

**KNOWLEDGE, ATTITUDE, AND PRACTICES OF BREASTFEEDING AMONG
LACTATING MOTHERS IN MATERNAL CLINICS OF SOUTH THANJAVUR CITY****A. Saliha Thasneem¹, Ms. Aruna²**

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ABSTRACT

Breastfeeding is a fundamental component of maternal and child health, with maternal nutrition, knowledge, and lifestyle playing a critical role in determining optimal breastfeeding outcomes. The present study aimed to assess the knowledge, attitude, and practices (KAP) of breastfeeding mothers attending maternal clinics in South Tanjore city, along with their socio-demographic profile, dietary patterns, and lifestyle behaviors. A cross-sectional study was conducted among 148 lactating mothers selected through purposive sampling from private maternal and pediatric clinics. Data were collected using a structured and validated questionnaire covering socio-demographic characteristics, anthropometric measurements, obstetric history, dietary intake (via food frequency questionnaire), lifestyle practices, and breastfeeding-related knowledge, attitude, and practices. Statistical analysis was performed using SPSS software, employing descriptive and inferential methods. The findings revealed that the majority of participants belonged to middle-income families (67.6%) and nuclear families (58.8%), with a high proportion being homemakers (85.1%). More than half of the mothers were overweight (55.4%), while the prevalence of anemia (7.4%), diabetes (3.4%), and thyroid disorders (5.4%) was relatively low. Lifestyle assessment indicated inadequate health behaviors, with 88.5% of mothers reporting ≤ 6 hours of sleep and only 4.1% engaging in regular physical activity. Dietary patterns were predominantly cereal-based (91.2%), with insufficient intake of protein-rich and micronutrient-dense foods, and only 27% reported using galactagogues. Despite generally positive attitudes toward breastfeeding and maternal nutrition, knowledge and practices were inadequate. A significant proportion of mothers lacked awareness regarding early initiation, exclusive breastfeeding duration, and the importance of colostrum. Notably, only 9.5% practiced exclusive breastfeeding. A statistically significant association ($p < 0.001$) was observed between maternal education and knowledge scores, while family support showed a positive correlation with overall KAP scores.

Key Words: Breastfeeding, Lactating mothers, Nutritional knowledge, Dietary practices, Lifestyle factors, Exclusive breastfeeding, Maternal health

1. INTRODUCTION

Breastfeeding is universally recognized as the optimal method of infant feeding, providing complete nutrition and essential immunological protection during the early stages of life. It plays a crucial role in promoting infant growth, cognitive development, and long-term health, while also offering significant physiological [1] and psychological benefits to mothers. The World Health Organization (WHO) recommends early initiation of breastfeeding within one hour of birth, exclusive breastfeeding for the first six months, and continued breastfeeding up to two years or beyond along with appropriate complementary feeding. Despite these global recommendations, the practice of exclusive breastfeeding remains suboptimal in many regions, particularly in developing countries. The success of breastfeeding is influenced by multiple interrelated factors, including maternal knowledge, attitudes, socio-demographic characteristics,[5] cultural beliefs, and lifestyle practices. Adequate knowledge regarding

breastfeeding techniques, duration, and benefits is essential for mothers to adopt appropriate feeding practices. Similarly, positive attitudes and confidence toward breastfeeding are key determinants of initiation and continuation. However, misconceptions, lack of awareness, and socio-cultural barriers often hinder optimal breastfeeding practices, leading to early cessation or inappropriate feeding behaviors. Maternal nutrition during the lactation period is another critical determinant of both maternal health and infant outcomes. A balanced diet ensures adequate milk production and nutrient composition, while poor dietary practices may compromise the quality and quantity of breast milk. In addition, lifestyle factors such as physical activity, sleep patterns, and overall health status further influence lactation performance and maternal well-being. In many low- and middle-income settings, challenges such as limited access to nutrition education, inadequate healthcare support, and socio-economic constraints contribute to gaps in knowledge and practices among lactating mothers.[2]

Previous studies have highlighted that even when mothers exhibit positive attitudes toward breastfeeding, there often exists a discrepancy between knowledge and actual practices. Factors such as maternal education, family support, and access to counseling services significantly affect breastfeeding behaviors. Understanding these determinants is essential for designing effective interventions aimed at improving maternal and child health outcomes.

1.1 OBJECTIVES

General Objective

- To assess the knowledge, attitude, and practices (KAP) related to breastfeeding among lactating mothers attending maternal clinics in South Tanjore city.[6]

Specific Objectives

- To evaluate the socio-demographic and health profile of lactating mothers. [2]
- To assess the anthropometric status of the participants. [7]
- To examine the dietary patterns and food frequency of lactating mothers. [6]
- To assess the knowledge, attitude, and practices regarding breastfeeding and maternal nutrition.
- To analyze the association between maternal education level and breastfeeding knowledge.[3]
- To determine the relationship between family support and overall KAP scores.
- To evaluate lifestyle factors such as physical activity, sleep, and fluid intake among lactating mothers.

1.2 RELATED WORKS

1.2.1 Importance of Breastfeeding

Breastfeeding is widely acknowledged as the most effective and natural method of infant feeding, providing optimal nutrition and protection during early life. Human breast milk is uniquely composed of macronutrients, micronutrients, and bioactive components that support infant growth, development, and immunity. It exists in three stages—colostrum, transitional milk, and mature milk—each tailored to meet the evolving needs of the infant. Colostrum, produced immediately after birth, is rich in proteins, immunoglobulins, and protective factors that enhance neonatal immunity and reduce the risk of infections.[8]

In addition to its nutritional value, breast milk plays a crucial role in immunological protection. It contains antibodies, cytokines, and beneficial microorganisms that help in the development of the infant's immune system and reduce the incidence of gastrointestinal and respiratory infections. Studies have also demonstrated that breastfeeding contributes to improved cognitive development, with certain components such as human milk oligosaccharides supporting brain function and neural development.

Breastfeeding offers substantial benefits to mothers as well. It aids in postpartum recovery, promotes hormonal balance, and reduces the risk of chronic conditions such as breast and ovarian cancers, type 2 diabetes, and cardiovascular diseases. Despite these well-established advantages, global breastfeeding practices remain suboptimal, highlighting the need for improved awareness and support systems.[9]

1.2.2 Knowledge, Attitude, and Practices (KAP) of Breastfeeding

Maternal knowledge is a critical determinant of successful breastfeeding practices. Awareness regarding early initiation, exclusive breastfeeding for the first six months, and the importance of colostrum is essential for optimal infant feeding. Approach indicates that mothers with adequate knowledge are more likely to initiate[7] breastfeeding early and maintain exclusive breastfeeding for the recommended duration. Several studies have reported significant gaps in maternal knowledge, particularly in developing countries. Misconceptions about breast milk sufficiency, lack of awareness about the benefits of colostrum, and incorrect understanding of complementary feeding practices contribute to poor breastfeeding outcomes. Socio-economic factors, educational status, and access to healthcare information play a significant role in shaping maternal knowledge levels.

1.2.3 Attitude toward Breastfeeding

Maternal attitude reflects beliefs, perceptions, and emotional readiness toward breastfeeding. Positive attitudes are strongly associated with higher rates of breastfeeding initiation and continuation. Factors such as cultural norms, family influence, and prior experiences significantly shape maternal attitudes. Support from family members, especially partners and elders, plays a crucial role in fostering positive attitudes and confidence in breastfeeding. Conversely, social stigma, lack of privacy, and workplace constraints can negatively influence maternal attitudes, leading to early discontinuation of breastfeeding. Studies have emphasized that mothers with higher self-efficacy and strong social support systems are more likely to adhere to recommended breastfeeding practices.[11]

1.2.4 Breastfeeding Practices

Breastfeeding practices include early initiation, exclusivity, frequency, and duration of feeding. Despite global recommendations, exclusive breastfeeding rates remain below target levels in many regions. Early introduction of complementary foods, use of prelacteal feeds, and reliance on formula feeding are common practices influenced by cultural beliefs and lack of knowledge. Approach highlights that maternal education,[10] socio-economic status, and healthcare access significantly influence breastfeeding practices. Working mothers often face challenges in maintaining exclusive breastfeeding due to time constraints, lack of workplace support, and inadequate facilities for milk expression and storage. These factors contribute to the gap between knowledge and actual practices observed in many populations.

1.2.5 Maternal Nutrition, Dietary Patterns, and Lifestyle Factors

Maternal nutrition during lactation is essential for ensuring adequate breast milk production and maintaining maternal health. A balanced diet rich in proteins, vitamins, and minerals is necessary to support both mother and infant. However, studies have shown that dietary patterns among lactating mothers are often inadequate, with excessive reliance on staple foods and insufficient intake of nutrient-dense foods.[12]

Lifestyle factors such as physical activity, sleep patterns, and hydration also influence lactation outcomes. Poor sleep quality, low physical activity levels, and inadequate fluid intake can negatively

impact maternal health and breastfeeding performance. In many cases, lack of awareness and limited access to nutrition education contribute to unhealthy lifestyle practices among lactating mothers.

1.2.6 Psychosocial Factors and Support Systems

Breastfeeding is influenced not only by biological and nutritional factors but also by psychosocial determinants. Maternal stress, anxiety, and postpartum depression can affect breastfeeding initiation and continuation. Emotional well-being[13] plays a critical role in shaping maternal confidence and ability to sustain breastfeeding.

Family support, particularly from partners and extended family members, has been identified as a key factor in promoting successful breastfeeding. Cultural beliefs and traditional practices also influence feeding behaviors, sometimes acting as barriers to optimal breastfeeding. Additionally, workplace policies, maternity leave, and access to breastfeeding-friendly environments significantly impact breastfeeding practices among working mothers.

2. STATISTICAL ANALYSIS

All collected data were systematically coded and entered into Microsoft Excel and subsequently analyzed using the Statistical Package for the Social Sciences (SPSS) version 26.0. Both descriptive and inferential statistical methods were employed to analyze the data and interpret the findings.[16]

2.1. Descriptive Statistics

Descriptive statistics were used to summarize the socio-demographic characteristics, anthropometric measurements, health status, dietary patterns, lifestyle practices, and breastfeeding-related knowledge, attitude, and practices (KAP) of the participants. The results were expressed in terms of frequency, percentage, mean, and standard deviation.[17]

The analysis revealed that the majority of participants were aged between 20–30 years (92.6%), with most being graduates (57.4%) and homemakers (85.1%). A large proportion belonged to middle-income families (67.6%) and nuclear family structures (58.8%).

Anthropometric assessment indicated that 55.4% of the participants were overweight, 36.5% had normal BMI, while only a small proportion were obese (4.7%) or underweight (3.4%). Health profile analysis showed a low prevalence of anemia (7.4%), [19]diabetes (3.4%), and thyroid disorders (5.4%).

Table.1. presents the socio-demographic and health profile of the study participants. The majority of mothers were aged between 20–30 years and were predominantly graduates, indicating a relatively young and educated population. Most participants were homemakers and belonged to middle-income nuclear families. Anthropometric assessment showed that more than half of the mothers were overweight, while a smaller proportion had normal BMI. The prevalence of health conditions such as anemia, diabetes, and thyroid disorders was relatively low. Overall, the table reflects a moderately healthy population with specific nutritional concerns, particularly related to weight status.

Variable	Category	Frequency (n)	Percentage (%)
Age Group	≤20 years	3	2.0
	20–25 years	66	44.6
	26–30 years	71	48.0

Variable	Category	Frequency (n)	Percentage (%)
	31–35 years	7	4.7
	36–40 years	1	0.7
Education Level	Illiterate	2	1.4
	Primary	2	1.4
	Secondary	7	4.7
	Higher Secondary	33	22.3
	Graduate	85	57.4
	Postgraduate	19	12.8
	Occupation	Homemaker	126
Private employee		16	10.8
Government employee		3	2.0
Agriculture		1	0.7
Freelance		1	0.7
Family Income (₹)		<5000	1
	5000–10000	2	1.4
	10000–20000	33	22.3
	20000–50000	100	67.6
	>50000	12	8.1
Family Type	Nuclear	87	58.8
	Joint	58	39.2
	Extended	3	2.0
BMI	Underweight	5	3.4
	Normal	54	36.5
	Overweight	82	55.4
	Obese	7	4.7
Health Conditions	Anemia	11	7.4
	Diabetes	5	3.4

Variable	Category	Frequency (n)	Percentage (%)
	Thyroid disorder	8	5.4
	Hypertension	0	0

Table.1. Descriptive Statistics of Study Participants (n = 148)

2.2 Analysis of Knowledge, Attitude, and Practices (KAP)

The knowledge component revealed substantial gaps among participants. A majority of mothers lacked awareness regarding key breastfeeding recommendations, including early initiation, exclusive breastfeeding duration, and the importance of colostrum. More than 70% of respondents were unaware of correct breastfeeding initiation time, and over 80% did not know the recommended duration of exclusive breastfeeding.

Despite these knowledge gaps, attitude scores indicated generally positive perceptions toward breastfeeding. However, this positive attitude did not consistently translate into appropriate practices. Only 9.5% of mothers[18] reported practicing exclusive breastfeeding, highlighting a significant gap between knowledge and practice.

2.3 Dietary and Lifestyle Analysis

Dietary assessment using the Food Frequency Questionnaire showed that the majority of mothers (91.2%) consumed cereals regularly, whereas the intake of protein-rich foods such as pulses, dairy, and animal products was comparatively low. Only 27% of participants reported consuming galactagogues to enhance milk production[20].

Lifestyle analysis indicated suboptimal health behaviors, with 88.5% of mothers reporting sleep duration of ≤ 6 hours per day, and only 4.1% engaging in regular physical activity. These findings suggest inadequate lifestyle practices that may affect maternal health and lactation outcomes.

Table.2. illustrates the dietary patterns and lifestyle behaviors of lactating mothers in the study. The findings indicate that a majority of participants (91.2%) consumed cereals regularly, reflecting a carbohydrate-dominant diet. However,[19] intake of protein-rich foods was inadequate in 73% of mothers, suggesting poor dietary diversity. Only 27% of participants reported using galactagogues to support milk production. Lifestyle assessment revealed that very few mothers (4.1%) engaged in regular physical activity, while most had insufficient sleep (≤ 6 hours). Additionally, a considerable proportion of mothers had inadequate fluid intake, which may negatively affect lactation and overall health.

Variable	Category	Frequency (n)	Percentage (%)
Cereal Consumption	Regular intake	135	91.2
	Irregular intake	13	8.8
Protein-rich Foods Intake (pulses, dairy, meat)	Adequate	40	27.0
	Inadequate	108	73.0
Galactagogue Use	Yes	40	27.0
	No	108	73.0

Variable	Category	Frequency (n)	Percentage (%)
Physical Activity	Regular exercise	6	4.1
	No exercise	142	95.9
Sleep Duration	≤6 hours/day	131	88.5
	>6 hours/day	17	11.5
Fluid Intake	Adequate	60	40.5
	Inadequate	88	59.5

Table.2. Dietary and Lifestyle Practices

2.4 Inferential Statistics

Inferential statistical tests were applied to examine the associations between selected variables:

- **Chi-square test** was used to assess the association between categorical variables such as education level and breastfeeding knowledge.
- A **statistically significant association ($p < 0.001$)** was observed between maternal education and knowledge scores, indicating that higher education levels were associated with better awareness of breastfeeding practices.
- **Correlation analysis** revealed a positive relationship between family support and overall KAP scores, suggesting that mothers with stronger family support systems demonstrated better knowledge, attitudes, [21]and practices.

2.5 Interpretation of Findings

The statistical findings highlight that although participants demonstrated favorable attitudes toward breastfeeding, significant deficiencies exist in knowledge and actual practices. Socio-demographic factors, particularly education and family support, were found to play a crucial role in influencing breastfeeding behaviors.

The presence of poor dietary diversity and inadequate lifestyle practices further emphasizes the need for targeted interventions. The statistical evidence supports the conclusion that structured nutrition education and breastfeeding counseling programs are essential to bridge the gap between knowledge and practice and to improve maternal and infant health outcomes[22].

3. METHODOLOGY

3.1 Study Design and Setting

This study employed a **cross-sectional descriptive Approach design**, which is appropriate for assessing the knowledge, attitude, and practices (KAP) of a population at a single point in time. The design allows for the identification of existing patterns, gaps, and associations between variables such as socio-demographic characteristics, dietary behaviors, lifestyle practices, and breastfeeding-related outcomes without manipulating any study factors. The **southern region of Thanjavur city**, Tamil Nadu, India. This region was selected due to its diverse population, comprising urban and semi-urban communities with varying socio-economic,[23] educational, and cultural backgrounds. Such diversity provides a representative setting to evaluate breastfeeding practices and maternal health behaviors. Data

collection was carried out in **selected private maternal and pediatric clinics**, which were purposively chosen based on accessibility, patient flow, and willingness to permit the study. These healthcare settings served as ideal points for recruiting lactating mothers, as they regularly attend clinics for postnatal care, infant check-ups, and immunization services over a defined period (June to October 2025), during which eligible participants visiting the clinics were approached consecutively until the required sample size ($n = 148$) was achieved. The clinic-based setting ensured reliable data collection through direct interaction and allowed for better clarification of responses during interviews.

Figure.1. Illustrates the overall methodology followed in the study using a step-by-step flowchart format. It begins with the selection of the study area in South Thanjavur city, followed by the identification of suitable healthcare settings such as maternal and pediatric clinics. The process then moves to participant selection, where lactating mothers were recruited based on defined criteria. Data collection was carried out using questionnaires, anthropometric measurements, and dietary assessment tools. A nutritional intervention in the form of counseling and pamphlets was also provided to participants. Finally, the collected data were analyzed using statistical methods, and the results were interpreted to draw meaningful conclusions[20].

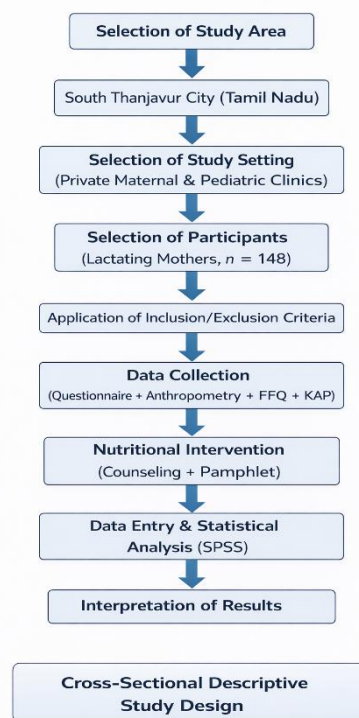


Figure.1. Flowchart of Study Design and Data Collection Process

3.2 Data Collection

Data collection was carried out over a period of five months (June to October 2025) among lactating mothers attending selected private maternal and pediatric clinics in South Thanjavur city. Prior permission was obtained from the respective clinic authorities before initiating the study. Participants were approached during their routine visits for postnatal care and infant health services. Eligible participants were informed about the purpose and objectives of the study, and written informed consent was obtained before data collection. Data were collected through face-to-face interviews using a semi-structured, pre-tested, and validated questionnaire. The interviews were conducted in the local language (Tamil) to ensure better understanding and accurate responses. Each interview session lasted approximately 20–30 minutes. The questionnaire consisted of multiple sections, including socio-

demographic characteristics (age, education, occupation, income, and family type), obstetric and lactation history, and health status. Anthropometric measurements such as height and weight were recorded using standard procedures, and Body Mass Index (BMI) was calculated accordingly. Information on health conditions[18] such as anemia, diabetes, and thyroid disorders was also documented. Dietary assessment was performed using a Food Frequency Questionnaire (FFQ) to evaluate the frequency and pattern of food consumption, including cereals, pulses, dairy products, fruits, and vegetables. Lifestyle factors such as physical activity, sleep duration, and fluid intake were also assessed. The knowledge, attitude, and practices (KAP) related to breastfeeding were evaluated using structured questions. Knowledge was assessed based on correct responses, attitude was measured using a Likert scale, and practices were assessed based on actual breastfeeding behaviors such as initiation, exclusivity, and feeding frequency. To ensure data quality, the questionnaire was pre-tested among a small group of participants prior to the study, and necessary modifications were made. All collected data were checked for completeness and consistency on the same day of collection[8].

Table.3. Explains the basic socio-demographic characteristics of the study participants. It includes information such as age, education level, occupation, family income, and family type, which help in understanding the background of lactating mothers. These variables are important as they influence health awareness, nutritional[24] practices, and breastfeeding behavior. The table provides a clear profile of participants, showing variations in socio-economic and educational status. It also helps in identifying patterns and associations between demographic factors and breastfeeding knowledge and practices. Overall, this section forms the foundation for analyzing how background characteristics impact maternal and child health outcomes.

Participant ID	Age	Education	Occupation	Family Income (₹)	Family Type
P001	24	Graduate	Homemaker	25000	Nuclear
P002	29	HSC	Private Employee	18000	Joint
P003	26	Graduate	Homemaker	30000	Nuclear
P004	31	Postgraduate	Govt Employee	52000	Joint
P005	23	Graduate	Homemaker	22000	Nuclear

Table.3. Socio-Demographic Details

Table.3. Illustrate the physical and health status of the study participants using anthropometric measurements. It includes data on height, weight, and Body Mass Index (BMI), which are used to classify mothers into categories such as underweight, normal, overweight, or obese. This helps in assessing the nutritional status of lactating mothers. The table also records the presence of health conditions such as anemia, diabetes[25], and thyroid disorders. These factors are important as they can influence breast milk production and overall maternal well-being. Overall, this section helps in understanding the relationship between maternal health and breastfeeding outcomes.

Participant ID	Height (cm)	Weight (kg)	BMI	BMI Category	Health Condition
P001	158	64	25.6	Overweight	None

Participant ID	Height (cm)	Weight (kg)	BMI	BMI Category	Health Condition
P002	162	58	22.1	Normal	Anemia
P003	155	68	28.3	Overweight	None
P004	160	72	28.1	Overweight	Thyroid
P005	150	50	22.2	Normal	None

Table. 4. Anthropometric and Health Status

Table.5. presents the assessment of breastfeeding-related knowledge, attitude, and practices among the study participants. The table shows individual scores for knowledge (out of 10), attitude (out of 20), and practice (out of 10), indicating the level of awareness, perception, and actual behavior of each mother. Higher scores [14]reflect better understanding, more positive attitudes, and appropriate breastfeeding practices. The table also includes information on whether the mother practices exclusive breastfeeding. It helps identify gaps between knowledge and actual practices, highlighting that even mothers with good knowledge and attitude may not always follow recommended breastfeeding practices. This section is important for evaluating overall maternal behavior and planning targeted interventions.

Participant ID	Knowledge Score (10)	Attitude Score (20)	Practice Score (10)	Exclusive BF
P001	4	15	5	No
P002	7	18	7	Yes
P003	3	14	4	No
P004	8	19	8	Yes
P005	5	16	5	No

Table.5. KAP (Knowledge, Attitude, Practice)

4. RESULT AND DISCUSSION

4.1 Discussion

The findings of the present study highlight important gaps in breastfeeding knowledge and practices among lactating mothers, despite relatively favorable socio-demographic conditions. The majority of participants were young and educated; however, this did not translate into adequate knowledge or appropriate breastfeeding practices. This suggests that formal education alone may not be sufficient to ensure awareness of optimal [13] breastfeeding guidelines. The high prevalence of overweight among participants indicates a potential imbalance in dietary intake and lifestyle behaviors. The dietary pattern observed in this study, characterized by high cereal consumption and low protein intake, reflects poor dietary diversity. Such nutritional inadequacies may affect maternal health and potentially influence the quality of breast milk. Although mothers demonstrated positive attitudes toward breastfeeding, there

was a clear gap between attitude and actual practices. The low rate of exclusive breastfeeding (9.5%) is particularly concerning and may be attributed to lack of knowledge, cultural beliefs, or insufficient support systems. Similar discrepancies between knowledge and practice have been reported in other studies, emphasizing the complexity of behavioral change. Life style factors such as inadequate sleep and low physical activity further [15] indicate poor health practices among lactating mothers. These factors may indirectly affect lactation performance and maternal well-being. The significant association between maternal education and knowledge underscores the importance of educational interventions, while the positive correlation with family support highlights the role of social environment in shaping maternal behaviour.[3]

4.2 Result

The present study included 148 lactating mothers attending selected maternal clinics in South Thanjavur city. The socio-demographic analysis revealed that the majority of participants (92.6%) were aged between 20–30 years, and more than half were graduates (57.4%). Most mothers were homemakers (85.1%) and belonged to middle-income families (67.6%), with a predominance of nuclear family structures (58.8%). Anthropometric assessment indicated that a significant proportion of participants were overweight (55.4%), while 36.5% had normal BMI. The prevalence of health conditions such as anemia (7.4%), thyroid[9] disorders (5.4%), and diabetes (3.4%) was relatively low. Dietary assessment showed that cereals were consumed regularly by the majority of mothers (91.2%), indicating a carbohydrate-dominant diet. However, protein-rich food intake was inadequate in 73% of participants. Only 27% of mothers reported the use of galactagogues to enhance milk production. Lifestyle practices were suboptimal, with 88.5% of participants reporting sleep duration of ≤ 6 hours and only 4.1% engaging in regular physical activity. Additionally, more than half of the mothers had inadequate fluid intake. Assessment of knowledge, attitude, and practices (KAP) revealed that although mothers generally exhibited positive attitudes toward breastfeeding, knowledge and practices were insufficient. A large proportion of participants lacked awareness regarding early initiation, exclusive breastfeeding duration, and the importance of colostrum. Notably, only 9.5% of mothers practiced exclusive breastfeeding. Inferential statistical analysis showed a significant association between maternal education and breastfeeding knowledge ($p < 0.001$). Furthermore, a positive correlation was observed between family support and overall KAP scores, indicating the importance of social support in influencing maternal behaviors.[7]

Table.6. illustrate the BMI distribution of lactating mothers. A majority of participants (55.4%) were classified as overweight, followed by 36.5% with normal BMI. Only a small proportion were underweight (3.4%) or obese (4.7%). The findings indicate a higher prevalence of overweight status among mothers, which may reflect imbalanced dietary patterns and limited physical activity.[4]

BMI Category	Percentage (%)
Underweight	3.4
Normal	36.5
Overweight	55.4
Obese	4.7

Table.6. Distribution of Participants by BMI

Fig.2. Represents the distribution of lactating mothers according to their Body Mass Index (BMI) categories. It shows that the majority of participants (55.4%) fall under the overweight category,

indicating a high prevalence of excess body weight among the study group. About 36.5% of mothers have a normal BMI,[6] reflecting a moderate proportion with healthy nutritional status. Only a small percentage are classified as underweight (3.4%) and obese (4.7%). The chart highlights an imbalance in nutritional status, with overweight being the dominant category, which may be associated with dietary habits and low physical activity levels.

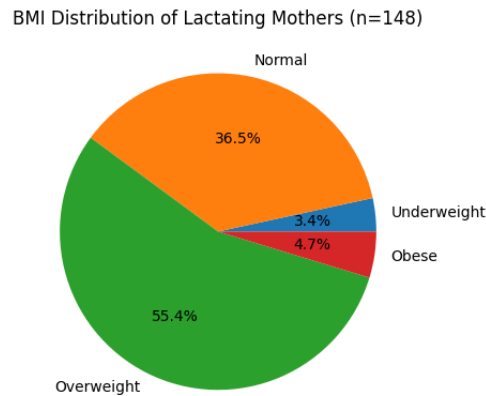


Figure.2. Bmi Distribution of Lactating Mothers

Figure 3. This dietary chart illustrates the adequacy of protein intake among lactating mothers in the study. It shows that a majority of participants (73%) had inadequate consumption of protein-rich foods such as pulses, dairy products, and animal sources. Only 27% of mothers reported adequate protein intake, indicating poor dietary diversity. This imbalance suggests that most mothers rely heavily on carbohydrate-based foods, with limited inclusion of essential nutrients required during lactation. Inadequate protein intake may affect maternal health and the quality of breast milk. Overall, the chart highlights the need for improved nutritional awareness and dietary interventions among lactating mothers. Dietary Chart

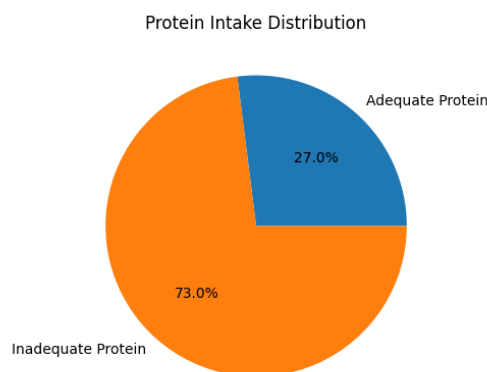


Figure3. Dietary Chart (Protein Intake Distribution)

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