


## On the knowledge about diseases and education level in the country

Milan Kubiatio<sup>1\*</sup> 

<sup>1</sup>J.E. Purkyne University, Faculty of Education, Department of Preschool and Primary Education, Pasteurova 1, 400 96 Usti and Labem, CZECH REPUBLIC

\*Corresponding Author: [mkubiatio@gmail.com](mailto:mkubiatio@gmail.com)

**Citation:** Kubiatio, M. (2024). On the knowledge about diseases and education level in the country. *European Journal of Health and Biology Education*, 11(1), 3-5.

The concept of disease is studied and discussed by many medical and non-medical persons, whose are interested in this problematic. It is possible to find many definitions, for example, the disease is a particular abnormal condition that affects the structure or function of all or part of an organism (Campbell et al., 1979). This concept is relatively old, but is still valid and many authors are working with it also nowadays. This concept is used also in education process in the version, which could be acceptable for age cohort of pupils and students. The education plays a crucial role in the understanding of disease among pupils. Because without adequate and quality education the disease could be more prevalent in the population. It is possible to read in many published articles focused on this topic, that people with lower education have got worse health and they are more susceptible to different kinds of diseases, not only common, but also civilization and non-common disease, which are rare among people around the world (Woolf & Aron, 2013). As Zajacova and Lawrence (2018) stated the basic understanding of the health benefits of education are thus integral to reducing health disparities and improving the well-being of 21st century populations. It is important to reflect, that the relationship between education and disease (in some cases also health) determine access to a multitude of material and non-material resources such as income, safe neighbourhoods, or healthier lifestyles, all of which protect or enhance health (Link & Phelan, 1995).

On the basis of these brief facts, it is possible to say, that spread of diseases, the prevention strategies, hygienic habits and other factors connected with health are crucial for the community. The family is the first instance, where the children should know about these

factors. On the second place this function plays school environment. The teachers and other educational workers are responsible for the correct understanding of spread disease, diseases manifestation, health habits and others. It is obvious, that the curriculum of subjects is connected with policymakers and politicians, and it can create an obstacle to teach correct knowledge, which could serve as a barrier against different misconceptions. In this stage, it is a crucial moment, which could affect many pupils in different age cohorts. When teachers are too influence by authorities from the politicians, it can be dangerous. The one reason is, that policymakers are trying to influence the content of the curriculum (in the context of diseases, it is regarding to biology curriculum). And if teachers will uncritically receive information from curriculum created by policymakers without any teaching experiences, it could be dangerous and it can caused irreversible damages in the minds of the pupils. The second reason is focus on memorization of facts. The theories about memorization were published in many articles, for example Hoque (2018) quoted, that the biggest weakness students have is that they either try to remember school material by rote memorization or have no strategy at all. Experiments show that students routinely over-estimate how much they remember and underestimate the value of further study. Many scientists and interested persons conducted studies on ways to improve critical thinking, scientific literacy, analysing students' personalities, especially in connection with the development of higher-level thinking skills, technical literacy and others (e.g. Avsec & Jamsek, 2018). Nowadays, in many cases, it is possible to read different scientific outcomes, research articles, books, book chapters, that are focused on the teaching

styles, methods, strategies of teachers and the situation is still same, that the memorization process during teaching and learning process is still prevalent and dominant in many school subjects. For example, Brecka et al. (2022), stated, that there are existing suggestions for the teaching, which should be focused to support creativity, active learning, development of critical thinking and other actual trends in the teaching and learning process. However, the memorization process and teaching focused on the facts without any deeper understanding is prevalent in many subjects. It is caused by the personality of teacher and also the influence of surroundings is also crucial and it can lead into the undesirable processes.

Regarding to concept of diseases and health, the teachers should be able to distinguish important kinds of information over the unimportant. The teachers should have the possibility to choose kinds of information which will be presented to pupils in the different grade levels. Also the form of teaching should be focus not only on the memorization of facts about different kinds of viruses, bacteria and diseases. But the teaching (learning) process should be arranged to present kinds of information, where also the affective and conative part will be taken into account. Without the effort to development critical thinking, creativity and other manners of modern teaching process, it is possible to await the growth of wrong conceptions about diseases, spread of diseases and about viruses and bacteria. It can influence the behaviour of people toward diseases, when they will be adult and the misconceptions could lead to casual behaviour toward different forms of diseases, which would be harmful for society, because some forms of diseases would cause higher mortality of people of different age cohorts. This problem is presenting in every country, the pupils, students, and adult society have got different forms of misconceptions about the diseases (e.g. Miller & Romine, 2020) Another thing, which is very important is leading to rejection of common medical operations, like the vaccination is. The last example is the rejection of vaccination by many people against pandemic virus called COVID-19 (Zaid & Pratondo, 2021). Many countries have got positive opinion on vaccination against this disease, due to progressive and modern educational system, where people understood the risk of this disease and also higher mortality. But, it is possible to find many countries, where the process of vaccination was not so successful (Feleszko et al., 2021). The reason of this rejection is in the problems of educational system and also the strong impact of politicians and policymakers. The impact was the high number of mortality among people, but there are still existing people, who refusing the positive effect vaccination. So,

there is possible to see the insufficient effect of educational system and the strong effect of policymakers, which can lead to refusing and problem with accepting of common manifestations against spread of diseases The relatively independence of educational system from policymakers and the freedom of teachers, how to teach could lead into presentation of correct kind of information and it could help to eliminate the misconceptions about diseases and increase the right awareness about positive effect of vaccination, preventing strategies and the correct approach to diseases.

## REFERENCES

- Avsec, S., & Jamsek, J. (2018). A path model of factors affecting secondary school students' technological literacy. *International Journal of Technology and Design Education*, 28, 145-168. <https://doi.org/10.1007/s10798-016-9382-z>
- Brecka, P., Valentova, M., & Lancaric, D. (2022). The implementation of critical thinking development strategies into technology education: The evidence from Slovakia. *Teaching and Teacher Education*, 109, Article 103555. <https://doi.org/10.1016/j.tate.2021.103555>
- Campbell, E. J. M., Scadding, J. G., & Roberts, R. S. (1979). The concept of disease. *BMJ*, 2(6193), 757-762. <https://doi.org/10.1136/bmj.2.6193.757>
- Feleszko, W., Lewulis, P., Czarnecki, A., & Waszkiewicz, P. (2021). Flattening the curve of COVID-19 vaccine rejection—an international overview. *Vaccines*, 9(1), Article 44. <https://doi.org/10.3390/vaccines9010044>
- Hoque, E. (2018). Memorization: a proven method of learning. *International Journal of Applied Research*, 22(3), 142-150.
- Link, B. G., & Phelan, J. (1995). Social conditions as fundamental causes of disease. *Journal of Health and Social Behavior*, 35, 80-94. <https://doi.org/10.2307/2626958>
- Miller, M., & Romine, W. (2020). Assessing college students' knowledge and misconceptions concerning the Ebola virus. *European Journal of Educational Research*, 9(2), 579-602. <https://doi.org/10.12973/eu-jer.9.2.579>
- Woolf, S. H., & Aron, L. Y. (2013). The US health disadvantage relative to other high-income countries: findings from a National Research Council/Institute of Medicine report. *JAMA*, 309(8), 771-772. <https://doi.org/10.1001/jama.2013.91>

- Zaid, Z., & Pratondo, K. (2021). Public perception on COVID-19 vaccination intention. *International Journal of Public Health Science*, 10(4), 906-913. <https://doi.org/10.11591/ijphs.v10i4.20914>
- Zajacova, A., & Lawrence, E. M. (2018). The relationship between education and health: Reducing disparities through a contextual approach. *Annual Review of Public Health*, 39, 273-289. <https://doi.org/10.1146/annurev-publhealth-031816-044628>