

Consent form and Interviewer administered questionnaire

Medicinal plants used among pregnant women admitted in Jimma University Medical Center maternity and gynaecology wards in Jimma city, Ethiopia

Consent form

Background and purpose

This is an invitation for you to participate in a research conducted with the objective of assessing medicinal plants and pharmaceutical medicines used among pregnant women admitted in Jimma University Medical Center (JUMC) maternity and gynecology wards in Jimma city, Ethiopia. Although medicinal plants play a significant role in traditional medicine during pregnancy, childbirth and postpartum care, little is known about the extent and types of medicinal plants used during pregnancy in Ethiopia. The aim of this study is therefore to investigate and describe medicinal plants and pharmaceutical medicines used during pregnancy, the reasons for use and the utilization pattern among inpatient pregnant and lactating women. As the study is directly related to women seeking care in the maternity and gynaecology ward of this hospital, you are one of the candidates who can participate in the study. Thus, you are kindly requested to participate in the present research and provide the information required from you.

What does the study involve?

Concerning the study process, first we will ask you questions about your background including questions about your age, religion, residence place, occupation, family size, ethnic group, marital status, educational level, access to modern health facility and walking distance to the facility. Next, we will ask you about maternal diseases, pregnancy-related illness and treatments, use of medicinal plants, information about women's safety concerns and experiences with use of medicinal plants in pregnancy. We will further collect data about your chronic diseases and medication history, self-medication with conventional medicines, and social drug use during pregnancy.

Potential advantages and disadvantages

The results obtained from this study are useful in order to develop better strategies to appropriately use medicinal plants, minimize medicinal plant use related problems and reduce maternal morbidity and mortality. There is not any disadvantage in participating in this study, except the time that it takes to answer the study questions.

What will happen to your personal information?

The data registered about you will only be used in accordance with the purpose of the study as described above. All the data will be processed without name, personal identification number or other directly recognisable type of information. A code number links you to your data and only the authorized study staff will have access to this list. There will be no way of linking your individual responses to the final result of the study findings. For documentation and follow-up purposes, the data will be kept until 14.01.2024. The data will be stored as de-identified data, i.e. a file with key identifiable information stored separately from the file containing other data. The data will be anonymized within 6 months after this date. It will not be possible to identify you in the results of the study when these are published.

Voluntary participation

Participation in this study is voluntary. You can withdraw your consent to participate in the study at any time and without stating any particular reason. This will not have any consequences for your further treatment. If you wish to participate, please sign the declaration of consent at the bottom of this page. In case if you are not able to give written consent (i.e. due to literacy and /or cultural reasons), your oral consent will be sought and documented as equal to a written consent. There are no consequences for women who decide not to participate in this study. The patient's decision to participate or not will have no impact on the treatment(s) that she receives.

Right to access and material storage

If you agree to participate in the study, you are entitled to have access to the information registered about you. You are further entitled to correct any mistakes in the information we have registered. If you withdraw from the study, no further information or material will be collected about you. Data that have already been collected will not be deleted.

Information about the outcome of the study

You, as a participant in this study, are entitled to receive information about the outcome/result of the study.

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Mr. Seid Mussa is a PhD student in the University of Oslo. He is a recipient of scholarship from the Norwegian Loan Fund (Lånekassen).

If you have questions concerning the study, you may contact the research team:

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Consent for participation in the study

I consent to participate in the study. _____

(Signed by the study participant, date)

Third party consent when this is warranted, either in addition to or in place of the participant's consent. _____

(Signed by a close relative/partner/friend, date)

I confirm that I have given information about the study. _____

(Signed by the data collector, date)

Questionnaire

Instructions for enumerators:

- Many questions allow multiple answers. Unless specifically instructed in the question, do not prompt and simply encircle the answers that the woman mentions
- For open ended questions please write down the pregnant woman's response legibly

Part I. Socio-demographics characteristics of respondents

1.1. Study ID code _____

1.2. What is your age? _____

1.3. What is your place of residence?

- A. Urban
- B. Rural

1.4. What is your educational level?

- A. Illiterate
- B. Read and write but no formal education
- C. Primary 1st cycle (1-4)
- D. Primary 2nd cycle (5-8)
- E. Secondary school (9-12)
- F. Post-secondary school
- G. Others, specify _____

1.5. What is your marital status?

- A. Married
- B. Single
- C. Divorced
- D. Widowed

1.6. What is your ethnic group?

- A. Oromo
- B. Amhara
- C. Gurage
- D. Dawuro
- E. Silte
- F. Yem

- G. Tigre
H. Others, specify _____
- 1.7. What is your religion?**
- A. Islam
B. Orthodox Christian
C. Protestant Christian
D. Catholic Christian
E. Others, specify _____
- 1.8. What is your occupation?**
- A. Farmer
B. House wife
C. Trader/Merchant
D. Government employee
E. Private employee
F. Daily labourer
G. Others, specify _____
- 1.9. How many family members do you have (including yourself)? _____**
- 1.10. Do you have access to any modern health facility (especially in 5 to 10 km walking distance from your residence)? (If no skip to Q 2.1)**
- A. Yes
B. No
- 1.11. How many minutes walking distance is it to your nearest health facility? _____**
- Part II. Pregnancy-related questions**
- 2.1. Are you pregnant? (If no skip to Q 2.3)**
- A. Yes
B. No
- 2.2. In which week of pregnancy (gestation age) are you? _____**
- 2.3. How many days have passed since delivery? _____**
- 2.4. How many children do you have from before the current pregnancy? _____**
- 2.5. How many times have you been pregnant (i.e. Gravida)? _____**
- 2.6. The number of times your pregnancies reaching viable gestational age (including live births and stillbirths, i.e. parity) _____**
- 2.7. History of any adverse pregnancy outcome? (If no skip to Q 3.1)**

A. Yes

B. No

2.8. What type (s) of adverse pregnancy outcome?

A. Down syndrome

B. Cleft lip/ palate

C. Neural tube defect

D. Cardiac defect

E. More than one/ mixed [please explain] _____

F. Others, specify _____

2.9. Have you used iron sulphate during pregnancy? (If no skip to Q 3.1)

A. Yes

B. No

2.10. When did you use?

A. First trimester (first three months of pregnancy)

B. Throughout the entire pregnancy

C. Before and during pregnancy

D. Others, specify _____

Part III. Chronic disease and medication

3.1. Do you have chronic disease? (If no skip to Q 4.1)

A. Yes

B. No

3.2. What is the chronic disease? _____

A. Hypertension

B. Diabetes mellitus

C. Asthma

D. Cardiac diseases

E. Liver disease

F. Chronic renal failure

G. Gastritis/peptic ulcer

H. HIV/AIDS

I. Others, specify _____

3.3. Do you take drugs for the management of chronic illness? (If no skip to Q 3.5)

A. Yes

B. No

3.4. What type of drugs are you taking [names of drugs]? _____

3.5. Are you currently attending chronic disease follow-up clinic?

A. Yes

B. No

Part IV. Self-medication with conventional medicines

4.1. Have you ever practiced self-medication (to treat self-diagnosed disorders or symptoms) with conventional medicines during pregnancy? (If no skip to Q 5.1)

A. Yes

B. No

4.2. Which drugs did you use for self-medication?

A. NSAIDs (write drug name (s)) _____

B. Dermatologicals (write drug name (s)) _____

C. Antimicrobials (write drug name (s)) _____

D. Others, Specify _____

4.4. Had you received any advice /counselling on self-medications drugs? (If no skip to Q 5.1)

A. Yes

B. No

4.5. For which of the following points you had received advice?

A. Tolerable side effects of drugs

B. Adverse drug reactions which requires prescribers visit

C. Management of missed dose

D. How to take the medication

E. Others specify _____

Part V. Social drug use during pregnancy

5.1. Do you smoke cigarette? (If no skip to Q 5.2.)

A. Yes

B. No

5.2. How many cigarettes do you smoke per day? _____

5.3. For how many years have you smoked? _____

5.4. Do you drink alcohol? (If no skip to Q 5.3.)

- A. Yes
 - B. No
- 5.5. Which type of alcohol do you drink? _____
- A. Tella (Local beer)
 - B. Katikala ('Ethiopian vodka')
 - C. Beer
 - D. Wine
 - E. Others, specify _____
- 5.6. What millilitre per day do you drink? _____
- 5.7. For how many years have you drunk? _____
- 5.8. Do you chew *Khat*? (If no skip to Q 6.1.)
- A. Yes
 - B. No
- 5.9. What is the average weight in “zurba” that you chew daily? _____
- 5.10. For how many years have you chewed? _____
- 5.11. Any other social drug you used? _____

Part VI. General questions about medicinal plants used during pregnancy

- 6.1. Have you used any medicinal plants to manage your current pregnancy illness?
(If yes skip to Q. 6.4; if no skip to Q. 6.2 and Q. 6.3, and after that thank the woman and stop the interview)
- A. Yes
 - B. No
- 6.2. Why didn't you use medicinal plants in pregnancy?
- A. Fear of complications to the baby
 - B. Religious belief
 - C. Not aware of their use in pregnancy
 - D. Counseled by the health worker
 - E. Others, specify _____
- 6.3. Outcomes of previous pregnancy for non-users of medicinal plants?
- A. Alive
 - B. Neonatal death
 - C. Stillbirth

D. Abortion

E. Others, specify _____

Instructions for enumerators:

- Please interview the woman and fill the following table carefully for those women who claimed that they have used medicinal plants during pregnancy
- Please write the appropriate response accordingly or letters of the corresponding variable option or the variable option itself under each medicinal plant the woman mentions in the “Information about medicinal plants used by the woman” column on the right side of this page)
- If the woman mentions more types of medicinal plants, please use additional questionnaire and record the same code number to the additional questionnaire

Ser. no.	Questions on medicinal plants and medicinal plant utilization NB: Multiple responses are possible throughout this part	Name of the medicinal plant used & Information about its utilization		
		1.	2.	3.
6.4.	<p>Could you tell me any medicinal plant that you have used in your pregnancy, for the management of your pregnancy illnesses or for the benefit of the foetus or for any other related purpose?</p> <p>NB: Please read the following medicinal plants for the interviewee and write down any Name of the plant(s) (local name and the language used) from the below list or other medicinal plants that she mentions</p> <ul style="list-style-type: none"> • Damakessie • Zingibil • Nech shinkrut • Abish • Tikur Azmud • Tena-Adam • Nech-bahr zaf • Dingetegna • Chikugn • Bisena/Misana • Kebericho • Kosso • Grawa • Ariti • Feto • Papaya • Ensilal • Dimbelal • Telba • Qarafa • Yeroo • Astenagr /Atse-faris • Areg Riesa • Senafitch • Besobila 			

Ser. no.	Questions on medicinal plants and medicinal plant utilization NB: Multiple responses are possible throughout this part	Name of the medicinal plant used & Information about its utilization		
		1.	2.	3.
6.5.	<p>For which type of pregnancy illness, do you use the medicinal plant?</p> <p>NB: <i>please read the following pregnancy related illnesses to the woman and write down any from the below list or other ailments that she mentions</i></p> <ul style="list-style-type: none"> • Pain (in back, neck or shoulder) • Headaches/Migraine • Heartburn/reflux problems • Gastritis/burning sensation • Urinary tract infection • Nausea • Vomiting • Induction of labour • Joint pain • Common cold/flu • Constipation/obstipation • Gestational hypertension (Preeclampsia) • Gestational diabetes • Abdominal cramps/ache • Postpartum bathing • Insomnia/Sleeping problems • Expel retained placenta • Prepare for labour • Leg/foot swelling • Wellbeing and nourishing foetus • General wellbeing • Mental wellbeing • Emergency illnesses • Depression 			
6.6.	In which trimester of pregnancy do you use it?			
	A. First trimester			
	B. Second trimester			
	C. Third trimester			
	D. Throughout pregnancy			
	E. Others, specify _____			
6.7.	For how many episodes do you take it during your pregnancy?			
	A. Once			

Ser. no.	Questions on medicinal plants and medicinal plant utilization NB: Multiple responses are possible throughout this part	Name of the medicinal plant used & Information about its utilization		
		1.	2.	3.
	B. Twice			
	C. Trice			
	D. Every time when I feel sick			
	E. Others, specify _____			
6.8.	What part of the plant do you use?			
	A. Flower			
	B. Fruit			
	C. Seed			
	D. Leaf			
	E. Root			
	F. Stem			
	G. Bark: which one? i) Root bark ii) Stem bark iii) Both types of barks			
	H. Others, specify _____			
6.9.	What is the Mode of use?			
	A. Dried			
	B. Fresh			
	C. Both Fresh and Dried			
6.10.	What preparation methods do you use for each medicinal plant (please ask the woman and write down details of preparation procedures for each medicinal plant)			
	A. Maceration			
	B. Decoction			

Ser. no.	Questions on medicinal plants and medicinal plant utilization NB: Multiple responses are possible throughout this part	Name of the medicinal plant used & Information about its utilization		
		1.	2.	3.
	C. Infusion (tea form)			
	D. Squeezing			
	E. Powdering			
	F. Others, specify _____			
6.11.	6.11.1. Is there any medicinal plant or other additive mixed with this Medicinal plant during preparation? (If no skip to Q 6.12) A. Yes B. No			
	6.11.2. If Yes, please mention it with the importance of its incorporation _____			
6.12.	What is the route of administration, with a brief explanation if possible?			
	A. Oral			
	B. Topical			
	C. Nasal			
	D. Inhalation			
	E. Others, specify _____			
6.13.	What is the measure of medicinal plant preparation? (please write details)____			
6.14.	What is the dosage? (please write details)_____			
6.15.	What is the frequency of administration per day? (please write details)___			
6.16.	What is the duration of treatment? (please write details)_____			
6.17.	What is the solvent you used for the preparation?			
	A. Water			
	B. Oil			
	C. Coffee			
	D. Tea			

Ser. no.	Questions on medicinal plants and medicinal plant utilization NB: Multiple responses are possible throughout this part	Name of the medicinal plant used & Information about its utilization		
		1.	2.	3.
	E. Milk			
	F. Soup			
	G. Others, specify _____			
6.18.	6.18.1. Is there any contraindications or any dietary restriction imposed during medicinal plants use? (If no skip to Q 6.19) A. Yes B. No			
	6.18.2. If yes, please tell me details _____			
6.19.	6.19.1. Do you have any information about precautions to be taken during medicinal plants use? (If no skip to Q 6.20) A. Yes B. No			
	6.19.2. If yes, please tell me details _____			
6.20.	6.20.1. Have you encountered/experienced any side effects during treatment? (If no skip to Q 6.21) A. Yes B. No			
	6.20.2. If yes, please tell me details _____			
6.21.	6.19.1. Have you encountered/experienced any adverse effects during treatment? (If no skip to Q 6.22) A. Yes B. No			
	6.21.2. If yes, please tell me details _____			

Ser. no.	Questions on medicinal plants and medicinal plant utilization NB: Multiple responses are possible throughout this part	Name of the medicinal plant used & Information about its utilization		
		1.	2.	3.
6.22.	6.22.1. Is there any antidotes to the adverse (unwanted) effects of the medicinal plant? (If no skip to Q 6.23) A. Yes B. No			
	6.22.2. If yes, please tell me details _____			
6.23.	6.23.1. Have you used any conventional medicine with the medicinal plants together or one after the other or at any time during pregnancy for pregnancy related illness prevention or treatment? (If no skip to Q 6.24) A. Yes B. No			
	6.23.2. Could you please tell me the name of the conventional medicine you used with the medicinal plants?			
	6.23.3. Why you used the conventional medicine and medicinal plants together?			
6.24.	6.24.1. Is there any interactions (medicinal plants-conventional medicine and/ or medicinal plants - medicinal plants interaction) you experienced/expected during treatment. (If no skip to Q 6.25) A. Yes B. No			
	6.24.2. If yes, please tell me details _____			
6.25.	6.25.1. Have you ever used medicinal plant for foetal advantage purpose? (If no skip to Q 6.26) A. Yes B. No			
	6.25.2. If yes, which medicinal plant? _____			

Ser. no.	Questions on medicinal plants and medicinal plant utilization NB: Multiple responses are possible throughout this part	Name of the medicinal plant used & Information about its utilization		
		1.	2.	3.
	6.23.3. If yes, What is the proposed advantage of the medicinal plant for the foetus?____			
6.26.	7.26.1. Is there any medicinal plants contraindicated during pregnancy? (If no skip to Q 6.27) A. Yes B. No			
	6.26.2. If yes, why? please tell me details_____			
6.27.	6.27.1. Is there any medicinal plants contraindicated during lactation? (If no skip to Q 6.28) A. Yes B. No			
	6.27.2. If yes, please tell me the medicinal plant name _____			
	6.27.3. Why is it contraindicated during lactation?			
6.28.	Anything you want to tell us before we conclude the interview?_____			

Part VII. Sources of information and medicinal plants used during pregnancy**7.1. What is your source of medicinal plants? _____**

- A. Market places
- B. Traditional healers (herbalist)
- C. Garden
- D. Shop
- E. Neighbor
- F. Others, specify _____

7.2. Who helps you in the collection of the medicinal plants?

- A. Family members (mother, father, husband, grandmother, etc.)
- B. Neighbours
- C. Friends
- D. My-self
- E. Others, specify _____

7.3. Who recommended you to use medicinal plants during pregnancy?

- A. Family members (mother, father, husband, grandmother, etc.)
- B. Neighbours
- C. Friends
- D. My-self
- E. Others, specify _____

7.4. If anyone recommended you, did you get any information how to use medicinal plants?

- A. Yes
- B. No
- C. Others, specify _____

7.5. Were you satisfied with medicinal plant treatment outcomes? (If yes, finish!)

- A. Yes
- B. No

7.6. Why you were not satisfied?

- A. Got abortion
- B. Uterine hyper-stimulation
- C. Fetal distress
- D. Stillbirth
- E. Uterine rupture
- F. Any other reason, specify _____

7.7. Will you use medicinal plants in your future pregnancy?

- A. Yes
- B. No

I thank you for your time and cooperation!**Data collector: Name _____ Signature _____ date _____**