THE PRACTICE OF LONGITUDINALITY IN ATTENDANCE OF CHILDREN'S HEALTH: COMPARISON BETWEEN DISTINCT CARE MODELS*

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ABSTRACT: The orientation of the primary healthcare services was evaluated in the perspective of longitudinality in children's healthcare. A transversal study with a quantitative approach was undertaken in the units with the Family Health Strategy and of the traditional model in the Primary Care Units. The data were raised through interviews held between June and July 2012, with families of children (n=482), and were analyzed using the Primary Care Assessment Tool. It was observed that long-duration personal relationships between the health professionals and the patients and family members is weakened in both models of care. The units of the Family Health Strategy obtained a score above the cut-off value in two of 11 items of the attribute 'longitudinality'. The Primary Healthcare Units had all the items with scores below the value. The principle of longitudinality was not shown to be incorporated, and its practice, as a principle of the Unified Health System, continues to be a challenge in both the models of care.
DESCRIPTORS: Primary Health Care; Children's health; Health evaluation.

A PRÁTICA DA LONGITUDINALIDADE NO ATENDIMENTO À SAÚDE DA CRIANÇA: COMPARAÇÃO ENTRE MODELOS ASSISTENCIAIS DISTINTOS

RESUMO: Avaliou-se a orientação dos serviços primários de saúde sob o foco da longitudinalidade, na atenção à criança. Estudo transversal e abordagem quantitativa em unidades com Estratégia Saúde da Família e o modelo tradicional nas Unidades Básicas de Saúde. Os dados levantados por entrevistas, entre junho e julho de 2012, com famílias de crianças (n=482) foram analisados conforme o *Primary Care Assesment Tool*. Constatou-se que a relação pessoal de longa duração entre os profissionais de saúde e os pacientes e familiares é fragilizada em ambos os modelos de assistência. As Estratégia Saúde da Família obtiveram escore acima do valor de corte em dois de 11 itens do atributo longitudinalidade. As Unidades Básicas de Saúde tiveram todos os itens com escores abaixo do valor. O princípio da longitudinalidade não se mostrou incorporado, a sua prática como princípio do Sistema Único de Saúde ainda permanece como desafio em ambos os modelos assistenciais.
DESCRITORES: Atenção primária à saúde; Saúde da criança; Avaliação em saúde.

LA PRÁCTICA DE LA LONGITUD EN EL ATENDIMIENTO A LA SALUD DEL NIÑO: COMPARACIÓN ENTRE MODELOS ASISTENCIALES DISTINTOS

RESUMEN: Se evaluó la orientación de los servicios primarios de salud bajo el ángulo de longitud en la atención al niño. Es un estudio transversal de abordaje cuantitativo en unidades con Estrategia Salud de la Familia y en modelo tradicional en las Unidades Básicas de Salud. Los datos obtenidos por entrevistas, entre junio y julio de 2012, con familias de niños (n=482), fueron analizados de acuerdo a *Primary Care Assesment Tool*. Se constató que la relación personal de larga duración entre los profesionales de salud y los pacientes y familiares es fragilizada en ambos los modelos de asistencia. Las Estrategias Salud de la Familia obtuvieron score mayor que el valor de corte en dos de 11 ítenes del atributo longitud. Las Unidades Básicas de Salud tuvieron todos los ítenes con scores abajo del valor. El principio de la longitud no se ha mostrado agregado; su práctica como principio del Sistema Único de Salud todavía permanece como desafío en ambos los modelos asistenciales.
DESCRIPTORES: Atención primaria a la salud; Salud del niño; Evaluación en salud.

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INTRODUCTION

This study's central theme is the principle of longitudinality, with a focus on children's health. Historically, children have been a priority in public health policies. The profiles of child morbidity and mortality have been resistant to the actions undertaken. It is clear that as the health conditions were intimately related with this population's living conditions, actions such as the increasing vaccine coverage, improvement in conditions of basic sanitation and nutrition, and the introduction and expansion of oral rehydration therapy have been decisive milestones in changing the profile of morbidity and mortality in recent decades[1].

It is necessary to reflect on the current indicators in order to assist the understanding of the child's health in contemporary society. Each year, approximately 4,000,000 newborns die before completing 28 days of life, while in developing countries, the risk of a child dying is 14 times greater than in a developed country. Between 1990 and 2012, the rate of child mortality fell from 13 million to 6.9 million, reaching 33% of the millennium goal of mortality reduction[2]. At the same time as mortality persists as a challenge, emphasis is placed on the

> importance of comprehensive care to the child in early childhood, which influences school success, the development of resilience and self-esteem, and the forming of relationships and self-protection, with a view to her independence[1:24].

The current social situation of the health system involves the real implantation of the Unified Health System (SUS), set up by the 1988 Federal Constitution of Brazil, and which has as its directives the universalization of the right to health, the competitiveness of the preventive and curative actions, the decentralization of the services, and social participation. Furthermore, so as to be adapted to the resolutions contained in the Alma-Ata Declaration, Brazil adopted Primary Health Care (APS) as the strategy for organizing the system, this being, therefore, considered an integral part of the health system, focusing on the individual, the family and the community. The APS seeks to bring health care closer to the locale where the people live and work, constructing the first element of continuous education for health[3].

Brazil's Unified Health System (SUS), as a juridical-legal apparatus, is one of the most advanced in the world; nevertheless, when the socio-cultural, political and economic dimensions in which this system takes place are contextualized, various types of contradictions appear. Among the most important, emphasis is placed on the ideology of the state as the provider, and of rights for the masses which are increasingly excluded[4]. Therefore, advancing in the SUS mechanisms is understood as a processual form in the search for advances in the consolidation of the health system inserted in the Brazilian social context[2].

Still on the subject of the SUS, one of the measures taken by the authorities was the creation of the Family Health Strategy (ESF), understood as able to cover and operationalize the integral approach to the health-illness process and to respond in the most effective way to the population's health problems. It is a dynamic process which allows implementation of the principles and directives of Primary Care, and must constitute a fundamental point for the organization of the care network. However, difficulties are recognized for adapting this care model to the principles, such as the increase of the bond between the health services and the population, that is, the longitudinality[5].

Longitudinality is recognized as one of the essential attributes of the APS[6]. Also known as continuity, it is defined as the bond with the service over time, such that, when new demand arises, this may be attended in the most efficient way. The achievement of Primary Health Care entails the existence of a locale, an individual, or a team of associated individuals who serve as a source of care for a specified period of time, regardless of the presence or absence of problems related to health[7]. Having longitudinal care means that those individuals in the population identify a source of care as "theirs", that the service providers recognize the existence of a formal or informal contract to be the habitual source of care directed towards the person (and not towards the illness)[6-7].

Studies reveal numerous benefits of the presence of longitudinality in the care provided to the child in the health services, such as the understanding of the patient's history of illness, the facility in prescribing preventive actions,

precision in the diagnoses, and reduction of costs to the public health system[7].

This study was undertaken in the municipality of Colombo, in the state of Paraná, which has two models of care in Primary Care; the Primary Healthcare Centers (UBS), which follow the traditional model of programmatic care, and the Centers with the Family Health Strategy (ESF)[8]. As both are vehicles of the SUS, longitudinality is one of the principles which should guide the care provided in them.

The proposal of this study, therefore, was to evaluate and compare the presence and the extent of the attribute of longitudinality in the services of the UBS centers and the ESF centers in the municipality of Colombo, in the Brazilian state of Paraná.

METHOD

This is a study with a transversal design and a quantitative approach, undertaken in the municipality of Colombo, in the state of Paraná. It has a population of 247,268 inhabitants, of which it is estimated that 8.58% corresponds to children aged between zero and five years old. In order to attend this population, the Municipal Health Department provides 21 health centers, of which nine are integrated into the ESF, while the others are traditional Primary Healthcare centers[8].

The study population was constituted by families of children aged between 0 and 1 year of age completed, registered and participating regularly in the activities in the municipality's health centers, as it is in this age range that the most recent consultations had been undertaken, making it more likely that the main caregiver could respond with the most up-to-date information. The exclusion criteria were children attended in the private health network, those whose addresses were non-existent or which could not be located, children who were adopted or who had died, or those who had been attended in the health center less than three times during their first year of life.

Based in the total of the study population, the calculation of the sample was undertaken with 95% confidence and 3% maximum calculation error. Interviews were held with 235 families, represented by the child's main caregiver, belonging to the Family Health Strategy centers, and with 247 families of the Primary Healthcare Centers, totaling 482 subjects.

For data collection, 12 students of nursing enrolled in programs of scientific initiation at a public university, with projects in that locale, were trained to hold the interviews, which took place in June and July 2012. The interviews were individual, with the support of the Primary Care Assessment Tool (PCATool) instrument (child edition), already validated in Brazil[9].

The analysis of the data took place as recommended by the PCATool, whose application involves scoring the items of the instrument, which vary from 0 to 10, with values above the mean of 6.6 being considered ideal for Primary Health Care[9].

The study received approval from the Research Ethics Committee of the University of São Paulo's School of Nursing and the competent levels of the Colombo Municipal Health Department; all the families responded only after agreeing and signing the terms of free and informed consent. The study was approved under record CAAE N. 02559112.2.0000.5392 and complied with the requirements and ethical principles established by Resolution 196/96.

RESULTS

Table 1 shows the profile of those responsible for the children, as well as data regarding the type and number of attendances received in the health services analyzed.

Of the total number of participants in the study, 48.8% used the services from the Primary Healthcare Network in the ESF modality, and 51.2% used the UBS services.

Table 2 shows the scores of the items which make up the attribute of Longitudinality, assessed based on the perception of the caregivers of the children attended in the Family Health Strategy centers and in the Primary Healthcare centers, which achieved mean scores of 5.4 and 3.4, respectively.

Table 1- Characteristics of those responsible for the children attended, number of consultations during the first year of life, and type of attendance received in the service, according to type of Health Center. Colombo, Paraná, 2012

Variables	ESF (n=235)		UBS (n=247)		Value
	n	%	n	%	"p"
Relatedness to the child					
Father	19	8,1	14	5,7	0,2936
Mother	187	79,6	209	84,6	0,1484
Grandmother	28	11,9	23	9,3	0,3540
Aunt	01	0,4	01	0,4	0,9592
Caregiver's sex					
Male	19	8,1	14	5,7	0,2936
Female	216	91,9	233	94,3	0,2936
Caregiver's educational level					
Illiterate	08	3,4	12	4,9	0,4221
Literate	227	96,6	235	95,1	0,3883
Age of caregiver (in years old)					
15 To 20	72	30,6	166	67,2	0,00001
20 To 30	146	62,1	12	4,9	0,00001
30 To 40	11	4,7	65	26,3	0,00001
40 To 50	03	1,3	02	0,8	0,2268
50 To 60	02	0,9	00	0,0	0,5969
> 60	01	0,4	02	0,8	0,5969
Activities attended by the child					
Consultation	29	12,3	37	15,0	0,3998
Consultation and vaccination	206	87,7	210	85,0	0,3364
Child's number of consultations					
Three	189	80,4	239	96,8	0,00001
Four	41	17,5	08	3,2	0,00001
Five	05	2,1	00	0,0	0,0216

Table 2 - Mean values, respective standard-errors (SE) and the value of the statistical significance of the t-test for each item which makes up the attribute of Longitudinality, according to type of health service. Colombo, 2012

Indicators	ESF (n = 235)		UBS (n = 247)		t Test
	Mean	SE*	Mean	SE*	
It is the same professional who attends the child in the service	7,0	0,166	2,8	0,145	< 0,01
You can telephone to speak with the professional in the service	3,7	0,148	2,6	0,144	< 0,0001
The professional understands what you say or ask	7,3	0,153	4,3	0,159	< 0,01
The professional responds to your questions in a way that you understand	4,6	0,159	4,1	0,161	0,018601
The professional gives you enough time to talk about your problems or concerns	3,6	0,165	2,3	0,142	< 0,0001
You feel comfortable telling the professional about your child's problems	5,7	0,188	5,4	0,189	0,195223
The professional knows the child as a person rather than as a health problem	4,5	0,190	3,1	0,151	< 0,0001
The professional knows the child's medical history	5,2	0,193	2,7	0,143	< 0,0001
The professional knows the medications which the child is taking	5,9	0,178	4,4	0,178	< 0,0001
The professional is willing to meet your family if necessary	6,0	0,175	2,9	0,145	< 0,01
Would you change to another health service if it were easy	5,7	0,192	2,4	0,138	< 0,01
General Score	5,4	0,189	3,4	0,166	< 0,0001

*SE = Standard Error

DISCUSSION

In this study, it was identified that the profile of the principal persons responsible for the children who made up the sample is similar in the Primary Healthcare Centers and in the Family Health Strategy Centers, with the mothers being the main persons responsible, followed by the grandmothers, corroborating other studies[10].

There are also similarities between the Centers in relation to the educational level of the person responsible, with a large majority being considered literate. This profile is in accordance with the social and demographic profile of the municipality, which indicates that the rate of illiteracy has reduced since 2006[8].

The main difference between the interviewees' profile in the centers researched is referent to the age of those responsible for the children. The ESF centers present a profile in which the majority of those responsible are aged between 20 and 30 years old, while in the UBS centers, the prevalent age is below 20 years old, the minimum age being 15 years old. We accept that this difference, in accordance with the prevalent profile of mothers, may indicate a factor of a high rate of early motherhood in the UBS centers. A study published in 2011[11] indicated pregnancy in adolescence as an emerging problem in the municipality of Colombo, although this study did not differentiate the rates by type of health center.

In relation to the activities attended by the child, there is similarity in both centers, with emphasis being placed on consultations and vaccinations. The municipality's Municipal Health Plan[8] lists the procedures undertaken in both centers for children according to the parameters of productivity and information of the Municipal Health Department's Primary Care Department, which refers to actions such as: administration of medications, dressings, nebulization, oral rehydration therapy, educational activities, collection of blood samples, childrearing, nursing consultations and vaccinations, among others.

It is observed that the population recognizes and uses the consultations and the vaccination services made available by the Health Center. Although the other actions were not mentioned directly, it is possible that they may be considered, by the service users, as inherent to the activities of the consultation.

Regarding the number of consultations attended by the children during the first year of life, it was observed that in the ESF Centers, the maximum was five, while in the UBS, it was four. In both, however, three consultations predominated, considering that, in the municipality, it is recommended that eight consultations should be undertaken during the first year of life, as, as stipulated by the Ministry of Health[12]. The consultation schedule for the control of growth and development of healthy children assumes the work of the entire children's care team, in a merged form, making it possible to broaden the offering of attendances in all of the health centers. In this regard, a strategy for increasing attendance at consultations in both the centers is considered necessary.

In relation to the continuity of the attendance by the same professional, only the ESF centers are in accordance with the definitions of the APS, which is defined as monitoring, by the same professional or not, of a specific problem of the patient, and the succession of events between one consultation and another, as well as the mechanisms for transferring information between one professional and another. It is estimated that there is greater turnover of staff in the traditional centers, which may explain the low mean found in the UBS. According to the Brazilian National Council of Health Departments (CONASS), the turnover of professionals in the health teams is considered one of the major challenges for the practice of longitudinal care in the Brazilian health services[13].

Both models of attendance had low scores in relation to the possibility of contacting the health professional by telephone, that is, contact made in person is a common practice. This result allows one to discuss the fact that it is necessary for the user to go to the health center in order to resolve any doubts referent to the child's health, which may be one of the factors behind the build-up of queues waiting for attendance in the centers.

Unlike the UBS centers, the ESF centers obtained adequate scores when whether the professional understands what the person responsible for the child says or asks is evaluated. This characteristic facilitates communication between the health professionals and service users, and creates satisfaction with the attendance provided. It is known, however, that communication is a

two-way street, and the two models of care did not achieve the minimum score regarding either the time dedicated by the professionals to understanding the family members' doubts, or to their expressing themselves understandably when responding to questions put to them. It was ascertained, therefore, that communication remains a flawed characteristic in both the health centers, as observed in similar studies[14].

Another aspect afforded by the longitudinality is the service user's feeling of freedom to talk about the child's problems to the health professional, which is fundamental to establishing a bond, which did not achieve a satisfactory value in either of the types of service. Thus, even the most effective continuity of attendance in the ESF does not produce this feeling in the service users, which may impair the forming of bonds with the service, it being the case that the absence of bonds hinders a relationship of trust between the two parties in the process[6].

The similarity in the low scores of the items relating to the professional's expert knowledge regarding the child's health-illness situation suggests the prevalence of attendance focused on the illness in both the types of service. It is suggested that this finding may be in consonance with the training of the professionals, whose courses do not re-affirm the appropriate importance of preventive medicine and of concepts of health promotion[13]. Studies emphasize that one of the most critical obstacles mentioned by the APS managers is the lack of specialized professionals, with technical ability in family health[14-15].

This same obstacle, mentioned by the managers in studies of the area, may indicate one of the explanations for the ESF and UBS centers not being in accordance with the precepts of the APS when those responsible for the children questioned as to whether the health professional would be willing to meet with the family were this necessary. One can also understand that the accumulation of the demand for services contributes towards the unavailability of professionals for actions different from those usually undertaken[14].

Finally, the evaluation of the attribute of longitudinality questions whether the service user would change health service if this process were easier. It is observed that the scores found in the two models of center are unfavorable, as those responsible for the children would opt to change service.

Analyzing the above, in a general way, it is noted, based on the results of this study, that the ESF and UBS centers are not in accordance with the APS criteria, when analyzed in the perspective of longitudinality.

CONCLUSION

The constant evaluation of the health services in the primary care network is one of the cornerstones which make up the APS. In this regard, it is considered that the results found in studies evaluating the APS in all the spheres of attendance of the primary care network contribute significantly to the attempts to overcome the difficulties. Transforming family health from a program into a strategy, within the national policy, requires these studies to be continued with and updated.

It was observed that the attribute of longitudinality needs to be strengthened in all the models of health centers, as both were shown to be distant from the ideals of the APS. This is necessary so as to optimize aspects which continue to hinder the quality of the care provided in the primary care network. When a service is not based on longitudinality, one can observe aspects such as: occurrences of incomplete treatments, inappropriate and incomplete use of the health services focussed on preventive actions, an increase in hospital inpatient treatment, a reduction of the professionals' ability to appropriately evaluate the needs of people and communities, unfavorable or non-existent comprehensiveness and coordination of the service's actions, and reduction in the satisfaction of the service's users.

The turnover of the professionals of the health teams, and the lack of training for those who are inserted in the system, constitute the main challenges to longitudinality in the APS.

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