation

Questionnaire instructions	
Original RMDQ	**English equivalent of the Igbo-RMDQ**
When your back hurts, you may find it difficult to do some of the things you normally do. This list contains some sentences that people have used to describe themselves when they have back pain. When you read them, you may find that some stand out because they describe you today. As you read the list, think of yourself today. When you read a sentence that describes you today, put a tick against it. If the sentence does not describe you, then leave the space blank and go on to the next one. Remember, only tick the sentence if you are sure that it describes you today.	Whenever your back is hurting you, you may realise that some things you used to do may become difficult. The statements that are written here are the ways people have described themselves when they are having waist pain (or back pain). When you read them or when someone reads them to you, you may see that some of them describe you today. When you are reading these or someone is reading them to you, think of yourself today. When you read or someone reads the statement that describes you today, mark the statement or tell the person that read it to you to mark that statement. If a statement does not describe you, leave that statement and move on to the next one. Remember to mark only the statements that you know describe you today.

Item no	Original RMDQ	English equivalent of the Igbo-RMDQ
1	I stay at home most of the time because of my back	I stay at home, nearly all the time, because of my waist pain (or back pain)*
2	I change position frequently to try and get my back comfortable	I change my position often to get a position that will be comfortable for my waist (or back)
3	I walk more slowly than usual because of my back	I walk slowly more than usual because of my waist (or back)
4	Because of my back, I am not doing any of the jobs that I usually do around the house	Because of my waist (or back), I am not doing any of the house work that I usually do around the house
5	Because of my back, I use a handrail to get upstairs	Because of my waist (or back), I hold onto the step hand to climb the stairs
6	Because of my back, I lie down to rest more often	Because of my waist (or back), I lie down to rest more frequently
7	Because of my back, I have to hold on to something to get out of an easy chair	Because of my waist (or back), I hold onto something when getting out of a chair
8	Because of my back, I try to get other people to do things for me	Because of my waist (or back), I try to get other people to do things for me
9	I get dressed more slowly than usual because of my back	I wear my clothes more slowly than usual because of my waist (or back)

10	I only stand up for short periods of time because of my back	I only stand up for short periods of time because of my waist (or back).
11	Because of my back, I try not to bend or kneel down	Because of my waist (or back), I try not to bend or kneel down
12	I find it difficult to get out of a chair because of my back	I find it difficult to get out of a chair because of my waist (or back)
13	My back is painful almost all the time	My waist (or back) is painful, nearly all the time
14	I find it difficult to turn over in bed because of my back	I find it difficult to turn around when I am lying down because of my waist (or back)
15	My appetite is not very good because of my back pain	I do not feel hungry very well because of my waist pain (or back pain)
16	I have trouble putting on my socks (or stockings) because of the pain in my back.	I have trouble putting on my foot wear because of the pain in my waist (or back)
17	I only walk short distances because of my back pain	I walk only short distances because of my waist pain (or back pain)
18	I sleep less well because of my back	I do not sleep well because of my waist (or back)
19	Because of my back pain, I get dressed with help from someone else	Because of my waist pain (or back pain), another person helps me to put on my clothes
20	I sit down for most of the day because of my back	I sit down most of the day because of my waist (or back)
21	I avoid heavy jobs around the house because of my back.	I avoid heavy work in the house because of my waist (or back)
22	Because of my back pain, I am more irritable and bad tempered with people than usual.	Because of my waist pain (or back pain), I am irritated and hot tempered towards people more than usual
23	Because of my back, I go upstairs more slowly than usual	Because of my waist (or back), I go upstairs or climb uphill more slowly than usual
24	I stay in bed most of the time because of my back.	I lie down most times because of my waist (or back)

Coloured text are modifications. Changes in the instructions gave the option of interviewer-administration of the Igbo-RMDQ. The expert review committee introduced two extra clauses in the instruction: 'or when someone reads them to you' and 'or tell the person that read it to you to mark your statement' to give the option of interviewer-administration.

*During pre-testing of Igbo-RMDQ, the Igbo word for 'waist pain' was how participants understood pain in the lower back. Literal Igbo translation of back pain was understood as either upper back pain or pain of the entire back. Therefore 'back pain or back' and 'waist pain or waist' were used in the items but 'waist pain or waist' was read out to this specific low back pain population.

Clinicians/researchers using the measure in a general back pain population could use 'back/back pain or waist/waist pain' in the relevant items as shown above. Used together, the Igbo equivalents of 'back/back pain and waist/waist pain' reflect the general back pain population. 'Waist pain'/'waist' should be used when investigating only a low back pain population.

In item 1, ‘nearly all the time’ was used to better reflect the original item as the same Igbo phrase means ‘many times’ or ‘most of the time’.

Item 5 was translated differently: ‘I hold onto something…’ and ‘I hold onto a stick…’ because there is no Igbo word for ‘handrail’. Through consensus of all translators, ‘I hold onto the step hand…’ was used as the Igbo equivalent means the same thing as the original item.

For item 16, a new phrase ‘my foot wear’ was used by the expert review team to better reflect the social context of rural Nigeria where many people do not wear socks.

For item 23, a new phrase ‘or uphill’ was added to the original item to reflect rural Nigeria where many dwellers lived in bungalows with hilly terrains.

Through consensus of all translators and the review team, ‘I lie down’ was used in place of ‘I stay in bed’ in item 24, as some rural Nigerian dwellers do not lie on beds.