Original Article

Awareness Regarding Growth Monitoring Among Mothers Attending a Health Post in Kathmandu

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Abstract

Malnutrition among children in developing countries is a major public health concern. Growth monitoring of under five children has been one of the major strategies for the prevention and control of malnutrition. Growth monitoring is an activity focuses on systematic measuring of a child weight, height according to age over a period of time, recording, plotting and interpretation as normal and abnormal in comparisons with WHO growth Z-scores to promote growth of children.

A descriptive cross sectional research design was used to find out the awareness regarding growth monitoring among mothers attending health post with under five children.

The study was conducted in Health Post, situated in Mahangkal, Kathmandu from October 2016 to December 2016. One hundred eleven mothers having 6 to 36 months old child attending in the health post with their child were selected by using non probability purposive sampling method. Data was collected through face to face interview by using structured questionnaire. Data was analysed by using descriptive statistics.

This study finding revealed that the majority of respondents (85.5%) were aware regarding the meaning of growth monitoring. However, fewer number respondents were aware on time interval of growth monitoring according to age of child. More than two third of the respondents had good awareness regarding growth chart including its purpose and components. The main source of information regarding growth monitoring was health personnel's. So, it could be recommended that health personnel should provide education and information covering all the aspects of growth monitoring to mothers attending health care facilities.

Key Words: Awareness, Growth Chart Card, Growth Monitoring

Introduction

Growth monitoring is the process of following the growth rate of a child in comparison to a standard by periodic anthropometric measurements in order to assess growth adequacy and identify faltering at early stages. Assessing growth allows capturing growth faltering before the child reaches the status of under-nutrition (UNICEF, 2007).

Growth monitoring refers to the assessment of the nutritional status of the children with the help of Road to Health Card. It is an operational strategy to promote health and serves as practical guidance to ensure regular growth (Jaikumar, 2008). It is a process of sequential measurement for the assessment of physical growth and development of children in the community with the purpose of promoting the child's health, development and quality of life (Morley & Elmore, 2012)

Growth monitoring of children is done to help

mothers know the nutritional status of their children. Many malnourished children look normal, both to their parents and to bystanders, until their size is compared with that of an expected child of the same age and sex (UNICEF, 2007). According to Ashworth, Shrimpton & Jamil (2008), the advantages of growth monitoring in developing countries include; reduction in under nutrition, morbidity and mortality among young children. Similarly, growth monitoring of under five children has been one of the major strategies for prevention and control of protein energy malnutrition. It is recognized as an effective means of detecting growth faltering early. providing a critical opportunity for making the preventive or curative actions needed. The growth monitoring coverage of under five children was 40% (NDHS, 2011/2012).

A study conducted in Amritsar district of India among the mothers having 12 to 23 months old child on awareness regarding growth chart reported that only (38.17%) had knowledge on growth monitoring chart (Upadhyay, 2014). Similar result was reported in study conducted in Bangladesh among mothers attending Integrated Management of Childhood Illness Clinic where 36% mothers were aware about growth monitoring chart (Adhikary, 2012).

Growth monitoring programms serve to promote child growth through measuring and interpreting growth, facilitating communication and interaction with caregiver and generating adequate action to promote child growth through: Increase caregiver's awareness about child growth improved caring practices and increased demand for other services, as needed (UNICEF, 2007).

The availability of growth chart does not automatically translate to its use. Knowledge of its meaning, usefulness and its acceptance by the mothers who are directly in charge of child care is necessary. Wide use of growth charts suggests that mothers accept full responsibility for their children's care (Upadhyay, Bisht & Singh, 2012). It means mother's awareness has a vital role in growth monitoring of their children.

Since, it is observed that many studies were conducted on the nutritional status of under five by weight and height assessment but only few studies are available on the knowledge and practices of the mothers on growth monitoring of under five children. Hence this study was conducted to assess the awareness of mothers regarding growth monitoring in a Nepalese context.

Methodology

A descriptive cross-sectional research design was used to find out awareness regarding growth monitoring among mothers attending health post with their under five children.

The study was conducted in Mahangkal Health Post, Mahangkal Kathmandu. The study population were the mothers having 6 to -36 months old child attending health post for immunization, health check-up of their baby, breast feeding and family planning counselling. All together 111 mothers were selected by using non probability purposive sampling technique who were willing to participate. The study was conducted from October 2016 to December 2016. Before data collection, approval was obtained from health post in-charge and respondents. Data was collected through face to face interview by using structured questionnaire. The questionnaire covered demographics and awareness regarding growth monitoring (Meaning, Purpose and source of information of growth monitoring including growth chart card) of children. The data was analysed by using descriptive statistics and presented in tables.

Results

Table1: Socio-demographic Characteristics of Mothers: Age, Education and Occupation

n = 111

Variables	Number	Percent
Age in Completed years		
15- 20	10	9.0
21- 25	35	31.5
26- 30	46	41.44
31-35	20	18.01
Education		
Can read and write only	6	5.4
Primary level	7	6.3
Lower secondary	9	8.1
Secondary level	31	27.9
Higher secondary level	27	24.3
Bachelor level	27	24.3
Master level	4	3.6
Occupation		
Agriculture	2	1.8
Business	33	30.6
Service	21	19.81
Home- Maker	55	49.5

Table 1 reveals that out of 111 respondents, 41.4% were between 26-30 years of age and only 9% were between 15-20 years of age. Regarding education, 27.9% respondents had secondary level of education and only 3.6% had master level of education. In response to occupation, 49.3% respondents were home makers and 1.8% were involved in agriculture.

Table 2: Awareness on Meaning of Growth Monitoring

n=111

Items*	Number	Percent
Regular measurement		
of child's weight, height		
according to age,		
immunization status and		
documents it in growth	0.7	0.5.5
card	95	85.5
Know about the child's	77	69.4
health status	, ,	07.1
Assess the nutritional	35	31.5
status of the child		
Provide information about		
immunization, breast		
feeding, nutrition and	36	32.4
diseases prevention		

^{*} Multiple Responses

Table 2 shows that out of 111 respondents, majority (85.5%) expressed that regular measurement of child's weight, height according to age including immunization status and documents it in growth card followed by 69.36% who know about the child's health status, 31.5% assess the nutritional status of the child and 32.4% to provide information about immunization, breast feeding, nutrition and disease prevention respectively.

Table 3: Awareness regarding Growth Monitoring Interval According to Age of Child

n=111

Variable	Number	Percent
Age Less than 6 Months		
Monthly #	85	76.5
Two monthly	2	1.8
Three monthly	2	1.8
Whenever child is brought for immunization or illness	22	19.8
Age 6-12 Months Monthly	11	9.9
Two months interval #	32	28.8
Three months interval	3	2.7
Whenever child is brought for immunization or illness	65	58.5
Age 1-2 Years		
Two months interval	11	9.9
Three months interval #	25	22.5
Six months interval	14	12.6
Whenever child is brought for immunization or illness	61	54.9
Age 2-3 Years Two months interval	4	3.6
Three months interval	16	14.4
Six months interval #	22	19.8
Whenever child become sick	69	62.1

Correct Response

Table 3 reveals that out of 111 respondents, more than 2/3rd (76.5%) answered correctly about the time interval of growth monitoring of child up to 6 months of age. Similarly, 28.8% respondents responded correctly the time interval of growth monitoring of child age between 6-12 months, 22.5% answered correctly the time interval of growth monitoring for the child age between 1-2 years and only 19.5% given correct answer about time interval of growth

monitoring of child age between 2-3 years. It means respondents awareness was decreased with increased age of child for growth monitoring.

Table 4: Awareness about Growth Chart Card

Variables	Number	Percent
Heard about Growth		
Chart Card(111)		
Yes	85	76.57
No	26	23.42
Purpose of Growth		
Chart Card(85) *		
To know the age,		
weight, height of child		
according to age	65	76.4
To detection the		
deviation from normal		
pattern of growth	69	81.17
To assess the nutritional		
status of child	65	76.4
To know about the		
immunization status	66	77.6
To provide information		
on immunization, breast		
feeding, nutrition and		
spacing	55	64.7
Components of		
Growth Chart		
Card(85) *		
Age of the child	75	88.2
Weight of the child	75	88.2
Immunization Status	65	76.4
Information on breast	45	52.9
feeding & Nutrition	25	29.4

^{*} Multiple Responses

Table 4 reveals awareness regarding growth chart card .Out of 111, 85 respondents were aware about growth card of which 2/3rd mentioned the purpose

of growth chart card and more than 2/3rd were aware on different components of growth chart card. Respondents had good awareness about growth chart card.

Table 5: Source of Information regarding Growth Monitoring

n=111

Variable	Number	Percent
Health Personnel	90	81.08
Mass media	25	22.5
Family members	30	27.02
Friends	15	13.5
Previous knowledge	35	31.5

^{*} Multiple Responses

The above table presents that the majority (81.0%) of the respondents mentioned that health personnel as main source of information regarding growth monitoring followed by 31.5% previous knowledge, 27% mentioned family members as a source of information, 22.5% mentioned mass media and only 13.5% expressed that friends as source of information respectively.

Discussion

This study shows that majority (85%) respondents were expressed that the meaning of growth monitoring means regular measurement and documents of child's weight, height, and immunization in growth card. Nearly similar result was reported by Debuo et al. (2017) where about 70.3% respondents expressed the meaning of growth monitoring means weighing, immunization and treatment of child.

In relation to time interval of growth monitoring, 76.5% respondents answered correctly about the time interval of growth monitoring of child up to 6 months of age. Likewise, 28.8% respondents responded correctly the time interval of growth monitoring for child age between 6-12 months, 22.5% responded correctly the time interval of growth monitoring of child age between 1-2 years and only 19.5% given correct answer about time interval

of growth monitoring for 2-3 years of age. It means respondents awareness decreased with increased age of child for growth monitoring interval and time. But more than 50% of respondents answered that child will be taken to the health post when he/she get sick irrespective of scheduled of periodic growth monitoring interval. But in contrast, Debuo et al. (2017) reported that 95.3% of the respondents expressed that the child's growth to be monitored once a month irrespective of their age.

In relation to the purpose of growth chart card, this study found that more than 2/3rd respondents mentioned the different purpose of growth chart card. Regarding awareness on component of growth card, this study found that the majority (76.4%) of the respondents mentioned immunization, followed by 52.2% information on breast feeding and 29.4% nutrition as components of growth monitoring card respectively. Nearly similar result was reported by Nene (2014) where 77.25% respondents mentioned immunization, 64.4% information on breast feeding as components of growth card respectively.

In response to source of information regarding awareness on growth monitoring, this study result found that the majority of the respondents expressed that health personnel as main source of information regarding growth monitoring and growth chart. Similar result was found in a study conducted by (Upadhyay, Bisht, Deepti and Singh, 2014) where majority of mothers reported that peripheral health functionaries i.e. Axillary Nurse Midwives were found as main source of information.

Conclusion

It can be concluded that more than two third of respondents are aware of the meaning of growth monitoring, growth chart card, its purposes and components. Only few mothers' are aware about time interval of growth monitoring of children. Study also reported that the main source of information was health personnel. So, it would be recommended

that health personnel should provide education and information covering all the aspects of growth monitoring to mothers attending the health facilities.

References

Adhikary, M. (2012). Maternal Knowledge on Growth Monitoring Charts of their Children. *Journal of Dhaka Med. Coll.* 20(2), 134-140.

Ashworth, A., Shrimpton, R., & Jamil, K. (2008). Growth monitoring and promotion: review of evidence of impact. Maternal and Child Nutrition, 4,86-117.

Jaikumar, M. (2008). Pocket Manual of Community Health Nursing .New Delhi: Jaypee Brothers

Morley, D., & Elmore, M.(2012). Growth Monitoring: A forgotten subject. http://www.fao.org.

Nepal Demographic and Health Survey (2011/2012). *Ministry of health and population KathmanduNepal.*

Novmeet (2016).Growth Monitoring: Journal of Health and Medicine.

Nene, G.(2014). Assessment of knowledge of Growth Monitoring Chart of Mothers/Caregivers of under five children attending underfive clinicat Gwamna Awan General Hospital Kakuri, Kaduna . Ahmadu Bello University. Nigeria: Author

Upadhya,D., Bisht, M., Deepti, S.S., & Singh,T. (2014). A study regarding awareness among mothers of children from 12 months to 23 months about growth charting and its determinants in rural area of Amritsar district. International Journal of Interdisciplinary and Multidisciplinary Studies, Vol 1 (7), 105-112.

UNICEF (2007). *Maternal and Child Health. http://www.unicef.org/Nigeria/children1926.html*

UNICEF (2007). Revisiting Growth Monitoring and its Evolution to Promoting Growth as a Strategic Program Approach: Building Consensus for Future Program Guidance Report of a Technical Consultation UNICEF Headquarters New York, USA.