Promoting physical activity in patient populations through curriculum change in undergraduate Lithuanian medical schools and schools of health: the VANGUARD project

Ann Bernadette Gates,1 Ramune Zilinskiene,2 Natalija Fatkulina,2 Brigita Mieziene,2 Rytis Jankauskas,2 Inga Gerulskiene,3 George S Metsios4

INTRODUCTION TO A SHARED EDUCATIONAL PURPOSE
Physical activity (PA) is one of the most effective interventions for reducing the burden of non-communicable diseases (NCDs)1 and may have comparative effectiveness with pharmaceutical interventions in reducing premature morbidity and mortality.2 Research also reveals that brief advice on the benefits of PA by healthcare professionals can have sustainable and clinically beneficial effects on the symptoms of patients with different NCDs.3 Moreover, the promotion of walking, cycling, sport, active recreation and play can prevent NCDs and contribute directly to achieving many of the 2030 WHO Sustainable Development Goals.4

With these holistic benefits evidenced, academic medical and health institutions (HEIs) are considered by WHO as important agents in reducing physical inactivity across the lifespan and especially in situations of disparities and inequities. However, PA learning modules are currently not part of medical curricula in European Union (EU) medical schools, which may be a significant missed opportunity.5 Academic leadership and change agency implementation by educators are likely to play critical roles in the sustainable and successful knowledge/skills adoption in the future healthcare workforce. In addition, students themselves can start to develop their leadership skills and actions within the health sector to strengthen their individual clinical practice regarding PA, and initiate conversations about strategic change within the system delivery models4 outlined by the WHO.

The Virtual Advice, Nurturing, Guidance on Universal Action, Research and Development for PA and sport engagement: the VANGUARD project, is an ERASMUS+ Sport Collaborative partnership between five EU countries (Greece, Lithuania, Portugal, Estonia, France) and the UK. It aims to educate future health professionals on the benefits of PA for people living with NCDs, inactivity, immobility, disability and inequity. VANGUARD embeds the free #MovementforMovement resources6 and adopts the NHS Change Model Implementation Framework, so that change in the curriculum, is implemented7 by all key stakeholders. The resources focus on making every contact count and every (strategic) influence matter for PA, in the prevention and treatment of NCDs and specific health conditions such as pregnancy and surgery. The resource content and ‘shared purpose’ approach has been professionally curated and extensively peer-reviewed, student reviewed, and involved considerable patient and public review.6

This Service Spotlight highlights the initial impact of the VANGUARD project in Lithuania and provides encouragement for other nations to embed PA in the medical and health curricula, especially in low- and middle-income countries.

VANGUARD IMPLEMENTATION METHODOLOGY
The change in the curriculum was codeveloped by Vilnius University, using principles from the WHO Implementation Framework,8 via medical students and staff, university senior management and local/national authorities. The implementation of the #MovementforMovement resources was agreed and integrated into various clinical modules, predominantly in nursing, through both distance and contact teaching/learning. This occurred simultaneously in Vilnius University and in the other Lithuanian medical/health schools including Lithuanian University of Health Sciences, Klaipêda University, Vilnius College, Šiauliai State College and Utena College. Vilnius University achieved this impact, in the best viable way, and in a timely manner, when all Universities across the world also had significant operational difficulties due to the COVID-19 pandemic.

Student participants accessed the #MovementforMovement resources and provided quantitative feedback covering the main aspects of the project. This process was led and monitored by Vilnius University in conjunction with the VANGUARD protocol.

Students at Vilnius College, Šiauliai State College and Klaipêda University were the most responsive in a quality assessment survey. Most respondents (93%) declared that the #MovementforMovement resources were clear, and 89% agreed the resources were applicable or highly applicable to their professional practice. Students also declared (81%) that there was a need for PA teaching within their study programme.

Across the future Lithuanian healthcare workforce, this approach clearly offers the ability to strengthen the knowledge and skills acquisition by students, (the system approach as defined by WHO), needed to deliver on the NCDs agenda, inequity, and the Sustainable Development Goals across their career. It also indicates a willingness by HEIs and their students to incorporate brief advice for PA as an important, additional, therapeutic tool in patient consults and in reducing inequities in health sector led public health campaigns. The potential community health impact by these changes could be substantial.

IMPLEMENTATION AT HIGHER LEVELS
Given the positive results, the Lithuanian Ministry of Education, Science and Sport successfully proposed the inclusion in the Council of the EU declarations that the promotion of PA could materialise via dedicated resources in the undergraduate healthcare curricula, for ensuring better support and advice to patients, within the clinical setting. This acknowledgement is critical in enabling other countries and HEIs to use this embedding protocol to

1School of Health Sciences, The University of Nottingham, Derby, UK
2Vilnius universitetas Medicinos fakultetas, Vilnius, Lithuania
3Ministry of Education and Science of the Republic of Lithuania, Vilnius, Lithuania
4School of Physical Education, Sport Science and Dietetics Department of Nutrition and Dietetics, University of Thessaly, Volos, Thessaly, Greece

Correspondence to Professor Ann Bernadette Gates, School of Health Sciences, The University of Nottingham, Derby DE221DA, UK; annngates@googlemail.com
establish similar projects with the promise of encouraging impact.

NEXT STEPS AND IDEAS FOR OTHER NATIONS
VANGUARD continues to shape a paradigm shift in our understanding of PA promotion and working towards a common delivery goal using change agency, communities of practice, and the leadership of HEIs in contributing to national and international strategic and cultural objectives.

Leadership, change agency and student participation were the hallmarks of success. The quality of the resources in strengthening essential knowledge and skills is now evidenced. Lithuania plans to share and disseminate further successes across different communities and globally.

Twitter Ann Bernadette Gates @exerciseworks
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ORCID iD
Ann Bernadette Gates http://orcid.org/0000-0001-8798-1478

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