

Additional file 1

English version of the semi-structured interview and focus group discussion guide

Manuscript title: Effectiveness of a KMS-SECI-based module and video-assisted education for improving early initiation of breastfeeding among primigravida mothers

Study context: Exploratory needs assessment for the development of a KMS-SECI-based IMD educational module and video-assisted education for third-trimester primigravida mothers.

Status of guide: This interview and focus group discussion guide was developed specifically for the present study and had not been previously published elsewhere.

Purpose of the guide

The guide was used to explore learning needs, perceived barriers, family support, health-worker practices and preferred educational media related to early initiation of breastfeeding (IMD). The findings informed the content, wording and delivery format of the module and educational video.

General instructions for interviewers/facilitators

- Use simple, respectful and non-judgmental language.
- Explain that participation is voluntary and that participants may refuse to answer any question.
- Obtain written informed consent before the interview or focus group discussion begins.
- Use the main questions consistently, but apply probes flexibly when clarification is needed.
- Avoid correcting participants during data collection; record their actual understanding, concerns and experiences.
- Maintain confidentiality by using participant codes rather than personal names in transcripts and notes.

Section A. Primigravida mothers

A1. Prior knowledge of IMD: What have you heard or understood about early initiation of breastfeeding or IMD?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

A2. Perceived benefits: What benefits do you think IMD may provide for the baby and the mother?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

A3. Practical understanding: What do you think should happen during the first hour after the baby is born?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

A4. Concerns and barriers: What concerns, fears or difficulties might prevent a mother from starting breastfeeding within the first hour after birth?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

A5. Self-confidence: How confident do you feel about asking for or participating in IMD after delivery?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

A6. Family influence: Who in your family usually influences decisions about newborn feeding, and how might they support or discourage IMD?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

A7. Husband support: What kind of support would you expect from your husband before delivery, during the first hour after birth and after returning home?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

A8. Preferred learning format: What type of learning material would help you understand IMD better: verbal counselling, printed module, video, discussion with midwives or a combination? Why?

Possible probes: Please explain further; Can you give an example; What would make this easier for you; What information is still unclear?

Section B. Husbands

B1. Understanding of IMD: What do you know about early initiation of breastfeeding within the first hour after birth?

Possible probes: Why; What support would be realistic; What message should be included in the module or video?

B2. Perceived role: What do you think a husband can do to support the mother before delivery and during the first hour after the baby is born?

Possible probes: Why; What support would be realistic; What message should be included in the module or video?

B3. Decision-making: How are decisions about birth preparation and newborn feeding usually made in your family?

Possible probes: Why; What support would be realistic; What message should be included in the module or video?

B4. Barriers to support: What might make it difficult for husbands to support IMD?

Possible probes: Why; What support would be realistic; What message should be included in the module or video?

B5. Communication with health workers: What information or guidance would help you communicate with midwives or health workers about IMD?

Possible probes: Why; What support would be realistic; What message should be included in the module or video?

B6. Learning needs: What type of educational material would be easiest for you to understand and review with your wife?

Possible probes: Why; What support would be realistic; What message should be included in the module or video?

Section C. Midwives and health workers

C1. Current counselling practice: How is IMD counselling usually delivered during antenatal care at this facility?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

C2. Common misconceptions: What misunderstandings about colostrum, breastfeeding or the first hour after birth are commonly found among primigravida mothers or families?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

C3. Service barriers: What facility, workload, referral or delivery-room factors may affect successful IMD within one hour?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

C4. Family involvement: How do husbands and family members usually influence IMD and early infant feeding decisions?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

C5. Key educational messages: What messages should be emphasized in an IMD module for primigravida mothers and husbands?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

C6. Video content: What behaviours or procedures should be shown visually in the educational video?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

C7. Feasibility: How can the module and video be integrated into routine antenatal education without adding excessive workload?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

C8. Fidelity monitoring: What simple indicators can be used to document whether mothers received, reviewed and understood the intervention materials?

Possible probes: What examples should be included; What wording is most acceptable locally; What challenges should be anticipated?

Section D. Closing questions

1. Is there any important issue about IMD education that has not been discussed?
2. What is the most important message that should appear in the module and video?
3. Do you have any suggestions to make the educational material clearer, more acceptable or easier to use?

Linkage with KMS-SECI development

The guide supported the KMS-SECI intervention development process. Socialization was explored through participant discussion of experience and perceived barriers. Externalization was supported by converting midwives' tacit knowledge and participant concerns into module language, checklists and video scenarios. Combination was supported by aligning local findings with maternal and newborn health recommendations. Internalization was addressed by identifying how mothers and husbands could repeatedly review and translate the material into an IMD readiness plan.