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Original article

KNOWLEDGE, ATTITUDES AND INTENDING PRACTICES TOWARDS EXCLUSIVE BREASTFEEDING AMONG FEMALE UNDERGRADUATES: A CROSS-SECTIONAL CASE STUDY OF MILDMAY INSTITUTE OF HEALTH SCIENCES .

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Abstract

Background:

Breastfeeding is a basic human activity that is vital to a baby"s growth and development. Excellent breastfeeding advice from health professionals can influence a mother"s decision to initiate and maintain breastfeeding positively. The study was aimed at assessing the knowledge, attitudes, and intended practices toward exclusive breastfeeding among female undergraduates at the Mildmay Institute of Health Sciences.

Methodology:

A mixed method cross-sectional study was performed among165full time undergraduate female students at MIHS, using convenience sampling by a structured self-administered questionnaire composed of 16 items to evaluate the students' knowledge, 18 items to assess attitudes towards exclusive breastfeeding, 12 items to assess the intending practices and socio-demographics characteristics questions.

Results:

Overall, the majority (55%) of study participants had inadequate knowledge, 54.5%of the participants had positive attitudes, 44.4% were neutral and 0.6% of the respondents were less positive towards breastfeeding, a statistically significant association (p=0.019) was found between the knowledge score and the score of intending practices.

Conclusions:

The conducted study illustrated inadequate knowledge, positive attitudes, and inappropriate intending practices toward exclusive breastfeeding among full-time female undergraduate students at the Mildmay Institute of health sciences.

Recommendations:

Curricular changes aimed at promoting, supporting, protecting, and correcting the misconceptions about exclusive breastfeeding should be put in place across all levels of female undergraduates in health professions. Smart advocacy about exclusive breastfeeding should be carried out within the institute to improve the level of knowledge about exclusive breastfeeding.

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1. Introduction:

Exclusive breastfeeding (EBF) isacornerstone to child survival,nutrition, and development because it provides essential, irreplaceable nutrition for a child"s growth and development (Hawley NL, 2015). Furthermore, EBF is a known economically effective intervention that can help reduce maternal and childhood morbidity and mortality (Black R E, 2013). .Moreover, breast milk in addition to calories and proteins contains bioactive factors like lactoferrin, cytokines, growth factors, and glutathione peroxides, among others, which have anti-infective, antioxidant, and growth-promoting properties (Horta B L, 2013). Previous studies revealed that infants who were not exclusively breastfed have a 16.5% higher likelihood of suffering from diarrhea and a 10.7% higher likelihood of pneumonia than thosewho were exclusively breastfed (LambertiLM, 2013)Despite the enormous benefits of EBF, the practice remains inadequate globally with the global nutrition report indicating that only 43% of infants were exclusively breastfed by 2015 (GNR, 2015) which is less than the United Nations International Children"s Emergency Funds(UNICEF) set target of increasing the prevalence of EBF to 70% by 2030. Yet the WHO recommends that EBF must commence within the first hour after childbirth and should be continued for the first six months after birth then sustained breastfeeding for two years and more, coupled with safe, nutritionally suitable, age-appropriate, and responsive complementary feeding starting in the sixth month (WHO, 2016).

Nearly two out of every 3 infants are not exclusively breastfed for the recommended 6 months and the rate has not improved in the past two decades(WHO, 2016). Only 37% of the infants are exclusively breastfed in low and middle-income countries (LMIC) and this is a concern considering that EBF is especially important in LMIC where poverty, nutrition, and disease burden, are common because of limited resources and economic, and environmental and culturalinfluences (Still et al., 2016). Despite the high rates of infant mortality and malnutrition, the prevalence of EBF is still as low as 36%in Sub-Saharan Africa (SSA) and 53.5% in East Africa.

Uganda has poor nutritional indices which indicate 12% low birth weight, 29% stunting, 16% underweight, and 5% overweight amongst children less than five years. The rate of EBF in Uganda stands at as low as 42.6% which is lower than the national target of increasing EBF prevalence to 80% in 2025(UBOS & ICF, 2016). If this is not checked, the country will continue to receive an increased rate of malnutrition and infant mortality.

A Cochrane review reported that the educational, emotional, teaching support and encouragement that mothers get from health care personnel is an important factor that is known to positively influence amother"s knowledge, attitude, and practice especially when it comes to exclusive breastfeeding as the ideal method of infant feeding (Oluwatosin & Folake, 2016). It is therefore important that students in health professions acquire adequate knowledge about EBF and develop skills to support and provide appropriate care to pregnant women, and mothers with infants, about EBF.

Currently, there is limited evidence on the knowledge, attitudes, and future intentions of local undergraduate students toward exclusive breastfeeding (Mohamad, et al 2019). Therefore, this study was conducted toassess the same among female undergraduates in MIHS. These students are the future health professionals who can helpto educate and promote EBF among the public.

2. Methodology:

2.1. Research Design:

The study employed a mixed-method cross-sectional study design. The design was used to collect both qualitative and quantitative data that assessed the socio-demographic factors, knowledge, attitude, and intending practices towards

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exclusive breastfeeding among female undergraduates at a point in time and the study can be conducted with ease in a short time. In addition, the study used a quantitative research approach where the collected data was tabulated to derive meaning.

2.2. Study Population:

The study involved full-time undergraduate female students who were pursuing certificate and diploma in nursing and midwifery, certificate and diploma in medical laboratory technology, certificate, and diploma in medical records, diploma in clinical medicine, public health, diploma and degree in human nutrition and clinical dietetics who voluntarily consented and satisfied the selection criteria below;

2.2.1. Inclusion Criteria:

The study included full-time undergraduate females at MIHS who were above eighteen years of age, were available at the time of data collection, willing and able to give written consent.

2.2.2. Exclusion Criteria:

The study did not involve modular female undergraduates, those who refused to consent voluntarily, those who were absent at the time of data collection as well as those that were under the age of 18 years.

2.3. Sample Size Determination:

The sample size was determined using the table designed by Morgan and Krejcie in 1970 .

According to the quality assurance office at MIHS, there were 290 full-time undergraduate females at the institute by the time this sample size was determined.

According to the Morgan and Krejcie table, a sample of 165 undergraduates out of the total of 290 full-time undergraduate females were enrolled in the study.

2.4. Sampling Technique:

The study utilized a consecutive sampling strategy whereby study participants were consecutively recruited into the study until when the required sample size was obtained.

Bearing in mind the limitation of resources in terms of funds and time available to carry out the study, consecutive sampling was used to achieve the desired sample size fast and inexpensively.

2.5. Data Collection Method:

2.5.1. Questionnaire Survey:

This is a method in which the researcher designs a set of questions related to the study objectives to collect the data required.

It was used to collect data about the sociodemographic factors, knowledge, attitudes, and intended practices of female undergraduates toward exclusive breastfeeding.

Standard questionnaires about infant feeding including the short form of the Australian Breastfeeding Knowledge and Attitude Questionnaire and the Alowa Infant Feeding Attitude Scale were adopted and edited to generate a questionnaire for this study.

2.6. Data Collection Instrument:

2.6.1. Questionnaire Guide:

Self-administered structured questionnaires having mixed questions was used in the study.

Each questionnaire comprised four distinct parts; Part A contained items eliciting the sociodemographic factors of the study participants. Part B contained items assessing the knowledge of the study participants about exclusive breastfeeding. Part C contained items about the attitudes towards exclusive breastfeeding and Part D contained items concerning the intended practices of the study participants towards exclusive breastfeeding.

2.7. Quality Control Method

2.8. Validity and Reliability

Validity is a measure of how well a test measures what it is supposed to measure (McClung, 1978).

To obtain consistency of the research findings, the validity and reliability were ensured by applying the expert judgment technique whereby the questionnaire was submitted to the supervisor"s review and scrutiny to check for its accuracy before it was given to respondents to provide their opinions during the data collection exercise.

2.9. Data Collection Procedure

An oral presentation about the information sheet was given to the eligible study participants.

The researcher with the help of a research assistant clarified whatever the respondents had not understood.

Questionnaires were handed out together with consent forms to the eligible participants and they were filled in approximately 15 minutes.

3. Data Analysis

The data were cleaned, sorted, coded, and entered into the statistical program Statistical Package for Social Sciences version 16 (SPSS) for analysis. The responses were scored as 0 for the wrong answers and 1 for the correct answers. Descriptive statistics were used to generate frequency counts, percentages, and charts to show the socio-demographic factors, knowledge, attitudes, and intended practices of the female undergraduate students. Percentages of the knowledge, attitudes, and practices were interpreted as high or low level of knowledge, positive or less positive attitude, and appropriate or inappropriate practice. Shaphro will test was considered as a numerical means of assessing normality because the sample was less than 2000. It yielded 0.972 which was above 0.05 and thus the sample was normally distributed. Spearman"s rank correlation and a 2 tailed test was carried out to find out any significant relationship between socio-demographic factors, knowledge, attitudes, and intended practices. Qualitative data were analyzed using thematic analysis.

3.1. Measurement Of Variables

In this study, independent variables constituted knowledge factors, attitudes, and intended practice toward exclusive breastfeeding. Exclusive breastfeeding was the dependent variable.

3.1.1. Knowledge

Knowledge was assessed using a total of 16 items. Each item consisted of a question and a correct response and 2 incorrect responses. The responses to each item were scored as 1 for a correct response and 0 for an incorrect response. The total score was calculated as a percentage of the correct responses. A total score greater than or equal to 70% on the knowledge questions

was considered to have a high level of knowledge, a score between 50% and 69% was considered to be average and a score less than

50% were considered as having a low level of knowledge about exclusive breastfeeding.

3.1.2. Attitudes

The attitudes were assessed using a total of 18 items. Each item consisted of a question and a Likert scale for the responses. The response to each item was scored on a scale of 1 to 5 with 5 being the most correct response and 1 being the least correct or incorrect response. The total score was calculated as a percentage of the correct responses. A total score of greater than or equal to 70% in the attitude questions were considered to have a positive attitude while those scoring between 50%-69% were considered to be neutral and those scoring less than 50% were considered to be less positive towards exclusive breastfeeding.

3.2. Intending Practices

The practices were assessed using a total of 12 items and each item consisted of a question, a set of responses, space for a response, or both. The response was scored as 1 for a correct response and 0 for an incorrect responses. The total score was calculated as a percentage of the correct responses. A total score of 100% was classified as appropriate practice and any score <100% was considered inappropriate practice.

Responses to open-ended questions were analyzed using thematic analysis.

3.3. Ethical Considerations

The proposal was reviewed and signed by the supervisor.

Permission for the study to be carried out at MIHS was sought from the academic registrar at Mildmay Institute of Health Sciences.

Written consent was sought from the study participants before questionnaire administration and

the participants were informed of their rights to ask for clarification or to terminate their participation.

Utmost privacy and confidentiality were ensured. The anonymity of the respondents was ensured by not putting names anywhere on the questionnaires and in the study findings. Participants were given an information sheet detailing the benefits and risks associated with participating in the study.

4. Presentation, Interpretation and Analysis of Fi ndings

4.1. Socio-Demographic Factors

Under this section, the researcher was interested in exploring the socio-demographic factors in the form of their age, course of study, marital status, height, and weight. The researcher successfully collected 165 filled questionnaires from the target respondents giving a response rate of 100% and the results are summarized as follows;

Age Bracket

150(90.9%) of the respondents were aged between 18 and 24 years, 14(8.5%) were between 25 to 30 years, and only 1 (0.6%) respondent was aged greater than 30 years.

Course of Study

As indicated in Table 1, the majority 56 (33.9%) of the respondents were nursing students, 36 (21.8%) were midwifery students, 26 (15.8%) were clinical medicine students, 18 (10.9%) were medical laboratory technology students, 9 (5.5%) were nutrition students, 6 (3.6%) were public health students and 14 (8.5%) were medical records students.

Level of Study

With regards to the level of study, the results indicated that the majority of the respondents constituting 112 (67.9%) of the undergraduates were pursuing certificate courses, 51 (30.9%) were pursuing diploma courses well as 2 (1.25%) were pursuing degree courses.

Year of Study

further revealed that the majority of the respondents that took part in the study were in year two 110 (66.7%), year one 50 (30.3%), year three 4 (2.4%), and year four 1 (0.6%).

Marital Status

Results from Table 1 indicated that the majority of the respondents who participated in the study were single 155 (93.9%), who were married 9 (5.5%) and1 (0.6%) respondents were engaged.

Height

The results in Table 3 show that 15(9.09%) of the respondents had heights ranging from 1.3 to 1.45 meters, 135(81.82%) of the respondents" heights ranged from 1.466 to 1.61 meters and 15(9.09%) of the respondents had heights between 1.62 and 1.77 meters. The minimum height was 1.32 meters and the maximum height was 1.75 meters. The respondents had a mean height of 1.5 meters.

WEIGHT

Results in Table 4 reveal that 34(20.61%) of the study participants had weights between 44kg and 49 kg, 59(35.76%) of them had weights between 50kg and 55kg, 41(24.85%) had weights between 56kg and 61kg, 16(9.69%) had weights between 62kg and 67kg, 13(7.88%) had weights between 68kg and 73kg and 2(1.21%) had weights in the range of 74kg and 79 kg.

The maximum weight of the respondents was 75kg well as the minimum weight was 44kg.

The respondents had a mean weight of 55.44kg

BODY MASS INDEX

As indicated in Table 1, 126 (76.4%) of the respondents were of normal weight, 3 (1.8%) were underweight and 36 (21.8%) overweight.

4.2. KNOWLEDGE ABOUT EXCLUSIVE BREASTFEEDING.

The first objective of this study was to assess the level of knowledge about exclusive breastfeeding among female undergraduates at the Mildmay Institute of Health Sciences. The results for this objective are summarized as follows;

A score greater or equal to 70% was considered to be high knowledge, a score (50% - 69%) was average, and a score less than 50% was considered to be low knowledge about EBF.

On the breastfeeding management subscale; results in Table 4 revealed that most of the respon-

Table 1: **Socio-demographic factors of the respondents.**

Socio- demographic factor	**Parameters**	**Frequency (n= 165)**	**Percentage (%)**
Age	18-24 years	150	90.9
	25 – 30 years	14	8.5
	Above 30 years	1	0.6
Course of study	Nursing	56	33.9
	Midwifery	36	21.8
	Nutrition	9	5.5
	Public health	6	3.6
	Clinical medicine	26	15.8
	Medical laboratory technology	18	10.9
	Medical records	14	8.5
Level of study	Certificate	112	67.9
	Diploma	51	30.9
	Degree	2	1.2
Year of study	Year 1	50	30.3
	Year 2	110	66.7
	Year 3	4	2.4

Table 2: **Socio-demographic**

	Year 4	1	0.6
Marital status	Married	9	5.5
	Single	155	93.9
	Engaged	1	0.6
Nutrition status	Underweight	3	1.8
	Normal weight	126	76.4
	Overweight	36	21.8

Height(m)	Frequency (n=165)	Percentage (%)
1.3-1.45	15	9.09
1.46-1.61	135	81.82
1.62-1.77	15	9.09

Table 3: Distribution of respondents according to height

Weight (kg)	Frequency (n=165)_	Percentage (%)
44-49	34	20.61
50-55	59	35.76
56-61	41	24.85
62-67	16	9.69
68-73	13	7.88
74-79	2	1.21

Table 4: Distribution of respondents according to weight

S/ N	Knowledge s tatement	Yes	No	Not sure	Correct re-sponse
Breastfeeding management subscale					
1	Exclusively breastfeeding infants require extra water inhot weather.	77 (46.67%)	63 (38.18%)	25 (15.15%)	No
2	A breastfeeding woman should be advised to wean if she becomes pregnant.	93 (56.36%)	52 (31.52%)	20 (12.12%)	No
3	All women with cracked nipples should express theirmilk and rest the nipples for 24 hours	91 (55.15%)	39 (23.64%)	35 (21.21%)	No
4	Antenatal nipple preparation prevents nipple soreness inthe first week postpartum.	90 (54.55%)	41 (24.85%)	34 (20.60%)	No
5	In most cases an exclusively breastfeeding mother must temporarily wean her baby while she is taking prescription medications	63 (38.18%)	76 (46.06%)	26 (15.76%)	No
6	Only feeding from one breast at each feed is a management option for a woman with an oversupply of breast milk.	56 (33.94%)	86 (52.12%)	23 (13.94%)	Yes

Table 5: Distribution of respondents basing on knowledge about exclusive breast feeding.

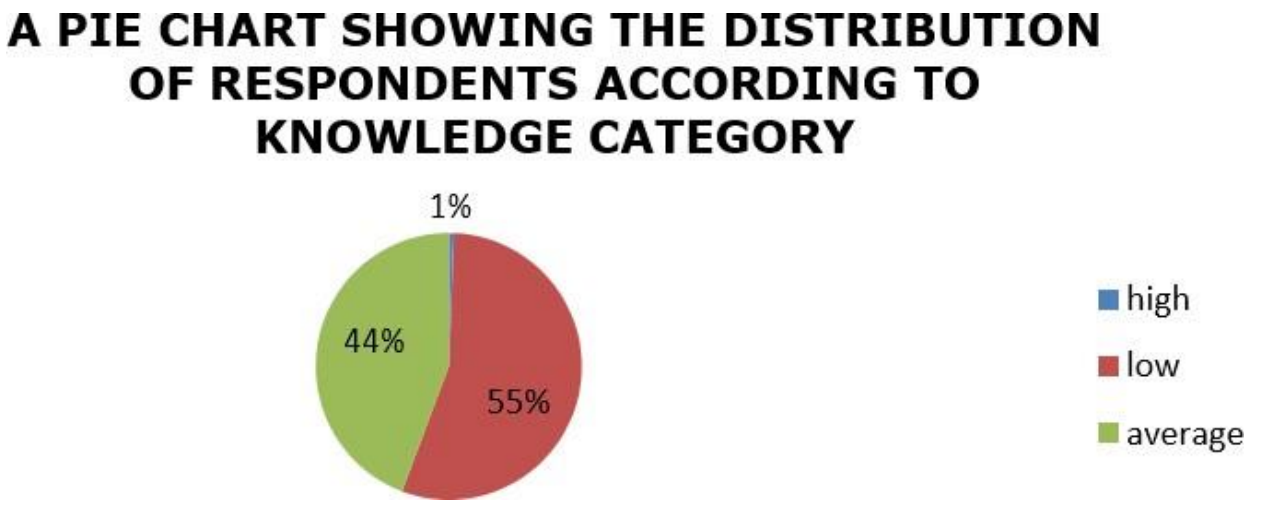

Figure 1: **Distribution of respondents according to their knowledge category.**

7	It is expected that exclusively breast-fed infants will regain their birth weight by two weeks of age.	93 (56. 36%)	49 (29.70 %)	23 (13.94%)	Yes
8	It is normal for an adequately breast-fed 2- week-old infant to only pass a bowel motion every 3 days or so.	51 (30. 91%)	77 (46.67 %)	37 (22.42%)	No
9	Increasing fluid intake will increase a mother"s milk supply.	118 (71. 52%)	32 (19.39 %)	15 (9.09%)	No
10	The nutritional content of breast milk changes throughout a breastfeed.	88 (53. 33%)	58 (35.15 %)	19 (11.52%)	Yes
11	The most common cause of cracked nipples is poor positioning and attach-ment of the infant at the breast.	88 (53. 33%)	42 (25.45 %)	35 (21.22%)	Yes
12	Growth of exclusively breastfed infants differs from that of formula fed infants.	130 (78. 79%)	18 (10.91 %)	17 (10.30%)	Yes
13	A „top-up" bottle after each breastfeed is the best way to manage an infant who is not gaining weight adequately.	85 (51. 52%)	59 (35.76 %)	21 (12.72%)	No
Benefits subscale					
14	Formula fed infants have more ear in-fections than breastfed infants.	59 (35. 76%)	44 (26.67 %)	62 (37.57%)	Yes
15	Women who have breastfed have a lower incidence of premenopausal breast cancer.	108 (65. 45%)	36 (21.82 %)	21 (12.73%)	Yes
16	Solids should be introduced to an ex-clusively breastfed infant at 4 months.	30 (18. 18%	116 (70.30 %)	19 (11.52%)	No

Table 6 Physiology sub scale.

Subscale	**Mean**
Breastfeeding management	33.03
Physiology subscale	49.09
Benefits subscale	57.17
Mean knowledge score	46.43

Table 7: Mean score on the different sub scales and the overall mean percentage score for knowledge.

dents 77 (46.67%) agreed, 63 (38.18%) disagreed, 25 (15.15%) were not sure about whether exclusively breastfeeding infants require extra water in hot weather, 93 (56.36%) of the respondents agreed,

52 (31.52%) disagreed and 20 (12.12%) were not sure if a breastfeeding woman should be advised to wean if she becomes pregnant, 91 (55.15%) respondents agreed, 39 (23.64%) disagreed and 35 (21.21%) were not sure about whether all women with cracked nipples should express their milk and rest the nipples for 24 hours, 90 (54.55%) of the respondents agreed,

41 (24.85%) disagreed and 34 (20.60%) were not sure about the statement that antenatal nipple preparation prevents nipple soreness in the first-week postpartum, 76 (46.06%) of the respondents disagreed, 63 (38.18%) agreed and 26(15.76%)

were not sure about the statement that an exclusive breastfeeding mother must temporarily wean her baby while she is taking prescription medications. 86 (52.12%) of the respondents disagreed, 56(33.94%) agreed and 23 (13.94%) were not sure if only breastfeeding from one breast at each feed is a management option for a woman who has an oversupply of breast milk.

Generally, results in Table 5 reveal that there was a mean score of 33.03%on the breastfeeding management subscale.

With regards to the physiology subscale; the results in Table 4 indicate that the majority 93 (56.36%) of the respondents agreed, 49 (29.70%) disagreed well as 23 (13.94%)were not sure about the statement that exclusively breastfed infants will regain their birth weight by two weeks of age, 77 (46.67%) disagreed, 51 (30.91%) agreed, 37 (22.42%) were not sure about whether it is normal for an adequately breastfed 2-week old infant to only pass a bowel motion every 3 days or so, 118 (71.52%) agreed, 32 (19.39%) disagreed, 15 (9.09%) were not sure about whether increasing fluid intake will increase a mother"s milk supply, 88 (53.33%) agreed, 58 (35.15%) disagreed, 19 (11.5%) were not sure if the nutritional content of breast milk changes throughout a breastfeed. 88 (53.33%) agreed, 42 (25.45%) disagreed well as 35 (21.2%) were not sure about the statement that the most common cause of cracked nipples is poor positioning and attachment of the infant to at the breast, 130 (78.79%) agreed, 18(10.91%) disagreed and 17 (10.30%) were not sure if the growth of exclusively breastfed infants differs from that of formula-fed infants, 85 (51.52%) agreed, 59 (35.76%) disagreed, 21 (12.72%) were not sure about whether a „to-up" bottle after each breastfeed is the best way to manage an infant who is not gaining weight adequately.

Results in Table 5 reveal that there was a mean score of 49.09% on the physiology subscale. With regards to the benefits sub-scale, table 4 indicates that the majority 62 (37.57%) of the respondents were not sure about the fact that formula feed infants have more ear infections than breastfed infants, 59(35.76%) agreed well as 44 (26.67%) disagreed about the same. 108(65.45%) of them agreed, 36(21.82%) disagreed, 21 (12.73%) were not sure about whether women who have breastfed have a lower incidence of post-menopausal breast cancer, 116(70.30%) disagreed, 30 (18.18%) agreed, 19(11.52%) were not sure about whether solids should be introduced to an exclusively breastfed infant at 4 months.

The results in Table 5 reveal that the respondents had a mean score of17% on the breastfeeding benefits subscale

Yes was the correct response to questions; 6,7,10,11,12,14,15 and no was the correct response to questions; 1,2,3,4,5,8,9,13 and 16.

Overall, the respondents had low knowledge about exclusive breastfeeding was low (55.15%), average (44.14%), and high (0.61%) with an overall mean knowledge score of 46.43% which is below average.

Knowledge had a significant relationship with intending practices with a p=0.016 using Spearman"s rank correlation.

4.3. ATTITUDES TOWARD EXCLUSIVE BREASTFEEDING

The second objective of this study was to describe the attitudes of female undergraduates at the Mildmay Institute of Health Sciences towards exclusive breastfeeding. the results for this objective were summarized as follows;

Attitudes were graded using a likert scale of 1 to 5 points where strongly agree=5, agree=4, don't know=3, disagree=2 and strongly disagree =1 for the positive statements. Strongly disagree=5, disagree=4,don't know=3, agree=2, strongly agree=1 for the negative statements (*).

Attitude scores were summed up and their percentages were generated.

A percentage score greater or equal to 70% was considered to be positive attitude, a score (50% - 69%) was neutral and a score less than 50% was considered to be less positive towards EBF. Overall the undergraduates in the study sample had a neutral attitude towards exclusive breastfeeding with a mean score of 63.08%. The attitudes of the study participants towards exclusive breastfeeding were positive (54.5%), neutral (44.8%) and

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S/N	Attitude statement	Stronglyagree	Agree	Idon't know	Dis-agree	Stronglydisagree	Total
1	The benefits of exclusive breastfeeding last only as long as the baby is exclusively breastfed.	41 (24.85%)	49 (29.69%)	20 (12.12%)	21 (12.73%)	34 (20.61%)	165 (100%)
2	Formula feeding is more convenient than breastfeeding.*	18 (10.91%)	41 (24.85%)	17 (10.30%)	32 (19.39%)	57 (34.55%)	165 (100%)
3	Exclusive	99	34	20	11	1	165

Table 8 (a): Distribution of respondents basing on attitude towards exclusive breastfeeding.

less positive (0.6%).

4.4. INTENDING PRACTICES TOWARDS EXCLUSIVE BREASTFEEDING.

With regards to the initiation of breastfeeding, 30 minutes 72(43.6%), 1 hour 54(32.7%), 2 hours 17(10.3%), after one day 12(7.3%) other 10(6.1%), among the other options, 2 times a day 1(0.6%), did not know 2(1.2%), immediately 4(2.4%), none 2(1.2%), not sure 1(0.6%).

22(13.3%), 44(26.7%), 16(9.7%), and 73(44.2%) of the respondents would add water, glucose, holy water and nothing to exclusively breastfeeding babies. Of the 10(6.1) respondents who selected other options, 1(0.6%), 1(1.2%),

1(0.6%) would add formula milk, did not know what to add, iron-rich foods, appetite medicine, 1(0.6%) were not sure and 1 (0.6) selected other but had no response about what to add to their 0-6 months old baby"s diet besides breast milk.

On the duration of exclusive breastfeeding, 4(2.4%), 7(4.2%), 10(6.1%), 132(80.0%) knew that it was 3 months, 4 months, 5 months, and 6 months respectively. Of the 12 (7.3%) respondents who selected other, 2(1.2%), 8% misunderstood it for 12 and 24 months respectively and 2(12% of those who selected others did not provide an option.

77(46.7%), 69(41.8%) of the respondents would either add or not add formula milk to the diet of their 0-6 months old baby while going to work well as 19(11.5%) did not know what to do for their babies while going for work.

Regarding exclusive breastfeeding in pregnancy, 99(60.0%), and 66(40.0%) of the respondents would and would not respectively continue breastfeeding their infants in case they became pregnant.

Reasons for intending to continue exclusive breastfeeding in case they became pregnant when their infants were still under 6 months were as stated under the themes below;

13(13.13%) of the respondents had no reason for intending to continue breastfeeding their less than six months old infants in case they became pregnant.

31(31.31%) of the study participants gave reasons related to the benefits of exclusive breastfeeding for example; *"It is because breast milk is healthy, easily digestible for the baby and I will do that until the baby is given birth to."* 19(19.19%) of the respondents gave reasons related to the WHO recommendations about exclusive breastfeeding. 2(2.02%) of the respondents provided reasons related to the prevention of breast problems for example, "to avoid breast problems."

25(25.25%) of the respondents gave other reasons including; "*so that milk does not suffocate the baby," "I will still breastfeed provided the milk is still present," "to feed the baby," "breastmilk ceases after getting pregnant," it is given as a supplement until when pregnancy is greater than 6 months," " so that milk does not suffocate the baby."*

The reasons for intending to discontinue exclusive breastfeeding, in case they became pregnant when their infants were still under 6 months were as follows;

	breastfeeding increases mother-infant bonding.	(60.00%)	(20.61%)	(12.12%)	(6.67%)	(0.60%)	(100%)
4	Breast milk is lacking iron.*	22 (13.33%)	22 (13.33%)	40 (24.25%)	30 (18.18%)	51 (30.91%)	165 (100%)
5	Formula fed babies are more likely to be overfed than breastfed babies.	43 (26.06%)	32 (19.39%)	37 (22.43%)	43 (26.06%)	10 (6.06%)	165 (100%)
6	Formula feeding is the better choice if the mother plans to go back to work. *	33 (20.00%)	75 (45.45%)	18 (10.91%)	29 (17.58%)	10 (6.06%)	165 (100%)
7	Mothers who formula feed miss one of the greatest joys of motherhood.	63 (38.18%)	56 (33.93%)	25 (15.15%)	17 (10.30%)	4 (2.44%)	165 (100%)
8	Women should not breastfeed in public places.*	18 (10.91%	37 (22.42%)	13 (7.88%)	57 (34.55%)	40 (24.24%)	165 (100%)
9	Exclusively breastfed babies are healthier than formula fed babies.	85 (51.51%)	40 (24.24%)	24 (14.56%)	15 (9.09%)	1 (0.60%)	165 (100%)
10	Breastfed babies are more likely to be overfed than formula fed babies.	26 (15.76%)	28 (16.97%)	32 (19.39%)	53 (31.12%)	26 (15.76%)	165 (100%)
11	Fathers feel left out if a mother exclusively breastfeeds.*	28 (16.96%)	43 (26.06%)	34 (20.61%)	37 (22.42%)	23 (13.94%)	165 (100%)
12	Breast milk is the ideal food for babies.	102 (61.82%)	39 (23.64%)	9 (5.45%)	11 (6.67%)	4 (2.42%)	165 (100%)
13	Breast milk is more easily digested than formula.	100 (60.61%)	41 (24.85%)	15 (9.09%)	7 (4.24%)	2 (1.20%)	165 (100%)
14	Formula is as healthy for an infant as breast milk.*	16 (9.69%)	31 (18.79%)	17 (10.30%)	59 (35.77%)	42 (25.45%)	165 (100%)

Table 8 (b): Distribution of respondents basing on attitude towards exclusive breastfeeding.

17(25.76%) of them had no reason for intending to discontinue EBF in case they became pregnant when their infants were still less than six months old this was evidenced by statements such as; *"I don't know," and "not sure."*

23(34.84%) of the respondents gave reasons related to breast milk quality and quantity. These included; *"because if a woman gets pregnant, the breast milk she produces doesn't contain anything like protein," "because the hormones that produce milk will now be focusing on the fetus," "it is considered to be contaminated," "because hormones which maintain pregnancy are increased so they suppress milk production," "there will be no milk," "to keep the milk for the next baby."*26(39.39%) *of the study participants gave reasons related to safety. This was perceived in terms of how safe it is to breastfeed during pregnancy, the effect of*

15	Breastfeeding is more convenient than formula.	90 (54.55%)	46 (27.88%)	16 (9.69%)	10 (6.06%)	3 (1.82%)	165 (100%)
16	Breast milk is cheaper than formula.	109 (66.06%)	43 (26.06%)	9 (5.46%)	3 (1.82%)	1 (0.60%)	165 (100%)
17	A mother who occasionally drinks alcohol should not breastfeed her baby.*	21 (12.72%)	43(26.06%)	36 (21.82%)	52 (31.52%)	13 (7.88%)	165 (100%)
18	A mother should give her baby either a soup, water, ajonal, honey or a feed before initiating breastfeeding after birth. *	12 (7.27%)	12 (7.27%)	30 (18.19%)	38 (23.03%)	73 (44.24%)	165 (100%)

Table 8 (c): Distribution of respondents basing on attitude towards exclusive breastfeeding.

Attitude category	Frequency (N=165)	Percentage (%)
Positive	90	54.5
Neutral	74	44.4
Less positive	1	0.6

Table 9 Distribution of respondents according to the different attitude categories

Intending practice statement	Responses	Results	
		Frequency	Percentage (%)
I will initiate breastfeeding in … hours/ days after birth.	30 minutes (half an hour)	72	43.6
	1 hour	54	32.7
	2 hours	17	10.3
	After one day	12	7.3
	Other	10	6.1

Table 10 (a) Distribution of respondents basing on their intending practices towards exclusive breastfeeding.

breastfeeding on the fetus, and also the effect of the breast milk produced on the infant. Responses such as; "It is not safe," "Not to harm my baby," "To prevent complications," "Baby will not grow well," "Baby may be affected by worms," and "To prevent infections to the breastfeeding baby," "it may cause a miscarriage."

20(12.1%), 73(44.2%), and 72(43.6%) of the respondents would carry out mixed feeding, breastfeeding, and formula feeding respectively for their 0-6 months old twins in case they had HIV.

4.4.1. The reasons for intending to carry out the respective forms of feeding were as follows;

Of the 20(12.1%) respondents who selected mixed feeding, 5(25%) of them thought that the breastmilk may not be enough for the twins, 4(20%) of them reported that mixed feeds contain all food nutrients which help the twins to grow healthy, 6(30%) of them misunderstood the question and they gave reasons related to weaning, 3(15%) of the respondents thought that mixed feeding could prevent mother to child transmission, 4(20%) of them had no reasons for their respective response and 3(15%) thought that it could prevent HIV transmission.

	Other options		
	2 times a day	1	0.6
	I don"t know	2	1.2
	Immediately	4	2.4
	None	2	1.2
	Not sure	1	0.6
	Water	22	13.3
	Glucose	44	26.7
	Holy water	16	9.7
	Nothing	73	44.2
	Other	10	6.1
I will give the following to my 0-6 months old baby besides breast milk	Other options;		
	Formula milk	1	0.6
	I don"t know	2	1.2
	Iron rich foods	1	0.6
	Appetite medicine	1	0.6
	Not sure	1	0.6
	Soft foods	3	1.8
	No response	1	0.6
I will give only breast milk for a period of;	3 months	4	2.4
	4 months	7	4.2
	5 months	10	6.1
	6 months	132	80.0
	Other	12	7.3
I will add formula milk to my 0-6 months old baby"s diet while going for work;	Other options		
	12 months	2	1.2
	24 months	8	4.8
	No response	2	1.2
	Yes	77	46.7
	No	69	41.8
	I don"t know	19	11.5
Would you continue breastfeeding your 0-6 months old baby incase you get pregnant?	Yes	99	60.0
	No	66	40.0
If you had HIV, what mode of feeding would you prefer for your 0-6 months old twin babies?	Mixed feeding	20	12.1
	Breastfeeding	73	44.2
	Formula feeding	72	43.6
If you had access to formula milk or cow"s milk, which of the two would	Formula milk	53	32.1
	Cow"s milk	89	53.9

Table 10 (b) Distribut**ion** of respondents basing o**n** the**ir** intending practices towards exclusive breastfeeding.

you add to the diet of your 0-6 months old baby and why?	None (breast milk)	23	13.9
As a health worker, if you received a gift from a company and it is requesting you to advertise their breast milk substitutes to mothers, would you advertise for it or not? Please provide a reason for your response.	Yes	77	46.7
	No	78	47.3
	I don"t know	10	6.1
Which of the following practices would you carry out in case your 0-6 months old baby cannot breastfeed at the breast?	Formula feeding	49	29.7
	Breast milk expression	105	63.6
	Mixed feeding	8	4.8
	Appetite medicine	2	1.2
	Nasal gastric feeding	1	0.6

Table 10 (c) Distribution of respondents basing on their intending practices towards exclusive breastfeeding.

Of the 73(44.2%) respondents who selected breastfeeding, 14(19.18) would do so because the infant is supposed to feed exclusively within the period of0-6 months, 1(1.37%) would do so because the babies will not have developed teeth so there would be limited chances of HIV transmission,22(30.14%) would do so because the breastmilk has all the nutrients forproper growth of the baby, 7(9.59%) had no reason for their response,3(4.11%) would breastfeed so as not to damage the baby"s intestines,1(1.37%) would breastfeed to build the baby"s immunity, 5(6.85%) would breastfeed because there are reduced chances of HIV transmission when a mother is adhering to antiretroviral therapy, 16(21.92%) would breastfeed because breastmilk is the best for the baby and5(6.85%)would breastfeed because breastmilk is readily available and cheap.

72(43.6%) of the respondents selected formula feeding but 4(5.56%) of them would formula feed because they thought that it contains all nutrients for the baby"s growth, 1(1.39) thought that breastmilk has HIV, 39 (54.17%) would formula feed to prevent HIV transmission, 2(2.78%) would formula feed to give the twins adequate feeds, 1(1.39%) thought that formula feeding is convenient, 2(2.78%) would formula feed. After all, the formula is easy to prepare, 9(12.50%) thought that the formula is healthy for the infant and 12(16.67%) of the respondents had no reason for their response.

53 (32.1%), 89(53.9%), and 23(13.9%) would add formula milk, cow"s milk, and nothing respectively to the diet of their 0-6 months old baby if they had access to the different feeds.

The reasons for intending to add the respective feeds to the diet of their infants under 6 months were as stated below; 2(3.77%) would formula feed because they thought that formula milk is microbe-free, 1(1.89%) thought that formula milk is the same as cow"s milk and so it contains colostrum, 1(1.89%) thought that formula milk was processed and studied so it is safer,thought that 2(3.77%) thought that formula is more hygienic, 8(15.09%) thought that formula is easy to prepare, 9(16.98%) had no reason for their response, 23(43.39%) that formula milk has all nutrients for the baby"s growth and those contained in breast milk,2(3.77%) thought that formula milk is safe, 3(5.67%) would do so because they thought that formula milk is fortified for feeding 0-6 months old babies and 2(3.77%) would formula feed because medical workers advise them to give it to infants 9% of the respondents would offer cow"s milk to their infants.

3(3.37%) of them would do so because it has proteins, 13(14.61%) would do so because it is natural, 27(30.34%) of them would do so because it is cheap, accessible and easy to prepare, 1(1.12%) because it is good for the baby, 1(1.12%)

thought that cow"s milk can easily be digested by the infant"s intestines, 27(30.34%) of them had no reason for their response,11(12.36%) of themthought that cow"s milk contains all nutrients and6(6.74%) of them would use cow"s milk because it contains no chemicals. 23(13.9%) of the respondents did not select any of the responses provided.

7(30.43%) of them had no reason for not opting for any of the options provided, 1(4.35%) of them knew that breastfeeding creates a mother-to-child bond, 10(43.48%) knew that breastmilk is the best for their infants, 1(4.35%) would neither formula fed or use cow"s milk because both forms of feeding would deprive the baby of the basic nutrients in breastmilk, 1(4.35%) knew that breastmilk is readily available for feeding the infants and 2(8.69%)would offer breast milk because the baby must be exclusively breastfed. 77(46.7%), 78(47.3%), and 10(6.1%) of the respondents would respectively advertise, not advertise, and did not know what to do in case they received a gift from a company requested them to advertise for their breast milk substitute to the mothers. The reasons for accepting to advertise for the breast milk substitutes once given a gift included the following;

1(1.29%) would advertise if they were poor,1(1.29%) thought that the substitutes make children strong and healthy, 1(1.29%)would advertise so as to become celebrities, 3(3.89%)thought that formula contains nutrients like those in breast milk, 29(37.67%) thought that formula is good for non- breastfeeding babies, 4(5.19%) thought that formula is good for non- breastfeeding babies, 29(37.67%) had no reason for their response, 1(1.29%) thought that formula milk helps mothers to boost the quality and quantity of their breast milk, 6(7.79%) would formula feed because the mother can only exclusively breastfeed for a few months (maternal leave) may use the breast milk substitute to ensure that their children get the necessary nutrients as they leave them home to go and work, 8(10.39%) would do so in order to help mothers who have little breast milk, 4(5.18%) would do so in case they know what they use to preserve their milk and if it is healthy enough and has no side effects, 1(1.29%) thought that by doing that they would be letting other mothers be aware of other options,1(1.29%) would advertise to get the gift,1(1.29%) thought that it is hygienic, 16(20.78%)would advertise to make money, become popular, make more friends and become a socialist.

*4.4.2. **The reasons for not accepting to advertise for the breast milk substitutes once given a gift included the following;***

6(20.51%) would not advertise because they are not supposed to be advertised, 15(19.23%) thought that breast milk is essential for proper growth and development of the child, 16(20.51%) knew that it is not ethical, 1(1.28%)would not because some products may be expired, and they may also affect the baby, 2(2.56%) knew that delayed breastfeeding causes breast engorgement, 1(1.28%) knew that marketing breast milk substitutes limits babies from thriving well since substitute milk does not contain nutrients essential for growth, 27(34.62%) had no reason for their response, 2(2.56%) don"t know how best the substitute milk has effectiveness on the baby"s body, 4(5.13%) knew that it would reduce the chances of bondage between the mother and the child and also limits exclusive breastfeeding, 1(1.28%) thought that the substitutes may contain chemicals which cannot be helpful to the baby and the mother, 4(5.13%) would not advertise unless if it is of good quality and I have confirmed its contents, 1(1.28%) thought that the substitutes are not published by Uganda National Beural of Standards, 7(8.97%)would not advertise for the breast milk substitutes because they are not good for the child"s growth and development.

49(29.7%), 105(63.6%, 8(4.8%), 2(1.2%), and 1(0.6%) would formula feed, express breast milk, mixed feed, give appetite medicine and use a nasal gastric tube respectively for a 0-6 months old infant who cannot feed at the breast.

4.4.3. The reasons for choosing the respective form of feeding for an infant under six months who could not feed at the breast included the following;

Of the 49(29.7%) respondents who selected formula milk, 6(12.24%) of them would offer it because they believe that it contains all the nutrients needed for the growth and development of the baby at the age of 0-6 months, 7(14.29%) thought that it is healthy for the infant, 1(2.04%) thought that it is safe, 1(2.04%) would give it to nourish the baby,

5(10.20%) thought that it is convenient, 14(28.57%) thought that it is easy to prepare, 1(2.04%) would offer it so as not to starve the baby,13(26.53%) had no reason for their response and 1(2.04%) added that they would either bottle-feed or spoon-feed an infant who cannot breastfeed at the breast.

Of the 105(63.6%) respondents who selected breast milk expression,7(6.67%) of them would do so because it is easily accessible and ready for consumption, 1(0.95%)knew that breast milk is easy to store, 8(7.62%) knew that it is the most convenient method of feeding, 31(29.52%) knew that breast milk has all natural nutrients, 5(4.76%) knew that it encourages exclusive breastfeeding, 3(2.86%) would do so to allow their babies breastfeed,20(19.05%)had no reason for selecting the given mode of feeding, 1(0.95%) would offer it because it is hygienic, 2(1.90%) knew that breast milk builds the baby"s immunity, 20(19.05%)knew that breast milk is the baby for their infant, 5(4.76%) knew that breast milk is cheap, 1(0.95%) knew that breast milk is safe for their infant and 1(0.95%) knew that breast milk expression is easy to carry out.

2(1.2%) of the respondents would give appetite medicine because they believe that it will help their babies to feed as soon as possible.

Of the 8(4.8%) respondents who opted for mixed feeding, 7(87.5%) of them had no reason and 1(12.5%) of them would do so to improve their child"s appetite.

1(0.6%) of the respondents opted for nasal gastric feeding because they believe that it helps the babies to feed even though their muscles are weak to suckle the breast milk.

The responses provided to the question about how breast engorgement was as stated below;

58(35.15%) of the respondents did not know how to prevent breast engorgement, 74(44.85%) could breastfeed the baby exclusively, 1(0.6%) of them could consume a lot of fluids, 6(3.64%) could empty the breast, 2(1.21%) would give health education, 2(1.21%) would win the baby, 11(6.67%) could pass a warm cloth on the breast, 1(0.6%) would take warm water, 2(1.21%) would treat an infection, 1(0.6%) would opt for antenatal care, 2(1.21%) would ensure proper positioning of the baby at the breast, 2(1.21%) would clean the breast, 1(0.6%) would carry out a breast examination and1(0.6%) would seek for medical checkups in case their breasts got engorged.

The responses provided to the question about what the respondents intend to do to make their hospitals baby friendly were as stated below;

4(2.42%) of the respondents would encourage exclusive breastfeeding,1(0.6%) would advocate for breastfeeding corners, 1(0.6%) would create a breastfeeding area at the reception, 13(7.88%) would paint the walls of the hospital building with baby"s play items, 29(17.58%) would paint the hospital walls with bright colors, cartoons and buying toys for the kids to play, 4(2.42%) would be friendly to the babies, 2(1.21%) would care for the babies, 1(0.6%) would help the babies get breast milk, 4(2.42%) would sing for them lullabies, 2(1.21%) would train mothers about breastfeeding, display baby"s pictures on the walls and make the hospitalcomfortable for mothers, 42(25.45%) did not know what to do, 2(1.21%) would create rapport with the mothers, 1(0.6%) would organize and set up neonatal and pediatric departments, 1(0.6%) would vaccinate the babies,1(0.6%) would buy for the babies sweets, 8(4.85%) would talk to babiesnicely and smile for them, 1(0.6%) would provide a conducive environment for mothers first of all because they are the ones who usually bring their babies to the hospital, 6(3.64%) would feed the baby always, 1(0.6%) would put rails on the babies" bed, 14(8.48%) would establish a play ground for the babies with

swings, slides, backs and toys,3(1.82%) would love the babies, 1(0.6%)would improve on modes of feeding babies other than direct breastfeeding, 4(2.42%) would create a nice relationship with the baby by giving it attention and acting like a baby, 1(0.6%) would expose the babies to people and mostly young children and those adults that love being around babies,8(4.85%) would play with the babies, 3(1.82%) would blow balloons to make babies happy, 6(3.63%) would keep the hospital clean and properly dispose off the medical waste, 1(0.6%) of the respondents would not grant permission to market and advertise breast milk substitutes as a way of making the hospital baby friendly.

4.5. Hypotheses(table 11 a and b)

Under this section, the researcher was interested in testing the study hypothesis to either accept or reject the null or alternative hypothesis.

Results reveal that there were significant relationships between;

The level of knowledge and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences at a P-value (P=0.019) and also between attitude and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences at a P-value (P<0.001).

All the null hypotheses were rejected and the alternative hypotheses were accepted because the hypothesis testing yielded P-values that were less than the significance level of 0.05.

5. Discussion of The Findings

In this area, the researcher provided a discussion of findings based on the objectives of the study to identify the agreements and disagreements between the findings and the available literature. These are summarized in line with the research objectives as discussed hereunder.

5.1. Knowledge About Exclusive Breastfeeding

Overall, the results of the study reflected that the majority(55%) of the students had inadequate exclusive breastfeeding knowledge. These results are in line with a study which was carried out by the faculty of Nursing at Beni-Suef University which declared that the majority (80.2%) of the study participants had inadequate knowledge about exclusive breastfeeding (Heba R. Elareed,

2020). Contrary to the above, an Indian study that was carried out among undergraduate students declared 100% overall adequate knowledge about exclusive breastfeeding among the study participants (Marrone S,.2018).

In the current study, students showed a deficiency of knowledge about the management of breast problems such as cracked nipples and nipple soreness, appropriate conditions for weaning, and management of milk oversupply. This is evidenced by the fact that the majority (46.67%) of the participants incorrectly thought that exclusively breastfeeding infants require extra water during hot weather, more than half (56.36%) would advise a mother to wean her infant if she became pregnant and more than half (52.12%) of the respondents thought that feeding from one breast at each feed is not a management option for a woman with an oversupply of breast milk. They also lacked adequate knowledge about the physiology of breastfeeding with a mean percentage score of 49.09% on the respective subscale. The findings of the study further confirm the association betweenthe student"s knowledge regarding breastfeeding physiology and management of its related problems. This is in agreement with those from earlier studies in Egypt and the USA which documented a positive relationship between students"s knowledge regarding breastfeeding physiology and the management of its related problems (Gavine A, 2017).

The exclusive breastfeeding knowledge inadequacy in the current study reflected the shallow and inadequate exclusive breastfeeding-related content among the different curriculums of the respective female undergraduates. This assumption was strengthened by a study in Jordan which documented that 60% of the midwives and nurses lacked knowledge in physiology, management, and problems of breastfeeding even though they had received relevant education at their faculties (AL-

Hypothesis	Test	P- value	Result
H0:There is no relationship between the level of knowledge and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences.	2 tailed test	0.019	Rejected
Ha: There is a relationship between the level of knowledge and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences.	2 tailed test	0.019	Accepted
H0: There is no relationship between attitude and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay	2 tailed test	<0.001	Rejected

Table 11 (a)

Institute of Health Sciences.			
Ha: There is a relationship between attitude and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences.	2 tailed test	<0.001	Accepted

Table 11(b)

Nuaimi K, 2019).

The overall knowledge inadequacy in the current study may also be due to a lack of adequate clinical experience about exclusive breastfeeding which would enable them to build their knowledge about exclusive breastfeeding. Therefore, the results indicate the need for breastfeeding education to improve the knowledge of female undergraduate students in the medical field and thus their future behavior since there was a significant relationship between knowledge and intending practice.

5.2. Attitudes Towards Exclusive Breastfeeding

The attitudes of undergraduate females in the health professions are essential in forming their approach to mothers who present with concerns about exclusive breastfeeding. The findings of the study reflected that more than half (54.5%) of the study respondents had positive attitudes towards exclusive breastfeeding, contrary to a study that was carried out among nursing students and documented a generally negative attitude towards exclusive breastfeeding (Heba R. Elareed, 2020).

In the current study, the majority (60%) of the study participants believed that breastfeeding increases mother-infant bonding which supports the positive attitudes held by the study participants.

33(20.0%) and 75(45.45%) of the study participants strongly agreed and agreed that formula feeding is the better choice if the mother plans to go back to work and about 18(10.91%)strongly agreed and 37(22.42%) agreed that mothers should not breastfeed in public places.

These two issues presented the most commonly encountered misconceptions previously reported in different countries (Ahmed A., 2011).

According to Ortiz, Mcgilligan & Kelly in 2004, Maternal employment has been one of the greatest barriers to EBF. In Uganda, women"s participation in the labor force is increasing due to a boost in education and socioeconomic transition thus attributed to the low rate, or discontinuation of breastfeeding, among working mothers (Al-Binali, 2012).

Although the study sample had mostly positive attitudes towards exclusive breastfeeding, a significant proportion (33.3%) of students be-

lieved that women should not breastfeed in public places. These results are consistent with the findings of a study that documented that embarrassment was perceived as a major barrier to breastfeeding and breastfeeding in public was not considered acceptable by many students (Al-Binali, 2012). Similarly, (Ahmed A., 2011)found that university students considered bottle-feeding more convenient and less embarrassing than breastfeeding; they believed that breastfeeding is a private affair and should not be done in public. A study among students in Saudi Arabia revealed that most students (75%) agreed that mothers should not breastfeed in public (Amin TT,2014).

Embarrassment remains a challenging barrier to exclusive breastfeeding, and it is not limited to public settings. Some mothers would feel embarrassed to breastfeed in public because it will

restrict their activities and this may become a reason for mothers to start formula feeding and discontinue breastfeeding prematurely(Mohamad, et al 2019).

5.3. Intending Practices Towards Exclusive Breastfeeding

The intending practices towards EBF among the students were generally inappropriate with over 60% of them intending to terminate breastfeeding in case they got pregnant when their infant is still under 6 months, and only 13.9% intended to continue breastfeeding their infants exclusively in case they had access to either formula or cow"s milk, the majority (46.7%) of the respondents intended to add formula milk to the diet of their 0-6 months old baby while going for work, less than half (43.6%) of the respondents intended to exclusively breastfeed their infants in case they had HIV and nearly half (46.7%) of the study participants intended to market breast milk substitutes in case they received a gift from the company. These findings indicate that most students were confused and did not truly understand the meaning of exclusive breastfeeding.

Contrary to the above, (Ahmed A., 2011)documented that the undergraduate students had goodintending practices towards EBF with over 66.5% of them not willing to give pre-lacteal feeds, 90.8% of them intending to breastfeed their infants exclusively, 74.4%of them intending to practice EBF at work and 97.7% of them intending to initiate breastfeeding in 0-6 hours. In the current study, the respondents presented inappropriate intending practices towards the promotion of BFHI with over 89.69% of the respondents providing incorrect responses to the question about what they would do to make the hospitals baby friendly. This could be due to the lack of adequate knowledge about exclusive breastfeeding.

Similar findings were documented in a Nigerian study which documented that there was poor (30%) knowledge among healthcare workers about BFHI awareness was programmed to help mothers practice exclusive breastfeeding (Ahmed A., 2011).

5.4. HYPOTHESES

The current study revealed a relationship between the level of knowledge and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences at a P-value (P=0.019) and also between attitude and the intending practice towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences at a P-value (P 0.001). Similarly, (Shehu & Hassan,2019) declared an association between attitudes and future breastfeeding practices among undergraduate students at a P-value (p 0.003).

6. Conclusions:

6.1. Knowledge About Exclusive Breastfeeding

Breastfeeding is on the global agenda (World Health Organization, 2003), and Uganda has implemented various policies and programs to protect, promote, and support breastfeeding. The findings of this study indicated that most students were confused and did not truly understand the meaning of exclusive breastfeeding.

The study respondents generally had low knowledge about exclusive breastfeeding. Therefore, there are greater chances of them providing misleading information to mothers about

the physiology and management of exclusive breastfeeding. These students are future health professionals and considering the important role of healthcare providers in exclusive breastfeeding promotion, misunderstandings among the students about these issues must be corrected.

The study findings further highlighted the need for MIHS to directly address the lack of exclusive breastfeeding knowledge among female undergraduate students. This is also because erroneous exclusive breastfeeding information provided by health care providers can compromise the quality of patient care, hinder the progress of mothers toward successful exclusive breastfeeding, and may undermine the government"s efforts and commitments to support and enhance exclusive breastfeeding practices in the country.

6.2. Attitudes Towards Exclusive Breastfeeding

More than half (54.5%) of the study participants had positive attitudes and nearly half (44.4%) of them were neutral towards EBF. However, there is still room for improvement as 44.4% of the study respondents were neutral and 0.6% of the study respondents were less positive towards EBF.

6.3. Intending Practices Towards Exclusive Breastfeeding

The intending practices of the study participants were generally inadequate as all the study participants intended to either terminate exclusive breastfeeding prematurely, add the formula, or practice mixed feeding in the diet of their six months old infant at one point in time.

6.4. Hypotheses

There was a significant relationship between knowledge and intending practices towards exclusive breastfeeding at a P=0.19 thus confirming the hypothesis that there is a relationship between the level of knowledge and the intending practices towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences.

There was a significant relationship between attitude and intended practices toward exclusive breastfeeding at a P<0.001 thus confirming the hypothesis that there is a relationship between the attitude and the intended practices towards exclusive breastfeeding among female undergraduates at Mildmay Institute of Health Sciences.

7. Recommendations

Curricula reviews aiming at promoting, supporting, protecting breastfeeding, and correcting misconceptions should be put in place across all levels of female undergraduates in health professions. The change in curriculum will improve the knowledge of the female undergraduates about EBF, which will in turn better their attitudes and also improve their intended practices.

Smart advocacy about exclusive breastfeeding should be carried out within the institute to increase awareness about exclusive breastfeeding among undergraduate students.

8. Contribution of The Study

The study has provided up-to-date information regarding the knowledge, attitudes, and intended practices of the female undergraduates in MIHS toward EBF. The results included a 55% overall knowledge inadequacy among the respondents.

The study identified the awareness gaps among undergraduate female students about exclusive breastfeeding. These included inadequate knowledge about the physiology and management of breastfeeding as evidenced by a mean score of 49.09 and 33.03 respectively.

The study provided recommendations aimed at bridging the awareness gaps about exclusive breastfeeding among female undergraduates. These included curricula reviews and the need for smart advocacy about EBF within the institute.

9. The Areas for Further Research

The study included only full-time female undergraduate students and as such the study findings cannot be generalized to the entire population. A qualitative study should be carried out using a representative sample of both undergraduate and

postgraduate students within the institute to provide a better understanding of the topic and to enable the generalization of the results to the entire population in the institute.

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List Of Abbreviations:

11. Publisher details

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Category: Non-Governmental & Non-profit Organization
Email: studentsjournal2020@gmail.com
WhatsApp: +256775434261
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BFHI	Baby Friendly Hospital Initiative
EBF	Exclusive Breastfeeding
GNR	Global Nutrition Report
HIV	Human Immuno-deficiency Syndrome
IYCF	Infant and Young Child Feeding
KAP	Knowledge Attitudes and Practices
LMIC	Low- and Middle-Income Countries
MIHS	Mildmay Institute of Health Sciences
NCD"S	Non-Communicable Diseases
SSA	Sub-Sahara Africa
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UBOS	Uganda Bureau of Statistics
UNICEF	United Nations International Children"s Emergency Funds
WHO	World Health Organization

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