



Difficulties In Prevention Of Overweight And Obesity In Children In General Practice In Bulgaria

Bulgaristan’da Aile Hekimliğinde Çocuklarda Obezite ve Aşırı Kilonun Önlenmesindeki Zorluklar

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ABSTRACT

General practice is a suitable and natural environment for educating children on the issues of nutrition and physical activity. The aim of the study is to research the main difficulties in prevention of overweight and obesity encountered in general practice. 34 general practitioners are encompassed in the study. Interviews with general practitioners have been made as well as a direct open observation of the preventive measures organization has been applied.

The insufficient funding, lack of materials in appropriate form on the obesity in children as well as the written documentation are the main barriers the general practitioners meet in the prevention of obesity in children. At this stage of the reform in Bulgaria there are substantial organizational difficulties with regard to the insufficient volume and quality of preventive measures on the problem with obesity in children.

Key words: Overweight, obesity, children, general practitioner

ÖZET

Aile hekimliği fiziksel aktivite ve beslenme konularında çocukların eğitimi için uygun ve doğal bir çevredir. Bu çalışmanın amacı aile hekimliğinde karşılaşılan obezite ve aşırı kilonun önlenmesinde ana zorlukları araştırmaktır. 34 aile hekimi bu çalışmada yer almıştır. Önleyici ölçümlerin organizasyonunun direk olarak gözlenmesinin yanı sıra, aile hekimleri ile de görüşmeler yapılmıştır

Yazılı belgeler kadar çocuklarda obezite üzerine uygun formlarda materyalin olmaması ve yetersiz finansman çocuklarda obezitenin önlenmesinde aile hekimlerin karşılaştığı ana engellerdir. Bulgaristan’daki reformun bu aşamasında çocuklarda obezite ile ilgili problemler üzerinde yetersiz sayıda ve kalitede önleyici tedbirleri ilgilendiren ciddi organize zorluklar mevcuttur.

Anahtar kelimeler: Aşırı kilo, şişmanlık, çocuklar, aile hekimi

INTRODUCTION

General practice is a suitable and natural environment for educating children on the issues of nutrition and physical activity. The advantages General practitioners (GP) have in forming a correct health ideology in children are: the direct access of children and their parents to their GP (1,3,15); the simultaneous working contact with the healthy and the ill (2,11); the lasting contacts with patients, and the prestige which normally the GP has with patients (1,6,11,12,15); the opportunities for influencing the whole family, which turns to be significant for the achieving of results with children, and for their dynamic tracing. (5,7,10,11).

In spite of the said advantages, GPs encounter a number of difficulties in obesity prevention. The more significant of which, in a world scale are: the unclear and subject to discussion matters regarding the issue of metabolism in children / amount of fat tissue; insufficient options for qualification in this field; unavailability of educational materials suitable for children. The GPs are still unprepared to make group interventions (2); Lack of approved effective strategies for taking control of overweight in children (4); insufficient number of standardized systems for control and tracing of dynamics of children's

weight in the contemporary conditions of life (11) unsatisfactory state of the available personnel for various specialists team work (7, 13); poor compliance (5, 4); insufficient parents' and children's motivation for cooperation (4); difficulties in affecting the whole family for achieving a better effect (5); insufficiency or unavailability of reimbursement, administrative support, accreditation, etc. (2, 9); the GPs great occupancy and time shortage (2).

Due to these difficulties which the GPs in world scale encounter, it is considered that prevention of overweight and obesity, especially in children is not efficient enough.

Research of the main difficulties in prevention of overweight and obesity encountered in general practice.

MATERIAL AND METHODS

34 General practitioners are encompassed. The percentage of women GPs is considerably larger compared to the men GPs. The researches data show that in 88.24% of the practices work women and in 11.76% are managed by men. The mean length of service is 23.68 +/- 9.49 years. Regarding the length of service, it should be noted that it is less with men – 17.25 +/-13.89 years against 24.53 +/- 8.72 years with women, but the difference is not statistically true, probably due to the small number of men in the profession – $P > 0.05$ ($u = 1.02$).

In the current stage of the health care reform in Bulgaria the primary care individual practices - 70.59% predominate over the joint practices – 29.41%.

The high-grade, effective and timely providing of primary health care is hard to be realized without team working. In the observed primary care practices, the mean number of team members is 2.18 +/- 0.39. Predominant are the teams consisting of a general practitioner and a nurse – 82.35% +/- 6.54. Comparatively small is the percentage of teams with 3 employees – 17.655 +/- 6.54. In modified teams included are: a midwife – in 5.89% of the practices, a second physician – in 8.82 % of the practices, a second nurse – in 2.94% of the practices.

For the purpose of revealing the GPs' opinion on the

overweight prevention, as well as some difficulties in conducting preventive measures, profound interviews with general practitioners have been made. Direct open observation of the preventive measures organization has been applied.

Data has been processed with the specialized application SPSS (version 15). The following statistical analyses have been used: nonparametric analysis – for testing hypothesis (the Pirson's criterion of consent (χ^2), and alternative analysis – for qualitative indicators.

RESULTS AND DISCUSSION

GPs have had the opportunity to explain the reasons why they do not take preventive measures regarding rational diet and physical activity with children for the purpose of prevention of obesity. Research data show that in 76.47% of the interviewed GPs the insufficient funding for taking preventive measures regarding the obesity problem is the barrier of highest percentage.

As a second reason, impeding the prevention of obesity GPs find the lack of information materials in appropriate form on the obesity in children as well as written documentation – respectively 70.59% each. 55.88% of the GPs mention the time shortage.

According to Dietz and co-authors the most common difficulties are the number of engagements of the GPs with a time deficit, insufficiency or unavailability of reimbursement, administrative support, accreditation, etc., as well as the fact that the GPs are still unprepared to perform group interventions (2).

Struggling with obesity requires a complex approach where parents play key role in acquiring success. 64.71% of the interviewed GPs share that the lack of interest on the part of the parents is a common barrier in the prevention of obesity in children.

Like in our research, Kolagotla L., Adams W. report that the insufficient motivation for cooperation among children and their parents is a barrier in taking preventive measures in the general practice with children, leading to a poor compliance (4).

In the research of King the difficulties regarding the influence on the whole family and reaching better results are a barrier in the prevention of obesity (5).

The aforementioned barriers are not dependent on the

Type of the practice	number	%	Sp%	t	P t	u	P u
Individual	24	70.59	7.67	3.8	0.001	4.26	<0,001
Joint	10	29.41	7.67	3.8	0.001		
Total	34	100					

Table 1: Distribution by type of the observed practices

Barrier	Individual practice			Group practice			Total		
	number	%	Sp	number	%	Sp	number	%	Sp
Lack of interest on the part of the parents	15	20	4.62	7	17.5	6.07	22	19.13	3.66
Insufficient time	13	17.38	4.33	6	15	5.65	19	16.52	3.5
Insufficient funding	17	22.67	4.86	9	22.5	6.65	26	22.61	3.29
Lack of materials	19	25.33	5	5	12.5	5.13	24	20.87	3.8
Written documentation	11	14.67	4.12	13	32.5	7.43	24	20.87	3.8
Total	75	100	-	40	100	-	115	100	-

Table 2: Barriers in conducting preventive measures.

type of practice – $P > 0.05$, $\chi^2 = 6.21$. Physicians with individual practice place in the first place “the lack of materials” and in the second place “the insufficient funding”. In the group practices in the first place it is the problem with the large volume of written documentation, and in the second place, analogically to the physicians with individual practice, it is the insufficient funding. The barrier “lack of interest on the part of the parents” is interesting, as this barrier is in the third place (Table 2).

On the grounds of the observations within the primary health care practices it has been found out that there is a lack of informative literature on the obesity in children and possibilities for prophylaxis delivered by the GPs to their patients – both parents and children. Only 5 individual and 2 group practices /or only $20.58 \pm 6.81\%$ distribute information materials regarding the issues on obesity.

There is no good coordination between the different levels – GPs, particular specialists, family, school, society. There are no set relations between physicians, dietitians and kinesiologists, who are key figures in applying diet programmes and prescribing the physical activity for children.

The general impression in the researches of Melissa et al. (7), as well as in Story et al. (13), is that the unsatisfactory state of the available personnel for various specialists team work is marked as a difficulty.

Sallis et al. mark an interesting barrier regarding the insufficient number standardized systems for control and tracing of dynamics of children's weight in the contemporary conditions of life (11).

Different researches data prove that the availability of handbooks for GPs does not change physicians' behavior with certainty; however, they abide by the handbooks as they are the first step towards change in physicians' behaviors because such manuals give GPs knowledge and effective approaches towards overweight and obesity management. An important barrier in prevention of obesity in children is that in our country there are no approved algorithms of

physicians' behavior with overweight and obese children.

Thus for example for The Great Britain SE Morris and co. have found out that almost half of the GPs (45.6%) use regularly in their practice the published handbooks on overweight prevention (8).

CONCLUSION

The insufficient funding, lack of materials in appropriate form on the obesity in children as well as the written documentation are the main barriers the general practitioners meet in the prevention of obesity in children.

At this stage of the reform in Bulgaria there are substantial organizational difficulties with regard to the insufficient volume and quality of preventive measures on the problem with obesity in children.

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