



# Study Report on Health & Financial Literacy of Students in Healthcare Professions

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## Introduction

Financial literacy helps in planning, implementing, and evaluating fiscal decisions, but many health workers report weaknesses in this core competency (Brydges, et al. 2019). Self-awareness, gaps in hospital and graduate nursing education, application of financial knowledge, and a micro versus macro view emerged as important themes in nursing and allied healthcare professional education. There is no doubt that in nursing, patient education on financial issues is considered important (Copanitsanou et al., 2017). Even though financial literacy is considered as an essential element in nursing management practice, there is still not enough attention given to this issue (Talley et al., 2013).

We would like to fill in this gap by the study specifically designed to support the research in this area which is also in line with the objectives of our project. As there is evidence in the scientific sources that elective courses in personal finance for health care professionals are effective (Brydges et al., 2019; McFarlan, 2015; Chui, 2009). The changes and expansion in the nurse administrator role indicate a need for a specialized body of financial knowledge and skills for making system focused decisions that integrate the clinical and business aspects of healthcare (McFarlan, 2020; Talley, et. Al., 2013; Waxman & Massarweh, 2018; Lemire, 2000). Please see the full bibliography in Annex.

In our BICEPS (Building Financial Capability for Healthcare Professionals) project, we aim to create targeted and relevant outputs, hence it was necessary to conduct a study report on health & financial literacy of healthcare students, implement thorough analysis and draw conclusions based on which we can build strong output.

Furthermore, we engaged experts and practitioners to tackle the specific issues for health & financial literacy competencies of our target group. The experts discuss the policy implications and recommendation & suggestions contributing to the development of health & financial literacy competencies in general.

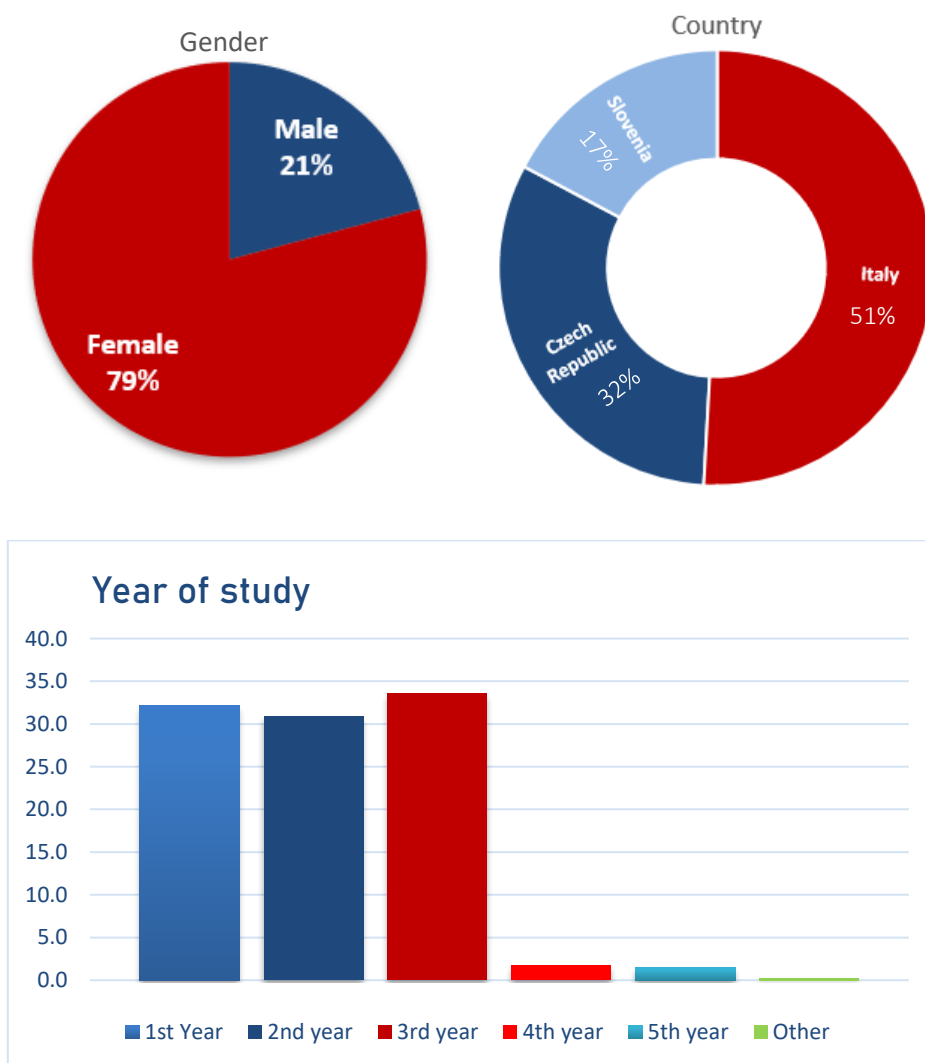


## Results of the Financial Literacy Survey BICEPS

### Data Sample & Methodology

In order to examine the financial literacy of healthcare students we distributed the online questionnaire and collected answers which resulted in the sample size N = 410. The data collection period spread from February to March 2021. The participating countries included Italy, Slovenia, and the Czech Republic. Of the respondents, 21% were men, and 79% were women. The age has the mean of 23 years. The respondents were primarily the bachelor students in their first year (32%), second year (31%), and third year (34%) of studying at the university.

Figure 1: Respondents' characteristics



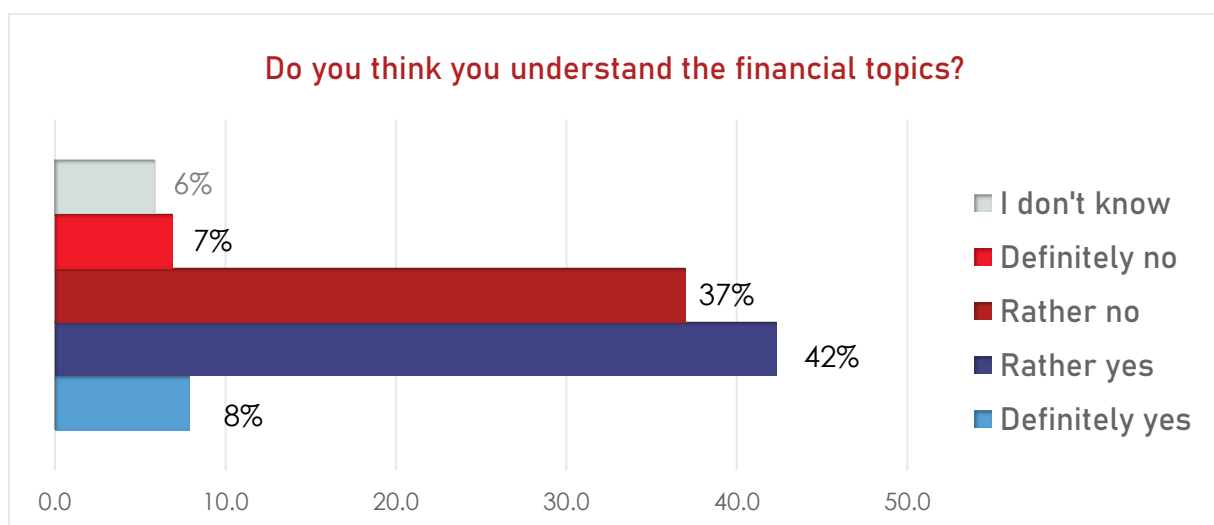
Source: authors' compilation based on collected data



## Survey Results

The respondents were asked a series of questions regarding their financial literacy, financial knowledge, financial behaviour and attitudes. When asked about their comprehension of personal finance topics, such as bank accounts, payment cards, savings, investment, loans and insurance, 50% of the respondents thought that they have a good understanding of given financial topics. In particular, 8% answered “definitely yes”, and 42% selected the answer “rather yes” to the question of whether they think they understand the financial topics (see [Figure 2](#)).

Figure 2: Self-assessment of the comprehension regarding personal financial topics



Source: authors' compilation based on collected data

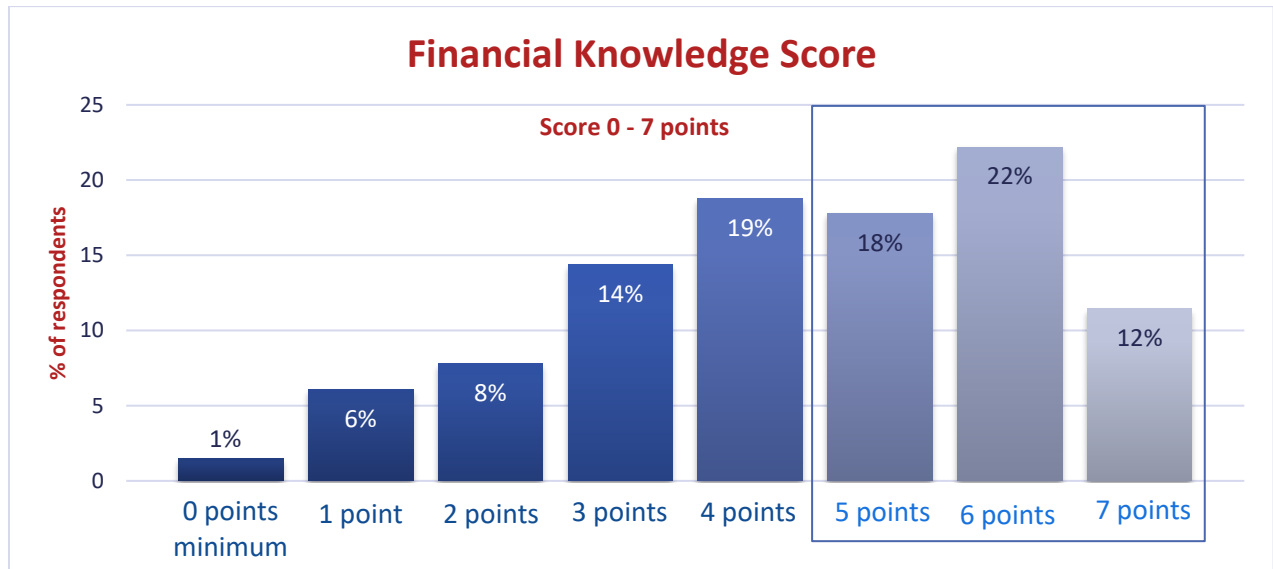
Financial stress can have a harmful effect on one's wellbeing and health. It is important to not underestimate the financial pressure and actively search for solutions when being confronted with anxiety regarding finances and other financial issues.

## Financial Knowledge

The OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion was used to measure financial knowledge based on questions testing the understanding of the basic financial concepts, the impact of inflation and purchasing power, calculation of simple interest, implications of compound interest, risk, return, and diversification. The financial knowledge score ranges from the minimum of 0 to the maximum of 7 points (OECD, 2018). [Figure 3](#) shows the distribution of the financial literacy score among the respondents.

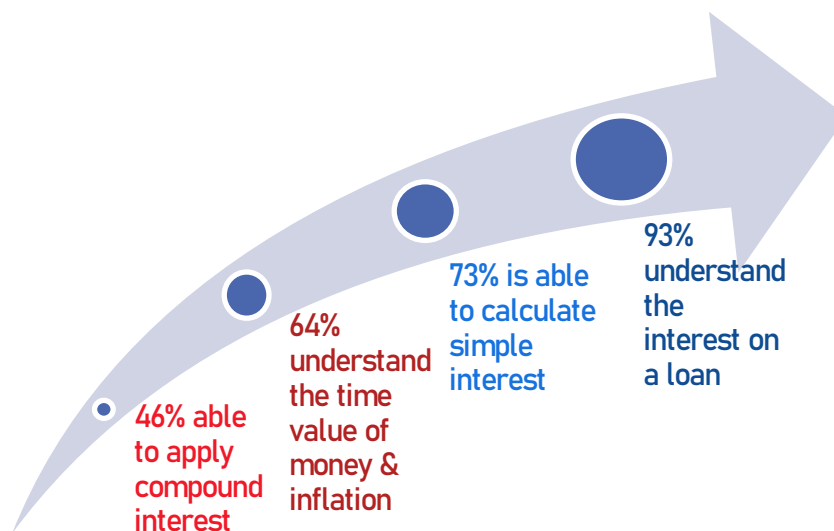


Figure 3: Financial Knowledge Score Distribution



Source: authors' compilation based on collected data

In Figure 3 we can see that around 15 % had their financial knowledge score equal or lower than two points, 33% scored three or four points, and 52% achieved five points and more, which is considered as a “target” financial knowledge score with at least 70% correct answers out of maximum 7 points (OECD, 2016). In particular, 12% earned the maximum of seven points in financial knowledge.

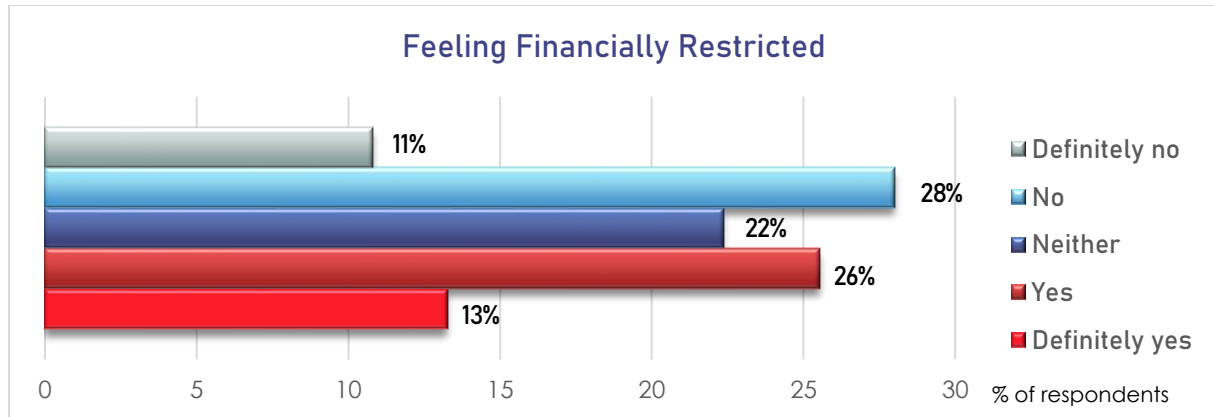


Concerning financial knowledge, 93% of the respondents understood the principle of the interest on a loan, 64% could deduce the implications of the time value of money, 73% were able to calculate the simple interest, whereas 46% could apply the compound interest. When analyzing true or false statements, 65% knew what is inflation, 62% understood the relation between the risk and return, and only 39% comprehended the principle of diversification.



Financial restraint might also have a negative impact on personal financial wellbeing. Respondents were asked whether they think that their financial situation limits their ability to do the things that are important to them (see Figure 4). Approximately 39% of the respondents answered positively that they feel financially restricted, whereas 39% not, and 22% answered neither yes nor no.

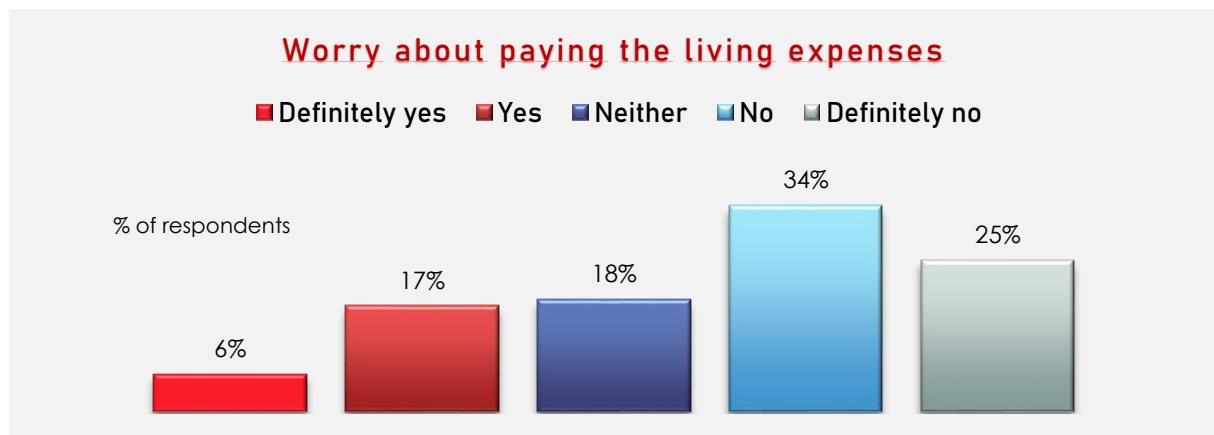
Figure 4: Self-assessment of the financial limitations and feeling financially restricted



Source: authors' compilation based on collected data

Being able to pay the living expenses is vital and failing to do so can negatively influence the individual financial cash flow and the overall financial situation as well as quality of life. Out of the respondents, around 23% expressed that they worried about paying their normal living expenses (6% answered “definitely yes” and 17% answered “yes), see Figure 5 below.

Figure 5: Living expenses

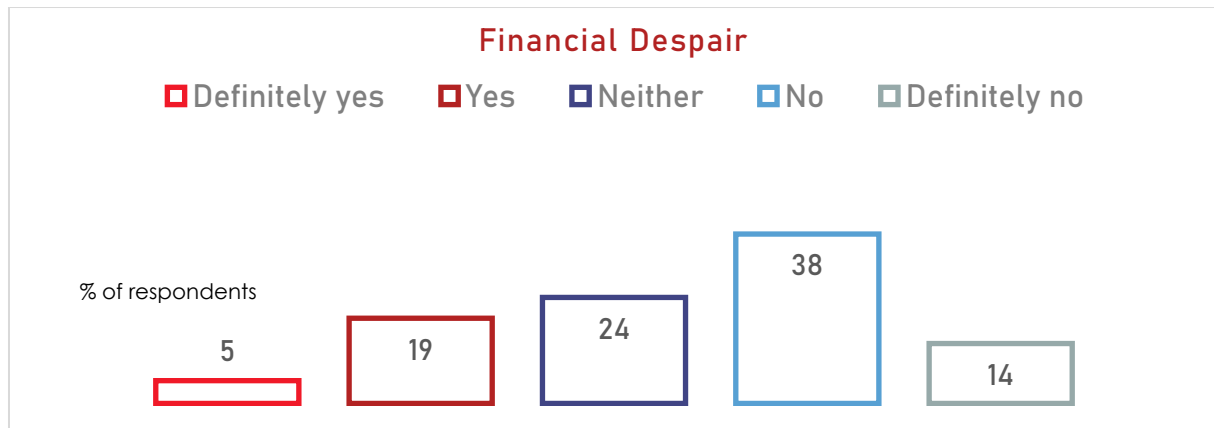


Source: authors' compilation based on collected data



Having a sense of control over your financial situation is important for managing your finances. However, only about 52% responded negatively to the question if they often feel helpless when they deal with their financial issues, and around 19% responded yes or 5% definitely yes to this question, see [Figure 6](#).

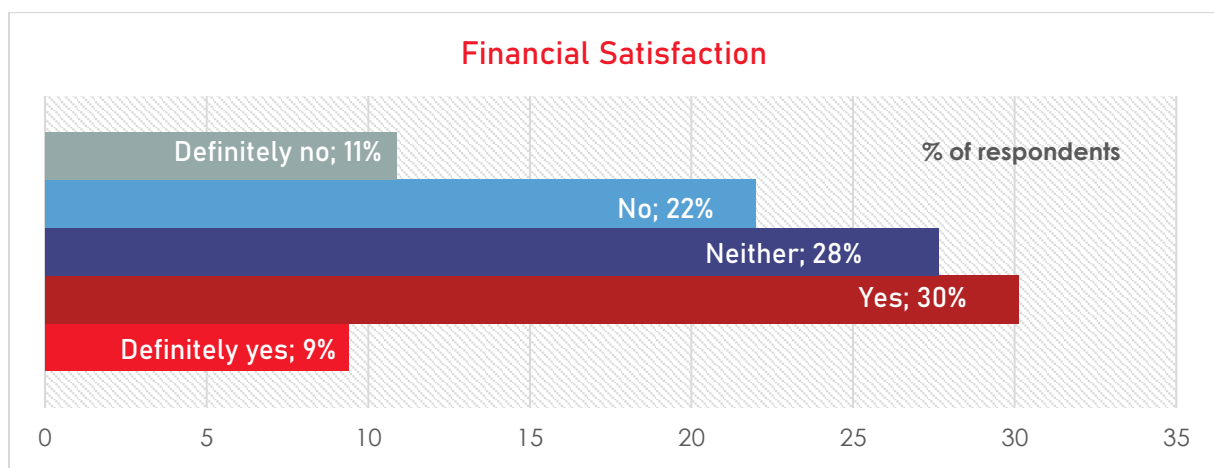
Figure 6: Financial Despair



Source: authors' compilation based on collected data

The financial situation can have a large impact on individuals' financial wellbeing and the consequent financial satisfaction or financial stress. To the question to what extent do you agree or disagree with the statement that they are satisfied with their current financial situation, only 9% of the respondents completely agreed, 30% agreed, and 28% neither agreed nor disagreed with the statement. In contrast, 22% answered that they were not satisfied, and 11% were completely dissatisfied with their current financial situation ([Figure 7](#)).

Figure 7: Financial Satisfaction



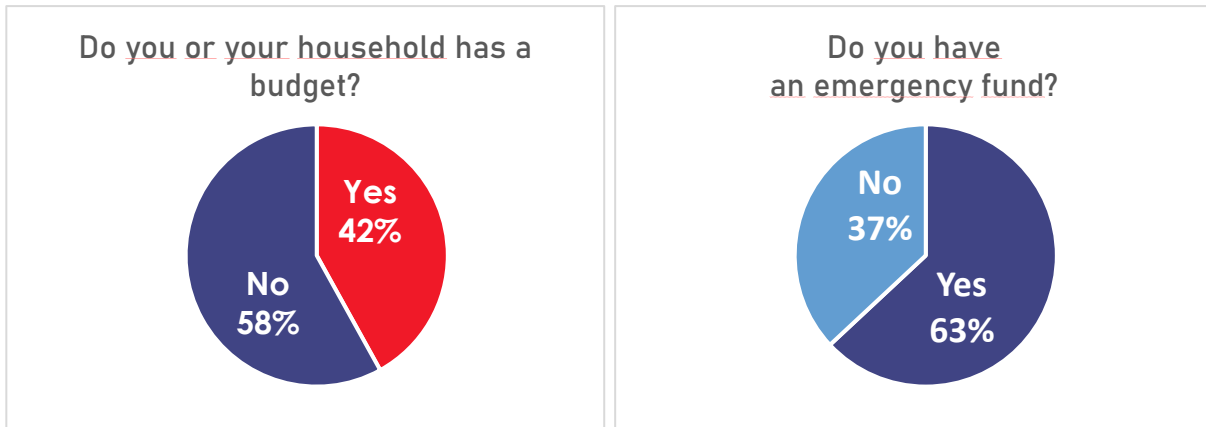
Source: authors' compilation based on collected data



## Money Management, Financial Behavior & Attitudes

In a time of economic uncertainty, having savings is essential to prevent any financial shortfalls or unexpected expenses that might arise. Moreover, knowing that we have some amount of money saved aside might ease stress concerning the unexpected financial emergency. In this study, more than one-third of the respondents did not have an emergency fund, see [Figure 8](#) below.

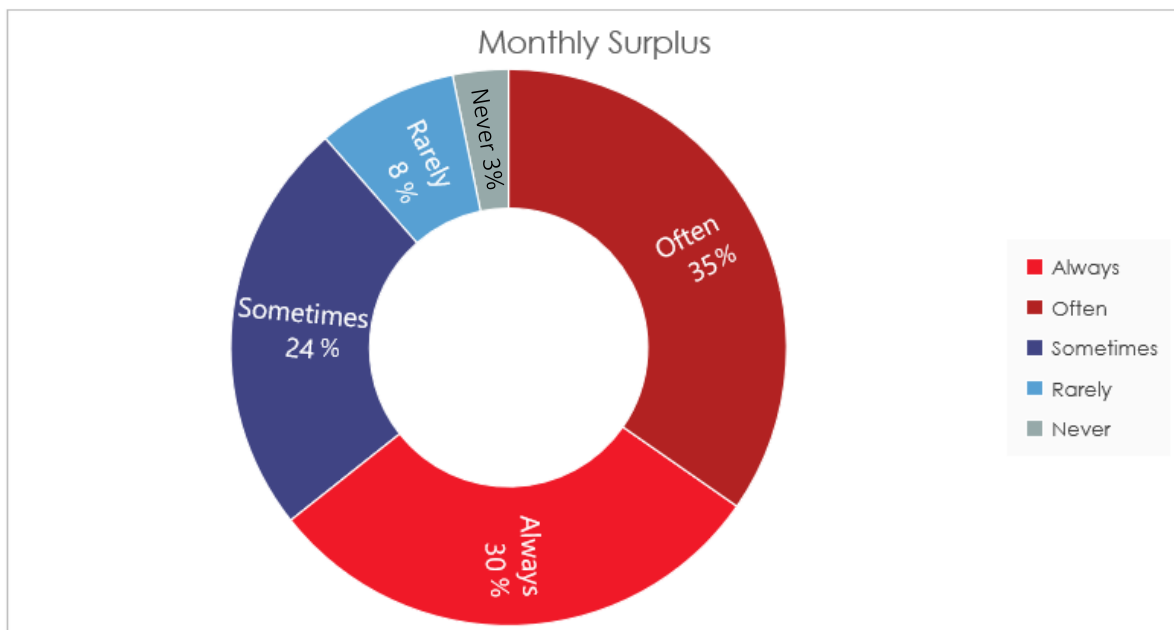
Figure 8: Have a budget and an emergency fund



Source: authors' compilation based on collected data

Planning personal finances and creating a budget is necessary not only for day-to-day money management but for the overall financial plan. In the survey, only 42% of respondents have a household budget, see [Figure 8](#). Of the respondents, 30% reported that they *always* have money left at the end of the month, and 35% answered that they *often* have a monthly surplus ([Figure 9](#)).

Figure 9: Have a monthly surplus



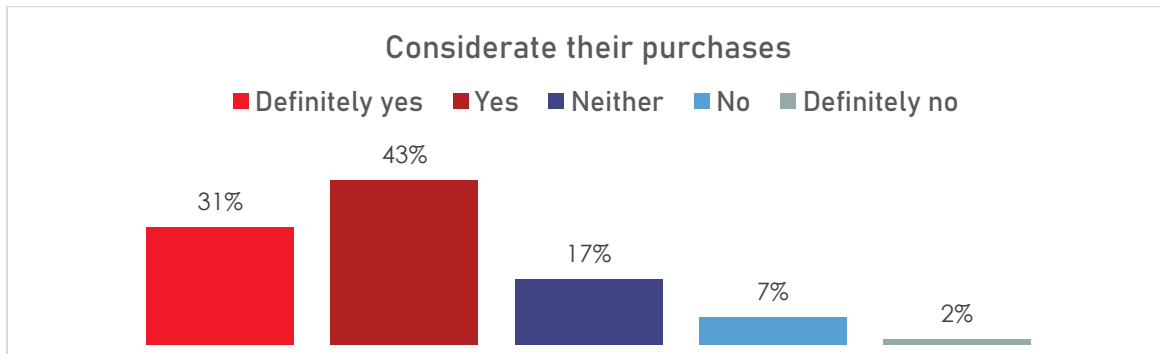
Source: authors' compilation based on collected data





To be able to make sound financial decisions, it is necessary to be aware of how we actually behave and make our choices. Being conscious in the process and weighing different options to choose the one that fit our needs is one of the core financial competencies. That includes also being able to consider your purchases and their affordability concerning your current financial situation. Around 43% of respondents claimed that they carefully consider their purchases, while 31% completely agreed with the statement, see [Figure 10](#).

Figure 10: Considerate Purchases



Source: authors' compilation based on collected data

In the approach to financial planning, one can assume that our economic activity (work) in our productive years would create enough financial resources that would stretch to support us in retirement, in which we could draw on our life savings & investments to maintain our living standard. In our study, 28% answered that they have no retirement plan at the moment, 7% felt very confident and 23% felt confident about their retirement plans. In contrast to 11% who did not feel confident about their retirement plans and 7% not at all confident (see [Figure 11](#)).

Figure 11: Confidence about Retirement Security



Source: authors' compilation based on collected data





## Policy Implications & Suggestions

In the following sections, you can see the descriptions of the national situations related to health & financial literacy which are the results of the panel discussion and expertise within the project.

### Policy Implications & Recommendations in Italy

Health literacy and financial literacy are important for both the healthcare sector and healthcare students for several reasons.

At first, the healthcare sector is composed of the National Health Service and its sustainability is mainly on the hands of nurses and of those of health care professional, who are at the bedside where they undertake several decisions affecting costs-. Therefore, it is crucial to equip nursing students and all health care professionals with these competences, that have been not introduced in the programmes to date, given that the financial issues have been managed at the medical or managerial level, thus not involving health care professionals. While the National Health Care System is offering its services across the country, in some regions, private sectors are well-established with high-quality services or time saving service.. Therefore although care is provided almost exclusively for free by the National Health System, which is public and doesn't require private insurance in order to be accessed, citizens can find answers to their health issues in private hospitals and clinics where not only the waiting lists for i.e., scheduled visits and diagnostics is shorter but also some services are offered (e.g. dental care). In this scenario, for example, financial literacy and health literacy are fundamental – at the same level – to guide the citizen in: (a) choosing the best institution making informed choices, (b) choosing private insurance/credit forms. So, financial literacy empowers the citizen allowing him to access private care if desired, while health literacy empowers the citizens in the care choices.

For general students, independently by the sector of study and specialization, it is important to build both capacities (health literacy and financial literacy) as they are in a period of life where they are building themselves as “person” and “citizen”. Making informed choices and being empowered is fundamental in this sense. As for healthcare students, in Italy, we have an increasing need to create strong healthcare managers of the future: managers that are able to manage not only clinical aspects but also economic aspects of the sector. Empowering students in their personal life at first is fundamental, as it creates the basis for awareness over the financial area.

If both financial literacy and health literacy are implemented together, supported by policies at a large scale, we could build a strong basis for further improvement of the whole healthcare sector



which is seen as a complex of aspects that must work as a unique organism. Thus, improving the health and financial related choices of all the citizens

Health literacy and financial literacy in Italy could be improved by acting on different aspects. For instance:

- ❖ Adding teaching of economics/financial literacy at the mandatory school (elementary, intermediate and high school) to build financial literacy. At each level of education, competencies can be improved gradually. This wide-scale education could contribute to improve the financial literacy of new generations. Financial teaching could be aggregated with informatics (IT).
- ❖ Health literacy could be expanded with massive eHealth (Digital Health) campaigns targeting students, adolescents and adults.
- ❖ Italy also has a wide percentage of elderly people, that may not benefit from financial literacy improvements in general but may need support in the usage of financial products that may require IT related skills to work (i.e. bank accounts). Improving digital skills could be a form of indirect improvement of financial capabilities as well.

The education system in Italy does not specifically focus on financial literacy or health literacy. Currently, Italian Education is based on different levels:

- at the primary school level where there is no financial education;
- at the secondary school level, which is composed of 1st grade (3 years) and 2nd grade (5 years). While all secondary schools of 1st grade are homogenous, students can choose their secondary school of 2nd grade and subjects are different. Some programs, i.e. 2nd grade school in accounting, may include financial aspects - but most programs do not;
- at the university level, where all healthcare professionals are educated, no courses are offered while some topics - mostly on the macroeconomy and business management might be offered by some teachers or elective courses. However, the topics are thought mainly theoretical and only in a few clinical situations, students are invited to reflect on the financial implications of the care.

Implementing the BICEPS program could lead to short- and long-term outcomes. As we pointed out above, there is a need to transform the education with best practices -as BICEPS is - where financial and health literacy can empower patients and future healthcare providers. Education - especially of new generations - is fundamental to this paradigm change. The BICEPS program also made us reflect on our university pathways courses, where financial education may be improved - also considering foreign experiences.



## Policy Implications & Recommendations in Slovenia

The majority of health care providers in Slovenia are public institutions, while a smaller proportion is private and licensed providers. Services provided by private providers are free or financed by supplemental insurance. However, some people can choose a private health provider of their choice among providers who have a contract with the Slovenian Health Insurance Institute, but they have to pay all costs out of their own pockets. Especially nowadays, there seems to be a trend in Slovenia of people switching to private health providers. The highest percentage of all private practices can be found in the dental field, where about 15% of all dentists have a private practice.

To help or counsel patients (or citizens in general) about their health care spending, it is important to teach nursing and allied healthcare students not only the importance of empowering patients/citizens in terms of health literacy, but also the importance of teaching them the financial literacy—including the knowledge and skills related to debt, investments, and budgeting—that is essential to accessing health care, alleviating poverty, and eliminating inequity. In this way, nurses can have a positive impact on patients, families, and communities (general public). Evidence shows that health literacy and financial literacy are linked to the health and well-being of older adults.

For this reason, some changes need to be made not only in healthcare education but also in earlier education, because financial literacy is a key skill for participation in modern society. Young people are growing up in an increasingly complex world where they will eventually have to take charge of their own financial future. Research shows that young adults have one of the lowest levels of financial literacy. This is reflected in their general inability to choose the right financial products and their frequent lack of interest in sound financial planning. However, the Slovenian school system does not yet have curricula on the basis of which elementary, secondary and undergraduate students could acquire adequate financial literacy skills unless the course of study itself provides for this e.g., the Faculty of Economics. In order to successfully incorporate financial literacy into existing courses, further research needs to be conducted and appropriate theoretical backgrounds or learning frameworks need to be created in order to adequately design modules or courses to teach health and financial literacy in Slovenia.

Therefore, the Building Financial Capability for Healthcare Professionals project is extremely important because, based on the project results, we will first introduce new courses for the Undergraduate Nursing program and then make plans for the Postgraduate Nursing program as well as a long-term goal for other healthcare professional studies. However, to improve financial and health literacy, this content could also be delivered as part of lifelong learning, for example, in the form of workshops that could be organized at academic and non-academic institutions (health-care providers, insurance companies, etc.).



## Policy Implications & Recommendations in the Czech Republic

Health and financial literacy in the healthcare sector is currently rather inadequate among both providers of care (health professionals) and consumers of care (patients and their relatives, general public). One possible consequence of low health and financial literacy levels is easy cognitive manipulation of citizens and their possible inability to make informed decisions and take responsibility for their health.

In January 2020, the Document National Strategy for Financial Education 2.0 (MFČR, 2020) was approved in the Czech Republic. The document aims to increase the level of financial literacy, strengthening the personal responsibility of everybody for managing their own finances, the document was built on the previous strategy by the Czech government from 2010.

The importance of financial literacy is undisputed. In many documents, in professional forums, research it has been repeatedly verified that the ignorance of the individual in managing their own budget and generally insufficient (low or poor) financial literacy of citizens can lead to instability of the financial system (economic crisis in previous years, in connection with COVID-19 pandemic – difficult periods for individuals, society and states, energy crisis and others).

To improve the current situation, it is necessary to improve the financial literacy of the country's population, which is intertwined in many areas. There is no doubt that there is a need to start financial education as part of primary and secondary education level. Focus on at-risk groups such as socially vulnerable groups, the unemployed, single parents, and others. In connection with the ageing of the population in the Czech Republic, it is also necessary to think about financial security in old age. Attention must also be paid to people and caregivers who help vulnerable citizens.

In the field of health literacy, there is a need to focus on:

- ❖ health promotion,
- ❖ responsibility for one's health,
- ❖ diseases prevention,
- ❖ provision of health services.

There is the area to create topics already included in the undergraduate curriculum of the Faculty of Medicine at Masaryk University.

Specifically, it includes the following issues:

- ❖ Focusing on health professionals, this group should be acknowledged and be equally involved in the discussion regarding health policies to promote the public health. There is an increased demands on the justification of political decisions in the public health area related to health & financial literacy. The higher competencies of healthcare professionals allow them to make decisions and influence outputs in the field of state health policy.



- ❖ With the focus on the general population & citizens, there is a need to enhance the ability of the population to make informed choices and take responsibility for their health.

The suggestions how to increase health & financial literacy in the Czech Republic, would be focusing both on providers and consumers of care. Health professionals would ideally be educated in the area of health & financial literacy already at the time of undergraduate study & professional preparation. The topic of health & financial literacy should be included in the syllabus of selected courses, subsequently in the form of courses such as specialized education. At present, the topics of health literacy are included in the syllabi of the courses for midwiferies, such as Basics of the theory of midwifery, Basics of the Theory of Nursing, Patient's education in midwifery, Public Health Promotion and Protection.

In the future would be beneficial if the topic of financial literacy could be included in the existing courses like: Management in Nursing, and Introduction to Health Economics, or implemented as an optional course (based on the demand) into the curricula for which the discussion with the management of the faculty and scientific guarantors of particular study programmes is needed.

With the relation to the general population, financial literacy should be part of primary, secondary, and follow up education (preparation for life). Health literacy can be effectively increased both at the national level through education projects focused on health services and at the local level through community activities.

## Conclusion

To summarize our suggestions, we propose the following points to be considered by the stakeholders, university management, healthcare managers, and policymakers. The recommendations for the healthcare professionals include incorporating health & financial literacy to study curricula that shall focus on building professionals' competencies to educate patients in health & financial literacy. Also, the healthcare professionals should receive relevant financial education that can subsequently empower patients & healthcare providers. The recommendations concerning the population in general focus on encouraging the shift of the responsibilities for their health and financial situation towards the individuals. Moreover, there is an extensive need to improve the individuals' decision making and increase their health & financial literacy overall.



## Recommendations concerning the general population

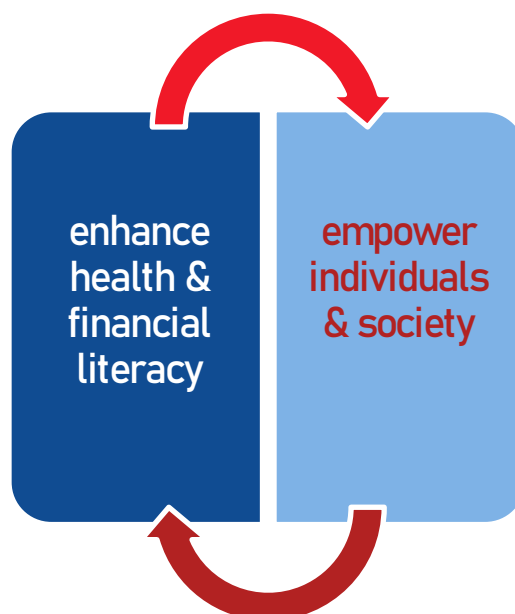


- Become more responsible for one's health, follow preventative measures regarding one's health
- Enhance the decision making ability to make informed choices
- Increase health & financial literacy

## Recommendations for healthcare professionals



- Add health & financial literacy to study curricula (under- & post-graduate level)
- Build competencies to educate care consumers (patients) in health & financial literacy when providing care by professionals
- Receive relevant financial education that can empower care consumers (patients) & healthcare providers



In conclusion, this report emphasizes not only the gap for improvement but also the importance of health & financial literacy. Furthermore, those topics are relevant for the whole general population as health and money are concern everyone and have a large impact on one's quality of life and wellbeing. If each individual takes care of their health (has sufficient health literacy and at the same time uses financial resources properly for a healthy lifestyle and disease prevention, then the burden on the provision of professional health care changes. Therefore, enhancing health & financial literacy can empower individuals and society worldwide and contribute to the rational use of health care and improve the performance of the health sector, thus enabling the targeting of care to those in need.





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