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ASSESSING THE CAREGIVERS' KNOWLEDGE AND ATTITUDE TOWARDS COMPLEMENTARY FEEDING PRACTICES OF THE UNDER FIVES IN KENYATTNATIONAL HOSPITAL
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ASSESSING THE CAREGIVERS' KNOWLEDGE AND ATTITUDE TOWARDS COMPLEMENTARY FEEDING PRACTICES OF THE UNDER FIVES AT KENYATTA NATIONAL HOSPITAL

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ABSTRACT

***Objective*: To assess the caregivers' knowledge and attitude towards complementary feeding practices of under-fives at Kenyatta National Hospital.**
***Design*: A descriptive cross-sectional study.**
***Setting*: The Immunisation clinic at Kenyatta National Hospital.**
***Subjects*: One hundread and twenty three randomly selected caregivers who brought their under five years old children for immunisation.**
***Results*: Most of the caregivers expressed fair knowledge and positive attitude towards complementary feeding. Seventy eight percent of the caregivers introduced complementary foods at the required age of six months. However, 22% of them introduced these meals when their children were between the ages of one to five months. The self reported reasons for this were family advice, cultural perceptions, busy schedules and medical conditions of the caregivers.**
***Conclusion*: The caregivers' knowledge and attitude had an direct impact on the timing and frequency of complementary feeding.**

INTRODUCTION

Childhood under nutrition is prevalent in low and middle-income countries. In Kenya, the mortality rate is 71 deaths of 1000 live births, of which 45% deaths are attributed to nutrition related factors as the underlying cause. This is as a result of misinterpreting feeding cues and using less-than-optimal feeding styles and practices by mothers in low income regions (1).

W.H.O recommends optimal infant and child feeding. In this view, exclusive breastfeeding should be initiated within half hour to an hour of birth, continued up to six months without introduction of any other food or drink. Infants should be provided with adequate quantities of and safely prepared nutritious complementary foods from six months and continued to be breastfed for at least two years. According to the guidelines, children in the age categories of six months to one year should be given 3 meals, 1-2 years should get 3 main meals plus 2 snacks while those between 3-5 years should take 3 main meals, 2 snacks plus 2 cups of milk per day.

In Kenya,complementary foods are introduced as early as the first month and by six months 84% of infants are already receiving complementary feeds (2). These feeds are given at a low frequency, poor composition, limited variety and as a replacement of breast milk resulting to under- or overweight, stunting and micronutrient deficiencies (3).

Kenyan women contribute 60–80% of the labour in household and productive activities; some are denied the required maternity provision by their incompliant employers resulting in poor child care practices (2).

Childhood feeding practices contribute to either risk of obesity or under nutrition among children. Transition from pure breast milk to solid foods poses a challenge to many caregivers as they receive misinterpreted information from peers and family members with different cultural basis.

Few studies have been done to help mothers with low incomes in transitioning their infants to complementary foods. The available interventions aim at nutritional knowledge enhancement; rather than developing the right attitude and skills to improve caregiver's responsiveness, feeding styles and practices (1).This qualitative study was necessary to evaluate their knowledge on healthy complementary feeding; identify factors contributing to the poor compliance to complementary feeding guidelines and hence come up with an appropriate way of bridging these gaps.

MATERIALS AND METHODS

Study design and setting: A Cross-sectional, descriptive study was conducted at the immunisation clinic. Purposive sampling was used to select this study

clinic because it serves diverse communities and it's easily accessed

Subjects: 123 caregivers, above 18 years of age, attending the immunisation clinic at K.N.H consented to participate in the study. The sample size was determined using the Fischer's formula.

The questionnaire: A semi-structured questionnaire was developed to collect data on the background information of the caregivers, knowledge, attitude and complementary feeding practices. Questionnaires were administered to ten caregivers who gave their views on the wording and structure of questions and the questionnaires were revised accordingly. The researcher and the research assistants administered the questionnaires to the respondents who consented. The questionnaires were then sorted, numbered and checked for completeness, accuracy and consistency before coding for statistical analysis.

Ethical clearance: Prior to the study, a written approval was obtained from the Ethics and Research Committee and the administration of K.N.H. The general purpose, procedure and benefits of the study were explained to the eligible caregivers before they were requested to sign the consent form.

Statistical analysis: Data were analysed using the SPSS version 20. For descriptive statistics, analysis of frequency and central tendency was calculated to describe demographic characteristics, and knowledge, attitude and self reported practices. A Likert scale was used to measure the strength of the respondents' feelings without scoring reversed for the negatively worded statements. A score of 1,2,3,4, and 5 was assigned to responses of strongly agree, agree, do not know, disagree respectively. A score of 1 and 2 was given to YES and NO statements respectively.

RESULTS

Background characteristics:as summarised in table 1,majority (39.8 %) of the caregivers were between 21-24 years of age, followed by the age categories of 25-28 years and >29years with a similar 26.8% while the young caregivers of less than 20 years were 6.6%. the largest proportion of the caregivers (76.4%) were married,15.4% were single,4.9% were separated and 3.3% were divorced. Fourty two point three percent of the caregivers were unemployed which forms the majority of the respondents. Thirty point nine perecent were employed on full time basis,14.6% were part time employees while 10.6% were students. Majority (92.7 %, f=114) of the caregivers were mothers, 5.7 % (f=7) were fathers while 1.6% (f=2) were guardians of the children brought to the immunisation clinic. Most (78.9%,f=97) of the caregivers made at least four antenatal visits. Fifteen point four percent made three visits,4.1% made two visits and 1.6% of them only visited the antenatal clinic once. A large proportion (69.9%) of the children who were still coming for immunisations were less than 17 months of age while 30.1% of them (fully immunised) were in the age bracket of 17 to 60 months.

Knowledge on complementary feeding: Table 2 and 3 summarises the sources of information and the caregivers' knowledge on complementary feeding respectively.

Table 1

Percent (%) distribution of the background characteristics of the caregivers (n=123)

Variable	% distribution
Age ofcaregivers(Years)	
<20	6.6
21-24	39.8
25-28	26.8
>29	26.8
Marital status	
Married	76.4
Single	15.4
Separated	4.9
Divorced	3.3
Employment status	
Unemployed	42.3
Full time employee	30.9
Part time employee	14.6
Students	10.6
Antenatal clinic visits	
>4 times	78.9
3 times	15.4
2 time	4.1
once	1.6

Table 2
Sources of information

	Responses	
	N	Percent
Clinic counselling sessions	104	51.2%
Family advice	33	16.3%
Workshops on raising healthy children	22	10.8%
TV and radio	25	12.3%
Internet	19	9.4%
Total	203	100.0%

Table 3
General knowledge on complementary feeding guidelines

General guidelines	Strongly agree		Agree		I don't know		Disagree		Strongly disagree	
	F	%	F	%	f	%	F	%	f	%
Babies do not need any other food before 6months of age	68	55.3	46	37.4	2	1.6	4	3.3	1	0.8
Complementary foods should be served after breastfeeding.	25	20.3	62	50.4	13	10.6	19	15.4	3	2.4
Babies should breastfeed for at least 2 years after introduction of complementary foods	40	32.5	58	47.2	6	4.9	11	8.9	7	5.7
A variety of nutritious complementary foods should be served at least 3 times per day.	48	39.1	54	43.9	12	9.8	6	4.9	3	2.4
Good complementary foods are energy-rich, nutrient-rich and locally affordable unlike fast foods.	37	30.1	61	59.6	12	9.8	5	4.1	2	1.6
Both bitter and sweet fruits and vegetables should be included in a child's diet.	24	19.5	61	49.6	18	14.6	15	11.6	5	4.1
2 healthy snacks are necessary for a child above one year of age.	25	20.1	67	54.5	18	14.6	10	8.1	3	2.4
Restriction against unhealthy snacks is important.	38	30.9	48	39.0	16	13.0	13	10.6	8	6.5

Reasons for early introduction of complementary feeds: With regards to Table 4, 52.8% of the respondents did so because their children were not satisfied with breast milk alone. Twenty six percent of them reported that this was due to their busy schedule, 20.3% reported that it was their medical condition while only 0.8% were influenced by their culture. Majority of the caregivers (37.4%) liked the complementary health talks offered at the clinic because they were done professionally, in an interesting way and they impacted with the knowledge of how to enhance healthy growth of their children. Fourty six point three percent of the caregivers reported the non existence of cultural myths while 53.7% mentioned some that existed: "*Breast milk alone is not always enough for a child', 'other foods should be introduced early'* and *'a child should be fed to fullness"*.

Table 4
Reasons for early introduction of complementary feeds

Reason	Frequency	Percent
cultural influence	1	.8
medical condition	25	20.3
my busy schedule	32	26.0
no satisfaction in breast milk alone	65	52.8
Total	123	100.0

Complementary feeding practices: Seventy eight point five percent of the respondents introduced complementary meals when their children were more than six months of age. Twelve point seven percent did so at the age of 4-5 months,7.6% at the age of 2-3 months while 1.3% at the age of one month. When asked about the frequency at which they fed their children, most (40.5%)of the respondents were doing so between 3 to 4 times per day. Thirty two point nine percent fed them between 5-6 tmes,24% fed them more than 7 time while 2.5% did so less than 2 times. Eighty nine percent of the respondents were using cups to feed their children,8.8% were using bottles while 2.2% were using both. Ninety six point two percent were serving their children on their own plates while 3.8% were serving them on shared plates. Most (73.2%) of the caregivers had their meals with their children as opposed to 26.8% who did not.

DISCUSSION

This study was conducted among the caregivers of the under fives attending the immunisation clinic at Kenyatta National Hospital. Majority of them were in the age brackets of 21 to 24 years. Majority of them were married and the few who reported to be single were still students. A larger number of the caregivers were the biological mothers with majority of them being unemployed. Most of the mothers made at least four antenatal clinic visits during their pregnancies and a majority only had one child.

Most of the caregivers loved and benefited from clinic counselling sessions as compared to those who relied on family advice on complementary feeding. However, there is an increasing dependence on workshops and media sources by the caregivers on this practice.

Most of the caregivers expressed fair knowledge and understanding of when to introduce complementary foods. Many of them agreed that children do not need any other food before six months of age. This is probably due to increased availability and exposure to nutritional information through the antenatal clinic counseling sessions and media (5,6). Majority of the caregivers knew the right components of a nutritious/ balanced diet and the frequency at which they should serve their children. They agreed that a variety of such foods should be served at least three times a day, with two health snacks and this should be done before breastfeeding. This is in agreement with the W.H.O guidelines on complementary feeding. Majority of them who had introduced complementary meals were adhering to this as they were serving their children various food varieties within these acceptable frequencies. They also agreed that restriction against unhealthy snacks is important.

Majority of the caregivers expressed a positive attitude towards the complementary health talks offered at the clinic. They reported that the talks were done professionally, in an interesting way and they impacted them with the knowledge of how to enhance healthy growth of their children. As a result, 78% of the caregivers introduced complementary foods at the required age of six months.

However, despite the knowledge and positive attitude expressed by the caregivers, 22% of them introduced these meals when their children were between the ages of one to five months. This might be due to the reason reported by (7) that mothers tend to ignore professional advice on infant-feeding recommendations if it is not practical in their real family circumstances; hence opt for their relatives' guidance when facing difficulties. Furthermore, cultural perceptions that infants are not satisfied with breast milk alone may also be misleading (8). Other reasons reported for this were caregivers' busy schedules and medical conditions. This is in line with another study (9) that reported avoidance and early cessation of breastfeeding by HIV positive mothers as a contribution to early introduction of complementary foods.

Majority of the caregivers embraced cup-feeding method as recommended by W.H.O guidelines. Most of them served their children on their own plates and dined together during family meals for close supervision and modeling of eating habits. Most of the children were taken care of by the house helps and elder sisters/brothers when their primary caregivers were busy. Majority of the caregivers complied well with the hygienic food handling practices.

In conclusion, it's clear that the caregivers attending the immunisation clinic at K.N.H had a fair

understanding of complementary feeding. They knew about when to introduce these meals and the right composition of such a diet. The high number of antenatal clinic attendance and use of media by the caregivers increased their knowledge on the above factors. Education therefore has a great influence on the level of knowledge, which directly affects the attitude of the caregivers towards complementary feeding. Attitude of caregivers was also influenced by cultural perceptions, their busy schedules and medical conditions. These directly had an impact on the timing and frequency of complementary feeding.

Health caregivers at the KNH should give more health talks on complementary feeding to the caregivers to reinforce what was learnt during the antenatal clinic visits. Simple brochures can also be developed and issued to caregivers for reference at home.

In collaboration with trained traditional birth attendants, community support groups can be established and linked to the hospital to promote exclusive breast-feeding and appropriate introduction of complementary foods. This will facilitate close monitoring of these practices among the caregivers.

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