J. Comm. Med. Iraq, 1991, Vol. 4, No. (1).

GOBI. KNOWLEDGE, ATTITUDE AND PRACTICE. BY IRAQI DOCTORS

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Key words: GOBI, Doctor - Iraq.

الخلاصة:

دراسة مدى معرفة وممارسة الاطباء العراقين لطرق الحفاظ على صحة الطفل

هذه الدراسة هي دراسة مسحية صممت للتوصل الى كشف مدى معرفة الاطباء المشمولين بالمسح والذين يمارسون رعاية الطفولة لاطفال تحت سن الخامسة بالستراتيجيات الاربعة التي اقترحتها منظمة المتحدة للطفولة (اليونسيف) لتقليل مراضة ووفيات الرضع والاطفال. وهذه الستراتيجيات هي مراقبة النمو، الارواء الفموي، الرضاعة الطبيعية والتحصين ضد الامراض المعدية (مختصرها مارت GOBI). لقد وجد ان الارواء الفموي والتحصين ضد الامراض المعدية كانا مفهومين اكثر وممارسين بصورة افضل عند الاطباء المشمولين بالمسح من مراقبه النمووالرضاعة الطبيعية. لقد كان عدد الاطباء في العينة المدروسة ٤٩٤ طبيباً.

SUMMARY:

This is a survey that was designed to test the knowledge of the doctors involved in pediatric care about the four strategies of health care that were suggested by the UNICEF to reduce infant and child morbidity and mortality. These strategies are growth monitoring, oral rehydration therapy (ORT), breast-feeding and immunization, abbreviated are GOBI. It was found that oral rehydration therapy and immunization were much better understood and practiced by the participating doctors than the other two, i.e. growth monitoring and breast-feeding. The total sample studied was 494 doctors.

INTRODUCTION:

Primary Health Care (PHC) was defined as essential health care made universally accessible to individuals and families in the community by means acceptable to them, through their full participation and at a cost that the community and country can afford[1]. This was the definition given by the Alma ata Conference on PHC in 1978 and from it we can understand that measures to improve the health status of a given community need not be expensive and sophisticated. If a certain health program gains the acceptability and support of its target population and if they can afford it we can expect its success. One of the main elements of PHC is maternal and child health concerning its promotive,preventive and curative aspects[1]. Primary Health Care is the idea which makes a revolution in child health, survival and development possible[2]. Considering the definition of PHC, there are strategies that will help achieve a better health status of children and these strategies

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were set by the UNICEF in 1985 as follows: Growth monitoring, oral rehydration therapy, breast-feeding and immunization or GOBI for short[2].

It is known that the nutritional status and physical growth of children have a great effect on the chances of child survival: Growth is affected by inappropriate feeding, poor diet and disease; particulary infections[3]. Most child malnutrition is invisible until it reaches an advanced stage. Growth monitoring-by means of regular monthly weighing and entering of the results on a child growth chart-makes faltering growth visible long before malnutrition begins. At that stage prevention is relatively inexpensive: and simple[2]. Dehydration that results from diarrhoea and vomiting kills five million children each year[4]. A reduction by 50% of diarrhoea associated deaths could be simply achieved by oral rehydration therapy (ORT)[5]. For infants, breast-milk is more nutritious, more hygenic and provides a degree of immunity from infections[2]. The protein in breast-milk is of superior quality with a perfect metabolic fit to the baby's cellular machinery[6]. Half the protein in breast-milk is immunologically active in addition to the presence of lymphocytes[7]. Ever since vaccines were introduced into modern medicine, it has become a common belief that while we have the means to protect the child's health from the dangerous effects of many childhood infections, it would be a crime not to do so[8].

One of the important channels to deliver these four health services to the population are doctors, but this is notthe only thing to do. We ask of our doctors to make people believe in the importance of these four simple PHC measures so that they would accept them and adopt them as early as possible. The doctor is therefore viewed as a health educator, not only as a healer. To teach people how to look after their health requires of a doctor to know, to believe and to practice what he teaches. It is that what we have aimed to look at in this study. The knowledge, attitudes and practices of doctors concerning the four simple PHC measures discussed above, i.e. GOBI.

MATERIALS AND METHODS:

Of the 18 governorates in Iraq, 12 were randomly selected to be included in the study. It was decided that the doctors studied should be the ones who usually see children under five years of age for preventive and/or therapeutic reasons. On the 31 st. of December, 1986, the number of the doctors who fulfilled this requirement was 3122 doctors all over the country. 15% of these which would be around 20% of the doctors in the 12 governorates was thought to be a sufficient sample size.

The questionnaire form was distributed to the doctors included in the sample (who were both pediaticians and general practitioners working in hospitals, private clinics and health centers). and the replies came from 494 doctors out of the 600 copies sent originally. A trained team of personnel has carried out the interviews and supervised the filling of the questionnaire forms.

Data were categorized and percentages were always worked out of a total of 494, even when more than one response was expected for certain questions which made the total more than 494.

RESULTS:

Table 1 shows the availability and use of scales and growth charts, which are necessary for monitoring growth of infants and children. Scales were said to be available for nearly half of the participants and growth charts for nearly one-third. Still 52.6% said that they used growth charts . In another check question on how to evaluate the growth of the

child during examination, nearly one-quarter of the doctors said that they did that by looking at the child, one-half said that they used weight scales and 38.4% said that they used growth charts which corresponds to the 33.6% given in Table 1. Table 2 shows the degree of dehydration at which the ORT was said to be used by the participants in the study. The answers were 70.4% for mild deyration and 55.3% for moderate dehydration. Only 11.5% of the doctors said that they would recommend it for severe dehydration. When asked whether to stop or continue feeding the child by mouth, 57.7% of the doctors said that they would advice to continue feeding by mouth 4-6 hours after giving the ORT

Table 1- Availability of weight scales and growth charts and their use by the participating doctors.

Answers	Weight scales available		Growth charts available		Growth charts used	
	No.	%	No.	%	No.	%
Yes	241	48.8	166	33.6	260	52.6
No	-	-	-	-	195	39.5
No reply	-	-	-	-	39	7.9

Table 2- Degree of dehydration at which the ORT would be used.

Degree of dehydration	Participants	
	No.	%
Mild (5 % of body weight lost)	348	70.4
Moderate (5 - 10 % of body weight lost)	273	55.3
Severe (10 - 15 % of body weight lost)	57	11.5
		100.0=494

Table 3- Advantages of breast-milk as stated by the participating doctors.

Advantages	Participants	
	No.	%
Antibodies in breast - milk	239	48.4
Breast - milk is germ free	157	31.8
Strong bonding between mothers and baby.	148	30.0
Rich in different nutrients	89	18.0
Available	77	15.6
Economic	45	9.1
Prevention of diarrhoea	32	6.5
Digestable	17	3.4
Prevention of breast cancer and atherosclerosis.	5	1.0
Helps uterine contraction after delivery.	2	0.4

N. B. More than one answer may be given by each participant.

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When asked about the use of antibiotics for the treatment of diarrhoea, a dangeruus 83.4% of the doctors said that they do use them although to varying degrees (always 11.5%, often 25.1%, sometimes 46.8%). Only 9.7% said that they never used them. Table 3 shows the advantages of breast-feeding as stated by the participating doctors. The results given in this Table will be discussed later in the text. Table 4 tests the (KAP) knowledge, attitude and practice of our doctors towards immunization. It shows that knowledge varies between 0% for tetanus neonatorum to 66.6% for tetanus in infancy and later life. Attitude towards vaccination is represented in the advice to give the vaccine, which varied between 3.2% for tetanus neonatorum (tetanus toxoid given to pregnant women) to nearly 90% for BCG and triple vaccine (DPT) and 81.2% for poliomyelitis vaccine. As for practice which was examined by asking about the timing of giving the vaccine, the right timing ranged from 53.6% for tetanus neonatorum to 100% for BCG. As for the measles vaccine, it can be seen that only 58%.9% of the doctors were convinced that the measles vaccine was useful.

DISCUSSION:

Concerning growth, the best way of monitoring it, is of course by using growth charts. This is a process of sequential measurements for the assessment of physical growth and development of children[9]. A single reading that is plotted on a growth chart is of no or very limited value. This simple and useful technique of plotting weight on growth charts was used by only one-third of the doctors.

As for ORT, the value of oral glucose-electrolyte solution for the treatment of dehydration has been well documented[10,11]. However, in cases of severe dehydration in infants and children intravenous Ringer's lactate solution is indicated[12]. The doctors participating in the study seem to be well-informed about the indications for the use of ORT.

It is generally agreed that after the first 4-6 hours after rehydration, or earlier if rehydration is complete, breast-feeding should continue. In non breast-fed infants the milk normally consumed by the infant should be diluted with an equal volume of water[12]. Antimicrobiol drugs are not indicated for the routine treatment of diarrhoea and are only used for

Table 4- Vaccination, knowledge, attitude and practice of the doctors.

Disease	Preventable by a vaccine		Advice to give it		Right timing of the vaccine	
	No.	%	No.	%	No.	%
Tuberculosis	268	45.5	442	89.5	494	100.0
Diphtheria	276	55.9	441	89.3	345	69.8
Pertussis	264	53.4	441	89.3	345	69.8
Tetanus	329	66.6	441	89.3	345	69.8
Tetanus, neonatorum	-	-	16	3.2	265	53.6
Poliomyelitis	298	60.3	401	81.2	303	61.3
Measles	291	58.9	364	73.7	323	65.4
Mumps	65	13.2	120	24.3		
Rubella	25	5.1	156	31.6		

specific indications [11]. Unfortunately, a very high percentage of our doctors are still using them for the treatment of diarhoea.

As for the benefits of breast-feeding, its immunological role (presence of antibodies) was stated by 48.4% of the participants only, although this fact is agreed upon by many authorities [12,13]. As for the sterility of breast-milk (germ-free) only 31.8% of participants were positive, and 30.0% were positive for strong bonding. The other advantages were mentioned but to lesser degrees. We do believe that our doctors should be more aware of the many advantages and the good value of breast-feeding. Inspite of the mass immunization campaign that has been started nationwide in 1985 and that is still going on we can still see that some of our doctors (and to varying percentages) are still not totally convinced about the value of some vaccines. This is especially true for the tetanus toxoid given to pregnant women to protect their newly born infants against tetanus neonatorum. In our opinion, this may be viewed as a very serious point if we want to tackle the problem of tetanus neonatorum. The other problem appears to be with the measles vaccine where only more than half of the doctors were convinced of its value although it is well known that this vaccine had controlled the disease as well as its complications in many countries.

Conclusions:

1- Use of growth charts for monitoring growth of infants and children is done by 38.4% of the participating doctors only.
2- ORT was correctly recommended for mild dehydration by 70.4% and for moderate dehydration by 55.3% of the participating doctors.
3- Advantages of breast-feeding do not seem to be properly appreciated by the participating doctors.
4- Immunization against the six target diseases of childhood seems to be satisfactory for tuberculosis, diphtheria, pertussis, tetanus and poliomyelitis. On the other hand immunization of the pregnant women with tetanus toxoid and of the infants against measles are not satisfactory.

Recommendation:

Doctors represent one of the channels from which the general population would receive health education. They are considered effective in delivering the knowledge that people need because of their distinguished status in any community. It is clear that our doctors still need more information and motivation concerning the four elements discussed in this paper to promote the health and development of our children.

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AKNOWLEDGEMENTS:

The authors of this study wish to express their gratitude to the Dr. J. Al-Sayeq (Director of the UNICEF Office-Baghdad) and to GFIW for their great help and support