Appendix 1: Survey questionnaire

Internet questionnaire

Medication use in pregnancy with focus on attitudes, perception of risk and mental health

The Multinational Medication Use in Pregnancy Study

INFORMATION ABOUT YOURSELF

1. In which country do you live?

Country:_____

In which region/province do you live?

Region: _____

2. Are you pregnant right now?

□ Yes

□ No

(If yes in Q2) In which pregnancy week are you?
From 1 to 44

(If yes in Q2) Is it a multiple pregnancy?

□ No

□ Yes (e.g. twins, triplets, etc)

(If No in Q2) How old is your newborn child (in weeks)?
0-4 / 5-8 / 9-12 / 13-16 / 17-20 / 21-24 / 25-28 / > 29

(If No in Q2) Do you breast feed your child?

□ Yes

□ No

3. How many children do you already have from before?

□ None

□ One

□ Two

□ More than two

4. What is your marital status?

□ Married

□ Cohabitant

□ Single

□ Divorced/Separated

□ Other

5. What is the highest education you have completed?

□ Primary school (8-9 years of education)

□ High-school (11-13 years of education)

□ University

□ Other education

6. What was your work situation when you became pregnant?

□ Student

□ Housewife

□ Health care personnel, i.e., physician, nurse, or pharmacist

□ Employed in another sector

□ Job seeker

□ None of the above

7. Is English your mother tongue?

□ Yes

□ No

(If No in Q7 above) What is your mother tongue? _____

8. Your age: Years, from 15 to 55

INFORMATION ABOUT YOUR PREGNANCY

9. (If pregnant) Are you attending any pregnancy/birth preparation course or similar?

□ Yes
□ No, but I am planning to attend
□ No, I am not going to attend it

10. (If pregnant) What are your thoughts about how the experience of giving birth is going to be?

Please indicate your thoughts in a scale from 1 to 6, where **1 corresponds to absolutely terrible and 6 to absolutely fantastic**

Absolutely terrible	1 □	2 □	3 □	4 □	5 □	6 □	Absolutely fantastic

11. Was your pregnancy planned?

□ Yes
□ No, but it was not completely unexpected
□ No, it was not planned

12. Did you contact any healthcare provider due to infertility?

□ Yes
□ No

(If Yes in Q12 above) Did you, in this pregnancy, become pregnant secondarily to infertility treatment?

□ Yes
□ No

13. Have you taken folic acid? (alone or as part of multivitamins)

□ Yes, before pregnancy
□ Yes, before and during pregnancy
□ Yes, only during pregnancy
□ No
□ cannot remember

14. Did you smoke cigarettes before becoming pregnant?

□ Yes, regularly
□ Yes, occasionally
□ No, never

(If yes in Q14 as regularly/occasionally) Do you/did you smoke during pregnancy?

□ Yes, more than before
□ Yes, approximately the same
□ Yes, but less
□ No

(If yes) How many cigarettes (on average) do you/did you smoke per day?

□ < 1
□ 1-5
□ 6-10
□ > 11

15. Did you drink any alcohol after finding out that you were pregnant?

□ Yes
□ No
□ Cannot remember

(If yes) How much did you drink (in units)?
1 alcohol unit is equivalent to:
one 25ml single measure of whisky (ABV 40%),
or a third of a pint of beer (ABV 5-6%)
or half a standard (175ml) glass of red wine (ABV 12%).

□ More than 1-2 units per week
□ 1-2 units per week
□ 1-4 units per month
□ 1-2 units during the pregnancy
□ Can not remember

HEALTH DISORDERS AND MEDICATIONS DURING PREGNANCY

16. Have you experienced any of the disorders listed below during this pregnancy? If you use or have used any medicines in relation to [each health disorder listed] please enter the names of the medicines. In which weeks of pregnancy have you used them?

Health disorder		Medicine	Period of use (pregnancy weeks)
Nausea	□ Yes □ No	(If Nausea ticked) If you use or have used any medicines in relation to nausea, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Heartburn or reflux problems	□ Yes □ No	(If Heartburn ticked) If you use or have used any medicines in relation to heartburn or reflux problem, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Constipation	□ Yes □ No	(If Constipation ticked) If you use or have used any medicines in relation to constipation, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Common cold	□ Yes □ No	(If common cold ticked If you use or have used any medicines in relation to common cold, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Urinary tract infections	□ Yes □ No	(If UTI ticked) If you use or have used any medicines in relation to urinary tract infections, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Other infections	□ Yes □ No	(If other infections ticked) If you use or have used any medicines in relation to other infections, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Pain in neck or back or pelvic girdle	□ Yes □ No	(If pain ticked) If you use or have used any medicines in relation to pain in neck or back or pelvic girdle, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Headache	□ Yes □ No	(If headache ticked) If you use or have used any medicines in relation to headache, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery
Sleeping problems	□ Yes □ No	(If sleeping problems ticked) If you use or have used any medicines in relation to sleeping problems, please enter the names of the medicines	□ week 0-12 □ week 13-24 □ week 25- delivery

17. Have you been on sick leave during this pregnancy?	
□ Yes	□ No

18. (If yes in Q17) What was the reason for it? In which pregnancy weeks have you been on sick leave?

Reason of the sick leave	**Sick leave period (pregnancy week)**
_____ _____	□ week 0-12 □ week 13-24 □ week 25-delivery

19. Below, some common over-the-counter (OTC) medicines are mentioned. Please indicate whether you have used any of them during pregnancy.

Please enter the name of all *X* medicines you have used.
In which pregnancy weeks have you used them?

		Name of the medicine(s) you have used	**Period of use (pregnancy week)**
Pain killers (*e.g. paracetamol*)	□ Yes □ No	(If painkillers ticked) Please enter the name of all pain killers you have used during pregnancy.	□ week 0-12 □ week 13-24 □ week 25- delivery
Nasal spray/drops (excluding salt water solution) (*e.g. Otrivine, Vicks Sinex decongestant Nasal spray*)	□ Yes □ No	(If nasal spray ticked) Please enter the name of all nasal sprays/drops you have used during pregnancy.	□ week 0-12 □ week 13-24 □ week 25- delivery
Medication against heartburn (*e.g. Gaviscon or Rennie*)	□ Yes □ No	(If OTC for heartburn ticked) Please enter the name of all medications you have used against heartburn during pregnancy.	□ week 0-12 □ week 13-24 □ week 25- delivery
Medication against nausea/travel sickness (*e.g. Cetirizine, Sea-Legs)*	□ Yes □ No	(If OTC for nausea ticked) Please enter the name of all medications you have used against nausea during pregnancy.	□ week 0-12 □ week 13-24 □ week 25- delivery
Medication against constipation (*e.g.Lactulose, Dulcolax)*	□ Yes □ No	(If OTC for constipation ticked) Please enter the name of all medications you have used against constipation during pregnancy.	□ week 0-12 □ week 13-24 □ week 25- delivery

20. Did you take any herbal preparations during pregnancy (e.g. ginger, echinacea, valerian, cranberries**)?**

□ Yes □ No □ Cannot remember

(If yes) Please provide the name of all herbal preparations you have taken during pregnancy**.**
(If yes) What was the reason for taking herbal preparations (health disorder, illness)?
(If yes) In which pregnancy weeks did you take herbal preparations?

Name of herbal preparation used	**Reason for use (health disorder, illness)**	**Period of use (pregnancy week**
_____ _____ _____	_____ _____ _____	□ week 0-12 □ week 13-24 □ week 25- delivery
_____ _____ _____	_____ _____ _____	□ week 0-12 □ week 13-24 □ week 25- delivery

21. (If you used herbal preparations during pregnancy) Who recommended to you to take herbal preparations during pregnancy? (You may tick more than one answer)

□ My own initiative
□ Family/friends
□ Physician
□ Midwife/Nurse
□ Pharmacy personnel
□ Herbal shop personnel
□ Internet
□ Magazines, media, etc.
□ Other (please specify:_____)

22. Did you use homeopathic products during pregnancy?

□ Yes □ No □ Cannot remember

(If yes in Q22 above) What was the reason for use?

_____

A BIT MORE ABOUT MEDICATION USE DURING PREGNANCY

23. Have you deliberately avoided taking an over-the-counter medicine during your pregnancy?

□ Yes □ No □ Cannot remember

(If yes in Q23 above) Which medicine was it?

_____

(If yes in Q23 above) What was the reason for doing so?

_____

_____

24. Have you deliberately chosen not to use a medicine prescribed by a doctor because you were pregnant?

□ Yes □ No □ Can not remember

(If yes in Q24 above) Which medicine was it?

_____

(If yes in Q24 above) What was the reason for doing so?

_____

_____

YOUR NEEDS FOR INFORMATION

25. Did you need information about medicines during the course of your pregnancy?

□ Yes □ No □ Cannot remember

26. (If yes in Q25) Whom did you turn to for information? (*You may tick more than one answer*)

□ Family/friends
□ Physician
□ Midwife/Nurse
□ Pharmacy personnel
□ Herbal shop personnel
□ Drug formulary/information leaflet
□ Poison information centre
□ Teratology information service
□ National center of information on medicines
□ Internet
□ Magazines, media, etc
□ Other (please specify:_____)

27. (if yes in Q25) If you have obtained information from various sources, was such information similar?

□ Yes, completely similar
□ Yes, as a whole (only the wording or detail level was somewhat different)
□ No, part of the information was different
□ No, the information was completely contradictory

28. (If No – last 2 options in Q27) If there were discrepancies among the sources, what did it mean to you? (*You may tick more than one answer*)

□ Nothing
□ I became anxious
□ I decided not to use the medication
□ I sought for a new information source (Which new source have you consulted? _____)
□ I chose to rely on one source and ignore the conflicting one (On which source have you relied? _____Which source have you ignored? _____)

29. How often do you have someone help you read hospital materials?

□ Always
□ Often
□ Sometimes
□ Occasionally
□ Never

30. How confident are you filling out medical forms by yourself?

□ Extremely
□ Quite a bit
□ Somewhat
□ A little bit
□ Not at all

31. How often do you have problems learning about your medical condition because of difficulty understanding written information?

□ Always
□ Often
□ Sometimes
□ Occasionally
□ Never

The following section will pop-up only if the subject has reported to be suffering from a chronic disease

I. MEDICATIONS FOR CHRONIC DISEASES DURING PREGNANCY

If you use or have used medicines for a chronic disease during your pregnancy fill out this part of the questionnaire (I, II, III) and provide some information about those medicines you use daily.

Some chronic diseases are asthma, allergy, hypothyroidism (low thyroid hormone), rheumatic diseases (incl. rheumatoid arthritis, psoriatic arthritis), diabetes (type I or II), epilepsy, depression, anxiety, cardiovascular diseases (incl. hypertension, high cholesterol, and heart diseases)

Do you suffer of any chronic disease? □ Yes □ No

(If Yes above) Please indicate whether you suffer of any of the following chronic diseases.

		If you use or have used medicines for *X* during your pregnancy, please enter the name of the medicines.	**In which weeks of pregnancy did you use them?**
Asthma	□ Yes □ No	(If Asthma ticked) If you use or have used medicines for asthma during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Allergy	□ Yes □ No	(If Allergy ticked) If you use or have used medicines for allergy during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Hypothyroidism (low thyroid hormone)	□ Yes □ No	(If Hypothyroidism ticked) If you use or have used medicines for hypothyroidism during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Rheumatic disorders (incl. rheumatoid arthritis, psoriatic arthritis)	□ Yes □ No	(If Rheumatic disorders ticked) If you use or have used medicines for rheumatic disorder during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Diabetes (type I or II)	□ Yes □ No	(If Diabetes ticked) If you use or have used medicines for diabetes during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Epilepsy	□ Yes □ No	(If Epilepsy ticked) If you use or have used medicines for epilepsy during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Depression	□ Yes □ No	(If Depression ticked) If you use or have used medicines for depression, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Anxiety	□ Yes □ No	(If Anxiety ticked) If you use or have used medicines for anxiety during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery

		If you use or have used medicines for *X* during your pregnancy, please enter the name of the medicines.	In which weeks of pregnancy did you use them?
Cardiovascular diseases (incl. hypertension, high cholesterol, heart diseases)	□ Yes □ No	(If Cardio disease ticked) If you use or have used medicines for cardiovascular diseases during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery
Others (If Others ticked) (Please specify which other disease(s): _____)	□ Yes □ No	(If Other disease ticked) If you use or have used medicines for your chronic disease during pregnancy, please enter the names of the medicines.	□ week 0-12 □ week 13-24 □ week 25-delivery

Section II will pop-up only if the subject has reported to be suffering of a chronic disease

II. YOUR VIEWS ABOUT PRESCRIBED MEDICINES

In this section of the survey questionnaire, the **Belief About Prescribed Medicine Questionnaire (BMQ-Specific)** was presented (Horne R, Weinman J, Hankins M. The beliefs about medicines questionnaire: The development and evaluation of a new method for assessing the cognitive representation of medication. Psychol Health. 1999;14(1):1-24).

Section III will pop-up only if the subject has reported to be suffering of a chronic disease. There will be one single scale for each chronic condition reported

III. QUESTION ABOUT YOUR USE OF MEDICATIONS FOR X DURING PREGNANCY AND/OR POSTPARTUM

In this section of the survey questionnaire, the **8-item Morisky Medication Adherence Questionnaire (MMAS-8)** was presented (*Morisky DE, Green LW, Levine DM. Concurrent and predictive validity of a self-reported measure of medication adherence. Medical care. 1986;24(1):67-74*).

Do you have any other comments about your medication use during pregnancy?

YOUR VIEWS ABOUT MEDICATIONS

In this section of the survey questionnaire, the **Belief About Medicine Questionnaire (BMQ-General)** was presented (*Horne R, Weinman J, Hankins M. The beliefs about medicines questionnaire: The development and evaluation of a new method for assessing the cognitive representation of medication. Psychol Health. 1999;14(1):1-24*).

32. Below are some statements about use of medicines in pregnancy.
Please specify how much you agree or disagree with these statements by ticking where appropriate. (*You may only tick once per line*)

	Strongly agree	**Agree**	**Uncertain**	**Disagree**	**Strongly disagree**
I have a higher threshold for using medicines when I am pregnant than when I'm not pregnant	○	○	○	○	○
Even though I am ill and could have taken medicines, it is better for the foetus that I refrain from using them	○	○	○	○	○
Pregnant women should preferably use herbal remedies than conventional medicines	○	○	○	○	○

YOUR ASSESSMENT OF PREGNANCY RISKS

33. Among 100 healthy women in a healthy environment, how many do you think will give birth to a child with a birth defect?

_____

34. Here below is a list with various medicines, food and other substances.
Please indicate how harmful you think they are for the foetus in a scale from 0 to 10, where 0 corresponds to 'not harmful' and 10 to 'very harmful'.

If you have not heard before about such substance, tick 'unknown substance'.

	Unknown substance	**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
Paracetamol/acetaminophen	○	○	○	○	○	○	○	○	○	○	○	○
Antibiotics (*e.g. Penicillins*)	○	○	○	○	○	○	○	○	○	○	○	○
Antidepressants	○	○	○	○	○	○	○	○	○	○	○	○
Thalidomide	○	○	○	○	○	○	○	○	○	○	○	○
Swine influenza vaccine	○	○	○	○	○	○	○	○	○	○	○	○
OTC medicines against nausea/travel sickness	○	○	○	○	○	○	○	○	○	○	○	○
Ginger	○	○	○	○	○	○	○	○	○	○	○	○
Cranberries	○	○	○	○	○	○	○	○	○	○	○	○
Blue veined cheese *(e.g. Gorgonzola)*	○	○	○	○	○	○	○	○	○	○	○	○
Eggs	○	○	○	○	○	○	○	○	○	○	○	○
Alcohol during the 1. trimester (*e.g. wine, beer, spirits*)	○	○	○	○	○	○	○	○	○	○	○	○
Smoking (*e.g. cigarettes*)	○	○	○	○	○	○	○	○	○	○	○	○
Dental X-ray	○	○	○	○	○	○	○	○	○	○	○	○

HOW YOU ARE FEELING NOW

In this section of the survey questionnaire, the **Edinburgh Postnatal Depression Scale (EPDS)** was presented (*Cox J, Holden J, Sagovsky R. Detection of postnatal depression. Development of the 10-item edinburgh postnatal depression scale. The British Journal of Psychiatry. 1987 June 1, 1987;150(6):782-6*).

HOW YOU SEE YOURSELF

In this section of the survey questionnaire, the **Big Five Inventory (BFI)** was presented (*John OP, Srivastava S, editors. The big five trait taxonomy: History, measurement, and theoretical perspectives: New York: Guilford; 1999; John OP, Robins RW, Pervin LA. Handbook of personality: Theory and research: The Guilford Press; 2008*).