

GENERAL PRACTICE HEALTH PROMOTION ACTIVITIES FOR INFANTS

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ABSTRACT

INTRODUCTION: Health promotion and disease prevention are the key elements of modern Primary Health Care (PHC). The objective of this study is to estimate the time allocated for health promotion activities in the GP daily routine.

METHODS: An anonymous survey was conducted among 526 GPs in 5 regions from the Eastern part of Bulgaria: Varna, Burgas, Shumen, Dobrich, Ruse (June-August 2009).

RESULTS: The time allocated for disease prevention and health promotion activities is mostly estimated as “average” (n=257; 48.9%). 47.6% (n=20) of the medical professionals who have obtained two specialties – GP and Paediatrics, as well as those with Paediatrics – 44.3% (n=58), allocate “much time” for health prevention activities ($\chi^2=41.03$; $p=0.002$; Spearman’s $\rho=0.13$, $p=0.009$). The majority of GPs (72.4%; n=380) consider the allocated time of 20.6 (± 5.9 ; 5÷40) minutes for children health check to be also adequate for disease prevention and health promotion activities. 336 (63.9%) of the GPs would assign these activities to the nurse they work with, while contact with breastfeeding consultants would be advised by 78.6% (n=81) of the GPs acquainted with the BC duties; and 65.2% (n=260) of the GPs who do not know these. The respondents who assess the health promotion activities for infants as “unsatisfactory” are 54.9% (n=259) with the main reasons for this being: poor organization of the children PHC, parents’ passivity and untrained GPs neglecting health promotion.

CONCLUSIONS: PHC has been still focusing mainly on disease and its treatment. The study identified a necessity for dispatching the health promotion activities for infants to professionals trained to these (healthcare nurses, breastfeeding and nutrition consultants, etc.).

Keywords: *primary health care, GP, infant, promotion, Eastern Bulgaria*

INTRODUCTION

In the context of deteriorating demographic situation, unsatisfactory population health status and

limited financial resources for Health Care in Bulgaria, the importance of the adequate functioning for Primary Health Care (PHC) has grown (1,2,3). Health promotion and disease prevention have been setup in the Alma Ata Declaration from 1978 as key elements for the performance of PHC. The recent definition of general practice emphasizes the important role of general practitioners (GPs) in health promotion and prevention: “the GP engages with autonomous individuals across the fields of prevention, diagnosis, cure, care and palliation, using and integrating the sciences of biomedicine, medical psychology and medical sociology” (4). Being the „goalkeep-

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Received: June 29, 2015

Accepted: July 7, 2015

ers” of the PHC, GPs have the unique opportunity to administer preventive and health promotion programmes for different age and sex population groups at every patient visit. The *US Preventive Services Task Force* recommends a very limited screening physical examination, relatively few screening laboratory tests and extensive risk-specific counselling (5).

However, the conducted studies show an opposite situation: prescribing of expensive screening tests, treatment and very rarely – an appropriate preventive program (6). The preventive activities of GPs from the European countries are expanded to a different extent due to the specificity of each of the Health Care systems (7). In Bulgaria, health promotion and preventive activities of the GP has been governed through the National Prevention Programmes of the National Health Insurance Fund (NHIF) (8,9). The emphasis put on children health in these programmes results from the fact, that the healthy start of life is a guarantee for a better health in the next age groups, as well as because of the higher efficiency of the children health promotion and disease prevention programs.

The purpose of the current study is to reveal through self-estimate the time allocated for health promotion activities in the GP daily routine.

METHODS

The presented results are part of a bigger direct individual questionnaire survey “GP and breastfeeding” conducted in 2011. The questionnaire forms were sent through the Regional Health Inspections or directly to 650 GPs in 5 regions in Eastern Bulgaria: Varna, Burgas, Shumen, Dobrich and Ruse. The total number of GP having contracts with the corresponding Regional Health Insurance Funds (RHIF) in 2011 was 916. The average responsiveness for the 5 regions was 83.5% (from 79.2 to 92.8%), or 544 GPs with filled-in forms. These individual questionnaire forms being the main instrument of the survey, included 21 questions and was based on the results from the survey conducted among mothers from the city of Varna in 2009, as well as on regulative documents of NHIF, National Centre of Public Health and Analyses (NCPHA) (9-14).

The statistical analysis was performed using SPSS v.17.0. Percentages for categorical variables and mean with standard deviation for continuous vari-

ables were calculated. Comparisons of means were performed by using unpaired t-test and Mann-Whitney test. Bivariate χ^2 test was used for comparisons of categorical variables. The level of significance was $p=0.05$.

RESULTS

Descriptive characteristics of the sample

The final number of the questionnaires meeting the requirements and included in the analysis was 526 (57.4% of the GPs having contract with NHIF in the regions included in the survey). Table 1 shows the characteristics of the participating GPs according to main demographic factors.

GP's tasks in the daily practice

According to the Ordinance on GP Medical Standards and the NHIF Programmes on Maternal and Child Health Care, GP's activities include: diagnostic-curative, dispensary, preventive, counselling and medico-social ones (9,11).

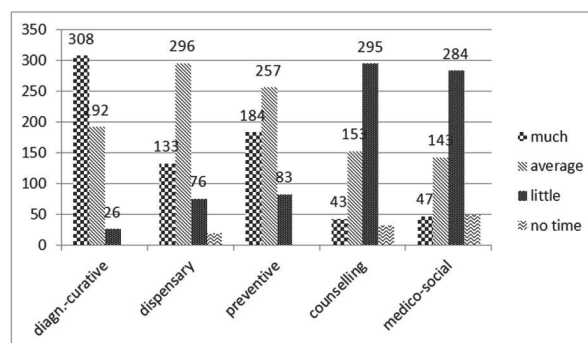


Fig. 1. Self-estimate of the time allocated by GPs for the activities of each group

For *diagnostic-curative activities* “much time” allocate 58.6% (n=308) of the respondents, while 36.5% (n=192) and nearly 5% (n=26) – correspondingly “average” and “little”. For the rest of the activities, the answers are predominantly “average” (dispensary – 56.4% and preventive – 48.9%) and “little time” (medical counselling – 56.3% and medico-social activities – 54.2%). Two thirds (60.7%; n=242) of the GPs in the urban regions indicate in fact allocating “much time” for diagnostic-curative activities, which is significantly higher compared to their colleagues from the rural practices (52%; n=66)

Table 1. Demographic characteristics of respondents

	Total n (%)	Urban (n%)	Rural (%)	p
Gender				
Male	131 (24.9)	75 (18.8)	56 (44.1)	
Female	395 (75.1)	324 (81.2)	56 (55.9)	<0.001*
Total	526 (100)	399 (100)	127 (100)	
Age				
n	523	396	127	
mean (SE)	48.9 (0.3)	48.7 (0.3)	49.8 (0.7)	0.2**
Speciality				
General Medicine(GM)	138 (26.2)	100 (25.1)	38 (29.9)	
Pediatrics	131 (24.9)	117 (29.3)	14 (11.0)	
Internal Medicine (IM)	41 (7.8)	31 (7.8)	10 (7.9)	
Other	33 (6.3)	19 (4.8)	14 (11)	
Paediatrics and GM	42 (8.0)	40 (10)	2 (1.6)	<0.001*
Internal medicine and GM	23 (4.4)	19 (4.8)	4 (3.1)	
No speciality	118 (22.4)	73 (18.3)	45 (35.4)	
Professional experience				
< 10 years	15 (2.9)	14 (3.5)	1 (0.8)	
10 - 19 years	173 (33.1)	128 (32.4)	45 (35.2)	
20 – 29 years	220 (42.1)	167 (42.3)	53 (41.7)	0.42*
≥30 years	114 (21.8)	86 (21.8)	28 (22.0)	
Total	522 (100)	395 (100)	127 (100)	
List of patients				
number	519	392	127	
mean (SE)	1546 (29.6)	1615 (34.8)	1333 (51.45)	<0.001**
Number of patients aged 0 - 3 years				
n	518	391	127	
mean (SE)	112.63 (7.81)	130 (10.1)	61 (5.12)	<0.001**

*Pearson's χ^2 test ; **Student's *t* – test

($\chi^2=7.35$; $p=0.025$). The GPs with Paediatrics speciality are the majority who respond with “much” for the diagnostic-curative activities (74%; $n=97$), while the least is the share of the GPs “with other speciality” (30.3%; $n=10$).

Dispensary activities occupy most of the time for the professionals who obtained two specialties – General Medicine (GM) and Internal Medicine (IM) (39.1%; $n=9$), as well as for those having only GM speciality (33.3%; $n=46$), while among those with prevail-

ing paediatric practice (Paediatrics and 2 specialties: GM and Paediatrics) the reply “much time” comprises 16% of all ($\chi^2=29.84$; $p=0.039$).

Medico-social activities take “little time” for the half of the urban GPs (51.1% $n=203$) and for two thirds (63.8% $n=81$) of the rural GPs.

The share of the GPs responding that they allocate “much time” for *preventive activities* is insignificantly bigger for the urban practices 37.1% ($n=148$) than the rural – 28.3% ($n=36$). 56 (14%) urban and

27 (21.3%) rural GPs spend “little time” for prevention ($\chi^2=6.01$; $p=0.11$). “Much time” for such activities allocate 47.6% (n=20) of the GPs with 2 specialties – GM and Paediatrics, as well as those having only Paediatrics – 44.3% (n=58) ($\chi^2=41,03$; $p=0,002$; Spearman’s $\rho=0.13$, $p=0.009$) (Figure 2). Probably, as the characteristics of their patients and accordingly the type of prevailing activities are similar, for the rural GPs, the obtained specialty does not influence the distribution of time for all the activities in consideration ($p>0.05$).

The health promotion activities for infants are carried out mainly during the screening checks, popularly known as infant consultation. According to the Screening Checks Regulation, the minimum duration of a check is 15 minutes (13). The answers given to the question „How long is the average duration of one consultation for an infant up to 1 year old?” point to between 5 and 40 minutes, the mean being 20.6 (± 5.9) minutes. 72.4% (n=380) of the participating GP consider the time indicated by them as adequate to teach the mothers about the infants care, feeding and health improving routines. A third of the professionals (36.3%; n=37) with professional experience below 15 years and 25.1% (n=105) with professional experience above 15 years assess the time allocated for infant consultancy as inadequate ($\chi^2=5.2$; $p=0.023$).

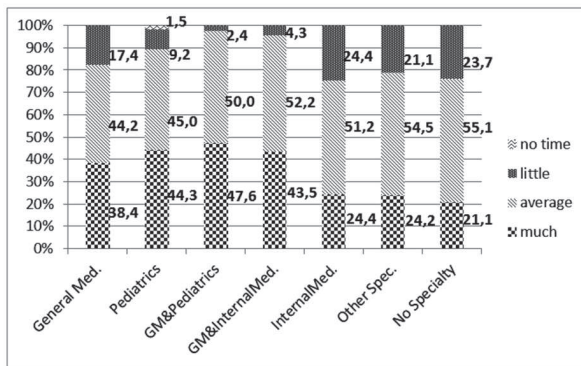


Fig. 2. Time allocated for preventive activities according to the GP specialty

The average duration of the infant consultancy differs statistically significantly between GPs with 5-10% (19.5 \pm 5.5 minutes) and above 10% (21.7 \pm 5.5 minutes) relative share of children below 3 years of

age ($p=0.04$). No significant differences have been identified for the rest of the GPs compared characteristics ($p>0.05$).

In most of the countries in West Europe, USA, Australia and Canada, **nurses and midwives** participate actively in the process of teaching the mothers with regard to infant health promotion and disease prevention (standalone practices or teamed with the GP, paediatricians). The professional activities within nurses competence, which may be executed independently or after assignment by physician are regulated in Bulgaria as well and particularly, newborn care consulting, including feeding, hygiene, immunization and breastfeeding promotion (15). The responses to the question “Would you assign the health promotion and disease prevention activities to the nurse you work with?” are 525, of which 336 (63.9%) being „yes” and 189 (36.1%) – „no”. From the GPs assessing the infant consultancy time as inadequate, 94 (65.3%) would have engaged the nurses in these activities. GPs with two specialties – GM and Paediatrics or another one – express to a largest extent (above 70%) preparedness to assign the infant health promotion and disease prevention activities to the nurses they work with. Such an intention is lowest among GP having only IM specialty (46.3%) (Figure3). No substantial differences in the attitude to dispatching such type activities to the nurses have been identified throughout the rest of the considered factors: sex, age, professional experience and relative share of children below 3 years of age ($p>0.005$).

A substantial relative share (41.3%; n=140) occupy the GP answers, where they state they would have assigned *all* the infant health promotion and disease prevention activities to nurses; 13.9% (n=47) indicated „immunization, feeding and health improving procedures”; separately - „infant care”, „feeding”, „anthropometry” and „health improving procedures” – 5-6% each. For about 2% of the responses misunderstanding of the term „infant health promotion” has been noticed: updating of records has been regarded as promotive activity. About one fourth of the GPs (23.2%) *would not assign* to nurses the infant health promotion and disease prevention activities. As a main reason for this has been indicated the lack of personnel educated for the purpose (37.7%; n=46). About one third (32.79%; n=40) of the respondents

point to the fact that these activities are among the duties of the GP. For 7.38% (n=9) of the participants „personal contact with patients is important”, hence they would not assign these activities to the nurse they work with.

One fifth (20.6%) of the GPs below 45 years of age and 8% above this age work without nurse assistance. 43.8% (n=120) of the respondents above 45 years of age would assign *all* the health promotion and disease prevention activities to nurses, while this share for those of the GP who are below 45 years is less than one third (30.2% p=0.001). For these younger GPs, the rate of dispatching other activities such as maintaining of records, anthropometric measurements, infant care advising, is significantly higher ($\chi^2=27.3$; p=0.001). The professionals above 45 years of age express a broader and multilateral comprehension about the activities they may assign to nurses, probably because of the bigger role of the child care nurses in PHC from before the start of the reforms 15 years ago.

Considering the shortage of time in GP daily routine to carry out the promotive and preventive activities, the professional resource of the **breastfeeding consultants** for supporting of these. 78.6% (n=81) of the GPs, who are acquainted with the role of these consultants and 65.2% (n=260) of those who are not, are willing to dispatch their patients to breastfeeding consultants.

GP's attitude towards the health promotion activities for infants carried out in Bulgaria

The prevailing comments from GPs are those assessing the health promotion activities for infants as „unsatisfactory” – 54.9% (n=259). “Satisfactory” and “good” is indicated by 29.4% (n=129) while only 1.7% (n=9) – “very good”. 65 of the respondents (14%) have no comment. There is no statistical difference for the assessment of the health promotion activities between the various considered characteristics of the respondents (p>0.05).

Almost half of the GPs (46.7%; n=221) express the opinion that the unsatisfactory level of the health promotion activities for infants results from the *poor organization of the Primary Child Health Care*: mixing of patients paths (children and adults; ill and healthy), lack of time for promotive activities, lack of unified doctrine from the medical community re-

garding breastfeeding and infant feeding, lack of methodical assistance to GPs, low payment and lack of patient fee for infants. The new-borns and the infants are not among the most preferred patients for the GPe, even for those with Paediatrics specialty: „much work – little money”.

In second place (21%; n=99) the respondents put the *role of the parents*: disinterested, with lower intelligence, trusting the internet more than their GP and thus underrating the GP's efforts to introduce health promotion to infants. Another substantial part of the participants (18.5%; n=87) indicate as a reason for the unsatisfactory level of the health promotion activities in Bulgaria, the *GPs themselves*: inadequate competence about the matter, unawareness about the importance of the promotive activities, neglecting these activities and focusing on the curative and dispensary part of their work.

The GPs responding that the health promotion activities are at good and very good level criticize mainly parents and less the regulative framework, while for those assessing the health promotion activities as unsatisfactory the main reason for this are the governing regulations (63.4%), as well as the GPs themselves (24.9%) ($\chi^2=97.7$; p=0.001).

The rural GPs indicate twice as often (39.6%) compared to the urban ones (19.6%), the role of the parents for the unfavourable condition of the infant promotive activities. The likely explanation for this is the lower educational level and health awareness of the rural parents, who do not follow strictly the GP's advices.

The results from the study of the GPs' health promotion activities in 11 European countries, as well as those from the WHO study in 16 countries reveal similar obstacles to their implementation: work overload and lack of time (67.7%), lack of reimbursement for these activities (39.9%), accessibility and cooperation from the patients (30.9%), lack of consensus and contradictions in the recommendations (26.7%) (16,17).

CONCLUSIONS

In spite of the 15 years of ongoing reforms in the Bulgarian Health Care sector, Primary Health Care has been still focused mainly on diseases and their treatment. According to the GPs, health promotion activities for infants are at “unsatisfactory level” and

do not correspond to the need and importance attributed to them. It has been identified as necessity to assign the health promotion activities for infants to trained for the purpose personnel (nurses, breast-feeding and nutrition consultants, etc.).

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