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DOCTORS´ PERSPECTIVES AND PRACTICES REGARDING EPILEPSY

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ABSTRACT - *Objective:* The main aim of this study was to evaluate the knowledge, management practices and attitudes towards people with epilepsy (PWE) by a group of general practitioners (GP) and pediatrician (PD) residents. *Methods:* A cross-sectional study was carried out in three training hospitals, and had been selected 31 GP and 47 PD who agreed with the study. The collection of data was made by self-applied structured questionnaire. *Results:* Many respondents have positive values about PWE, and recognize prejudice in the population against them. The residents recognize in themselves and in the colleagues lack of knowledge about PWE, and that Medical School do not give enough importance to the study of PWE. The reference of PWE to the neurologist is a common practice among the doctors. Half of them are favorable to the idea of assuming the patients clinical management after an initial clientele appraisal by the neurologist. *Conclusions:* The non-neurologist doctors do not feel comfortable in managing PWE due to barriers. Our doctors complain about the undergraduate medical training related to the epilepsy. Although, there is not a clear relationship between the undergraduate medical training, referral practices and satisfaction about the management of PWE. The patients care is influenced not only by knowledge, but also by doctors' attitudes. In this way, there are other barriers, perceived or not, to providing care to PWE by the generalists, and they need to be approached in the medical undergraduate curriculum and medical continuing education.

KEY WORDS: epilepsy, physician, perspectives, knowledge, attitude, education.

Perspectivas e práticas dos clínicos gerais em relação à epilepsia

RESUMO - *Objetivo:* Avaliar conhecimento, práticas clínicas e atitudes em relação às pessoas com epilepsia (PCE) por um grupo de clínicos gerais e pediatras. *Método:* Um estudo transversal foi conduzido em três hospitais de treinamento médico, onde foram selecionados 31 clínicos e 47 pediatras residentes. Os dados foram obtidos através de questionário auto-aplicado. *Resultados:* Os entrevistados apresentaram valores positivos em relação às PCE, mas reconheceram preconceitos da população em relação a essa clientela. Os médicos reconheceram neles próprios e nos colegas carência de conhecimentos sobre PCE, e que a Faculdade de Medicina não dá a devida importância para o estudo desses pacientes. Eles encaminham os pacientes com freqüência para os especialistas. Metade deles é favorável à idéia de assumir o manejo clínico dos pacientes após a avaliação inicial pelos especialistas. *Conclusões:* Os não neurologistas não se sentem confortáveis em lidar clinicamente com os PCE por causa de barreiras. Nossos médicos têm queixas sobre o ensino de graduação médica em relação ao treino clínico sobre esses pacientes. No entretanto, não existe evidente relação entre o ensino da graduação, práticas de referência, e satisfação sobre o controle clínico da clientela. Os cuidados clínicos com os pacientes são influenciados não apenas por conhecimento, mas também pelas atitudes dos médicos. Dessa forma outras barreiras, percebidas ou não para prover o atendimento para os PCE pelos clínicos, devem ser abordadas no currículo médico da graduação, e em cursos de educação médica continuada.

PALAVRAS-CHAVE: epilepsia, médico, perspectivas, conhecimento, atitude, educação.

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There is a growing concern about psychosocial aspects of people with epilepsy (PWE). Consequently, researches have been carried out taking community and medical students' attitudes into account, as it was already done in Brazil[1], as well as medical knowledge and practices[2-7]. The medical care emphasizes all the dimensions of the human being, psychosocial and biological. The general practitioner (GP) and pediatricians (PD) can easily apply this integrated approach in the patients' management, than the specialists can do [7]. They are usually the person's primary care providers who has recently experienced a first seizure. In this way, it is especially important to know their professional practices and attitudes regarding PWE, apart from the neurologists, as it was done by the Australian group leaded by Roy G. Beran[3,5]. Danesi[4], did this in a developing country. Rutgers[6] evaluated the benefit of specialist be responsible for diagnosis and institution of treatment, meanwhile the GP by the follow up of the care. Although, there is also the need in evaluating the management provided to PWE by medical residents at the training hospitals in Brazil. It is also important to know their interest, knowledge, and attitudes regarding epilepsy, reflex of what they have learned at the medical school and what they are applying at their incipient medical practice. Consequently, this study is carried out to evaluate the knowledge, management practices and attitudes towards PWE by a group of GP and PD residents.

METHOD

A cross-sectional study was carried out in three training hospitals: Hospital Universitário Clementino Fraga Filho, Instituto de Pediatria e Puericultura Martagão Gesteira, from the Federal University of Rio de Janeiro, and also, the Hospital dos Servidores do Estado. The third is a non-university hospital. The PD and GP resident doctors training were surveyed, and the collection of data was made by self-applied structured questionnaire with its design based on previous ones [2,3,6]. The questionnaire variables included 27 questions about: 1.identification; 2. doctors attitudes and perceptions about PWE in the society; 3. reference and investigation patterns; 4. non-neurologists knowledge (and satisfaction) about management of PWE and antiepileptic drugs (AED); 5. acceptance of the idea that the management can be extended to the seizures control, and the satisfaction with the work link between the neurologist and other doctors in favor of PWE. The answer to many questions were standardized: *knowledge* – agree, disagree and undecided; *reference and investigation patterns* – always, frequently, sometimes and never; and *satisfaction* – satisfied, not satisfied. The polycothomus answers were dichotomized for the purpose of analysis (agree, disagree–undecided; always-frequently, sometimes-never).

The confidentiality was assured by means of a code number that was recorded against each doctor's name. The data were analyzed with the computer program Epi Info 6.04. Statistical analysis for significant differences was used to compare two samples of the categorical data with the X^2 test (Yates corrected) or Fisher exact test, and numerical, t test. The proportion estimation precision was calculated by the exact binomial 95% confidence interval.

Table 1. Sociodemographic data: GP and pediatricians.

Variables	GP n= 31		Pediatricians n=47		p
Age (sd)	25.516 (sd=1.151)		26.766 (sd=2.209)		0.004
	n	%	n	%	
Sex					
Male	21	67.7	08	12.5	<0.001
Female	10	32.3	39	87.5	
Undergraduate medical training (medical school)					
Public	22	71.0	33	70.2	0.86
Private	09	29.0	14	29.8	

Table 2. Summary of responses of doctors perspectives and practices regarding PWE.

Variables	Total (n=78)		GP (n=31)		PD (n=47)		p
	%	CI	n	%	n	%	
A-Doctors attitudes and perceptions about the PWE in the society							
PWE can have a normal quality of life	86.0	80.7-95.4	24	77.4	46	97.9	0.005
PWE can not make close friends as the other people	03.8	0.8-10.8	02	06.5	01	2.1	0.35
exist an epileptic personality	12.7	6.3-22.3	05	16.1	05	10.6	0.35
many people do not understand PWE	88.6	80.7-95.4	28	90.3	42	89.4	0.60
many people are afraid of PWE	86.1	77.6-93.6	27	87.1	41	87.2	0.62
many employers who claim not to discriminate against PWE, in fact do so	92.4	85.6-97.8	31	100	42	89.4	0.07
PWE should avoid physically strenuous work	08.9	3.6-17.6	7	22.6	40	85.1	<0.001
PWE should avoid mentally stressful work	13.9	7.2-23.8	9	29.0	2	4.3	0.003
B-Non neurologists knowledge							
many doctors are unfamiliar with the variety of AED and their specific use	93.7	87.3-98.5	29	93.5	45	95.7	0.52
many doctors are unfamiliar with the side effects of many AED	93.7	87.3-98.5	29	93.5	45	95.7	0.52
not satisfactory instruction made by the Undergraduate medical training	72.2	61.8-82.5	28	90.3	29	61.7	0.005
C-Non neurologists satisfaction							
with the familiarity with the variety of AED and their specific use	53.2	42.2-65.0	15	48.4	27	57.4	0.44
with the familiarity with the side effects of many AED	17.7	10.1-28.2	6	19.4	8	17.0	0.79
with sufficient knowledge about PWE	35.4	25.3-47.5	7	22.6	21	44.7	0.05
regarding Undergraduate medical training	16.5	9.2-26.8	4	12.9	9	19.1	0.47
D-Reference and investigation patterns							
I refer the PWE to the neurologist	77.0	65.7-85.4	18	22.6	42	61.7	<0.001
I start the treatment of the PWE	37.1	26.7-48.9	18	25.8	11	02.1	0.002
I modify the treatment proposed by the neurologist	0	0.0-5.8	0	0	0	0	0
E-Follow up care the neurologist can be the responsible for the diagnosticprocedures and AED prescription, and the other doctors can assume the subsequent care	51.9	40.9-63.9	14	45.2	27	57.4	0.29

Table 3. Reference and investigation patterns.

	Response							
	always		frequently		sometimes		never	
Statement	n	%	n	%	n	%	n	%
I refer the PWE to the neurologist								
GP	7	22.6	11	35.5	13	41.9	0	0
PD	29	61.7	13	27.7	05	10.6	0	0
total	36	46.2	24	30.8	18	23.1	0	0
I start the treatment of the PWE								
GP	8	25.8	10	32.3	11	35.5	02	06.5
PD	1	2.1	10	21.3	31	66.0	05	10.6
total	9	11.5	20	25.6	42	53.8	07	09.0
I modify the treatment proposed by the neurologist								
GP	0	0	0	0	21	67.7	10	32.3
PD	0	0	0	0	11	23.4	36	76.6
total	0	0	0	0	32	41.0	46	59.0
The neurologist can be the responsible for the diagnostic procedures and AED prescription, and the other doctors can assume the subsequent care								
GP	14	45.2	11	35.5	6	19.4	0	0
PD	27	57.4	17	36.2	3	06.4	0	0
total	41	52.6	28	35.9	9	11.5	0	0

Table 4. Relationship between the satisfaction of the management of PWE versus undergraduate medical training and follow up of the care.

Variables	Satisfaction with Undergraduate Medical Training				Doctors in charge of the follow-up care			
	yes		no		yes		no	
	n	%	n	%	n	%	n	%
Satisfaction								
with the familiarity with the variety of AED and their specific use								
yes	8	19.0	34	81.0	21	50.0	21	50.0
no	5	13.9	31	86.1	20	55.6	16	44.4
p	0.76				0.79			
with the familiarity with the side effects of many AED								
yes	4	28.6	10	71.4	7	50.0	7	50.0
no	9	14.1	55	85.9	34	53.1	30	46.9
p	0.17				0.93			
with sufficient knowledge about PWE								
yes	8	28.6	20	71.4	15	53.6	13	46.4
no	5	10.0	45	90.0	26	52.0	24	48.0
p	0.07				0.92			
Medical School public								
yes	10	18,2	45	81.8	28	50.9	27	59.1
no	3	13.0	20	87.0	13	56.5	10	43.5
p	0.42				0.84			

RESULTS

We applied the questionnaires in 72.9 % of the all resident doctors of the three training hospitals (31/ 40 GP - 77.5 %; 47/ 67 pediatricians – 70.1 %).

The respondents have different profiles according to the specialty regarding the age and sex, older and more females in the pediatrician group (Table 1).

Many of them answered that PWE can have normal quality of life. They believe the population can not understand them, are afraid of them, as well as the employers discriminate them, and the majority was not prone to believe in the existence of an epileptic personality (Table 2-A).

The respondents agree that the colleagues are not familiar with the AED, its side effects and specific use, moreover the Medical School do not give the enough importance to the study of PWE (Table 2-B). There is also the concern about the lack of knowledge, and none satisfaction with their own expertise related to the same matter (Table 2-C).

Although, PWE's reference to neurologist is a common practice among the doctors (Tables 2-D, 3), but the GP refers less frequently than the PD, and start the specific medication more frequently (Tables 2-D,3). About half of the doctors is favorable to the idea of assuming the clinical management of the patients after an initial appraisal of them by the neurologist (Table 2-E,3). There is not relationship amongst those who agree with this possibility and the satisfaction about their own knowledge that would permit them to deal with this task. Neither the public medical undergraduate training, nor private has importance in this regard (Table 4). There is not relationship between the satisfaction of the management of PWE versus undergraduate medical training or will of following up of the care of the PWE.

DISCUSSION

We analyzed abstract variables as believes, as well as practices. In this way, the reliability of the instrument is a special concern in this study. Taking into account this problem, we used standardized self-applied questionnaire due to its efficiency and uniformity prone to reduce this pitfall. Although, we recognize that some questions are liable to be answered in a biased nice way, more than in a real one.

Many doctors recognize that population or employers have stereotyped prejudice against these patients, believing that PWE were more likely to have emotional and relationship problems, contribute less to society, and they have abnormal quality of life. These impressions are in accordance with the results of others surveys about public attitudes toward epilepsy, as reviewed by Trostle[8]. Although, it seems that the respondents are not suspicious of the PWE, and they had positive attitudes towards them. Otherwise, many doctors referred patients with epilepsy to a neurologist for initial management in preference to initiating investigation and treatment themselves, because they realize an insufficient knowledge to treat themselves the PWE, as shown by other studies with the same approach[2-4]. Our doctors have complains too about the undergraduate medical training related to the epilepsy. Although, there is not a clear relationship between the undergraduate medical training, and referral practices, and satisfaction about the management of PWE. Chappell and Smithson[10] in their study showed that the patients surveyed were also aware of the lack of confidence of the GP regarding their care: more than 90% of them stated that the doses of the drugs were never or rarely changed. Mason et al[8] stated that patients care is influenced not only by knowledge, but also by doctors' attitudes, and by other barriers, realized or not. Thapar et al,[7] enrolled reasons for the non agreement of the PWE care to be carried out by GP: mainly for lack of knowledge, unfamiliarity with new drugs, and lack of time. Rutgers,[6] concluded that the GP were prone to this role, but only about half of our doctors accept to follow up the care initially proposed by the specialist. As emphasized by Frith et al.[5] , GP in general have an important role in the prevention of new seizures, minimization of AED side effects, and maintaining the patients self-esteem contributing to the life quality maintenance,

that can reduce the impact of patient's epilepsy on their daily life. Consequently, there is a need to set it to undergraduate medical curricula, and programs of continuing medical education, better information for diagnosis and treatment approach, psychosocial issues about people living with epilepsy, avoiding misconceptions about these patients and consequently barriers (perceived or not) in their medical, social and psychological care. The clinicians, as emphasized by Trostle[9], are often responsible for both the therapeutics and the social management of PWE, and in this way, the general doctors as a whole, would welcome guidelines for epilepsy care, as considered by Thapar et al.[7].

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