

Additional file 1: Cognitive interview questionnaire: Adapted reproduction section of woman’s questionnaire – DHS VIII, English

Interviewer name _____ Respondent ID _____ Interview date: ___ / ___ / ___

(DD/MM/YY)

Time interview started: :

Section A – interview questions from DHS

Original question	Response categories	Probes (Pre-set & by interviewer)	Respondent’s answer after probe	Interviewer’s comment (on verbal & non-verbal behavior)	Suggested revision
201. Now I would like to ask about all the births you have had during your life. Have you ever given birth?	Yes No (<i>If no, skip to 206</i>)	<ul style="list-style-type: none"> Can you repeat the question in your own words? <i>Any other probe by interviewer</i> 			
202. Do you have any sons or daughters to whom you have given birth who are now living with you?	Yes No (<i>If no, skip to 204</i>)	<ul style="list-style-type: none"> What does this question mean to you? <i>Any other probe by interviewer</i> 			
204. Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	Yes No (<i>If no, skip to 206</i>)	<ul style="list-style-type: none"> What does this question mean to you? <i>Any other probe by interviewer</i> 			
206. Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried, who made any	Yes No (<i>If no, skip to 209 to calculate total births</i>)	<ul style="list-style-type: none"> Can you repeat the question in your own words? How easy or difficult did you find this question to answer? Why do you say that? 			

<p>movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?</p>		<ul style="list-style-type: none"> • <i>Any other probe by interviewer</i> (e.g. I noticed you hesitated before you answered – what were you thinking about?) 			
<p>207. a) How many boys have died? b) And how many girls have died? IF NONE, RECORD '00'.</p>	<p>a) Boys dead..... b) Girls dead.....</p>	<ul style="list-style-type: none"> • How easy or difficult did you find this question to answer? Why do you say that? • Were you comfortable answering this question? Why or why not? • <i>Any other probe by interviewer</i> 			
<p>209. Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct?</p>					
<p>210. Women sometimes have a pregnancy that does not result in a live birth. For example, a pregnancy can end in a miscarriage, an abortion, or the child can be born dead. Have you ever had a pregnancy that did not end in a live birth?</p>	<p>Yes No (<i>If no, skip to 214</i>)</p>	<ul style="list-style-type: none"> • Can you repeat the question in your own words? • What does miscarriage mean to you? • What does abortion mean to you? • What does it mean to you when I say a child can be born dead? • How easy or difficult did you find this question to 			

		<p>answer? Why do you say that?</p> <ul style="list-style-type: none"> • <i>Any other probe by interviewer</i> 			
211. How many miscarriages, abortions, and stillbirths have you had?	Pregnancy losses.....	<ul style="list-style-type: none"> • Can you repeat the question in your own words? • How easy or difficult did you find this question to answer? Why do you say that? • Were you comfortable answering this question? Why or why not? • <i>Any other probe by interviewer</i> 			
214. Now I would like to record all your pregnancies including live births, stillbirths, miscarriages, and abortions, starting with your first pregnancy.		<ul style="list-style-type: none"> • What does this question mean to you? • Was this hard or easy? Why do you say so? • <i>Any other probe by interviewer</i> <p>(e.g. I noticed you hesitated before you answered – what were you thinking about?)</p>			
232. Are you pregnant now?	<p>Yes No Unsure (If No or Unsure, end the interview)</p>	<ul style="list-style-type: none"> • How sure of your answer are you? • How easy or difficult did you find this question to answer? Why do you say that? 			

		<ul style="list-style-type: none"> • Were you comfortable answering this question? Why or why not? • How would you say that question yourself? • <i>Any other probe by interviewer</i> (e.g. I noticed you hesitated before you answered – what were you thinking about?) 			
233. How many weeks or months pregnant are you?	Weeks..... Months.....	<ul style="list-style-type: none"> • How sure of your answer are you? • How did you arrive at that answer? • Was it easy or difficult to answer this question? Why do you say that? • How would you say that question yourself? • <i>Any other probe by interviewer</i> 			

Thank subject for her time and end the interview

Time interview ended : :

B. Other areas for the interviewer to fill in after interview

Please describe any other problems you observed during the interview

- Where respondent had difficulty answering a question
- Were they hesitant over some questions?