SCHOOL-BASED PHYSICAL ACTIVITY AND GOOD PRACTICES IN EUROPE

DOBRE PRAKTYKI W ZAKRESIE SZKOLNEJ AKTYWNOŚCI FIZYCZNEJ W EUROPIE

Lea Samanta Nash Castro^{1(A, B, D, E, F)}, Chalida Mae Svastisalee^{2(A, C, E)}, Romeu Mendes^{1, 3(C, D, E, F)}, Olivier Fontaine^{4(B, D, E)}. João Breda^{1(A, D, E)}

> ¹World Health Organization, Regional Office for Europe, Denmark ²Metropolitan University College, Copenhagen, Denmark ³EPIUnit-ISPUP, Portugal

⁴European Commission, Directorate-General for Education and Culture, Sports Unit, Belgium

Authors' contribution Wkład autorów: A. Study design/planning zaplanowanie badań B. Data collection/entry zebranie danych C. Data analysis/statistics dane - analiza i statystyki D. Data interpretation interpretacja danych E. Preparation of manuscript przygotowanie artykułu F. Literature analysis/search wyszukiwanie i analiza literatury G. Funds collection zebranie funduszy

Summary

Background. Despite the known benefits of physical activity for children, inactivity levels remain high in Europe. Schools are considered ideal settings for promoting physical activity. Nonetheless, they often fail to achieve their full potential in increasing the levels of exercise among students. This study aimed to examine the current evidence regarding physical activity promotion in the European Union school context, and to understand how key scientific evidence and World Health Organization (WHO) guidance are used.

Material and methods. Representatives of all 28 European Union Member States were asked to complete a survey to understand their national school-based physical activity practices.

Results. Responses from 22 countries were received. Of all the initiatives, most included fostering of positive attitudes to physical activity or health, while a few incorporated genderbased considerations in their design. Lastly, intersectoral collaboration in the creation of the physical education curricula is yet to be fully integrated among European Union Member States. **Conclusions.** There is a substantial focus on physical activity promotion in schools across the European Union, although the school context could be utilized to a greater degree. In general, further efforts in this area are required in order to have a stronger positive effect on physical activity levels in European Union children.

Keywords: physical activity, child, school, health policy, preschool

Streszczenie

Wprowadzenie. Pomimo powszechnie znanych korzyści wynikających z aktywności fizycznej dzieci, jej poziom w Europie nadal pozostaje niski. Szkoły są uważane za idealne miejsca do promowania aktywności fizycznej, jednak ich potencjał często nie jest w pełni wykorzystywany. Celem tego badania jest analiza aktualnych danych dotyczących promowania aktywności fizycznej w szkołach w Unii Europejskiej oraz zrozumienie sposobów wykorzystywania

kluczowych dowodów naukowych oraz wytycznych WHO.

Materiał i metody. Reprezentantów wszystkich 28 państw członkowskich Unii Europejskiej poproszono o wypełnienie ankiety, której celem było poznanie szkolnych praktyk w zakresie aktywności fizycznej.

Wyniki. Otrzymano odpowiedzi z 22 krajów. Spośród przedstawionych inicjatyw większość obejmowała promowanie pozytywnego nastawienia do aktywności fizycznej i zdrowia. Tylko w niewielu przypadkach uwzględniono aspekty związane z płcią. Okazało się, że międzysektorowa współpraca w tworzeniu programów nauczania wychowania fizycznego nie jest jeszcze w pełni zintegrowana wśród państw członkowskich Unii Europejskiej.

Wnioski. W całej Unii Europejskiej kładzie się duży nacisk na promowanie aktywności fizycznej w szkołach, choć rola szkoły w tym zakresie powinna być wykorzystana w większym stopniu. Reasumując, należy podjąć dalsze działania, które mogą podnieść poziom aktywności fizycznej dzieci w Unii Europejskiej.

Słowa kluczowe: aktywność fizyczna, dziecko, szkoła, polityka zdrowotna, przedszkole

Tables: 3 Figures: 1 References: 23 Submitted: 2018 Aug 8 Accepted: 2018 Oct 17

Nash Castro LS, Svastisalee CM, Mendes R, Fontaine O, Breda J. School-based physical activity and good practices in Europe. Health Prob Civil. 2019; 13(1): 9-18. https://doi.org/10.5114/hpc.2018.80226

Address for correspondence / Adres korespondencyjny: João Breda, Division of Noncommunicable Diseases and Promoting Health through the Life-Course, World Health Organization, Regional Office for Europe, Marmorvej 51, 2100 København, 2100, Copenhagen, Denmark, e-mail: rodriguesdasilvabred@who.int, phone: +45 45 33 70 00
ORCID: Lea Samanta Nash Castro https://orcid.org/0000-0002-7842-8141, Romeu Mendes https://orcid.org/0000-0002-3806-438X, João Breda https://orcid.org/0000-0002-8177-4926

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Introduction

Social and psychological developments take place during childhood and lay the foundation for good health and activity levels throughout the life-course. This makes it crucial to address a child's physical activity (PA) habits at a young age before a sedentary lifestyle can be adopted [1, 2]. Benefits of engaging in PA for children include physical aspects, such as contributing to growth and development, developing healthy cardiovascular, musculoskeletal and metabolic functions, as well as maintaining a healthy body weight. Beneficial mental aspects include improved cognitive skills and mood [3-6]. Furthermore, since PA can relieve tension, restlessness and improve concentration, physically active students are more likely to have good conduct in class and achieve better academic performance [7, 8].

Despite the known benefits of PA, academic demands can negatively influence the time spent on physical activities. Furthermore, there is a tendency for children and adolescents to spend more time in sedentary activities, as environments and opportunities for active play have decreased [9]. This may contribute to the high levels of physical inactivity in Europe. Data from the Health Behavior in School-aged Children (HBSC) survey, indicate that in 2014, only 15% of girls and 25% of boys were physically active for 60 minutes or more per day across European Union (EU) Member States [10]. Physical inactivity and sedentary behaviors have been linked to several conditions such as an increased risk of developing type 2 diabetes, cardiovascular disease and childhood obesity [11].

When it comes to activity levels throughout the life-course, data from the HBSC survey, shows a decrease in moderate-to-vigorous PA with age, with the lowest levels found among 15-year-old adolescents [10]. To prevent this decline, promoting PA in years prior to adolescence may be part of the solution. School has been identified as an ideal venue for fostering PA [7]. Some advantages of using this setting include: the fact that physical education (PE) has been implemented as part of the formal school curriculum in all EU Member States [12], and that a large number of children that can be reached through schools [13]. Schools can also reach those from disadvantaged groups such as those from lower socio-economic groups or children with disabilities [7]. Additionally, schools allow for the possibility of long-term strategies, as most children attend the same school for long periods of time. Lastly, they provide the possibility of including both structural and operational changes, which increases the variety of opportunities for PA promotion [14].

Besides the World Health Organization (WHO) general recommendations on PA [4], other regional mechanisms are in place to provide guidance of how to increase all forms of PA throughout the life-course, such as WHO's Physical Activity Strategy for the European Region 2016-2025 (PAS) [9]. This strategy considers PA as being a leading factor in health and well-being in Europe and it was approved by all 28 EU Member States. Particular attention is given to the burden of non-communicable disease associated with insufficient activity levels and sedentary behaviors throughout the life-course. One of the main objectives within the PAS, is promoting PA in preschools and schools [9]. The PAS suggests that schools should provide an appropriate number of regular physical education lessons that integrate knowledge about PA, as well as activities that incorporate mobility, movement, teamwork, and the competitive aspects of sport. This approach allows all children and adolescents to enjoy PA, regardless of their preferences or training levels, and also enjoy the same health benefits. Furthermore, PA initiatives should promote skills and positive attitudes that support and enable children and adolescents to lead physically active lives. Lastly, the PAS recommends ensuring the availability of playgrounds and appropriate teaching resources and materials. At the policy level, the PAS [9] highlights the importance of employing an intersectoral approach that involves the education, sports, and health sectors in the design of the PE curricula. This approach can lead to better synergies, in order to improve population health and health equity [15]. The PAS also suggests that PA, health knowledge and skills should be a mandatory part of the training curriculum and continuing professional development for all future teachers, sports trainers and childcare professionals, not only for those teaching PE classes [9].

Recommendations and standards for PA interventions in schools have also been suggested by scholars [13, 14, 16, 17]. Available literature suggests that interventions carried out in the school environment should comprise of periods longer than six months and should include age-appropriate activities for improved consolidation of healthy habits [14, 16, 17]. Utilizing theoretical models to support the design, variable selection, form of analysis, and evaluation of interventions is also recommended [14]. Involving not only children and adolescents, but also their parents or guardians in the given initiative is also imperative to insure optimal outcomes [13]. Lastly, scholars recommend considering gender differences when planning interventions, as it was observed that boys respond more effectively to structural interventions such as changes to the physical environment and to the structure of PE classes, whereas girls respond better to behavioral interventions [14, 18-20].

Despite the availability of recommendations and guidelines to promote PA in the school context, there is limited evidence regarding how countries utilize this guidance in national initiatives and policies. Therefore,

the aim of this study was to examine current evidence regarding best practice in the promotion of PA in the EU school context and to understand how guidance from the PAS [9] and available scientific evidence [13, 14, 16, 17] is reflected in PA-related actions in EU Member States.

Material and methods

The research team developed a survey on school-based PA for the purpose of this cross-sectional study. All 28 EU Member States were contacted through representatives of the EU Health Enhancing Physical Activity (HEPA) Focal Points Network. Focal Points are contact persons from national authorities within the public health and or sport sectors, appointed by each EU Member State, to coordinate the process of providing data on PA to the European Commission (EC) and the WHO. The survey was sent to Focal Points by email, along with instructions for completion and a description of the study. The survey was designed based on guidance from the PAS [9] and recent recommendations from scientific literature, regarding school-based PA initiatives. Seven questions were included in the survey; three of them had an open-ended nature, while four were close-ended questions. The survey provided a list of options and asked the respondents to choose the most appropriate answer, along with open boxes for additional comments underneath all closed questions. The first question asked if any changes had been made in the amount of mandatory or voluntary hours of PE in pre-schools and/or primary schools in their country since 2015, as this was the date for the last EC/WHO survey on PA. The second and third questions requested examples of best practices of PA in the school context, so Focal Points could highlight any relevant local or national initiatives in their country and tick off any applicable options. The following options were included:

- Fostering positive attitudes to PA and health (such as supporting all levels of abilities and promoting PA and health in a relaxed and inclusive environment);
- Age specific activities or considerations (referring to consideration of physical development and age in the planning of the activities);
- Gender specific activities (activities that reflect the different needs and preferences of boys and girls);
- The initiative includes a theoretical framework as a basis for its design (such as behavior change theories);
- Improvements in playgrounds or play areas (for example, ensuring the availability of safe and appealing environments for sports and active play);
- Continuing education on PA for teachers (any additional training for general or PE teachers);
- Other (any other consideration in the design of the initiative).

Questions 4 and 5 were identical to questions three and four, allowing for respondents to provide one additional example of a school-based initiative. Furthermore, question 6 requested information on which governmental bodies or sectors design the school PE curricula in their country. Focal Points were asked to tick-off one or more of the following options: a) education sector; b) sports sector; c) health sector; or d) other. Option d) included an open text box, where respondents could elaborate on their answer. Lastly, question 7 was of open-ended nature, and invited Focal Points to state any other relevant developments for this age group in their country.

Results

Of the 28 EU Member States contacted, 22 returned a completed survey. Responses were received between September and October 2016. Furthermore, no response was received from Austria, Bulgaria, France, Lithuania, Luxembourg and Slovakia. Additionally, Belgium returned one response per region for a total of three replies, in order to best represent the country. However, these responses were combined and assessed as one Member State.

Regarding the changes in the amount of mandatory or voluntary hours of PE in pre-schools and/or primary schools, three countries indicated that the mandatory hours of PE have increased since 2015 (Table 1). Nonetheless, in Greece, there were two types of primary schools, and while the hours increased for the 'Classic city' primary schools, they decreased for the 'Unified Reformed Curriculum' primary schools. Therefore, no changes for Greece are reported in Table 1.

Table 1. Overview of changes in mandatory or voluntary hours of Physical Education in primary schools in 22/28 EU Member States since 2015

Country	Lessons/hours of PE per week in 2015	Changes in 2016	Details	
Belgium	FLE: 2 hours. GER: min. 2 lessons of 50 minutes. FRE: 2 hours. All mandatory.	=	N/A	
Croatia	Grades 1-3: 3 hours. Grades 4-8: 2 hours. All mandatory.	=	N/A	
Cyprus	1.5 hours (2 periods) mandatory.	>	3 periods for 5 th and 6 th grade	
Czech Republic	2 hours mandatory; Additional 3 hours optional.	=	N/A	
Denmark	3.75 hours (45 min. per day) mandatory.	=	N/A	
Estonia	2 lessons mandatory.	=	N/A	
Finland	2 hours mandatory.	=	N/A	
Germany	3-5 hours mandatory depending on the region.	=	N/A	
Greece	2 hours for grades A-D. 3 hours for grades E and F.	=	Increase in 'Classic City' schools and decrease in schools with 'Unified Refor- med' Curriculum. Precise number of hours not available.	
Hungary	5 lessons of 45 minutes mandatory.	=	N/A	
Ireland	1 hour mandatory.	=	N/A	
Italy	2 hours mandatory.			
Latvia	2 hours mandatory.	=	N/A	
Malta	1.5 hours mandatory.	=	N/A	
Netherlands	On average 144 min. in grades 1 and 2 and 87 minutes in grades 3-8. PE is mandatory, but the specific amount is decided by each school individually		N/A	
Poland	For grades 1-3, PE is integrated into the educational system. For grades 4-6, 4 lessons of 45 minutes are mandatory.	=	N/A	
Portugal	2 hours mandatory.		Optional increase in PE for children in grades 1-4.	
Romania	For grades 1-2, 2 mandatory hours plus 1 optional hour of play and movement.			
Slovenia	2-3 mandatory lessons of 45 minutes each.	=	N/A	
Spain	Average of 2 hours, but varies per region.	=	N/A	
Sweden	1.5 hours mandatory	=	N/A	
United Kingdom	ENG: No minimum.		N/A	

^{=,} no change; >, increase in the number of hours; N/A, no answer; PE, physical education; FLE, Flemish community; GER, German-speaking community; FRE, French speaking community; ENG, England; SCO, Scotland; WAL, Wales; NI, Northern Ireland.

One to two best practice examples of national or local PA initiatives were provided by EU Member States for a total of 34 examples (belonging to 21 out of the 22 respondents Member States). Results were compiled

to illustrate which aspects of the PAS [9] and recommendations from scientific literature [13, 14, 16, 17], were included (Table 2).

Table 2. Overview of the main results from Focal Point survey by country

Country	Initiative name	Age group	Positive attitudes	Age specific	Gender specific	Theoretical framework	Play areas	Continuing education
Belgium	Stichting Vlaamse Schoolsport (Foundation Vlaamse Schoolsport) [Flemish Community]	6 to 18	Yes	Yes	Yes	Yes	Yes	No
	Multimove action for children [Flemish Community]	3 to 8	Yes	Yes	No	Yes	No	Yes
	Fitte Schule (Fit school) [German-speaking Community]	6 to 12	Yes	Yes	No	No	Yes	Yes
	Program for school sport in the German-speaking Community	3 to 18	Yes	Yes	No	Yes	Yes	No
Croatia	National program "Living healthy"	7 to 10	Yes	Yes	No	Yes	Yes	Yes
Czech Republic	Sazka Olympijský víceboj (Sazka Olympic multi-event contest)	6 to 15	Yes	Yes	No	No	No	No
	Plavecko-běžecký pohár (Swimming- running Cup)	9 to 15	Yes	No	No	No	No	No
Cyprus	Extra Curricular School Sport Activities	6 to 18	Yes	Yes	Yes	Yes	No	Yes
	School Sport Games	12 to 18	Yes	Yes	Yes	Yes	No	Yes
Denmark	Sunde Børn Bevæger Skolen (Healthy children move the school)	6 to 16	Yes	Yes	No	Yes	No	No
Estonia	Sport for all program for schools	7 to 18	Yes	Yes	Yes	No	No	Yes
Finland	Finnish Schools on the Move	7 to 12	Yes	Yes	Yes	Yes	Yes	Yes
Germany	Nationale Action Plan "In Form"	All age groups	Yes	Yes	No	Yes	Yes	No
Greece	Panhellenic School Sports Day	6 to 18	Yes	No	No	No	No	No
	European Sports Week	6 to 18	Yes	No	No	No	No	No
Hungary	A Sport Legyen a Tied! (May sports be with you!)	7 to 14	Yes	No	No	No	Yes	No
	TE IS Program	10 to 18	Yes	Yes	No	Yes	No	No
Ireland	National Physical Activity Plan	All age groups	Yes	Yes	No	Yes	No	Yes
Italy	Sport di Classe (Class Sport)	6 to 10	Yes	No	No	No	Yes	No
	Sportathlon	10 to 14	No	No	Yes	No	Yes	No
Latvia	"Sporto visa klase" (All class do sports)	9 to 11	Yes	Yes	No	No	No	No

Country	Initiative name	Age group	Positive attitudes	Age specific	Gender specific	Theoretical framework	Play areas	Continuing education
Malta	OnTheMove	1 to 16	Yes	Yes	No	Yes	Yes	No
	Move 360	8 to 10	Yes	Yes	No	Yes	No	No
Netherlands	De gezonde basisschool van de Toekomst – Movare Limburg (The healthy primary school of the Future - Movare Limburg)	4 to 12	Yes	Yes	Yes	Yes	Yes	Yes
	Stanislascollege Rijswijk - beweegvmbo	13 to 16	Yes	No	Yes	Yes	Yes	No
Portugal	Extension of "Desporto Escolar" (School Sports)	5 to 9	No	Yes	No	No	No	No
	CNID Cup	11 to 18	No	Yes	No	No	No	No
Romania	Mini Handball National School Sport Olympiad	7 to 11	No	No	No	No	No	Yes
	Secondary Schools Olympiad	11 to 15	No	No	No	No	No	Yes
Slovenia	"Zdrav življenjski slog" (Healthy lifestyle)	6 to 16	Yes	Yes	No	Yes	No	No
Sweden	Sports program in after-school-child-care	7 to 12	Yes	Yes	No	Yes	No	No
Spain	"¡Dame 10!" (Give me 10!)	3-6 and 6-12	Yes	Yes	No	Yes	No	Yes
	U.D.A., Unidades Didacticas Activas (Active teaching units)	6 to 17	Yes	Yes	Yes	Yes	No	Yes
United Kingdom	The Daily Mile	5 to 11	Yes	No	No	No	No	No

From the best practice examples reported, two Member States included all six of the recommendations or guidance in at least one of the initiatives, three included five recommendations, five countries included four, four countries included three, three included two and four countries included only one recommendation or guidance from the PAS [9] or scientific evidence [13, 14, 16, 17]. Additionally, one country did not provide any best practice examples.

Regarding the age groups targeted, 71% of the best practice examples addressed children aged six and above. Furthermore, 18% also included children below six years of age. One initiative (3%) targeted preschool children exclusively, while 8% of the initiatives involved citizens of all ages.

Moreover, almost all countries (90%, n = 20) included the fostering of positive attitudes towards PA and/or health, 82% (n = 18) included age-specific considerations, 32% (n = 7) included gender specific activities, 59% (n = 13) used a theoretical framework, 41% (n = 9) included improvements in play areas, and 41% (n = 9) included continuing education for teachers.

Lastly, seven countries highlighted additional aspects included in the good practice examples. Czech Republic and Slovenia added that the initiative also targeted disadvantaged groups such as those with physical and mental disabilities for the former and socially excluded children for the latter. In Finland, there was focus on active commuting, encouraging active breaks, reducing sitting time, as well as cooperation with other sectors. In Germany, intersectoral networking and the identification of best practices were a priority. In Greece, the focus was on developing social skills, diversity, acceptance, and cooperation. In the initiative from Latvia, there was also a focus on comparing children in the initiative with those who only receive 2 mandatory hours of PE per week, in order to show the benefits of PA. Lastly, the initiative provided by Romania also considered encouraging students with athletic abilities.

Regarding the number of governmental sectors used in the design of the school PE curricula (Figure 1), 14 (64%) countries responded that one sector was included, 4 (18%) countries indicated that two sectors were used, and another 4 (18%) indicated that three or more sectors were used.

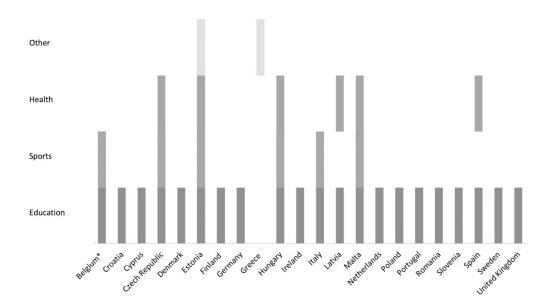


Figure 1. Types of governmental sectors involved in the design of the school Physical Education curricula *Average data for the three Communities in Belgium

As illustrated in Figure 1, almost all countries (95%) involved the education sector in the design of the school PE curricula. Six countries (27%) included the sports sector, and another six utilized the health sector. Additionally, some countries indicated that other bodies aside from those suggested are involved in the design of the PE curricula. Greece reported that the Institute for Educational Policy and the Department of PE are in charge of this matter. In the case of the United Kingdom, head teachers also participate in these curriculum decisions.

Data presented for Belgium was averaged from the three survey responses provided by the Focal Points. More specifically, The Flemish community included three all bodies, The German-speaking community included the education and sport sectors and the French community involved only the education sector in the design on the PE curricula.

Member States were invited to provide additional comments on this issue. Belgium (Flemish Community), highlighted the existence of a working group on nutrition an exercise, in which different sectors are represented, where they consult each other and decide on actions and measures to be taken. In Cyprus, the Ministry of Education and Culture, organizes various alternative and innovative activities in an effort to introduce school children to the benefits of PA. In Czech Republic, the issue of promotion of PA in the school environment meets the National Strategy Health 2020 and the Framework Educational Program (National Curriculum) as two strategic documents. In Finland, new recommendations have been developed for PA in early childhood [21]. In Greece, there is a two-year project targeting children with reduced PA levels, especially those from socially vulnerable groups, such as low-income families or refugees. The aim of this project is to increase PA and to improve their health. In the Netherlands in 2015, the Ministry of Education started a public debate to call for input into the school curriculum, in order to better optimize the curriculum in the future. Poland indicated that the education sector plays a leading role in the design of the PE curriculum, although the decision is made in cooperation with the sport sector. Lastly, the Swedish Education Act, which includes pre-school and after-school-child-care, emphasizes promotion of a healthy lifestyle among children.

When it comes to question 7, on the request for an update on any other relevant developments for this age group in their country, eight countries provided information. This is further summarized in Table 3.

Relevant development **Country** The Flemish Institute for Health Promotion and Disease is taking actions towards reducing sedentary behavior. In 2013, the government decided to implement a center for the early promotion Belgium of physical, mental and social development in children and adolescents (German-speaking Community). In almost every county and city office, NGOs and schools organize local, public actions focused on Czech Republic healthy lifestyle choices, which involve HEPA The Ministry of Education and the Primary Education Council launched the Physical Education Plan in 2017, so that each primary school pupil gets at least two hours of PE per week, taught by Netherlands a qualified teacher. In response to this, members of parliament took initiatives to make three hours of PE a week provided by specialized PE teachers mandatory. A national surveillance platform has been introduced in order to enable the evaluation of physical Portugal fitness and PA in all school-aged children in Portugal. Actions at governmental level are being taken to expand the curricula with 5 hours per week of PA, Slovenia with the involvement of specialized PA teachers, in combination with generalized teachers A research group was established to organize a congress for PA teachers to exchange experiences in promoting PA and health in the school setting. There is also a program which offers a formative Spain curriculum for schools on the promotion of healthy habits and the use of sport as a tool for education and health. The amount of funding for PE and sports in schools is planned to be doubled from £160m in England September 2017 to £320m over the next few years.

Table 3. Relevant developments in the area of school-based physical activity or health promotion

Discussion

The aim of this study was to examine the current evidence regarding the promotion of PA in EU schools, and to understand how guidance from the PAS [9] and available scientific evidence [13, 14, 16, 17] is reflected in PA interventions in EU Member States.

As such, this study contains four main findings. Firstly, numerous actions are being taken to promote PA in schools. Secondly, intersectoral collaboration in the design of the PE curricula is not a fully integrated practice among EU Member States. Thirdly, it seems that limited focus is given to considerations on gender differences in the design of PA initiatives. Fourthly, schools could be utilized to a larger degree as HEPA promoting venues.

Results from this study indicate a vast interest among EU counties in promoting PA in school-aged children, through good practice examples, as well as through more recent developments in national agendas. For example, the assignment of the HEPA Focal Points in all EU Member States, indicates that there are resources set aside to tackle the high prevalence of physical inactivity [22], as well as an openness towards collaboration between countries. Furthermore, three countries had increased the hours of PE in schools between 2015 and 2016, while others highlighted relevant developments such as increasing budgets for HEPA promotion or ensuring the provision of specialized teachers for PE. These are all positive indications that EU Member States are taking action towards promoting HEPA and reducing the prevalence of physical inactivity in children.

As a second finding, intersectoral collaboration in the design of the school PE curriculum is yet to be fully integrated among EU Member States. Despite guidance from public bodies such as the WHO and European Commission, it seems as EU Member States have yet to adopt this fully in their HEPA strategies. Although in most EU Member States the education sector is primarily responsible for planning the PE curriculum, by involving other sectors such as the sports and health sectors considerations can be made as to the specific requirements for equipment and venues for PA. This can lead to greater quality PA and more opportunities for PA in the school setting.

Thirdly, based on the good practice examples provided by the Focal Points, it may seem that limited focus is given to gender considerations when planning school-based PA interventions. This may be an area with room for improvement, as research shows that girls respond differently to PA interventions than boys [18], and are considered a more vulnerable group when it comes to PA engagement [9]. Nonetheless, since few examples were provided from each country, these may not be representative of general focus of PA initiatives in EU Member States. Additionally, some interventions may not explicitly include gender specific considerations, but may offer activities based on skills and preferences of the children and thereby indirectly address their gender differences.

Lastly, although the benefits of PA for children seem to be recognized throughout the EU, the amount of mandatory hours allotted to organized PE varies among countries, with an average being around two hours

per week [12]. Considering the WHO recommendation of 60 minutes of PA per day for children [4], this only contributes to a fraction of the time in which children should be physically active [23]. Although other PA opportunities are offered by some EU Member States, such as PA during breaks, within lessons, as well as after school activities [5], considering the long hours that children spend in schools, this setting could be utilized to a greater degree to ensure higher PA levels in school-aged children.

Strengths

Overall this study possesses several strengths. Firstly, employing the EU HEPA Focal Points as providers of country-specific information allowed for first-hand and up to date information about Member State's actions towards PA in schools. Secondly, the high survey response rate (78.5%) is an important strength of this study, providing evidence from a large geographical area in the EU.

Limitations

This study is not without limitations. Firstly, it relies on self-reported survey information, which could involve responder bias, as the Focal Points were likely to respond in a positive manner about their country. Additionally, the inclusion of open questions could have led to misinterpretations and placed limitations on the accuracy of the data provided. Moreover, there may have been a misunderstanding of the concept of 'schoolaged' children within the respondents, as a specific age group was not specified. This may have influenced the type of responses given. Lastly, only two best practice examples were requested from Focal Points, therefore general conclusions cannot be drawn, as the data may not be representative of the general status of school-based PA initiatives in the given country.

Conclusions

Results of this study show that in general, there is a substantial focus on PA promotion in schools across EU Member States, although the school context could be utilized to a greater degree as a HEPA-promoting venue. Furthermore, the majority of the best practice examples comply with WHO guidance in terms of fostering positive attitudes to PA. Nonetheless, when it comes to gender-specific considerations in the design of PA initiatives, this may be an area with room for improvement. Utilizing multiple sectors in the design of the PA curricula has yet to be fully integrated in EU Member States. Overall, further efforts in this area could have a greater influence on PA levels in children in Europe. Nonetheless, future research should focus on analyzing school-based PA best practices, in order to be able to draw further conclusions on the focus and needs of EU Member States in this context.

Disclosures and acknowledgements

The authors would like to thank all representatives of the EU Physical Activity Focal Points Network for their time and efforts in gathering the information requested in the survey.

Conflicts of Interest: The authors declare no conflict of interest.

Disclaimer: [B is WHO staff member. Any views expressed here are his own.

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