

# COMPETENCIES OF PUBLIC HEALTH CARE PROFESSIONALS AND COMPETENCY DEVELOPMENT NEEDS IN PROVIDING QUALITY SERVICES TO ADOLESCENTS

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**Abstract.** *This article presents findings of the study of public health care professionals' attitude toward the specific competencies in adolescent health care and competency development needs. The study is based on the assumption that adolescents are specific receivers of services provided by public health care professionals; the services, therefore, should be provided with due regard to age, developmental, interpersonal, community, organisational, structural, and other intrinsic factors in terms of adolescents. When counselling adolescents, public health care professionals should be proficient in the following domains: communication style, consultation structure, policies and procedures, involvement of parents/guardians in an adolescent health care process, etc. Proficiency in the above domains requires specific competencies in adolescent health care. An analysis of public health care professionals' attitude, in view of their existing competencies in adolescent health care, might help to respond more comprehensively the following problematic questions: Why are adolescents to be considered unique clients of services provided by public health care professionals? What do competencies in adolescent health care consist of? What are the needs for competencies of public health care professionals in adolescent health care and development thereof? Thus, this article is aimed to reflect an attitude of public health care professionals toward the specific competencies in adolescent health care and competency development needs. The article consists of an introduction and two parts: the first part provides theoretical assumptions; the second part is dedicated to an empirical analysis of an attitude of public health care professionals toward the specific competencies in adolescent health care, a content thereof, and competency development needs in view of existing competencies in adolescent health care. The article ends with a discussion and conclusions, followed by references.*

**Keywords:** *competencies in adolescent health care, public health care professionals.*

## Introduction

WHO (World Health Organisation) and the United Nations (UN) pay special attention to the health and development of adolescents. Under the youth

health projects, the UN began to develop a health care policy for adolescents as a unique age group with specific problems and needs.

Since 1996, WHO has been investing in developing resources and tools to support the competencies of health care providers in adolescent health.

There have been insufficient studies on public health care professionals' competences in adolescent health and competency educational needs conducted so far (and no studies recorded in Lithuania to this day). It is worth mentioning the contribution made by V. Baltag and S.M. Sawyer (2017) in highlighting the ecological perspective of adolescent health care.

Though, a certain paradox is observed: A paradox persists, however: the WHO, the United Nations, and health professionals report high interest in developing skills to work better with adolescents, and yet their education needs remain unmet (Sawyer, 2013).

All the above listed factors bring forth a *scientific problem*: what are the competencies of public health care professionals and competency educational needs in providing quality services to adolescents? The pilot empirical study seeks to answer the following *problematic questions*: Why are adolescents to be considered unique clients of services provided by public health care professionals? What do public health care professionals' competencies in adolescent health care consist of? How do professionals themselves assess their existing competencies in adolescent health care? What are their educational needs?

In order to analyse the above problematic issues, purpose of the research is hereby set: to reflect an attitude of public health care professionals to the competencies in adolescent health care and the needs for development thereof. The purpose of the research is limited to an analysis of attitudes of officials (specialists and managers, n = 287) from Lithuanian municipal public health bureaus. The study excludes employees from specialised public health facilities and the National Public Health Centre.

The following methodological approaches have been applied in analysing the competencies of public health care professionals and their needs in providing quality services to adolescents:

- Adolescents are unique clients of services provided by public health care professionals (WHO, 2014, p. 2);
- Professionals, providing quality public health services to adolescents, need multi-level competencies in adolescent health that go far beyond just biomedical knowledge and skills (WHO, 2015, p. 5);

The practical relevance of the study is demonstrated by the following findings: (a) Self-assessment of adolescent health care competencies by professionals working in public health bureaus is subject to their level of education and, therefore, competency development needs vary; b) A number of

core structural elements of competencies to be developed by public health care professionals can be identified in primary care settings: *effective interaction with an adolescent client; management of common health conditions during adolescence; delivery of services for adolescents in line with new quality standards and health policies; management of chronic health conditions including disability; assessment of mental health and management of mental health problems; detection and management of endemic diseases.* This should be taken into account in developing professional education programmes and in promoting inter-disciplinary cooperation between officials, institutions, curriculum coordinators and educators.

### **Particularities of Services Provided to Adolescents by Public Health Care Professionals and Domains of Competencies**

In answering the question of why public health care providers should develop competencies in adolescent health, it is worth emphasising that Adolescents are not simply older children or younger adults. Individual, interpersonal, community, organisational, environmental, and structural factors make adolescent clients unique in the ways that they understand information, in what information (individual one rather than group) and which channels of information influence their behaviours, and in how they think about the future and make decisions in the present. The above is reflected in the ecological model of adolescent health care (Baltag et al., 2017).

The ecological model of adolescent health care consists of various factors:

- *Individual-level factors related to the age and stage of development:* rapid growth and maturation with puberty (e.g. physical growth, sexual maturation, neuro-cognitive functioning, emotional maturation); onset of health-related behaviours and states which signal a wider scope of health risks than in younger children; limited capacity to modify behaviour to override risks in the context of intense activities involving peers (“hot cognitions”); limited capacity to perceive long-term health risks that might otherwise influence current behaviours; increasing desire for confidentiality and autonomy in health consultations when compared to younger children; lower health literacy in comparison to adults; greater capacity than children to seek health care independent of parents, yet less experience than adults about when to seek health care; less empowered than adults to claim rights in health care;
- *Interpersonal-level factors:* often reliant on adults to transport them to health consultations; often accompanied by parents or other adults, who generally expect to remain present in health consultations;

distancing from parents or other adults reduces parents' capacity to understand the inner world of their child and the risks the adolescent may be experiencing (e.g. self harm); embarrassment, shame and fear of consequences can reduce adolescents' preparedness to share important information with parents and health-care providers; health-care providers function as "gatekeepers" to health resources; their beliefs about the appropriateness or legality of resources for adolescents can reduce access to health-promoting resources (e.g. provision of contraception to unmarried sexually active girls);

- *Community-level factors:* Many health issues that particularly affect adolescents are highly stigmatised within communities, which may deter adolescents from care seeking; adolescents have a lower ability to resist community values and norms which oppose or stigmatise care seeking (e.g. HIV testing for unmarried girls); community values and norms reflect adults' views, which may not appreciate the prevalence of adolescent behaviours nor the challenges of behaviour change.
- *Organisational and structural factors:* lack of privacy within health services can be more challenging for adolescents than adults due to adolescents' sensitivity about what others think; Lack of or insufficient training in adolescent health makes health-care providers less acquainted with the health and social needs of adolescents and their rights; Limited rights to consent to services; limited access to practical resources (e.g. finances, transportation).

As a consequence of these factors, health consultations with adolescents will have to be carried out with special attention to the provider's *communication style, the structure of the consultation and adolescents' involvement in decisions that affect their health* (WHO, 2017).

When emphasising *communication style*, there should be considered such aspects as adaptation of language to an adolescent's age and stage of development; building rapport, promoting engagement and empowerment; normalisation of confidential assessment of health-related behaviours; involving an adolescent in decision-making.

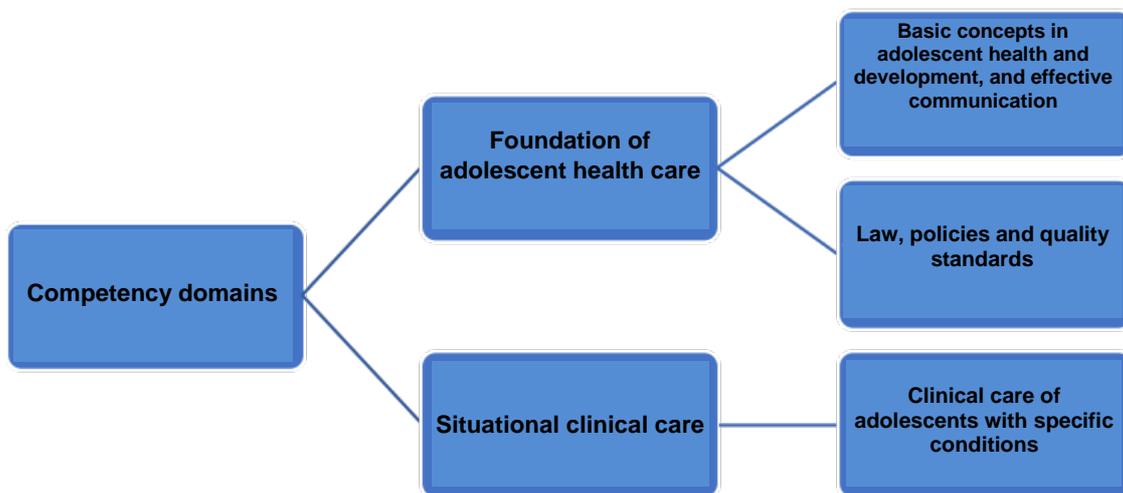
*Health consultations with adolescents* integrate treatment of the presenting complaint with broader assessment; provide time alone with the adolescent that is confidential; undertake psychosocial assessment; assess capacity for autonomous decision-making.

*Policies and procedures of consultations* are intended to ensure privacy; support confidential health care; promote adolescent assent and consent; reduce the financial burden of health care for the adolescent; link to community services and agencies.

*Parent/guardian involvement in the process of care* supports parents’ (or guardians’) involvement as appropriate and builds parents’ (or guardians’) understanding of appropriate health consultations with adolescents.

Responding to adolescents’ uniqueness requires providers to develop competencies – knowledge, skills and attitudes – in better understanding adolescent development and in adopting a different communication style tailored to an adolescent’s age and stage of development.

Equally important, providers need to be competent in applying in clinical practice the laws and policies that promote, protect, and fulfil adolescents’ rights in health care, for example, in assessing adolescents’ capacity for autonomous decision-making. Finally, the particularities of management of adolescents with specific conditions need to be known to ensure effective care:



*Figure 1 Key domains, in which health-care providers working with adolescents need competencies (source: WHO, 2011; 2014)*

Every provider of health care services for adolescents should have core competencies in adolescent health and development; the core competencies can be taught in both pre-service and in-service education (various courses, seminars, etc.). According to the WHO (WHO, 2014), curricula for health care professionals should include relevant disciplines to develop future health care professionals' competencies in the above areas. As part of the study, a questionnaire was developed. It, as mentioned above, outlined the competencies required for a public health care professional, with their content in terms of knowledge and skills defined according to WHO recommendations (WHO, 2011; 2014; 2015).

## **Research results**

*Research methodology.* On the initiative of Klaipėda University, a pilot study was conducted in 2019, with the aim – to find out respondents' attitude toward existing competencies in adolescent health care and competency development needs, in view of each individual competency domain and content thereof. A quantitative approach of the empirical study was selected. The scientific literature was analysed and an empirical study designed. It consists of several stages: 1) preparation for research; 2) survey; 3) data analysis; 4) discussion of findings.

At the first stage, an empirical research tool – closed-ended questions – was developed, on the basis of the competencies and scope of application thereof as provided by the World Health Organisation (WHO, 2011; 2014). The questionnaire was designed with the research objectives in mind. The questions, stated in the questionnaire, seek to find out what competencies public health care professionals have, their self-assessment, what is lacking in professional practice to make the services provided more effective. The first part of questionnaire was intended to analyse demographic data; the second part – to self-assessment of competencies by public health care professionals; and the third part – to analyse development of competencies. In assessing the existing competencies, each competency was named and accompanied by the content in terms of knowledge and skills, as specified in WHO documents (WHO, 2015). The validity (internal reliability) of the research questionnaire was pursued by means of the expert evaluation method. The purpose of the research and general information on filling the questionnaire was presented to respondents. Respondents' anonymity was ensured, without the need to specify their full name. Statements and questions of the questionnaire were not offensive or degrading.

The second stage involved a survey of public health care professionals from various municipal public health bureaus of Lithuania. According to the Register of Public Health Specialist (2019), Lithuanian public health bureaus employs 1,128 specialists. The study sample, with a 5 percent error, consisted of 287 respondents. The research used a questionnaire survey method and a target criterion selection, i.e., population sample units are selected by the set criteria (only specialists employed with the Lithuanian public health bureaus were selected). This method of selection is justified by the assumption that public health practitioners in public health bureaus have a closer contact with adolescents in their services than professionals in specialised public health services or the National Public Health Centre. In designing the sample, the survey respondents were intended to represent the general population of public health care professionals. In order to estimate a sample size and to summarise

results of the study in terms of the general population with a 5% error, the calculations provided by B. Bitinas (1998, p. 145) were used. Therefore, 287 respondents are considered to be a sufficient and representative sample of the study. The study involved persons working in Lithuanian public health bureaus. Very few male (1.3%) participated in the survey; therefore, this demographic index is ignored. By age, 30-34 years old (16.84%), 55-59 years old (12.41%), and 50-54 years old (12.23%) respondents dominated. By education level, public health care specialists were classified into groups I to IV as follows: group I - 44.14% of graduates of public health studies; group II - 30.2% of graduates in the field of medical studies; group III - graduates of social sciences - 22.36%, and group IV - other education, 3.3%.

At the third stage, the data obtained were analysed using the statistical database approaches: descriptive statistics, correlation analysis, etc. Analysis of data was carried out using the statistical analysis software for social sciences, SPSS 17. Results of the questionnaire were processed using methods of mathematical descriptive statistics: multi-scale averaging, non-parametric tests (independent sample), Kruskal-Wallis test, factor analysis, principal components analysis (direct oblimin, Kaiser normalization), factor correlation analysis (Spearman rho correlations).

Descriptive statistics were used to summarise data from all the survey questions. Distribution of means was made (answers of rank scales were analysed). Frequency analysis was applied (percentage of respondents' demographic data; means of statement rating (M), standard deviations of answers (SD), statistical significance criterion (p) of differences (p value). The relevance of data for factor analysis was verified using Bartlett's criterion ( $\chi^2$ , statistics, df and p values), KMO criterion and MSA measure. The Scree test data were taken into account when deciding on the number of factors to be excluded.

In order to identify how the respondents' self-assess existing competencies in adolescent health care, the distribution of differences between the mean of the statements' diagnostic rank scale and the mean of self-assessment (groups I to IV by the level of education) was estimated. The questionnaire provides a 5-point diagnostic rank scale of statements: Excellent (5), Good (4), Can't answer (3), Moderate (2), Low (1). The closer the value is to 1, the lower the respondent's self-assessment of competencies is; the closer the answer is to 5, the higher the respondent's self-assessment of competencies is. Values close to 3 mean that self-assessment is neutral (in cases the respondent was unable to differentiate between competences for various reasons). The respondents were aware of the content of each competency, expressed in knowledge and skills. Only competency titles are provided in this article.

**Table 1 Domain: Basic Concepts in Adolescent Health and Development, and Effective Communication**

Competency	Non-parametric tests		Kruskal-Wallis test		
	Values	SD	$\chi^2$	df	p
Competency 1.1. Demonstrate an understanding of normal adolescent development, its impact on health and its implications for health care and health promotion.	3.74	1.21	5.32	3	0,150
Competency 1.2. Effectively interact with an adolescent client.	2.60	1.12	17.24	3	0.000

Most of the respondents gave a very positive self-assessment (M: 3.62 to 3.74) to the Competency 1.1. *Demonstrate an understanding of normal adolescent development, its impact on health and its implications for health care and health promotion* (differences in self-assessment between all groups were not statistically significant) under the Domain “Basic concepts in adolescent health and development, and effective communication.” However, self-assessments of the Competency 1.2. *Effectively interact with an adolescent client* had a statistically significant ( $p = 0.001$ ) difference (M = 2.60;  $=\chi^2$  1.12, df = 3). These competences were best assessed only by the respondents under the group III, with a degree in social sciences (M = 3.92;  $\chi^2 = 18.05$ , df = 3). Differences in self-assessment between age groups were not statistically significant.

**Table 2 Domain: Laws, Policies and Quality Standards**

Competency	Non-parametric tests		Kruskal-Wallis test		
	Values	SD	$\chi^2$	df	p
Competency 2.1. Apply in clinical practice the laws and policies that affect adolescent health-care provision.	3.01	1.26	15.16	3	0.000
Competency 2.2. Deliver services for adolescents in line with new quality standards and health policies.	2.76	1.08	11.91	3	0.000

Competencies in the field of laws, policies and quality standards were assessed as relatively moderate. The Competency 2.1. *Apply in clinical practice*

the laws and policies that affect adolescent health-care provision was high-assessed by the respondents who had a degree in public health studies (group I) (M = 3.30;  $\chi^2 = 21.16$ , df = 3) and medical studies (group II) (M = 3.32;  $\chi^2 = 37.99$ , df = 3). Meanwhile, statistically significant estimates were found to be lower in the respondent group III (graduates in social and other studies) (M = 2.58;  $\chi^2 = 21.12$ , df = 3). Similar analysis results were obtained for the Competency 2.2. *Deliver services for adolescents in line with quality standards* (M = 2.76;  $\chi^2 = 17.45$ ; df = 3). Differences in self-assessment between age groups were not statistically significant.

The table 3 shows that the respondents top-rated the following competences: Competency 3.7. *Promote physical activity* (M = 4.09;  $\chi^2 = 7.13$ ; df = 3); Competency 3.8. *Assess nutritional status and manage nutrition-related disorders* (M = 3.94;  $\chi^2 = 11.27$ , df = 3) and Competency 3.10. *Assess and manage substance use and substance use disorders* (M = 3.92;  $\chi^2 = 18.05$ ; df=3). Differences in self-assessment between various groups of respondents were not significant.

Table 3 Domain: *Clinical Care of Adolescents with Specific Conditions*

Competency	Non-parametric tests		Kruskal-Wallis test		
	Values	SD	$\chi^2$	df	p
Competency 3.1. Assess normal growth and pubertal development and manage disorders of growth and puberty.	3.76	1.20	5.32	3	0.150
Competency 3.2. Provide immunizations.	3.24	1.43	17.32	3	0.118
Competency 3.3. Manage common health conditions during adolescence.	2.73	1.14	21.05	3	0.000
Competency 3.4. Assess mental health and manage mental health problems.	2.83	1.42	16.45	3	0.000
Competency 3.5. Provide sexual and reproductive health care.	3.56	1.34	17.06	3	0.008
Competency 3.6. Provide HIV prevention, detection, management and care services.	3.62	1.07	5.88	3	0.000
Competency 3.7. Promote physical activity.	4.09	1.00	7.13	3	0.068
Competency 3.8. Assess nutritional status and manage nutrition-related disorders.	3.94	0.97	11.27	3	0.010

Competency 3.9. Manage chronic health conditions including disability.	2.80	1.21	15.16	3	0.000
Competency 3.10. Assess and manage substance use and substance use disorders.	3.92	1.16	18.05	3	0.010
Competency 3.11. Detect violence and provide first-line support to the victim.	3.70	1.26	36.6	3	0.000
Competency 3.12. Prevent and manage unintended injuries.	4.62	0.84	4.66	3	0.198
Competency 3.13. Detect and manage endemic diseases.	2.94	1.42	3.93	3	0.009

Differences emerged in the self-assessment of other competencies: *Competency 3.3. Manage common health conditions during adolescence* was rated low by the group III ( $M = 1.00$ ;  $\chi^2 = 18.07$ ;  $df = 2$ ); *Competency 3.9. Manage chronic health conditions including disability* ( $M = 0.98$ ;  $\chi^2 = 32.21$ ;  $df = 3$ ); *Competency 3.13. Detect and manage endemic diseases* ( $M = 1.01$ ;  $\chi^2 = 15.07$ ;  $df = 3$ ). Apparently, the latter three competencies received the lowest self-assessment points after the data were entered. Differences in self-assessment between age groups were not statistically significant.

Factor analysis of statements allowed to identify several core structural elements of competencies to be developed by public health care professionals in primary care settings:

*Table 4 Results of Factor Analysis*

Statement	L	%
Effectively interact with an adolescent client	0.823	32.26
Manage common health conditions during adolescence	0.804	30.21
Deliver services for adolescents in line with new quality standards and health policies	0.627	23.31
Manage chronic health conditions including disability	0.528	17.43
Assess mental health and manage mental health problems	0.506	16.82
Detect and manage endemic diseases	0.478	14.46

Extraction Method: Principal Component Analysis. Rotation Method: Oblimin with Kaiser Normalization.

As can be seen in the table above, the statement *Effectively interact with an adolescent client* ( $L = 0.823$ ) has the highest factor weight. This means that the self-assessment of competencies by the respondents demonstrates the core factor of competency development.

Another significant element of competency development, *Manage common health conditions during adolescence* ( $L = 0.804$ ), is closely related to curricula in biomedicine (public health and medical studies) and becomes relevant to those with a different (social or other) degree.

Significant and integral elements of respondents' competency development are as well: *Deliver services for adolescents in line with new quality standards and health policies* ( $L = 0.627$ ); *Manage chronic health conditions including disability* ( $L = 0.528$ ); *Assess mental health and manage mental health problems* ( $L = 0.506$ ); *Detect and manage endemic diseases* ( $L = 0.478$ ).

The correlation analysis of the variables revealed that the respondents' self-assessments of one domain (*Clinical care of adolescents with specific conditions*) were associated with stronger, statistically significant correlation, compared to other domains of competencies. Moderate correlation in self-assessments prevailed under the Competency 3.3. *Manage common health conditions during adolescence* ( $\rho = 0.623$ ), Competency 3.9. *Manage chronic health conditions including disability* ( $\rho = 0.628$ ), and Competency 3.10. *Assess and manage substance use and substance use disorders* ( $\rho = 0.626$ ). Correlation relationship in self-assessment of all the above competencies were statistically significant ( $p < 0.000$ ). Moderate correlation in self-assessments was established under the Competency 1.2. *Effectively interact with an adolescent client* ( $\rho = 0.598$ ) and Competency 2.2. *Deliver services for adolescents in line with new quality standards and health policies*.

Since the survey has involved public health care professionals of all ages and educational backgrounds, the correlation analysis data may be explained by the fact that self-assessment of competencies was influenced by their different preparation. As stated before, respondents with a biomedical degree gave a greater rating to the competencies under the Domain *Clinical care of adolescents with specific conditions*.

## Discussion

According to the World Health Organisation (WHO), "adolescence" is clearly a phase rather than a fixed time period in an individual's life. It is a phase of development on many fronts: from the appearance of secondary sex characteristics (puberty) to sexual and reproductive maturity; the development of mental processes and adult identity; and the transition from total socio-economic and emotional dependence to relative independence (Health 21 –

Health for All in the 21st Century: An Introduction to the Health for All Policy Framework for the WHO European Region, 2017, p. 27). Therefore, health care professionals play a vital role in providing timely consultations to adolescents by acceptable means and duly informing them about health promotion and maintenance, prevention of health disorders, and development of harmful habits.

Economic and social change have brought great opportunities and threats to adolescent health. The transition to a holistic vision of health, together with changes in adolescent social roles, has shifted the burden towards adolescent health care, i.e., how to increase the use of efficacious policies and programmes worldwide, while recognising that communities and nations differ and need to make local decisions, both in the context of adolescent health and competencies of service providers. There is a need to understand that adolescent health contributes to adult health and can deliver economic dividends to nations that invest wisely in adolescent health (Resnick, Catalano, Sawyer et al., 2012, p. 1564). A similar dividend might become the development of public health care professionals' competencies in adolescent health care.

WHO studies show that about 70% of premature death in adults is because of the lifestyle risk behaviours established during the adolescence period. However, not every country, institution, or a health care professional is properly prepared to provide quality services to adolescents.

An important point is institutions that would provide adolescent health care most effectively, because United Nations statistics show that somewhere in the world, every five seconds, a child under 15 dies (UN Inter-agency Group for Child Mortality Estimation, 2018). Currently, responsibility for adolescent health and wellbeing at a global level is currently dispersed across many agencies. For example, within the UN, these include WHO, UNICEF, UNFPA, UNAIDS, UNESCO, and UNODC. Each agency has its own emphasis and particular age mandate. Greater coordination and stronger inter-agency partnerships, supported by funding partners, will be essential for progress. Whether this can be achieved without the creation of a global focal point for adolescent health and wellbeing within the UN system is an important question. The establishment of networks that bring together the global constituents for adolescent health and wellbeing will also be essential in galvanising and reviewing action, mobilising and growing global resources including funding, technical and research capacity, processes for youth advocacy, and frameworks for inter-sectoral action. (Patton, Sawyer, Santelli et al., 2016, p.51).

However, there are still many misconceptions about adolescents that hinder to enhance a progress in adolescent health care: the opinion that they are healthy enough and, therefore, do not need much attention is wrong. It is wrong to believe that the only problems that adolescents actually face are sexual or

reproductive health. The scientific evidence base is inadequate and we definitely cannot claim it to be true (WHO, 2015).

The number of deaths among adolescents is high and no adolescent should die from a preventable or treatable causes (UN Inter-Agency Group for Child Mortality Estimation, 2018). However, when it comes to public health in general, more emphasis should be placed on harmful behaviours (such as tobacco, alcohol, drug use, or unsafe sex) and diseases (such as depression or obesity) that occur during adolescence and have long-term health consequences throughout life.

Separate interventions targeting various adolescent health problems are not enough to reduce adolescent mortality. Health care services, knowledge and skills of adolescents are important but, yet, are not enough. Structural, environmental and social changes are necessary. The greater portion of reducing adolescent mortality requires, among other changes, a stronger support from parents and schools, a strategy and educational programmes for professionals to protect adolescent health. This means that we must find more effective ways not just to think of some of adolescent health issues but to focus more on interventions addressing the determinants of multiple risk behaviours. There are many unexploited resources, including technology and interactive media, for improving and maintaining adolescent health. Adolescents are concentrated at the centre of these innovations, though, are professionals of services for adolescents actually ready for this?

Lithuanian public health bureaus employ public health care professionals of all ages and educational backgrounds. Regardless of their age or level of education, they must obtain and develop specific competencies in providing services to the unique population – adolescents who make up a significant part of our society.

It is now time to build upon the experience gained over the last few decades and to maintain a positive dynamics in adolescent health care. Today, nonetheless, it can be said that the foundation of quality action is the collaboration of all professionals working with adolescents, while engaging adolescents themselves in active work, as well as the response to the needs of service providers' specific competencies in adolescent health. Health care is a complex process, the end result of which is good quality of life and, together, wellbeing.

## **Conclusions**

The analysis of theoretical assumptions suggests that adolescents are to be considered unique clients of services provided by public health care professionals because of individual age, developmental, interpersonal,

community, organisational, structural, and other factors that make the ecological model of adolescent health care.

The World Health Organization suggests several domains for public health care professionals in adolescent health care: (a) Basic concepts in adolescent health and development, and effective communication; (b) Law, policies and quality standards; and (c) Clinical care of adolescents with specific conditions. Based on the above domains, specific competencies and their content are identified. The content of the competences varies and requires interdisciplinary knowledge, skills, and attitudes in biomedicine, social, and other sciences.

Public health care professionals positively self-assess their existing competences in adolescent health care, yet, several trends prevailed during the study:

- Subject to their educational background, respondents self-assessed their existing competences in adolescent health care differently;
- Public health care professionals with a degree in social sciences underestimated the competencies under the domain *Clinical care of adolescents with specific conditions*;
- Public health care professionals with a degree in biomedical sciences underestimated the Competency 1.2. *Effectively interact with an adolescent client* and the Competency 2.2. *Deliver services for adolescents in line with new quality standards and health policies*.

Factor analysis of the statements allowed identifying several core structural elements of competencies to be developed by public health care professionals in primary care settings. The following competency development needs have been identified: effective interaction with an adolescent client; management of common health conditions during adolescence; delivery of services for adolescents in line with new quality standards and health policies; management of chronic health conditions including disability; assessment of mental health and management of mental health problems; detection and management of endemic diseases. The above structural elements of competency development should become a guideline for public health care professionals in educational programmes. This should be taken into account in developing professional education programmes and in promoting inter-disciplinary cooperation between officials, institutions, curriculum coordinators and educators.

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