

# Questions documentation

## Young women's health and fertility Clinical form

The Norwegian Mother and Child Cohort Study (MoBa)

Clinical questionnaire filled out by clinician performing a clinical examination of 2<sup>nd</sup> generation MoBa women in the MoBa collection Young women's health and fertility

Version	Date	Performed by	Description
1.0		Siri Håberg (FHI) Katrine Kranstad (FHI)	Original version

## LIST OF CONTENTS

<b>NOTE .....</b>	<b>3</b>
<b>General information .....</b>	<b>4</b>
<b>Physical measures .....</b>	<b>6</b>
<b>Blood pressure and EKG .....</b>	<b>7</b>
<b>Finger length - Right hand.....</b>	<b>9</b>
<b>Questions about menstruation.....</b>	<b>10</b>
<b>Clinical examination of the vulva.....</b>	<b>11</b>
<b>Transvaginal ultrasound - Cervix length .....</b>	<b>12</b>
<b>Transvaginal ultrasound - Uterine volume .....</b>	<b>13</b>
<b>Transvaginal ultrasound - Endometrium.....</b>	<b>14</b>
<b>Transvaginal ultrasound - Uterine pathology .....</b>	<b>15</b>
<b>Transvaginal ultrasound - Left ovary .....</b>	<b>16</b>
<b>Transvaginal ultrasound - Right ovary.....</b>	<b>18</b>
<b>Transvaginal ultrasound - Status .....</b>	<b>20</b>
<b>Fields for uploading ultrasound files .....</b>	<b>21</b>

## **NOTE**

This instrument documentation was written based on version C of the questionnaire.

## General information

### 1. Name of original scale: MoBa specific questions.

Q		Response options	Variable name
<b>Version A, B, C</b>			
<b>1</b>	Date of examination [Calendar field]		UK11
<b>2</b>	Examining clinician's initials [Text field]		UK12
<b>2</b>	Examining clinician's initials pseudonym	Random number	UK12_K
<b>4</b>	When did the participant get up today? [Time field/clock]		UK13
<b>9</b>	Specify the time of blood sampling [Time field/clock]		UK18
<b>Version B, C</b>			
<b>3</b>	Examination clinic Radio buttons	1. Volvat Spiren 2. Haukeland Universitetssykehus 3. Fertilitetssenteret Sykehuset Telemark Fertilitetsavdelingen Sør	UK99
<b>Version A, B</b>			
<b>5</b>	Number of awake hours since awakening? [Number field]	min: 0 hours, max: 24 hours, integers only	UK14
<b>6</b>	Number of hours of sleep in the last 24 hours? [Number field]	min: 0 hours, max: 24 hours, two decimals	UK15
<b>7</b>	Is the participant fasting? [Number field]	min: 0, max: 48, integers only	UK16
<b>8</b>	Number of hours since last meal [Number field]	min: 0, max: 48, integers only	UK17
<b>Version C</b>			
<b>5.1</b>	For how long has the participant been awake since he got out of bed? Enter number of full hours. [Number field]	min: 0 hours, max: 72 hours, integers only	UK107
<b>5.2</b>	and... Number of minutes. [Number field]	min: 0 hours, max: 59 hours, integers only	UK108
<b>6.1</b>	For how long has the participant slept in total in the last 24 hours? Enter number of full hours. [Number field]	(min: 0 hours, max: 24 hours, integers only)	UK109
<b>6.2</b>	and... Number of minutes [Number field]	(min: 0 hours, max: 59 hours, integers only)	UK110

<b>8.1</b>	Time since last meal? Enter number of full hours <i>[Number field]</i>	(min: 0 hours, max: 24 hours, integers only)	UK111
<b>8.2</b>	and... Number of minutes <i>[Number field]</i>	(min: 0 hours, max: 59 hours, integers only)	UK112

## **2. Description of original instrument:**

MoBa specific questions.

## **3. Rationale for choosing the questions:**

The variables give necessary background information for analysis of biological material collected in the MoBa clinical data collections "Unge kvinners helse og fruktbarhet" and "Unge menns helse og fruktbarhet".

## **4. Revision during the data collection period:**

No revisions have been made.

## Physical measures

### 1. Name of original scale: MoBa specific questions, based on clinical practice

Q		Response options	Variable name
10	Provide the height of the person in nearest cm. [Number field]	min: 90, Max 250, integers only	UK19
11	Provide the person's waist measurement in nearest cm [Number field]	min: 0, Max 250, integers only	Uk20
12	Provide the person's hip measurement in nearest cm [Number field]	min: 0, Max 250, integers only	UK21
13	Provide the person's weight in kilograms (nearest Kg) [Number field]	min: 0, Max 500, integers only	UK22
15	Provide the person's visceral fat measure (number 1-59) [Number field]	(min: 1, Max 59, integers only	UK24
19	Provide the person's resting metabolism in kcal per day (nearest kcal. Pr. day) [Number field]	min: 0, Max 15.000, integers only	UK28
14	Provide the person's bodyfat measure in percentage (nearest full %-point) [Number field]	min: 0, Max 100, integers only	UK23
16	Provide the person's water content in percentage (nearest full %-point) [Number field]	min: 0, Max 100, integers only	UK25
17	Provide the person's muscle-mass in kilograms (nearest Kg) [Number field]	min: 0, Max 400, integers only	UK26
18	Provide the person's metabolic age (nearest full year) [Number field]	min: 0, Max 110, integers only	UK27
20	Provide the person's bone mineral mass in Kg [Number field]	min: 0 hours, max: 500, two decimals	UK29

### 2. Description of original instrument:

Based on clinical practices. Measures are taken while participant is fasting.

Reference for hip/waist: UiO, Procedures for anthropometric measurements. 2012, University of Oslo medical faculty):

A "Tanita" is used for obtaining all weight/body mass/metabolic age/motabolism etc. measures.

Equipment type: TANITA DC-240 M

### 3. Rationale for choosing the questions:

These are relevant clinical measures to obtain from the MoBa second generation

### 4. Revision during the data collection period:

No changes in the questions between versions. Only changes in the order of the numbering as shown in the table.

## Blood pressure and EKG

### 1. Name of original scale: MoBa specific questions, based on clinical practice

Q		Response options	Variable name
<b>First measure</b>			
21	<b>Systolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK30
22	<b>Diastolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK31
<b>Second measure</b>			
23	<b>Systolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK32
24	<b>Diastolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK33
<b>Third measure</b>			
26	<b>Systolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK34
26	<b>Diastolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK35
<b>Average measure</b>			
27	<b>Systolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK36
28	<b>Diastolic</b> <i>mmHg</i>	min: 0, max: 500 integers only	UK37
<b>EKG</b>			
29	<b>EKG-file upload</b> <i>Follow instructions for uploading the EKG-file. Sensitive data must be removed from the file before uploading. Do not include participant PIN-ID, name or other sensitive information in the file name.</i>	File attachment	UK38
30	<b>Resting heart rate per minute</b> <i>Number field (min: 0, Max 300, integers only)</i>	min: 0, max: 300 integers only	UK39

### 2. Description of original instrument:

Based on clinical practice. Reference for blood pressure: Dahlum, A.B. and I. Ottosen. Non-invasiv blodtrykksmåling (NIBP)- metoder og feilkilder. 2016; Available from: <https://ehandboken.ous-hf.no/document/122459>. Reference for EKG: Ingrid H. Johansen, J.B., Cecilie Arentz-Hansen, Kåre Moen. LEGEVAKT håndboken. 2021. Cited 2023; available from: [https://lvh.no/symptomer\\_og\\_sykdommer/hjerte\\_og\\_kar/ekg/elektrodeplassering](https://lvh.no/symptomer_og_sykdommer/hjerte_og_kar/ekg/elektrodeplassering)

**3. Rationale for choosing the questions:**

These are relevant clinical measures to obtain from the MoBa second generation.

**4. Revision during the data collection period:**

No changes in the questions between versions. Only changes in the order of the numbering as shown in the table.

## Finger length - Right hand

### 1. Name of original scale: MoBa specific questions.

Q		Response options	Variable name
31	Finger 1 (thumb), length in mm [Number field]	min: 0, max: 600 integers only	UK40
32	Finger 2 (index), length in mm [Number field]	min: 0, max: 600 integers only	UK41
33	Finger 3 (middle), length in mm [Number field]	min: 0, max: 600 integers only	UK42
34	Finger 4 (ring), length in mm [Number field]	min: 0, max: 600 integers only	UK43
35	Finger 5 (pinky), length in mm [Number field]	min: 0, max: 600 integers only	UK44

### 2. Description of original instrument:

Inspired by the following reference: Manning, J.T., et al., The ratio of 2nd to 4th digit length: a predictor of sperm numbers and concentrations of testosterone, luteinizing hormone and oestrogen. Hum Reprod, 1998. 13(11): p. 3000-4.)

### 3. Rationale for choosing the questions:

These are relevant clinical measures to obtain from the MoBa second generation

### 4. Revision during the data collection period:

No changes in the questions between versions, only changes in the order of the numbering.

## Questions about menstruation

### 1. Name of original scale: MoBa specific questions, inspired by clinical practice.

Q		Response options	Variable name
36	During the time the person is without hormonal contraception, does she have a regular menstrual cycle? <i>[Radio buttons]</i>	1.No 2.Yes	UK45
37	What is the person's most common time interval from the first day of bleeding to the next first day of bleeding? <i>[Radio buttons]</i>	1. Less than 24 days 2. 24-27 days 3. 28-31 days 4. 32-35 days 5. More than 35 days	UK46
38	How long does a person's menstrual bleeding usually last? <i>[Radio buttons]</i>	1. 2 days or less 2. 3-7 days 3. More than 7 days	UK47
39	Does the person have menstrual pain that interferes with normal activities? <i>[Radio buttons]</i>	1. Every month 2. Sometimes 3. Never	UK48
40	What date was the person's first bleeding day in the menstrual cycle she is currently in? <i>[Calendar field]</i>		UK49
40	Calculated - Days since first day of last period.		UK_DAYS_SINCE_LMP
<b>Version B, C</b>			
41	Day of current menstrual cycle <i>Pull down menu</i>	1. Day 1 2. Day 2 3. Day 3 ... Day 60 Later than day 60	UK100

### 2. Description of original instrument:

MoBa specific questions.

### 3. Rationale for choosing the questions:

Clinical practice and definitions of oligomenorrhea, normal cycle lengths etc. Relevant reference: Norsk gynekologisk forening Veileder i gynekologi (2021). ePub. ISBN 978-82-692382-1-1.

### 4. Revision during the data collection period:

Q 41 only included in B and C.

## Clinical examination of the vulva

### 1. Name of original scale: MoBa specific question, inspired by clinical practice.

Q		Response options	Variable name
42	Anogenital distance in mm <i>AGDAC: Distance from the upper pole of the anus (at 12 o'clock) to the anterior clitoris</i> <i>[Number field]</i>	<i>min 0, max 400, integers only</i>	UK50
43	Anogenital distance in mm <i>AGDAF: Distance from the upper pole of the anus (at 12 o'clock) to posterior fourchette –</i> <i>[Number field]</i>	<i>min 0, max 400, integers only</i>	UK51

### 2. Description of original instrument:

Dural O, Kurbanova T, Yasa C, Ugurlucan FG, Selvi E, Ozdemir PK, Akhan SE. Idiopathic primary ovarian insufficiency is associated with anogenital distance, a marker for prenatal environment. Eur J Obstet Gynecol Reprod Biol. 2021 Mar;258:304-308. doi: 10.1016/j.ejogrb.2021.01.017. Epub 2021 Jan 12. PMID: 33498004

### 3. Rationale for choosing the questions:

These are relevant clinical measures to obtain from the MoBa second generation.

### 4. Revision during the data collection period:

No changes in the questions between versions, only changes in the order of the numbering.

## Transvaginal ultrasound - Cervix length

**1. Name of original scale:** MoBa specific question, based on clinical practice.

Q		Response options	Variable name
44	Cervix length in mm [Number field]	<i>min 0, max 400, integers only</i>	UK52

**2. Description of original instrument:**

Based on clinical practice. If the length is difficult to measure, a "best estimate" is registered.

**3. Rationale for choosing the questions:**

These are relevant clinical measures to obtain from the MoBa second generation.

**4. Revision during the data collection period:**

Variations in the order of the numbering.

## Transvaginal ultrasound - Uterine volume

**1. Name of original scale:** MoBa specific question, based on clinical practice.

Q		Response options	Variable name
45	Length in nearest whole mm [Number field]	<i>min 0, max 400, integers only</i>	UK53
46	Width in nearest whole mm [Number field]	<i>min 0, max 400, integers only</i>	UK54
47	AP diameter in nearest whole mm [Number field]	<i>min 0, max 400, integers only</i>	UK55

**2. Description of original instrument:**

Based on clinical practice.

**3. Rationale for choosing the questions:**

These are relevant clinical measures to obtain from the MoBa second generation.

**4. Revision during the data collection period:**

Variations in the order of the numbering.

## Transvaginal ultrasound - Endometrium

**1. Name of original scale:** MoBa specific question, based on clinical practice.

Q		Response options	Variable name
48	State the person's largest intrauterine thickness (outer-outer) to the nearest whole mm  [Number field]	min 0, max 400, integers only	UK56

**2. Description of original instrument:**

Based on clinical practice.

**3. Rationale for choosing the questions:**

These are relevant clinical measures to obtain from the MoBa second generation.

**4. Revision during the data collection period:**

Variations in the order of the numbering.

## Transvaginal ultrasound - Uterine pathology

### 1. Name of original scale: MoBa specific question, based on clinical practice.

Q		Response options	Variable name
49	Is pathology present?  [Radio button]	1. No pathology 2. Yes	UK57
Version B, C			
50	Type of pathology Fill out ONLY if pathology is present.  [Multiple choice]	Malformations	UK101
		Myomas over 20 mm in largest diameter	UK102
		Suspicion of adenomyosis	UK103
		Negative sliding sign	UK104
		Polyps	UK105
Version A			
48	Type of pathology Fill out ONLY if pathology is present.  [Radio button]	1. Malformations 2. Myomas over 20 mm in largest diameter 3. Suspicion of adenomyosis 4. Negative sliding sign 5. Polyps	UK58

### 2. Description of original instrument:

Based on clinical practice.

### 3. Rationale for choosing the questions:

These are relevant clinical measures to obtain from the MoBa second generation.

### 4. Revision during the data collection period:

Variations in the order of the numbering and use of radiobutton and multiple choice.

## Transvaginal ultrasound - Left ovary

### 1. Name of original scale: MoBa specific question, based on clinical practice.

Q		Response options	Variable name
51	Length in nearest whole mm [Number field]	min 0, max 400, integers only	UK59
52	Height in nearest whole mm [Number field]		UK60
53	Width in nearest whole mm [Number field]		UK61
54	Does the person have a cyst? [Radio button]	1. No 2. Yes	UK62
55	State the number of follicles 2-4 mm [Number field]	min 0, max 400, integers only	UK65
56	State the number of follicles 5-7 mm [Number field]		UK66
57	State the number of follicles 8-10 mm [Number field]		UK67
58	State the number of follicles 11-13 mm [Number field]		UK68
59	State the number of follicles 14-16 mm [Number field]		UK69
60	State the number of follicles 17-19 mm [Number field]		UK70
61	State the number of follicles 20-22 mm [Number field]		UK71
62	State the number of follicles 23-25 mm [Number field]		UK72
Version B,C			
54.1	What is the largest diameter in whole mm  <i>This element will only be displayed if option "Yes" is selected in Q54 "Does the person have a cyst"</i> [Number field]	min 0, max 400, integers only	UK63
54.2	Briefly describe echogenicicity compares to ovarian stroma  <i>This element will only be displayed if option "Yes" is selected in Q54 "Does the person have a cyst".</i> [Radio button]	1. Hypotension 2. Hyperdense 3.Isodens 4. Endometrioma	UK64

**2. Description of original instrument:**

Based on clinical practice.

**3. Rationale for choosing the questions:**

These are relevant clinical measures to obtain from the MoBa second generation.

**4. Revision during the data collection period:**

Variations in the order of the numbering.

## Transvaginal ultrasound - Right ovary

### 1. Name of original scale: MoBa specific question, based on clinical practice.

Q		Response options	Variable name
63	Length in nearest whole mm [Number field]	Number field: min 0, max 400, integers only	UK73
64	Height in nearest whole mm [Number field]		UK74
65	Width in nearest whole mm) [Number field]		UK75
66	Does the person have a cyst? Radio buttons	1. No 2. Yes	UK76
67	State the number of follicles 2-4 mm [Number field]	Number field: min 0, max 400, integers only	UK79
68	State the number of follicles 5-7 mm [Number field]		UK80
69	State the number of follicles 8-10 mm [Number field]		UK81
70	State the number of follicles 11-13 mm [Number field]		UK82
71	State the number of follicles 14-16 mm [Number field]		UK83
72	State the number of follicles 17-19 mm [Number field]		UK84
73	State the number of follicles 20-22 mm [Number field]		UK85
74	State the number of follicles 23-25 mm [Number field]		UK86
Version B, C			
66.1	What is the largest diameter in whole mm  This element will only be displayed if otion "Yes" is selected in Q66 "Does the person have a cyst"  [Number field]	min 0, max 400, integers only	UK77
66.2	Briefly describe echogenicity compares to ovarian stroma  This element will only be displayed if option "Yes" is selected in Q66 "Does the person have a cyst".  [Radio button]	1. Hypotension 2. Hyperdense 3. Isodens 4. Endometrioma	UK78

### 2. Description of original instrument:

Based on clinical practice.

**3. Rationale for choosing the questions:**

These are relevant clinical measures to obtain from the MoBa second generation.

**4. Revision during the data collection period:**

Variations in the order of the numbering.

## Transvaginal ultrasound - Status

### 1. Name of original scale: MoBa specific question.

Q		Response options	Variable name
75	Is the vaginal ultrasound completed on this participant? <i>[Radio button]</i>	1. Yes, completed vaginal ultrasound 2. No, not completed vaginal ultrasound 3. No, not completed vaginal ultrasound but completet abnominal ultrasound	UK106

### 2. Description of original instrument:

MoBa specific question.

### 3. Rationale for choosing the questions:

Included in order to clarify if a vaginal ultrasound was indeed performed. Included in order to help researchers interpret potential missing ultrasound data in the data set.

### 4. Revision during the data collection period:

Only included in versions 2a and 2B.

## Fields for uploading ultrasound files

### 1. Name of original scale: MoBa specific question.

Q		Response options	Variable name
<b>Version A</b>			
73	3D image of uterus	File attachment	UK87
74	3D image of ovary, right		UK88
75	3D image of ovary, left		UK89
76	2D image of uterus, sagittal		UK90
77	2D image of uterus, coronal		UK91
78	2D image of ovary, right		UK92
79	2D image of ovary, left		UK93
80	3D volume video of uterus		UK94
81	3D volume video of ovary, right		UK95
82	3D volume video of ovary, left		UK96
83	2D video of uterus, sagittal (for endometrium)		UK97

### 2. Description of original instrument:

MoBa specific question.

### 3. Rationale for choosing the questions:

Included as a means of collecting ultrasound pictures and videos.

### 4. Revision during the data collection period:

Only included in version A, but NEVER USED. A solution containing direct import of files into TSD was preferred.