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Research Article

Maternal capabilities, knowledge and attitudes toward infant nutrition among pregnant women in Isuikwuato Local Government Area, Abia State, Nigeria

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Highlights/Key Messages

- Knowledge of infant feeding is linked to women's decision-making autonomy.
- Education alone is insufficient without addressing psychosocial barriers.
- Interventions must target mental health and social support for mothers.
- Social support and health perception shape attitudes toward child nutrition.

Background
Maternal capabilities during pregnancy are crucial during the first 1,000 days of a child's life, which is from conception to their second birthdays.

Objective
The purpose of the present study was to assess the maternal capabilities, knowledge and attitudes of pregnant women towards infant nutrition in the first 1,000 days of life in Isuikwuato Local Government Area (LGA), Abia State, Nigeria.

Methods
A community-based cross-sectional study was conducted among a sample of 186 pregnant women aged 15–49 years residing in the more easily accessible areas of Isuikwuato LGA. Data were collected using a semi-structured interviewer-administered questionnaire adapted from the WHO/UNICEF infant and young child feeding assessment tools. Information obtained included socio-demographic characteristics, maternal capabilities, knowledge, and attitudes toward infant nutrition. Data were analysed using descriptive statistics, including frequencies, percentages, means, and standard deviations, while Pearson correlation analysis was used to determine associations between variables. Statistical significance was set at $p < 0.05$.

Results
Most participants had a tertiary education (83.9%) and high income (83.3% had ⩾N71,000). A majority had high decision-making autonomy (73.1%), low social support (91.9%), and low self-efficacy (61.3%). They had good knowledge (90.3%) and positive attitudes (51.6%) towards infant nutrition. Decision-making autonomy was significantly associated with knowledge on infant nutrition ($p < 0.05$). Their attitude towards infant nutrition was significantly associated with social support and perceived health status.

Conclusion
Knowledge and attitudes toward infant feeding were satisfactory in this sample of high-income, well-educated pregnant women, despite a lack of social support.

Keywords: attitudes; infant nutrition; knowledge; maternal capabilities; pregnant women

Introduction

Infant nutrition during the first 1,000 days of life, spanning from conception to a child's second birthday, is widely recognised as one of the most critical determinants of lifelong health, growth, and development (Black et al., 2017). This developmental window is a period of rapid brain, immune, and organ maturation, as well as metabolic programming, during which adequate nutrition plays a fundamental role in achieving optimal physical, cognitive, and psychosocial outcomes. Nutritional deprivation during this sensitive phase may result in irreversible consequences, including stunting, impaired cognitive development, weakened immunity, poor academic performance, and an increased risk of chronic non-communicable diseases later in life (UNICEF, 2023; WHO, 2023; Victora et al., 2021).

Maternal nutrition before and during pregnancy is particularly important because it directly influences foetal growth and infant health outcomes. Pregnancy significantly increases the physiological demand for energy, protein, vitamins, and minerals, including iron, folic acid, calcium, iodine, and zinc (Prasad & Sylvester, 2025). Deficiencies in these nutrients have been associated with adverse outcomes, including maternal anaemia, preterm birth, low birth weight, neural tube defects, and increased infant morbidity and mortality (Danley & Laban, 2025). Following birth, appropriate infant feeding practices, especially early initiation of breastfeeding, exclusive breastfeeding for the first 6 months, and timely introduction of safe, nutritionally adequate complementary foods, are essential for sustaining healthy growth and development (Schwarzenberg et al., 2018).

Globally, malnutrition remains a major public health concern, particularly in low- and middle-income countries where poverty, food insecurity, poor maternal education, and inadequate healthcare services continue to compromise infant feeding practices (Black et al., 2013). In Nigeria, the burden of childhood malnutrition remains alarmingly high. The Nigeria Demographic and Health Survey (NDHS) (2024) reported that approximately 40% of children under five years are stunted, 8% are wasted, and 27% are underweight. Micronutrient deficiencies such as vitamin A and iron deficiency anaemia are widespread, particularly among pregnant women and children (UNICEF, 2023). Despite increasing awareness of recommended infant feeding practices, adherence remains suboptimal in many parts of Nigeria. Exclusive breastfeeding rates remain low, while the premature introduction of complementary foods remains common. In Southeast Nigeria, It has been observed that only about 40% of mothers introduced complementary feeding at the recommended age of six months, whereas many initiated feeding earlier than recommended. Factors contributing to inappropriate feeding practices include financial difficulties, cultural beliefs, inadequate maternal knowledge, poor family support systems, and limited access to accurate health information (Victor et al., 2014). Maternal education and exposure to nutrition counselling have been identified as strong predictors of appropriate infant feeding behaviours (Issaka et al., 2015).

Beyond nutritional knowledge alone, recent evidence suggests that maternal capabilities strongly influence infant nutrition outcomes. Maternal capabilities refer to the psychosocial, cognitive, emotional, and social resources that enable women to provide optimal care for themselves and their children (Stoltzfus et al., 2015). These capabilities include decision-making autonomy, self-efficacy, mental well-being, social support, attitudes toward gender norms, workload management, and access to economic resources (Matare et al., 2021; Stoltzfus et al., 2015). Women with stronger maternal capabilities are more likely to make informed nutrition decisions, access healthcare services, practice appropriate breastfeeding and complementary feeding, and respond effectively to child health needs (Stoltzfus et al., 2015).

Knowledge and attitudes toward infant nutrition are also critical determinants of feeding behaviour. Maternal knowledge involves awareness and understanding of nutritional requirements, breastfeeding recommendations, complementary feeding practices, and the importance of balanced diets during infancy (WHO & UNICEF, 2021). Attitudes reflect mothers' beliefs, perceptions, and feelings toward infant feeding recommendations, which may either encourage or hinder appropriate nutritional practices (Radzyminski, 2016). Positive maternal attitudes, combined with adequate knowledge of nutrition, are essential for improving child feeding behaviours and nutritional outcomes.

Economic stress and time constraints further strain caregiving, as many mothers undertake extensive labour to support their families, reducing the time available for child care and meal preparation (WHO, 2023). In rural communities such as Isuikwuato, socioeconomic constraints, deeply rooted cultural practices, and inadequate access to healthcare services may compound existing challenges in maternal nutrition and infant feeding. Despite these multifaceted influences, empirical evidence examining maternal capabilities, knowledge, and attitudes toward infant nutrition within this specific sociocultural context remains scarce. Against this backdrop, this study was designed to assess the maternal capabilities, knowledge and attitudes toward infant nutrition among pregnant women in Isuikwuato Local Government Area (LGA), Abia State, Nigeria.

Methods

Study Design and Sampling

A community-based cross-sectional study design was used to assess maternal capabilities, knowledge and attitudes towards infant nutrition in the first 1,000 days of life among 186 pregnant women living in Isuikwuato LGA.

Sample size: The sample size was calculated using Cochran's formula described by Araoye (2008), with a margin of tolerable sampling error of 5%; and based on a prevalence of maternal nutrition knowledge of 46% (Omachi et al., 2024), arriving at 382.

Simple random sampling by balloting without replacement was employed to select six of the eight villages in the LGA. Systematic sampling was used to select households within each selected village. Every fifth household was selected after determining a sampling interval from the household listing for each village. Eligible pregnant women identified in the selected households were recruited into the study. In households where more than one eligible pregnant woman was present, simple random

sampling was used to select one participant.

Data Collection

The participants were interviewed using a semi-structured, validated questionnaire to obtain background information and socioeconomic characteristics. Another section of the questionnaire contained WHO/UNICEF (2021) questions on knowledge and attitude toward infant and young nutrition. Knowledge of infant and young child nutrition was assessed using seven questions. Each correct response was awarded one (1) mark, while each incorrect response was assigned zero (0) marks. The total scores obtained by respondents were converted to percentages, giving a minimum possible score of 0% and a maximum of 100%. Based on the percentage scores, respondents were categorised as having good knowledge (50–100%) or poor knowledge (0–49.99%). Attitudes toward infant and young child nutrition were assessed using six questions, each measured on a 3-point Likert scale with agree, undecided, and don't know response options. Each favourable response was assigned one (1) mark, while each unfavourable response was assigned zero (0) marks. Attitude status was categorised as follows: respondents with mean scores ranging from 3.00 to 6.00 were classified as having a positive attitude, while those with mean scores ranging from 0.00 to 2.99 were classified as having a negative attitude toward infant and young child nutrition.

The maternal capabilities construct developed by Stoltzfus et al. (2015) was adopted for the study. Decision-making autonomy was assessed using five questions. Responses were coded as "Yes" = 1 and "No" = 0. The total score for each respondent was obtained by summing the scores from the five items, with higher scores indicating greater decision-making autonomy.

Gender-norm attitude was assessed using six questions rated on a 5-point Likert scale of agreement. Responses ranged from 1 (restrictive gender-norm attitude) to 5 (egalitarian gender-norm attitude). The overall score was calculated as the mean of the six responses, with higher mean scores indicating more egalitarian gender attitudes.

Maternal depressive symptoms were assessed using ten questions measured on a 4-point Likert scale. The total score was obtained by summing the responses to all ten items. Scores ranging from 0 to 9.99 indicated low levels of depressive symptoms, while scores from 10 to 30 indicated high levels of depressive symptoms.

Mothering self-efficacy was measured using six questions rated on a 5-point Likert scale of agreement, where 1 indicated low self-efficacy and 5 indicated high self-efficacy. The final score was calculated as the mean of the six responses, with higher scores reflecting greater self-efficacy. Perceived health status was assessed using 11 questions, with response formats varying by item. Responses were subsequently recoded on a scale of 0 to 5, where 0 represented the least healthy (unhealthy) status and 5 represented the healthiest status. Scores were computed according to the instrument guidelines, and the final perceived health status score was calculated as the mean of the subscale scores.

Perceived social support was assessed using sixteen questions measured on a 5-point frequency Likert scale, where 1 indicated low social support, and 5 indicated high social support. The overall social support score was calculated as the mean of the sixteen responses, with higher scores indicating greater perceived social support.

Statistical Analysis

Data were analysed using descriptive statistics, including frequencies, percentages, means, and standard deviations, to summarise socio-demographic characteristics, maternal capabilities, knowledge, and attitudes toward infant and young child nutrition. Pearson's correlation analysis was employed to examine relationships between maternal capabilities (e.g., decision-making autonomy and social support) and infant feeding practices, as well as knowledge and attitudes toward infant and young child nutrition. Statistical significance was set at $p < 0.05$. All statistical analyses were conducted using IBM SPSS Statistics, version 27.

Results

The sample size was originally 382, but the achieved number of responses was 186, representing a 48.7% response rate. This relatively low response rate may be attributed to the geographical characteristics of the study area, including rolling hills, valleys, and other challenging terrain that made some locations difficult for research staff to access. Additionally, the limited number of pregnant women in the villages during the data collection period may have led researchers to skip them, further reducing the number of respondents.

The results presented in Table 1 describe the background and socioeconomic characteristics of women of reproductive age (WRA) included in the study.

Table 1. Background data and socioeconomic characteristics of the respondents (pregnant women)

Variables	Frequency(n=186)	Percentage
Mean (28.00 ± 3.23)		
Age range		
Young people (20–24 years)	29	15.6
Young adult (25–29 years)	94	50.5
Mid adult (30–35 years)	63	33.9
Marital status		
Married	179	96.2
Not married	7	3.8
If married,		
Living with spouse	156	87.2
Not living with spouse	23	12.8
Pregnancy stage		
< 3 months	40	21.5
3–6 months	77	41.4
> 6 months	69	37.1
Visit to a health facility		
Once	49	26.3

Variables	Frequency(n=186)	Percentage
2–3 times	31	16.7
> 3 times	106	57.0
Education level		
No formal education	1	0.5
Primary education	-	-
Secondary education	29	15.6
Tertiary education	156	83.9
Occupation		
Unemployed	25	13.4
Government employed	41	22.0
Privately employed	25	13.4
Self-employed	95	51.1
Income level*		
< N30, 000	7	3.8
N30,000 – N50,000	-	-
N51,000 – N70,000	24	12.9
N71,000 and above	155	83.3

*At the time of the field research, ₦1,600 = US$1

Table 2 presents the respondents' maternal capability status. Despite perceiving themselves as healthy and having high levels of autonomy, psychosocial challenges such as stress, low self-efficacy, and depressive symptoms were prevalent.

Table 2. Maternal capabilities status characteristics of the respondents (pregnant women)

Maternal capabilities	Frequency(n=186)	Percentage
Decision-making autonomy		
Lower decision-making autonomy	16	8.6
Greater decision-making autonomy	136	73.1
Gender-norm attitude		
Restrictive gender-norm attitude	114	61.3
Egalitarian gender-norm attitude	72	38.7
Social support		
Low levels of social support	171	91.9
High levels of social support	15	8.1
Perceived health status		
Unhealthy	-	-
Healthy	186	100.0
Mothering self-efficacy		
Low self-efficacy	114	61.3
High self-efficacy	72	38.7
Perceived time stress		
Low levels of time stress	16	8.6
High levels of time stress	170	91.4
Maternal mental health status		
Low depressive symptoms	77	41.4
High depressive symptoms	109	58.6

Table 3 presents the knowledge and attitudes of pregnant women in the sample regarding infant and young child nutrition during the first 1,000 days of life. Although knowledge levels were generally high, only around half had positive attitudes toward infant nutrition practices.

Table 4 presents the relationship between maternal capabilities, knowledge, and attitudes of pregnant women toward infant and young child nutrition. There was a positive correlation (r = 0.208) between greater autonomy and nutrition knowledge, and positive correlations (r = 0.155) between perceived health status and attitude toward infant and young child nutrition, and between social support and attitudes (r = 0.146). These findings imply that maternal capability factors, particularly autonomy, perceived health, and social support, play important roles in shaping women's knowledge and attitudes toward optimal infant nutrition during the first 1,000 days of life.

Table 3. Knowledge and attitude of pregnant women on infant and young child feeding nutrition

Variables	Frequency(n=186)	Percentage
Knowledge status		
Poor knowledge	18	9.7
Good knowledge	168	90.3
Attitude status		
Negative attitude	90	48.4
Positive attitude	96	51.6

Table 4. Association between maternal capabilities status, knowledge and attitude of pregnant women on infant and young child nutrition

(n = 186)	DMA	SS	PH	Attitudes	Knowledge
DMA					
R	1	0.030	-0.038	-0.077	0.208*
p-value	-	0.686	0.607	0.299	0.004
Attitude					
R	-0.077	- 0.146*	- 0.155*	1	0.001
p-value	0.299	0.047	0.034	-	0.988

DMA = decision making autonomy: SS = social support: PH = perceived health: r = Pearson correlation

Discussion

The findings of this study provide insights into pregnant women's maternal capabilities, knowledge, and attitudes regarding infant nutrition during the first 1,000 days of life in Isuikwuato LGA, Nigeria. The results suggest that although most women demonstrated good knowledge of infant and young child nutrition (IYCN), several maternal capability factors may limit the translation of knowledge into positive nutritional practices and attitudes.

The high proportion of women with tertiary education, the high percentage who attended healthcare facilities >3 times during pregnancy, and their relatively stable, high-income levels may explain the high levels of knowledge observed regarding infant and young child nutrition. Numerous studies have shown strong associations between educational attainment and health outcomes (Clark & Royer, 2013; Spitzer, 2020). In particular, Noncungu et al. (2026) found that maternal health knowledge enabled pregnant women to access, understand and apply health information to support maternal and foetal well-being.

The findings on maternal capabilities indicate both strengths and vulnerabilities among the respondents. A large proportion of women reported high decision-making autonomy, which was positively associated with knowledge of infant and young child nutrition. This finding is consistent with Saaka (2020), who found that higher maternal autonomy was significantly associated with improved child growth outcomes and enhanced dietary intake in Ghana.

However, many respondents reported restrictive gender-

norm attitudes, which can limit women's freedom to implement recommended nutrition practices even when they possess adequate knowledge. Restrictive gender norms manifest in the health system and reflect and reinforce gender inequalities, compromising the health and well-being of patients (Hay et al., 2019).

Another salient finding was the high proportion of women who reported low social support. The significant relationship we observed between social support and attitudes toward infant and young child nutrition suggests that women who receive better support are more likely to develop positive attitudes. This finding highlights the importance of involving family members, especially spouses, in nutrition education interventions. Bedaso et al. (2021) demonstrated that inadequate social support is strongly linked to feelings of despair and psychological distress during pregnancy.

The study also revealed high levels of perceived time stress and depressive symptoms among respondents. These findings may reflect the multiple responsibilities faced by women, particularly those who are self-employed or engaged in income-generating activities while simultaneously managing pregnancy and household activities. Maternal stress and poor mental health can impact caregiving capacity and adherence to recommended nutrition practices during the first 1,000 days of life. Although all respondents perceived themselves as healthy, the high prevalence of depressive symptoms indicates possible hidden psychological burdens that may not be immediately recognised. Roberts et al. (2025) emphasised that pregnant women are particularly vulnerable to maternal stress and associated mental health challenges. Adequate social support from spouses, family members, friends, and the wider community is essential for reducing psychological distress and promoting positive maternal mental health.

The relatively low response rate, resulting from the challenging geographical characteristics of the study area and the limited number of pregnant women available during the data collection period, should be considered when interpreting the findings. This probably biased the sample toward the higher income groups less likely to live in isolated communities. Consequently, the results may not be fully representative of the entire study population. Additionally, the study did not specifically assess pregnant women with existing health conditions, whose inclusion might have provided a more representative understanding of the relationship between maternal health status, maternal capabilities, and infant nutrition outcomes. Future studies should consider incorporating this population to generate more nuanced insights into factors influencing infant nutrition.

Conclusions

Most of the pregnant women in our sample had high levels of education, income, decision-making autonomy, and perceived themselves as healthy. Nevertheless, they suffered from restrictive gender norms, low social support and high depressive symptoms. They had good knowledge and positive attitudes towards IYCN, with a strong, significant association between knowledge and decision-making autonomy. Attitudes towards IYCN were significantly associated with social support and perceived health status. This study highlights the urgent need for interventions to improve the social support and mental health of pregnant women in the Isuikwuato LGA., Abia State, Nigeria

Author Contributions

Conceptualization was done by IO, Methodology were conducted by IO, EAU, AJO and OU, Validation was done by IO, EAU, AJO and OU. IO wrote the formal analysis while investigation was conducted by IO, EAU, AJO and OU. Resources and data collection were carried out by IO, EAU, AJO and OU. Writing – Original was written by IO, EAU and OU, review and editing was conducted by IO and EAU. IO, EAU, AJO and OU supervised the project. Project administration was conducted by IO and OU with visualization by IO and EAU. All authors then critically reviewed the following versions. All authors have read and approved the final version of the paper and its submission and have given consent for publication

Declaration of Generative AI and AI-Assisted Technologies in Scientific Writing

Nothing to disclose.

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Data Availability Statement

Data will be provided based on request.

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Conflict of Interest

The authors declare that they have no conflicts of interest.

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APPENDIX

Maternal Capabilities Construct

No.	Question	Response	Code
DECISION MAKING AUTONOMY			
L01	Are you married?	|__|__|	A = Yes B = No
L02	Do you live with husband/partner?	|__|__|	A = Yes B = No
L03.	How often do you talk with your husband about the following subjects:		
L03.1	Your work activities?	|__|__|	A = Often/All of the time B = Sometimes/Occasionally C = Never/Not at all D = Not Applicable NA
L03.2	What happens at home?	|__|__|	
L03.3	Your expenditures?	|__|__|	
L03.4	Your children's health?	|__|__|	
L03.5	Your own health including current pregnancy?	|__|__|	
L03.6	Child feeding or plans for feeding the new baby?	|__|__|	
L05	Can you decide on your own to buy the following things?:		
L05.1	Small amounts of food like vegetables, fruits, and beans?	|__|__|	A = Yes B = No C = Don't buy
L05.2	Bigger amounts of food like a bag of maize?	|__|__|	
L05.3	Medicine for yourself?	|__|__|	
L05.4	Medicine for the children?	|__|__|	
GENDER NORM ATTITUDE			
L04	Now, I would like to have your opinion on some ideas regarding how people live within a household. Please tell me if you agree or not with each of the following declarations.		
L04.1	In a household, the man should make the important decisions.	|__|__|	A = Strongly agree B = Agree C = Neutral D = Disagree E = Strongly disagree
L04.2	If the woman works outside home, her husband or partner should help her with the daily housework.	|__|__|	
L04.3	A husband should not let his wife work (employment) outside home, even if she would like to do it.	|__|__|	
L04.4	A woman has the right to express her opinion if she does not agree with what the husband or partner says.	|__|__|	
L04.5	A woman must accept that her husband or partner beats her, in order to keep the family together.	|__|__|	
L04.6	It is better to send a son to school than a daughter.	|__|__|	
MOTHER'S SOCIAL SUPPORT			
L08	Apart from those who live with you, how often do you see or talk to somebody from your own family?	|__|__|	A = Several times per week B = About once per week C = One to two times per month D = Several times per month E = Less than once per month but more than once a year F = About once per year or less G = Never
L09	Do you participate in any women's group in your community?	|__|__|	A = Yes B = No
L10	About how many close friends and close relatives do you have?	|__|__|	Number of persons
	Sometimes people look to others for companionship, assistance, and other types of support. Please tell me how often the following kinds of support are available to you, if you need it.		
L11	If you were sick and needed someone to take you to the clinic, how often would you have difficulty finding someone to go with you?	|__|__|	A = Always/All of the time B = Most of the time C = Sometimes
L11.1	How often do you feel like you're not always included by your close friends?	|__|__|	
L11.2	How often is there someone who understands your problems?	|__|__|	
L11.3	If you needed a place to stay for a week because of an emergency, how often could you easily find someone who would put you up?	|__|__|	
L11.4	How often is there someone you can turn to for advice about handling problems with your family?	|__|__|	
L11.5	How often is there someone, at least one person, who shows you love and affection?	|__|__|	
L11.6	How often is there at least one person who prevents you from interacting with others?	|__|__|	
L11.7	How often is there at least one person you know whose advice you really trust?	|__|__|	
L11.8	If you were sick, how often could you easily find someone to help with your daily chores?	|__|__|	

No.	Question	Response	Code
L11.9	How often is there someone who appreciates you for the things you do for your family?	|__|__|	D = A little of the time E = Never/None of the time
L11.10	If a family crisis arose, how often would you have difficulty in finding someone who could give you good advice?	|__|__|	
L11.11	When you feel lonely, how often are there (several) people you can talk to?	|__|__|	
L11.12	If you needed money in an emergency, such as the need to take a sick person to the hospital, how often could you count on someone's help?	|__|__|	
L11.13	How often is there someone you can count on to listen to you when you need to talk?	|__|__|	
L11.14	How often is there someone who gives you information to help you understand a situation?	|__|__|	
L11.15	How often do you meet or talk with family or friends?	|__|__|	
MOTHER'S PHYSICAL HEALTH			
M01	In general, how would you say your health is?	|__|__|	A = Good/Excellent B = Fair/Okay/Neutral C = Poor/Bad
M02	Compared to one year ago, how would you say your health in general is now?	|__|__|	A = Better now than a year ago B = About the same C = Worse now than a year ago
M03	How much does health limit you in accomplishing any vigorous activities, such as running or lifting heavy materials?	|__|__|	A = Yes, limited a lot B=Yes, limited a little C= No/Not limited at all
M04	During the past 4 weeks, how often did you have a lot of energy?	|__|__|	A = Often/All of the time B= Sometimes/A little of the time C = Never/None of the time
M05	During the past 4 weeks, have you cut down on the amount of time you spent on work or other activities because you were not feeling well?	|__|__|	A = Yes B = No
M06	During the past 4 weeks, have you accomplished less than you would like because you were not feeling well?	|__|__|	A= Yes B = No
M07	During the past 4 weeks, has your health interfered with your normal social activities with family, neighbors, or others?	|__|__|	A = Yes B = No
M08	During the past 4 weeks, how much bodily pain have you had?	|__|__|	A = Severe/A lot B = Moderate/Some/A little C = None
M09	During the past 4 weeks, how often did you feel tired?	|__|__|	A = Often/All of the time B = Sometimes/A little of the time C = Never/None of the time
M10	Here are some statements about your health. Please tell me how you feel about the statements.		
M10.1	I seem to get sick more often than other people.	|__|__|	A = Strongly agree B = Agree C = Neutral D = Disagree E = Strongly disagree
M10.2	I am as healthy as or even healthier than anybody I know.	|__|__|	
SELF EFFICACY			
N00a	Have you ever given birth to a child?	|__|__|	A = Yes B = No If No **SKIP to N01.9**
N00b	Is that child still alive?	|__|__|	A = Yes B= No If No **SKIP to N01.9**
N01	Here are some statements about how you might feel about being a mother. Please tell me how you feel about the statement.		
N01.1	I feel sure of myself as a mother.	|__|__|	
N01.2	I know I am doing a good job as a mother.	|__|__|	
N01.3	I feel inadequate /incapable in my job as a mother.	|__|__|	

No.	Question	Response	Code
N01.4	I know things about being a mother that would be helpful to other mothers.	|__|__|	A = Strongly agree B = Agree C = Neutral D= Disagree E= Strongly disagree
N01.5	My mother was better prepared to be a good mother than I am.	|__|__|	
N01.6	I am confident that a new mother could learn from me what she needs to know about being a good mother	|__|__|	
N01.7	I meet my own personal expectation for skills in caring for my child	|__|__|	
N01.8	I know how to do all that is required to be a good mother to my child. After responding to this question, skip to n02.	|__|__|	
N01.9	I would like to ask you about how you feel about (becoming) a mother. Here are some statements about how you might feel about being a mother. Please tell me how you feel about the statement.		
N01.10	As I think about becoming a mother, I feel sure of myself?	|__|__|	A = Strongly agree B = Agree C = Neutral D = Disagree E= Strongly disagree
N01.11	I know I will do a good job being a mother.	|__|__|	
N01.12	As I think about becoming a mother, I feel inadequate or incapable for the job.	|__|__|	
N01.13	I know things about being a mother that would be helpful to other mothers.	|__|__|	
N01.14	My mother was better prepared to be a good mother than I am.	|__|__|	
N01.15	I am confident that a new mother could learn from me what she needs to know about being a good mother.	|__|__|	
N01.16	I meet my own expectations for skills I will need to care for my new baby.	|__|__|	
N01.17	I know how to do all that is required to be a good mother for my new baby.	|__|__|	
TIME STRESS			
N03	Now, I would like to ask you about how you feel about your work and chores. Here are some statements. Please tell me how you feel about the statement.		
N03.1	I often get to the end of the day and feel unhappy because I could not finish my work.	|__|__|	A = Strongly agree B = Agree C = Neutral D= Disagree E = Strongly disagree
N03.2	I feel that my work is just too much for me to do.	|__|__|	
N03.3	My work often gives me stress.	|__|__|	
N03.4	I worry about all the things that I have to get done in a day.	|__|__|	
N03.5	I have had to cut down on sleep because I had so much work to do.	|__|__|	
N03.6	I am satisfied with the amount of time that I have available in a day to take good care of my children.	|__|__|	
N04	If you had more time in a day to take care of your children, what additional things would you do? Please tell me all your ideas.	|__|__| |__|__| |__|__|	A = Play/sing with them B = Take more time feeding them C = Prepare different foods for them D = Wash clothes more often E = Wash/groom hair more frequently F = Teach them things G = I nearly always have enough time H = Don't change anything I = Other J = Don't know
N05	In what ways do you change the way you take care of your children when you have a very busy day and struggle to get all the work done? Please tell me all your ideas	|__|__| |__|__| |__|__|	A= Feed leftover/cold food B = Feed less frequently C = Let a sibling take care of them D = Let them take care of themselves E = Be cross with them/get impatient F = Don't take time to play with them G= I don't feel busy H = Don't change anything I = Other J = Don't know
MOTHER'S MENTAL HEALTH (EDINBURGH POSTNATAL DEPRESSION SCALE)			
T1	I would like to know how you feel, not only how you feel today but how you have been feeling during the last one week (7 days). For this, I will ask you TEN questions. Each question has FOUR possible answers. Please tell me the one that matches with your current situation.		
T2	Have you been able to laugh and see the funny side of things?	|__|__|	A = As much as you always could B = Not quite so much now C = Definitely not so much D = Not at all
T3	Have you looked forward with enjoyment to things?	|__|__|	A = As much as you used to B = Rather less than you used to C = Definitely less than you used to

No.	Question	Response	Code
			D = Hardly at all
T4	Have you blamed yourself unnecessarily when things went wrong?	|__|__|	A= Yes, most of the time B= Yes, some of the time C = Not very often D = No, never
T5	Have you been anxious or worried for no good reason?	|__|__|	A = No, not at all B = Hardly ever C = Yes, sometimes D = Yes, very often
T6	Have you felt scared or panic for no very good reason?	|__|__|	A= Yes, quite a lot B = Sometimes C = No, not much D = No, not at all
T7	Have things been getting on top of you?	|__|__|	A = Yes, most of the time I haven't been able to cope at all B = Yes, sometimes I haven't been coping as well as usual C= No, most of the time I have coped quite well D = No, I have been coping as well as ever
T8	Have you been so unhappy that you have had difficulty sleeping?	|__|__|	A = Yes, most of the time B = Yes, sometimes C= Not very often D= No, not at all
T9	Have you felt sad or miserable?	|__|__|	A = Yes, most of the time B = Yes, quite often C = Not very often D = No, not at all
T10	Have you been so unhappy that you have been crying?	|__|__|	A = Yes, most of the time B = Yes, quite often C= Only occasionally D = No, never
T11	Has the thought of harming yourself occurred to you?	|__|__|	A = Yes, quite often B = Sometimes C = Hardly ever D = Never