TO ASSESS THE KNOWLEDGE, ATTITUDE AND PRACTICE REGARDING 1000DAY NUTRITION AMONG HEALTH CARE PHYSICIANS OF TERTIARY CARE HOSPITALS IN PESHAWAR

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ABSTRACT

Objectives: The objective of present study was to document existing knowledge, attitude and practice regarding nutrition in first thousands days of life among health physicians of tertiary care hospitals in Peshawar and to provide recommendations to formulate strategy.

1000 day nitrition: Nutrition during first 1000 days of life i.e. period from start of mother's pregnancy to her child's second birthday is known as 1000 days nutrition.

Materials and methods: A descriptive cross sectional study was conducted in Khyber teaching hospital,Lady Reading Hospital and Hayat abad Medical Complex Peshawar for months from June 2016 to August 2016. Sampling technique was convenient non probability. A size of 150 was calculated using Rao software. Medical officers, gynecologists, peadiatricians, medical specialists were included in this study. Data was collected using self structured questionnaire as developed according to WHO guidelines. Data was entered into and analysed using SPSS 21.

Results: According to present study the knowledge about 1000 days nutrition was 14%. The attitude towards importance of exclusive breastfeeding was that 96% doctors considered it important. 87.3% considered lack of Vitamine A to be highly serious. As far as practice was concerned 90% doctors prescribed supplements, only 8% had attended seminars related to nutrition.Only 5.3% provided informative material for mothers regarding nutrition.

Conclusions: It was concluded that Health care physicians in teaching hospitals had adequate knowledge regarding nutrition but they did not practice sufficient measures to meet the nutrition needs and refresh their knowledge.

Key words: Knowledge, attitude, practice, 1000 day nutrition, Health care physicians.

INTRODUCTION

Malnutrition is an underlying cause of death for 2.6 million children each year, and it results in millions of children with lifelong physical and mental impairments. Worldwide more than 170 million children do not have the potential to reach their full health because of poor nutrition in the earliest months of life. A child's future is determined by the quality of nutrition in the first 1000 days. The period from the start of mother's pregnancy to her child's second birthday is a critical period when a child's brain and body are developing rapidly. If the children do not get the proper nutrients during this period the damage is often irreversible.[1]

Like other major health issues, malnutrition is a prevalent problem in the south Asian region. Half of the world's malnourished women and children are found in just three countries: Bangladesh, India and Pakistan. South asia is the worst affected region and presents what has been termed an "Asian Engima" due to high rates of low birth weight (LBW), unhygienic conditions, unsatisfactory breastfeeding and weaning practices and the poor status of women .[2]

Every year 7.6 million children die before they reach the age of 5, most from preventable and treatable illnesses and almost all in developing countries.[3] Malnutrition is an underlying cause of more than one third (35%) of these deaths.[4] The rates of malnutrition in children under 5 determined by the 2011 National Nutrition Survey were as follows: wasting 13% underweight 38% and stunting 37%.[5]

Malnutrition is a recognized health problem in pakistan and plays a substantial role in the country's elevated child morbidity and mortality rates.[6] According to world bank statistics 2012, infant mortality rate in pakistan is 69.7 deaths in 1/1000 live births.[7]

Health care professionals have vital role to play in promoting good nutrition in first 1000 days of life. They should have sufficient knowledge and practice this knowledge to meet critical needs in the community by screening children for malnutrition, treating diarrhea, promoting breast feeding and counseling mothers about balanced diet, hygiene and sanitation.

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According to study conducted in USA[8], a list of "55 core competencies in clinical nutrition" that a primary practitioner should have, was developed. The purpose of KAP assesment is to document existing attitudes and practices towards 1000 day nutrition to provide baseline data and to help policy makers in monitoring progress for formulating strategies.

OBJECTIVES

The objective of present study was: To document the existing knowledge, attitude and practices towards 1000 day nutrition among health care physicians in Public Sector Teaching Hospitals in Peshawar

OPERATIONAL DEFINITION

1000 DAY NUTRITION

Nutrition during first 1000 days of life i.e. period from start of mother's pregnancy to her child's second birthday is known as 1000 days nutrition

METHODOLOGY

SETTING: this study was carried out in the setting of a tertiary care hospitals i.e Khyber Teaching Hospital,Lady Reading Hospital and Hayat abad Medical Complex Peshawar.

DURATION OF STUDY: 3months(June 2016 to August, 2016).

SAMPLING TECHNIQUE: Convenient non probability sampling technique.

SAMPLE SIZE: A sample size of 150 was calculated using RAO software using Confidence interval of 95%.

SAMPLE SELECTION:

INCLUSION CRITERIA

Medical Officers

Gynecologists

Pediatricians

Medical specialists

STUDY DESIGN: A descriptive cross sectional study.

DATA COLLECTION TOOL: Data was collected by self structured Questionnaire as deveolped according to WHO guidelines. Questionnaire was divided intp four Portions.

First portion included the demographic data (age, gender,education)

Second portion included questions related to knowledge

Third portion assessed the attitude

Fourth portion was related to practice of health care physicians regarding 1000 day nutrition

DATA ANALYSIS PLAN

Date ware entered into and analyzed using SPSS version 21. For quantitative variables like age, mean and standard deviation were calculated and qualitative variable like gender, education, knowledge regarding 1000 day nutrition, duration of breast feeding health risks due to micronutrient deficiency and attitude and practices regarding counseling of mothers in relation to the above aspects were assessed.

RESULTS

Socio-Demographic characteristics

The mean age of cohort of physicians was 35.03 + 8.8 with the range of 23.59 years. Out of 150, 77(51.3%) were males and 73(48.7%) were femaels. As far as their professional qualification was concerned majority of them were MBBS i.e 82(54.7%) while rest were FCPS i.e. 48(32%) and MCPS i.e 20(13.3%)

KNOWLEDGE OF HEALTH CARE PHYSICIANS

Of the 150 health care physicians only 21(14.0%) were aware of the term 1000 day nutrition. Figure 1: Do you know about the term 1000day nutrition.(n=150)

Knowledge regarding start of breasfeeding is shown in Table 1.

When asked for how long should exclusive breastfeeding be continued 130(86.7%) agreed for 6 months, 14(9.3%) doctors agreed for 9 months, 6(4%) did not know. As shown in Figure 2.

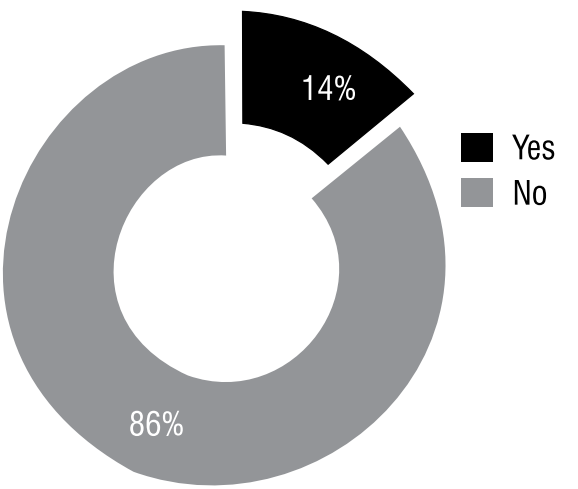

Table 1: Knowledge regarding start of breast feeding (n=150)

	Frequency (%)
Within 1st hour after birth	125(83.3%)
Within 6 hours after birth	16(10.7%)
Within 1st day	3(2%)
Don't know	6(4%)

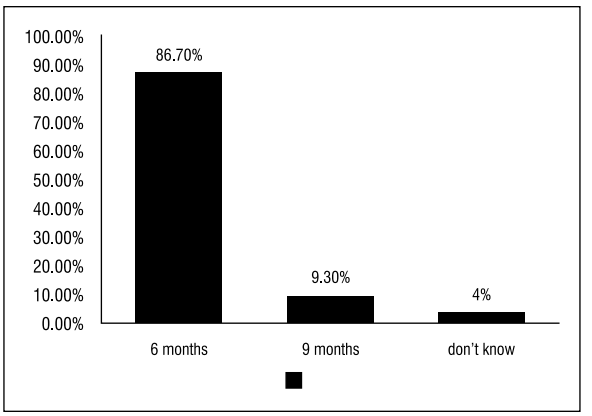

Figure 2: The length of exclusive breastfeeding (n=150)

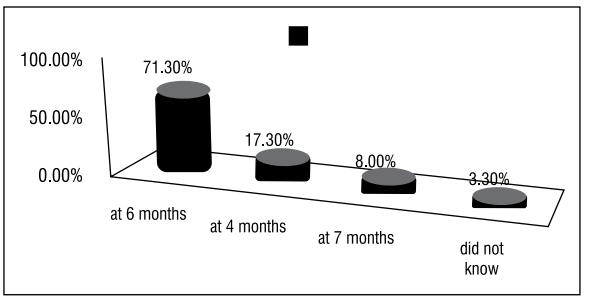

Figure 3: Knowledge of start of complimentary feeding according to WHO (n=150)

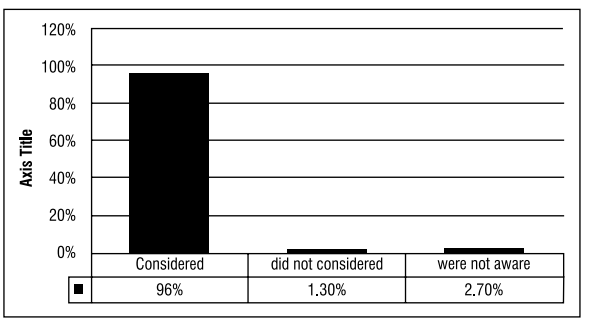

Figure 4: Importance of exclusive breastfeeding (n=150)

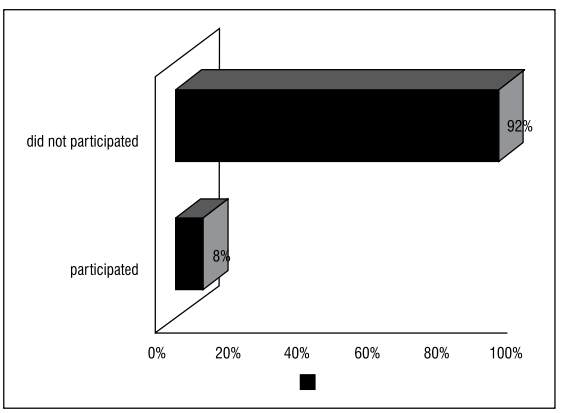

Figure 5: Participation in any seminar related to nutrition (n=150)

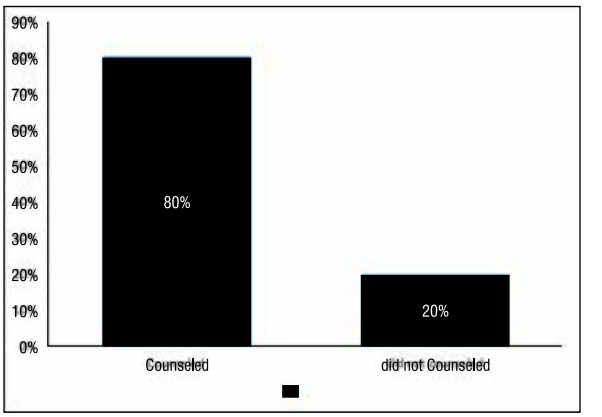

Figure 6: Counselling of mothers on types and ways of preparing complimantery foods (n=150)

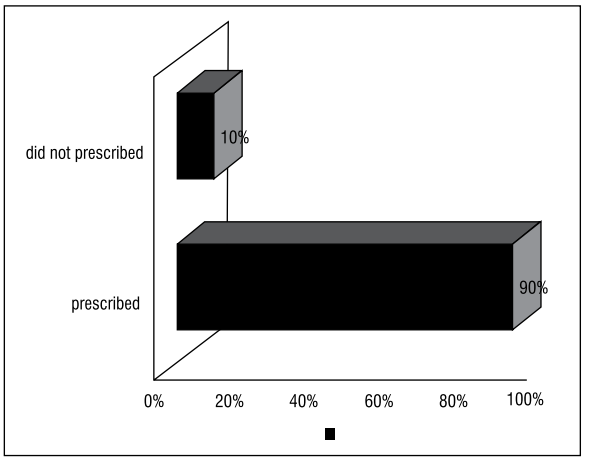

Figure 7: prescription of iron supplements (n=150)

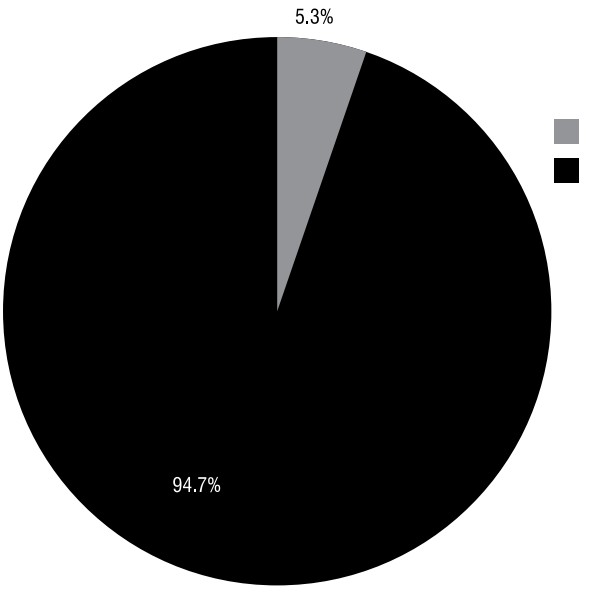

Figure 8: Provision of informative material about nutrition in first 1000 days of life. (n=150)

Table 2: Health risks for infants and children regarding lack of iron in diet(n=150)

Health Risk for infants due to lack of iron	Frequency n (%)
Delay in physical and mental development	137(91.3%)
Others	9(6.0%)
Don't know	4(2.7%)

Table 3: Consequences of lack of iodine for unborn baby in mother's diet (n=150)

Consequences of lack of iodine for unborn baby	Frequency n(%)
Risk of being mentally impaired	138(92%)
Risk of physically damaged	7(4.7%)
Others	1(0.7%)
Do not know	4(2.7%)

Table 4: Importance of Vitamin A defeciency (n=150)

Importance of Vitamin A deficiency	Frequency n(%)
Highly serious	131(87.3%)
Not serious	5(3.3%)
I'm not sure	14(9.3%)
Do not know	4(2.7%)

Table 5: prescription of zinc syrup along with ORS for diarrhea. (n=150)

Prescription of zinc syrup along with ORS for Diarrhea	Frequency n(%)
Yes	87(58%)
No	63(42%)

When asked about start of complementry feeding according to WHO 107(71.3%) agreed for 6 months, 26 (17.3%) agreed for 4 months, 12(8%) doctors opted for 7 months and 5(3.3%) doctors did not know. As shown in figure 3.

Regarding the health risk for infant and children due to lack of iron in diet 137(91.3%) agreed it caused delay in physical and mental development while 4(2.7%) did not know. As shown in table 2

About the consequences of lack of iodine for unborn baby in mother diet, 138(92%) agreed that there was a risk of being mentally impaired, 7(4.7%) agreed for risk of being physically damaged and 4(2.7%) did not know. As shown in table 3.

HEALTH CARE PHYSICIANS ATTITUDE

Out of 150, 144(96%) considered exclusive breastfeeding important, 2(1.3%) did not consider it important and 4(2.7%) health care physicians were not sure about this. As shown in figure 4

Out of 150,131(87.3%) health care physicians considered Vitamin A Deficiency as highly serious, 5(3.3%) considered it not serious while 14(9.2%) were not sure about its severity. As shown in table 4.

HEALTH CARE PHYSICIANS PRACTICE

Only 12(8%) participated in seminars related to nutrition in last two years and 138(92%) did not. As shown in figure 5. 120(80%) counseled mother on types and ways of preparing complimentary foods while 30(20%) did not. As shown in figure 6. Out of 150,135(90%) prescribed iron supplements to pregnant ladies and 15 (10%) did not. As shown in figure 7

Out of 150 health care physicians 87(58%) recommended in zinc syrup to children along with ORS for diarrhea while 63(42%) did not. As shown in table 5.

Out of 150 health care physicians only 8(5.3%) provided any informative material or pamphlets about nutrition in first 1000 days of life to mothers while 142(94.7%) healthcare physicians answered that they did not. As shown in figure 8.

DISCUSSION

In present study assessing knowledge, attitude and practice about 1000 day nutrition the knowledge regarding the term 1000 day nutrition was 14%. Regarding the awareness of exclusive breastfeeding 83.3% health care physician answered the breast feeding should be started within the first four hours after birth, while study conducted in albania in 2010[9], 68% of the doctors answered that breast feeding should be started within the first hour.

In present study 86.7% physicians claimed that exclusive breasfeeding should be continued for 6 months, whereas according to study conducted in Albania 2010[9], 81.7% doctors claimed that breastfeeding should be up to 6 months.

Present study revealed that 71.3% primary care physicians knew that according to the WHO, the complementary feeding should be started in the 6th month. However in a study conducted in Albania 2010[9], over 83% of the doctors knew that according to WHO, complementary feeding should be started in 6 months .

According to present study results, 90% primary care physicians prescribed iron supplements to the pregnant women while according to study conducted in Albania in 2010[9].58.3% doctors prescribed iron supplements to pregnant women .the higher ratio in our study was due to the fact that most of our population is

suffering from nutritional deficiency due to poor socio economic condition.

87.3% primary care physician in present study thought that vitamin A deficiency is highly serious while in study conducted in New York, more than half of all pediatricians and family practitioners stated that they always recommend vitamin supplements[10].

Judging by this survey the answer to the initial question concerning to what degree primary care physicians in the Pakistan actually practiced basic nutritional competencies is: Not to a great degree. Their favorable attitudes generally were not consistent with their reported clinical performance The frequency with which they reported practicing appropriate nutrition-related behaviors were well below the minimal level of core competence as defined by the study by young et al[8].

As stated by young et al, the ultimate test of a good nutrition program is medical education lies in the enthusiastic , knowledgeable and effective application of nutrition in the management of patients.[8]

The limitation of present study was that it was a descriptive cross sectional study so a snapshot at one time was taken.

CONCLUSION

It was concluded that health care physicians in our setting had adequate knowledge regarding nutrition. Their attitudes towards feeding practices and micronutrient deficiencies were quite appreciable but they did not practice sufficient measures to meet the nutrition needs and refresh their knowledge.

RECOMMENDATIONS

Based on finding in present study following are the recommendations.There should be on job training for health care physicians regarding nutrition related to 1000 days by periodically arranging seminars and workshops. Increase government support for proven solutions to fight malnutrition and save lives. Formulation of laws that support families and encourage breastfeeding. Development of protocols for prevention diagnosis and treatment of micronutrient deficiencies

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