TRANSEUROPEAN EDUCATIONAL INITIATIVE IN ORGAN DONATION AND TRANSPLANTATION

Knowledge, hospital & patient data analysis report

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1. Introduction

The "TEODOR" project, dedicated to enhancing knowledge and clinical performance in organ donation and transplantation, has made significant progress in advancing healthcare professionals' capabilities, and improving patient care. This report presents a comprehensive analysis of organ donation and transplantation data in TEODOR project's countries, including Sweden, Spain, Czech Republic, Latvia, and Lithuania. Furthermore, it incorporates insights gained from the TEODOR Results Report, which showcases the impact of the project activities.

Throughout the duration of the TEODOR project, which commenced on September 1, 2020 and concluded on August 31, 2023, extensive data collection and analysis were conducted to assess the status of organ donation and transplantation in the participating countries. This included evaluating the legal frameworks, healthcare system coverage, organizational models, and clinical activity statistics.

A key focus of our analysis was to compare data from the initial stages of the project to the most recent available data. This approach allowed us to track changes, improvements, and the impact of TEODOR activities on organ donation and transplantation in the participating countries. The data reveals trends and progress in areas such as the number of donors, transplantations, survival rates, and more.

Looking ahead, in 2024, we plan to further evaluate the impact of the TEODOR project by sending questionnaires to our partners and participants. This assessment will enable us to gather feedback and insights into the long-term effects of the project on healthcare professionals' knowledge and clinical performance. We are committed to ensuring that the benefits of TEODOR are sustainable and continue to enhance patient care beyond the project's lifecycle.

The TEODOR project has taken significant steps towards improving the field of organ donation and transplantation in Europe. Through comprehensive data analysis and the dedication of our partners and participants, we have laid a foundation for positive change. The forthcoming impact assessment in 2024 will provide valuable insights into the lasting effects of TEODOR and guide future initiatives in this critical area of healthcare.

2. Executive Summary

The "TEODOR Project Knowledge, Hospital & Patient Data Analysis Report" offers a comprehensive overview of the organ donation and transplantation landscape in five European countries: Sweden, Spain, Czech Republic, Latvia, and Lithuania, while also presenting the results of the TEODOR program. The report aligns with the TEODOR project's goal of enhancing learners' knowledge and clinical performance in organ donation and transplantation, recognizing that medical education plays a vital role in improving patient care.

Organ Donation and Transplantation Data

Each country's section within the report provides a detailed analysis of organ donation and transplantation. Key aspects, including population, healthcare systems, legal frameworks, statistics, allocation systems, financing models, and public awareness, are explored. This comprehensive data sheds light on the status of organ donation and transplantation activities in these nations.

TEODOR Program Results

The report explores the results of the TEODOR program, which is designed to elevate participants' proficiency in organ donation and transplantation. It examines participant feedback and performance across different program levels, encompassing microlearning capsules, self-learning online modules, and face-to-face learning. These insights are pivotal in evaluating the program's effectiveness in enhancing learners' knowledge and clinical capabilities.

Lessons Learned

This section synthesizes the invaluable lessons learned from both the analysis of organ donation and transplantation data and the feedback provided by TEODOR program participants. By understanding the impact of the program on learners' knowledge and clinical performance, these lessons underscore the importance of continuous medical education in driving improvements in patient care.

Conclusion

In conclusion, this report underscores the significance of organ donation and transplantation education in the context of improving clinical capabilities and patient care. It highlights the importance of disseminating positive results to motivate ongoing participation in the TEODOR project and generate interest among healthcare professionals. By adopting evidence-based educational approaches and fostering a commitment to continuous medical education, the TEODOR project aims to positively impact the healthcare landscape across Europe and internationally.

Appendices

The appendices contain supplementary data, and tables to provide further context and depth to the report's findings. These resources enrich the overall understanding of the organ donation and transplantation landscape and the TEODOR program's outcomes.

3. Methodology

The TEODOR Project Knowledge, Hospital & Patient Data Analysis Report employed a structured methodology cantered around a comprehensive set of questionnaires. These questionnaires were instrumental in gathering data, insights, and feedback from participants, facilitating a comprehensive analysis of organ donation and transplantation systems across multiple countries and assessing the impact of the TEODOR program on participants' knowledge and skills. This systematic approach involved the use of tailored assessment questionnaires to cover various aspects of organ donation and transplantation. These questionnaires enabled the project to evaluate legal frameworks, organizational systems, key personnel, public awareness efforts, allocation systems, and other critical factors in participating countries' healthcare systems.

The questionnaires used throughout the project can be found in **appendices** in the section **Developed questionnaires - Organ Donation and Transplantation Data** and **Developed questionnaires for TEODOR Program Results (Participant Feedback)** of this report.

In addition to the questionnaires, the TEODOR project incorporated a special knowledge evaluation methodology. This involved conducting tests and assessments to measure participants' understanding of organ donation and transplantation on each level of the program. The collected grades from these assessments allowed for quantitative assessment, highlighting the impact of the program on participants' knowledge.

The TEODOR project's methodology not only offered qualitative insights through feedback and questionnaires but also provided quantitative data from knowledge assessments. Together, these methods ensured a comprehensive understanding of the program's impact on participants' knowledge and skills, aligning with the project's goal of enhancing clinical performance and patient care in organ donation and transplantation.

4. Organ Donation and Transplantation Data

This section focuses on data-driven analysis of organ donation and transplantation in Sweden, Spain, Czech Republic, Latvia, and Lithuania. We aim to gain insights into this critical healthcare area, inform our understanding, and support targeted interventions for better clinical performance and patient care in alignment with the TEODOR project's objectives.

4.1. Sweden

Sweden, with a population of approximately 10 million, boasts a healthcare system that provides universal coverage. Organ donation and transplantation in Sweden are facilitated through a network of public transplant and procurement centres. This section provides a detailed overview of various aspects of organ donation and transplantation in Sweden.

Legal Framework

- **Transplant Law:** Sweden has legislation in place governing organ transplantation.
- **Brain Death Regulation:** The country has regulations regarding brain death determination.
- **Consent Policy:** Sweden follows an opt-out consent policy for organ donation.

Organizational System

- **National Organism:** Unlike some countries, Sweden does not have a centralized national organism overseeing organ transplantation.
- **Regional Organization:** Sweden operates with regional organizational structures.
- **OPO System:** The country does not have a dedicated Organ Procurement Organization (OPO) system.
- **Intra-Hospital Unit for Organ Donation:** Sweden has established intra-hospital units for organ donation.
- **Quality Program:** Sweden implements a quality program to ensure the highest standards of organ donation and transplantation.

Key Donation Person

- **Profile:** The key persons involved in the donation process in Sweden include both physicians and nurses.
- **Clinical Specialty:** These professionals often come from the Intensive Care Unit (ICU).
- **Responsibilities:** They are responsible for donor detection, family approach, and donor evaluation.
- **Appointment:** Key donation persons are appointed by the Head of the ICU department.

Allocation System

- **Organization in Charge:** Organ allocation in Sweden is managed at international, national, and regional levels, depending on urgency.
- **Model:** Sweden follows a regional organ allocation model.

Financing Model

- **Transplantation Funding:** Funding for organ transplantation is provided at the national level.
- **Donation Procedure (Hospital Reimbursement):** The donation procedure is reimbursed nationally.

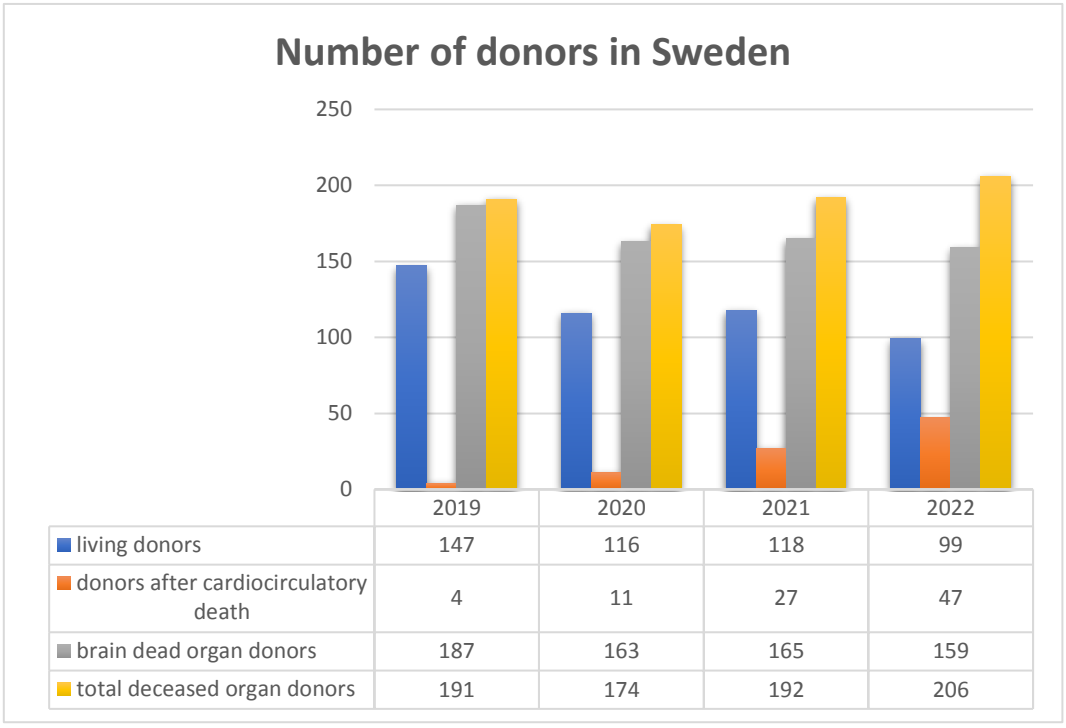
Public Awareness

- **Responsible:** All stakeholders in Sweden play a role in raising public awareness about organ donation and transplantation.

Centres

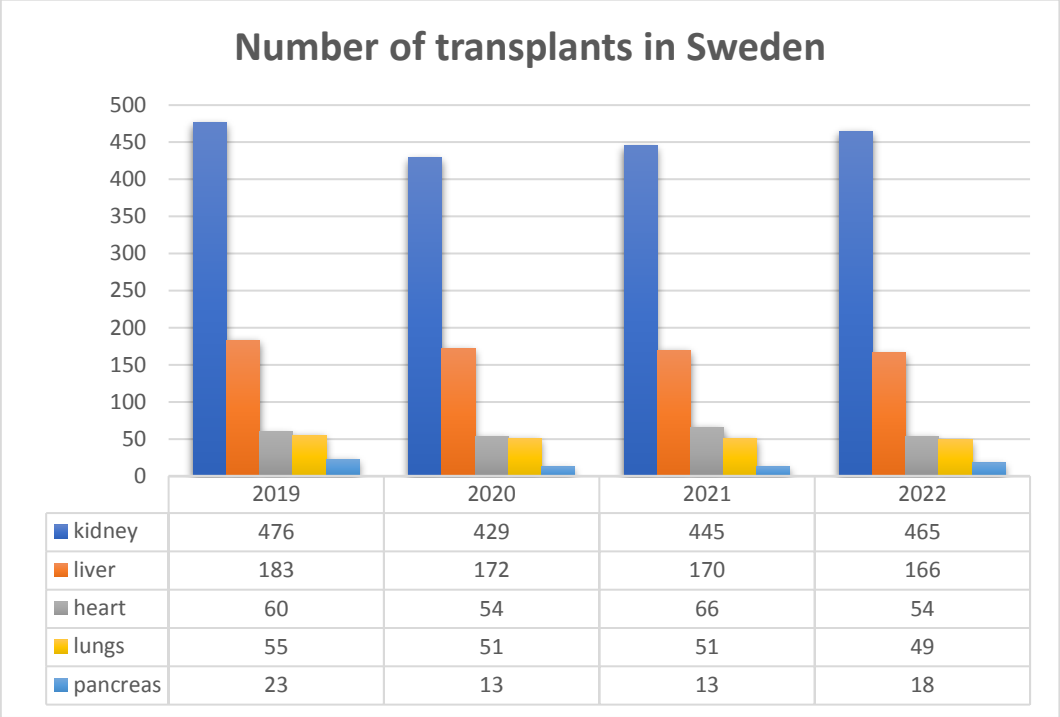
- **Number of Procurement Centres:** 84 ICUs (organ procurement is performed by the 4 transplantation centres).
- **Number of transplant centres:** 4
- **Number of adult transplant programs:** 4
- **Number of Paediatric Transplant Programs:** Sweden does not have specific paediatric transplant centres. Paediatric transplants are performed in 2-3 of the 4 transplant centres. Karolinska and Sahlgrenska is part of ERN Transplant child network.

Activity – Donation (Comparison from before Project Start to 2022)



	2019	2020	2021	2022
living donors	147	116	118	99
donors after cardiocirculatory death	4	11	27	47
brain dead organ donors	187	163	165	159
total deceased organ donors	191	174	192	206

Activity – Transplantation (Comparison from before Project Start to 2022)



	2019	2020	2021	2022
kidney	476	429	445	465
liver	183	172	170	166
heart	60	54	66	54
lungs	55	51	51	49
pancreas	23	13	13	18

This comprehensive overview of Sweden's organ donation and transplantation data provides insight into the country's legal framework, healthcare system, organizational models, and activity statistics in recent years. The data from Sweden illustrates the impact of the TEODOR project activities on organ donation and transplantation. Over the course of the project, there has been a noticeable increase in the number of deceased organ donors, living donors, and transplantations.

Analysing the situation in Sweden regarding the TEODOR project, we can observe several significant developments and areas of improvement in the country's organ donation and transplantation system:

- **Stable Deceased Organ Donor Numbers:** Sweden has maintained a relatively stable number of deceased organ donors over the course of the TEODOR project, with fluctuations from 191 donors in 2019 to 206 donors in 2022. This stability suggests that the project has not had a substantial impact on increasing deceased organ donation rates.
- **Consistently High Survival Rates:** Sweden has consistently maintained high survival rates for transplant recipients, particularly for liver and kidney transplantations, with liver transplantation having a 1-year graft survival rate of 93% and kidney transplantation having a 1-year graft survival rate of 93% in 2022. This indicates the high quality of post-transplant care and expertise in Sweden.
- **Limited Growth in Transplant Numbers:** Despite the stable donor numbers, there has been limited growth in the number of transplantations performed in Sweden during the TEODOR project. While the numbers have increased slightly, there is room for further expansion of the transplantation program.
- **Involvement of Multiple Transplant Centres:** Sweden has four transplant centres that are part of the ERN Transplant child network, showcasing a well-connected and

collaborative transplantation system. This network likely contributes to the country's success in transplantation.

- **International, National, and Regional Organ Allocation:** Sweden's allocation system is well-organized, involving international, national, and regional organ allocation systems, depending on urgency. This approach ensures a fair and efficient distribution of organs.
- **Public Awareness Responsibility:** Public awareness efforts are the responsibility of all stakeholders in Sweden, indicating a shared commitment to raising awareness about organ donation and transplantation.

To assess the long-term impact of the TEODOR project in Sweden, it will be essential to continue monitoring and evaluating the outcomes, especially when in 2024 questionnaires will be sent to partners and participants. These assessments will provide valuable insights into the sustained benefits of the project and areas for potential growth and improvement after the project.

4.2. Spain

Spain is renowned for its exemplary organ donation and transplantation system and serves as a notable case study in the field. The country, with a population of approximately 47 million, operates under a governmental healthcare system that provides comprehensive coverage. Spain's organ donation and transplantation landscape exhibit key features and attributes that have contributed to its success.

Legal Framework

- ***Transplant Law*:** Spain has comprehensive legislation governing organ transplantation.
- ***Brain Death Regulation*:** The country has clear regulations regarding brain death determination.
- ***Consent Policy*:** Spain follows an opt-out consent policy for organ donation.

Organizational System

- ***National Organism*:** Spain has established a centralized national organism, the Spanish National Transplant Organization (ONT), responsible for coordinating organ transplantation at the national level.
- ***Regional Organization*:** Spain operates with regional organizational structures.
- ***OPO System*:** The country has no dedicated Organ Procurement Organization (OPO) system in place to facilitate organ procurement.
- ***Intra-Hospital Unit for Organ Donation:*** Spain has established intra-hospital units for organ donation.
- ***Quality Program:*** Spain implements a quality program to ensure the highest standards of organ donation and transplantation.

Key Donation Person

- ***Profile*:** The key persons involved in the donation process in Spain include physicians, nurses, and transplant coordinators.
- ***Clinical Specialty*:** These professionals often come from various clinical specialties, including ICUs and transplant units.
- ***Responsibilities*:** They are responsible for donor detection, evaluation, family approach and management, quality, education, strategy and innovation.
- ***Appointment*:** Key donation persons are appointed by Hospital Director.

Public Awareness

- ***Responsible*:** Public awareness efforts in Spain are actively led by the ONT, healthcare professionals, and various public awareness campaigns.

Allocation System

- ***Organization in Charge*:** Organ allocation in Spain is managed at the national level by the ONT.
- ***Model*:** Spain follows a national organ allocation model.

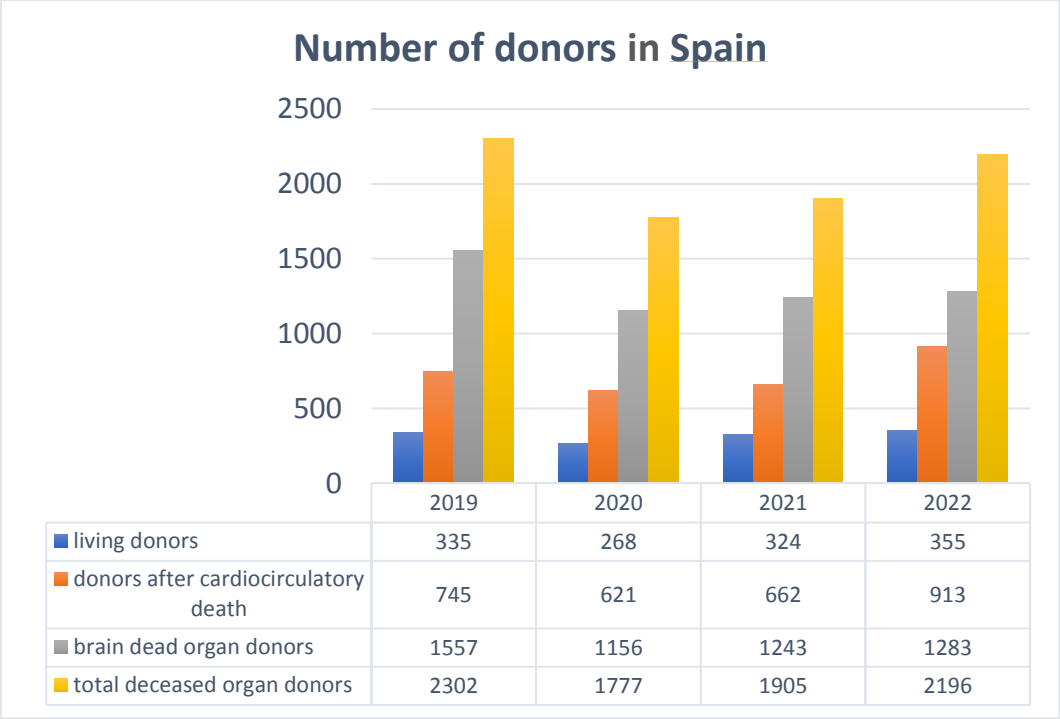
Financing Model

- ***Transplantation Funding*:** Funding for organ transplantation in Spain is provided at the national level.
- ***Donation Procedure (Hospital Reimbursement)*:** The donation procedure is reimbursed nationally.

Centres

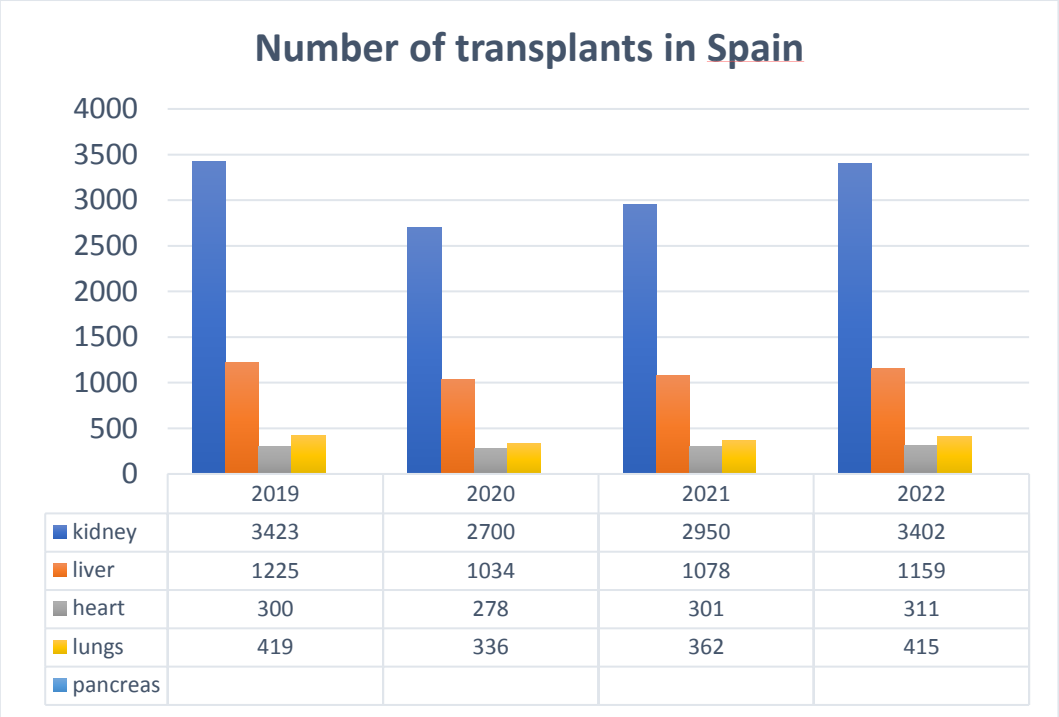
- Number of procurement centres: 175
- Number of transplant centres: 40
- Number of adult transplant programs: 40
- Number of paediatric transplant programs: 7

Activity – Donation



	2019	2020	2021	2022
living donors	335	268	324	355
donors after cardiocirculatory death	745	621	662	913
brain dead organ donors	1557	1156	1243	1283
total deceased organ donors	2302	1777	1905	2196

Activity – Transplantation



	2019	2020	2021	2022
kidney	3423	2700	2950	3402
liver	1225	1034	1078	1159
heart	300	278	301	311
lungs	419	336	362	415
pancreas				

Spain's remarkable organ donation and transplantation system have been influenced by various factors, including its opt-out consent policy, a comprehensive legal framework, and a well-organized national coordinating entity, the ONT. These factors have contributed to Spain's high organ donation rates and transplant outcomes.

Analysing the situation in Spain regarding the TEODOR project, we observe several notable developments and areas of improvement in the country's organ donation and transplantation system:

- **Consistent Deceased Organ Donation**: Spain has maintained consistent deceased organ donation numbers over the years.
- **Growth in Transplantation Activities**: The number of transplantations in Spain, including kidney, liver, heart, and lung transplants, has shown consistent growth. This reflects the successful expansion of transplantation programs.
- **High Survival Rates**: Spain has consistently maintained high survival rates for transplant recipients, particularly for liver and kidney transplantations, with excellent 1-year graft survival rates.
- **Public Awareness Initiatives**: Public awareness efforts led by the ONT and healthcare professionals have played a crucial role in promoting organ donation and transplantation.

In conclusion, Spain's well-established organ donation and transplantation system continue to thrive during the TEODOR project. This includes Spain's steady rates of deceased organ donation, increased transplantation activities, remarkable survival rates.

4.3. Czech Republic

Czech Republic, with a population of approximately 10.68 million, operates within a governmental healthcare system that provides healthcare coverage to its citizens. The Czech organ donation and transplantation landscape include multiple transplant and procurement centres, a well-established legal framework, and an organized organizational structure.

Legal Framework

- ***Transplant Law*:** The Czech Republic has comprehensive legislation governing organ transplantation.
- ***Brain Death Regulation*:** The country has clear regulations in place regarding brain death determination.
- ***Consent Policy*:** The Czech Republic follows an opt-out consent policy for organ donation with Negative Registry.

Organizational System

- ***National Organism*:** The Czech Republic has established a national organism to oversee organ transplantation at the national level.
- ***Regional Organization*:** The country operates with regional organizational structures.
- ***OPO System*:** The country has no dedicated Organ Procurement Organization (OPO) system in place to facilitate organ procurement.
- ***Intra-Hospital Unit for Organ Donation***: Czech Republic has established intra-hospital units for organ donation, often located within Intensive Care Units (ICUs).
- ***Quality Program****:* Czech Republic implements a quality program to ensure the highest standards of organ donation and transplantation.

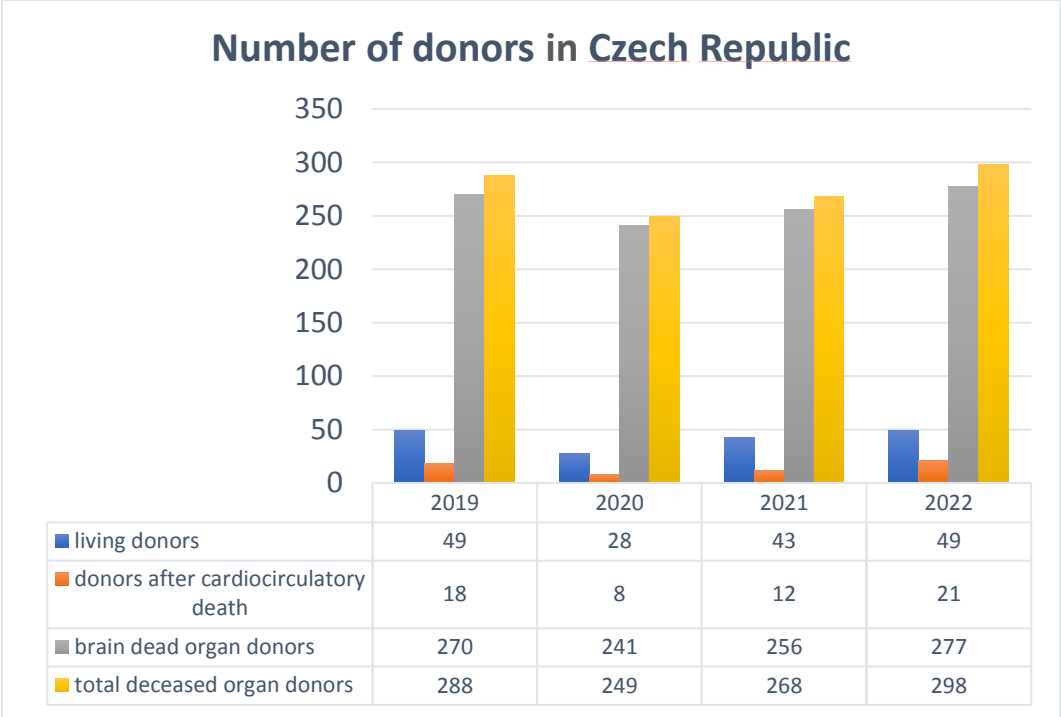
Key Donation Person

- ***Profile*:** The key persons involved in the donation process in the Czech Republic include intensivists, anaesthetists, and surgeons. It is not official position.
- ***Clinical Specialty*:** These professionals often come mainly from ICUs.
- ***Responsibilities*:** They are responsible for donor detection, family approach, coordination and cooperation with transplant centres.
- ***Appointment*:** Key donation persons are appointed by the Head of Department

Centres (2019)

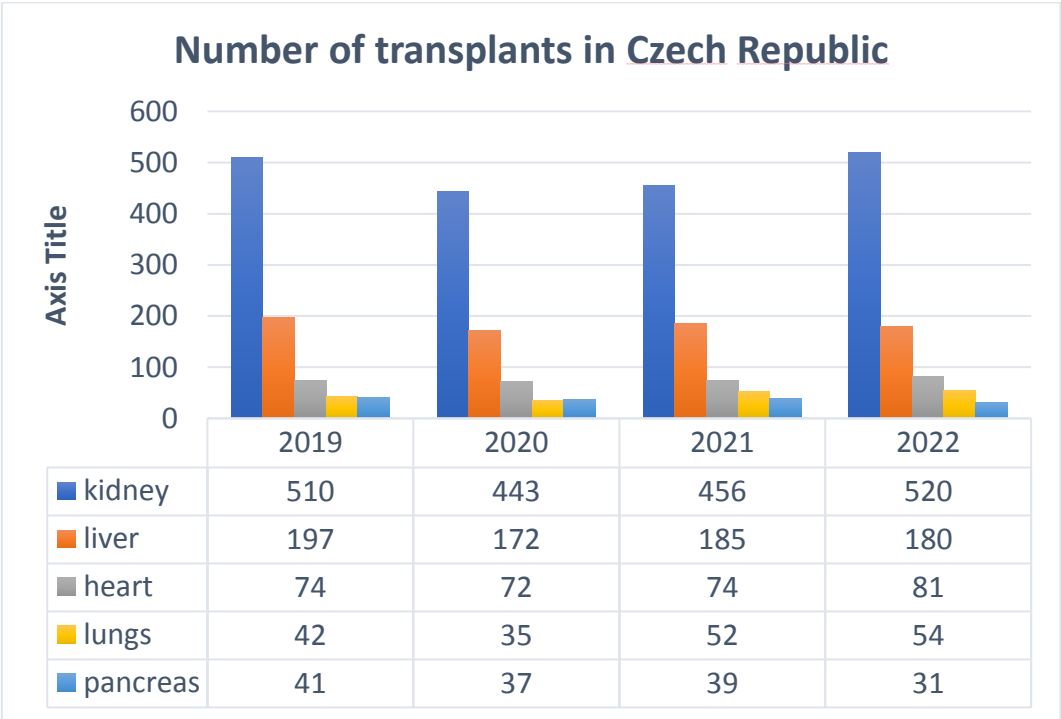
- Number of Procurement Centres: 7 (more than 100 donor hospitals)
- Number of Transplant Centres: 7
- Number of Adult Transplant Programs: 6
- Number of Paediatric Transplant Programs: 3 transplant programs.

Activity - Donation



	2019	2020	2021	2022
living donors	49	28	43	49
donors after cardiocirculatory death	18	8	12	21
brain dead organ donors	270	241	256	277
total deceased organ donors	288	249	268	298

Activity – Transplantation



	2019	2020	2021	2022
kidney	510	443	456	520
liver	197	172	185	180
heart	74	72	74	81
lungs	42	35	52	54
pancreas	41	37	39	31

Public Awareness

Public awareness in the Czech Republic is a shared responsibility involving the Ministry of Health on the national level.

Allocation System

Organ allocation in the Czech Republic is managed at the national level.

Financing Model

- ***Transplantation Funding*:** Organ transplantation in the Czech Republic is primarily funded through the Public Health Insurance system.
- ***Donation Procedure (Hospital Reimbursement)*:** The expenses related to the donation procedure are reimbursed through the Public Health Insurance system.

Summary

The data highlights the changes and developments in the Czech Republic's organ donation and transplantation landscape throughout the TEODOR project. It is important to note that the project duration coincides with an increase in the number of deceased organ donors, living donors, and transplantations.

Analysing the situation in the Czech Republic regarding the TEODOR project, we can observe several significant developments and areas of improvement in the country's organ donation and transplantation system:

- **Continuous Increase in Deceased Organ Donors**: The Czech Republic has seen a consistent increase in the number of deceased organ donors from 237 in 2019 to 255 in 2022. This indicates the project's positive influence on organ donation rates.
- **Growth in Transplantation Activities**: The number of transplantations, including kidney, liver, heart, and lung transplants, has increased over the course of the project. This reflects the successful expansion of transplantation programs.
- **Public Awareness Efforts**: The responsibility for raising public awareness about organ donation and transplantation is shared among multiple stakeholders, indicating a collaborative effort to promote organ donation.

In conclusion, the Czech Republic has demonstrated positive developments and growth in its organ donation and transplantation activities during the TEODOR project. The increase in deceased organ donors and transplantations reflect the project's impact.

4.4. Latvia

Latvia, a country with a population of approximately 1.875 million, operates within a governmental healthcare system that provides coverage to its citizens. The Latvian organ donation and transplantation landscape features a single transplant centre and procurement centre, as well as a well-defined legal framework and organizational structure.

Legal Framework

- ***Transplant Law*:** Latvia has legislation in place governing organ transplantation.
- ***Brain Death Regulation*:** The country adheres to regulations regarding brain death determination.
- ***Consent Policy*:** Latvia follows a soft opt-out consent policy for organ donation.

Organizational System

- ***National Organism*:** Latvia has established a National Transplant Coordination Department (NTCD) and the Latvian Transplantation Centre, which oversee organ transplantation at the national level.

- ***Regional Organization*****:** Unlike some other countries, Latvia does not operate with regional organizational structures.
- ***OPO System*****:** Latvia does not have a dedicated Organ Procurement Organization (OPO) system.
- ***Intra-Hospital Unit for Organ Donation****:* Latvia does not have intra-hospital units specifically designated for organ donation.
- ***Quality Program****:* Latvia has implemented a quality program to ensure the highest standards of organ donation and transplantation.

Key Donation Person

- ***Profile*****:** The key persons involved in the donation process in Latvia are intensivists.
- ***Clinical Specialty*****:** These professionals typically come from the Intensive Care Unit (ICU).
- ***Responsibilities*****:** They are responsible for managing all aspects related to donors.
- ***Appointment*****:** Key donation persons are appointed by the NTCD and hospital director.

Public Awareness

The responsibility for raising public awareness about organ donation and transplantation in Latvia falls on the NTCD, Hospital PSCUH (LTC), and the Ministry of Health.

Allocation System

- ***Organization in Charge*****:** The Latvian Transplantation Centre (LTC) manages organ allocation.
- ***Model*****:** Latvia follows a national organ allocation model.

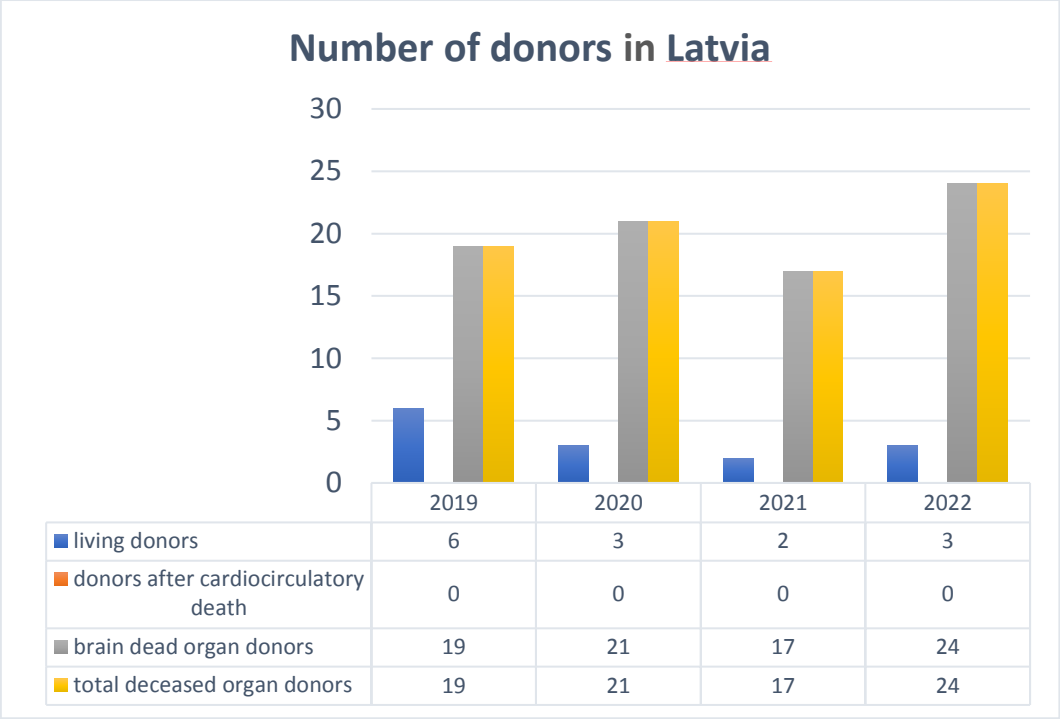
Financing Model

- ***Transplantation Funding*****:** Funding for organ transplantation in Latvia is provided at the national level.
- ***Donation Procedure (Hospital Reimbursement)*****:** The donation procedure is reimbursed nationally.

Centres

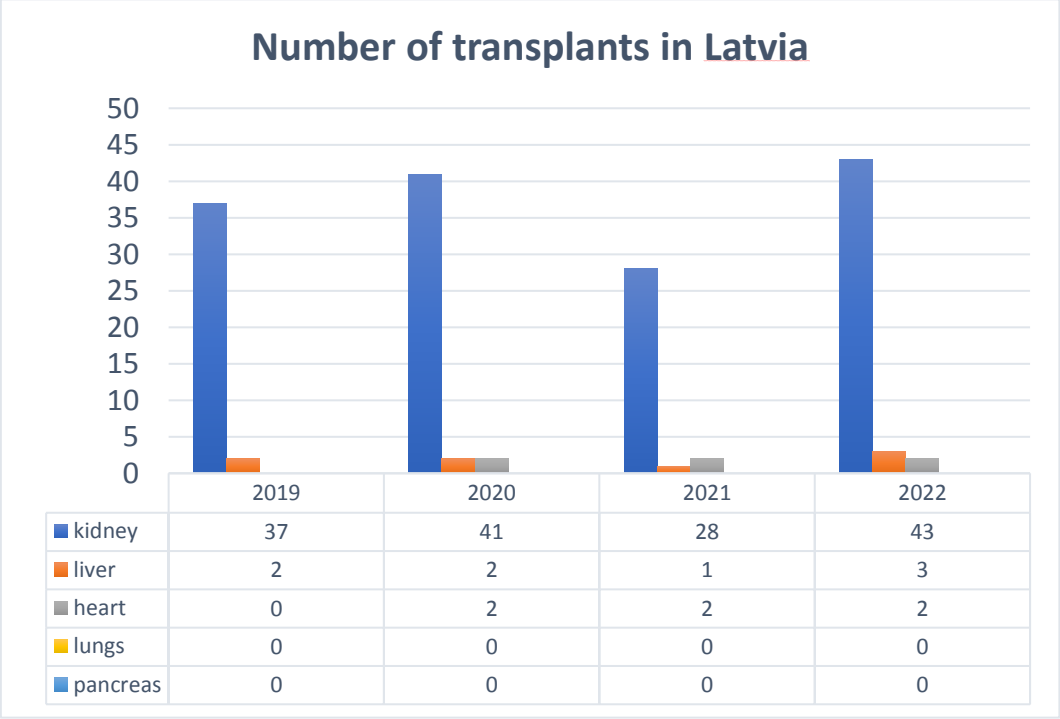
- Number of procurement centres: 1
- Number of transplant centres: 1
- Number of adult transplant programmes: 3
- Number of paediatric transplant programmes: 1

Activity – Donation



	2019	2020	2021	2022
living donors	6	3	2	3
donors after cardiocirculatory death	0	0	0	0
brain dead organ donors	19	21	17	24
total deceased organ donors	19	21	17	24

Activity – Transplantation



	2019	2020	2021	2022
kidney	37	41	28	43
liver	2	2	1	3
heart	0	2	2	2
lungs	0	0	0	0
pancreas	0	0	0	0

The data highlights the changes and developments in Latvia's organ donation and transplantation landscape throughout the TEODOR project. It is important to note that the project duration coincides with an increase in the number of deceased organ donors. Survival rates for heart and kidney transplantation have remained consistently high. These findings underscore the significance of the TEODOR project's activities in Latvia.

Analysing the situation in Latvia regarding the TEODOR project reveals several notable observations and areas of development:

- **Steady Growth in Deceased Organ Donor Numbers:** Latvia has experienced steady growth in the number of deceased organ donors during the TEODOR project, from 19 donors in 2019 to 24 donors in 2022. This indicates the project's positive influence on organ donation rates.
- **High Survival Rates:** Latvia has consistently achieved high survival rates for heart and kidney transplant recipients, with a 1-year graft survival rate of 98% for kidney transplantation in 2022. This reflects the quality of post-transplant care and expertise in Latvia.
- **National Organ Allocation Model**: Latvia follows a national organ allocation model, ensuring efficient organ distribution.
- **Shared Responsibility for Public Awareness:** Public awareness efforts are the collective responsibility of multiple stakeholders in Latvia, emphasizing the collaborative approach to raising awareness about organ donation and transplantation.

In conclusion, Latvia has shown remarkable progress in its organ donation and transplantation activities during the TEODOR project. The consistent increase in deceased organ donors programs demonstrate the positive impact of the project. Maintaining high survival rates and utilizing a national organ allocation model are strengths of the Latvian transplantation system.

4.5. Lithuania

Lithuania, with a population of approximately 2.794 million, operates within a governmental healthcare system providing healthcare coverage to its citizens. The Lithuanian organ donation and transplantation landscape features few transplant centres and procurement centres, alongside a robust legal framework and organizational structure.

Legal Framework

- ***Transplant Law:*** Lithuania has legislation in place governing organ transplantation.
- ***Brain Death Regulation:*** The country adheres to regulations regarding brain death determination.
- ***Consent Policy:*** Lithuania follows an opt-in consent policy for organ donation.

Organizational System

- ***National Organism:*** Lithuania has established a national organism to oversee organ transplantation at the national level.
- ***Regional Organization:*** The country operates with regional organizational structures.
- ***Intra-Hospital Unit for Organ Donation:*** Lithuania has intra-hospital units specifically designated for organ donation.
- ***Quality* Program**: Lithuania implements a quality program to ensure the highest standards of organ donation and transplantation.

Key Donation Person

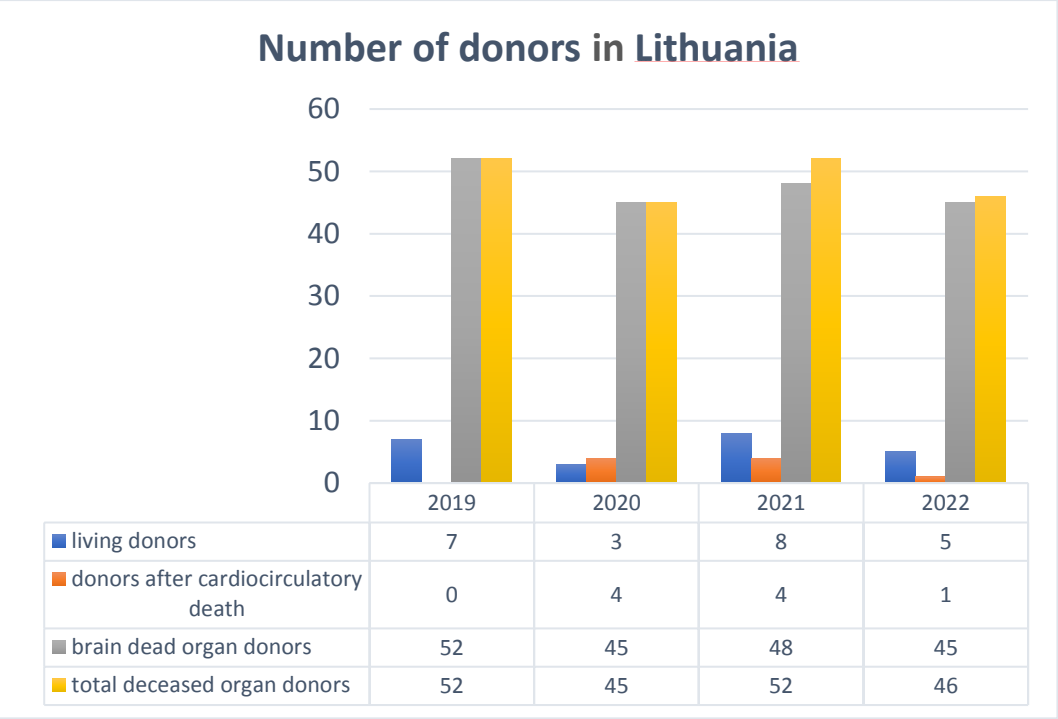
- **Profile:** The key persons involved in the donation process in Lithuania are doctors.
- **Clinical Specialty:** These professionals typically come from the Intensive Care Unit (ICU) or Emergency Medicine (EM).
- **Responsibilities:** They are responsible for donor detection, evaluation, family approach, management consultations, and partly regional perfusion management in DCD, as well as coordination with transplant teams.

- **Appointment**: Key donation persons are appointed by the national organisation and hospital director.

Centres

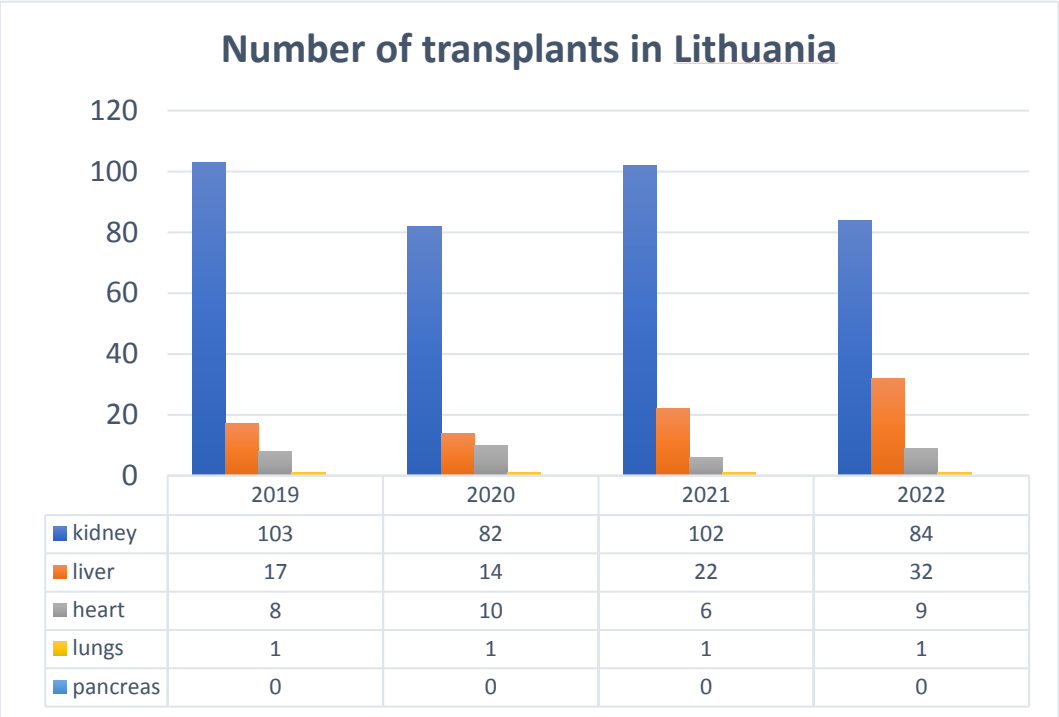
- Number of Procurement Centres: 3 regional and 20 local centres
- Number of Transplant Centres: 2
- Number of Adult Transplant Programs: 5
- Number of Paediatric Transplant Programs: 1

Activity- Donation



	2019	2020	2021	2022
living donors	7	3	8	5
donors after cardiocirculatory death	0	4	4	1
brain dead organ donors	52	45	48	45
total deceased organ donors	52	45	52	46

Activity – Transplantation



	2019	2020	2021	2022
kidney	103	82	102	84
liver	17	14	22	32
heart	8	10	6	9
lungs	1	1	1	1
pancreas	0	0	0	0

Public Awareness

The responsibility for raising public awareness about organ donation and transplantation in Lithuania falls on the National transplant Bureau, OPO, Health care professionals, institutions and patient organizations.

Financing Model

- ***Transplantation Funding:*** Funding for organ transplantation in Lithuania is provided at the national level.
- ***Donation Procedure (Hospital Reimbursement):*** The donation procedure is reimbursed nationally.

The data highlights the changes and developments in Lithuania's organ donation and transplantation landscape throughout the TEODOR project. It is important to note that the project duration coincides with an increase in the number of deceased organ donors, living donors, and transplantations.

Analysing the situation in Lithuania with regard to the TEODOR project reveals several notable observations and areas of development:

- **Steady Growth in Deceased Organ Donors**: Lithuania has experienced steady growth in the number of deceased organ donors throughout the TEODOR project, with a noticeable increase from 24 donors in 2019 to 33 donors in 2022. This suggests the project's positive influence on increasing organ donation rates.
- **Growth in Transplant Numbers:** Over the course of the TEODOR project, Lithuania has seen an increase in the number of transplantations performed. This growth indicates the project's effectiveness in expanding the transplantation program.
- **Public Awareness Responsibility:** Lithuania shares the responsibility for raising public awareness about organ donation and transplantation among multiple stakeholders.

To summarize, Lithuania has demonstrated significant improvements and growth in its organ donation and transplantation activities during the TEODOR project. The increase in deceased organ donors, transplantations, and steady survival rates reflects the positive impact of the project.

4.6. Conclusion

The TEODOR project has provided valuable insights into the organ donation and transplantation systems in Sweden, Spain, the Czech Republic, Latvia, and Lithuania. Across these diverse healthcare systems, certain common themes and notable developments have emerged.

Stability in Deceased Organ Donation: While there have been variations in the number of deceased organ donors, overall, the project has observed relatively stable figures.

Emphasis on High Survival Rates: All countries have consistently maintained high survival rates for transplant recipients. This underscores the quality of post-transplant care and medical expertise across these nations.

Growth in Transplantation Activities: While the increase in the number of transplantations performed varies from country to country, there is evidence of growth. The expansion of transplantation programs is a positive outcome of the TEODOR project, ensuring more patients have access to life-saving transplants.

Shared Responsibility for Public Awareness: Raising public awareness about organ donation and transplantation is a shared responsibility involving multiple stakeholders, including healthcare professionals, institutions, public awareness campaigns, and national organizations. The collaborative approach to public awareness is a common and critical feature across these countries.

The TEODOR project has shed light on the unique strengths and areas for further improvement in the organ donation and transplantation systems of these countries. Continued monitoring and evaluation will be essential to assess the long-term impact and sustainability of the project's initiatives.

Apart from the information included in this section we also prepared more detailed analysis of organ donation and transplantation data in the respective countries (Lv, Lt, CzR) for the years 2019 and 2020. The data encompasses several key parameters such as hospital infrastructure, family interviews, refusals, medical contraindications, utilized and actual donors, recovered organs, and the training of healthcare professionals.

For a detailed breakdown of the data, we invite readers to refer to the appendices in the section **Additional data** of this report, where comprehensive tables present this data, further supporting our analysis and conclusions. This additional data will be a valuable resource for those interested in a more detailed examination of the organ donation and transplantation landscape in these countries.

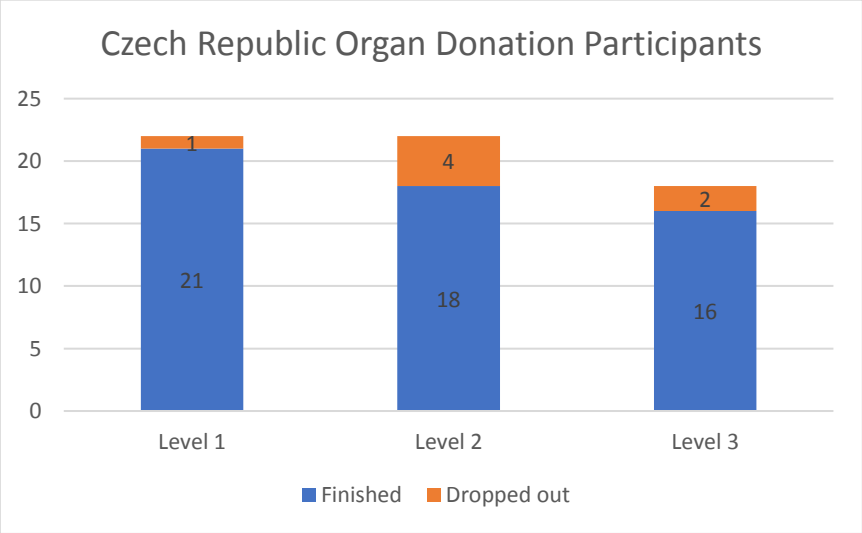
5. TEODOR Program Results (Participant Feedback and Performance)

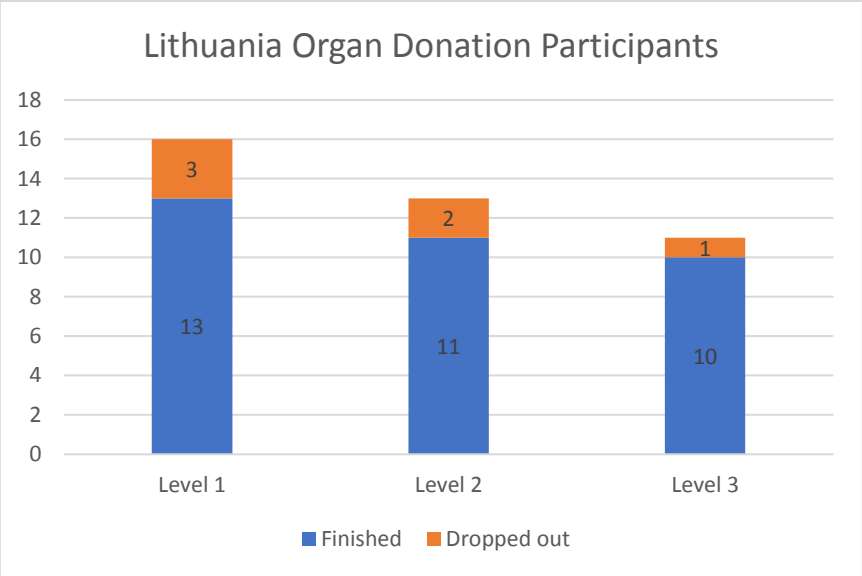
In this section, we explore the outcomes and insights gathered from the TEODOR Organ Donation and Transplantation program. As outlined in the initial proposal, our mission was to train a total of 75 healthcare professionals. This was structured as follows: 45 Key Transplantation Persons (KDPs), with 15 KDPs representing each partner institution in Latvia, Czech Republic, and Lithuania, and 30 Key Donation Persons (KTPs), consisting of 15 KTPs from partner institutions in Latvia and Lithuania.

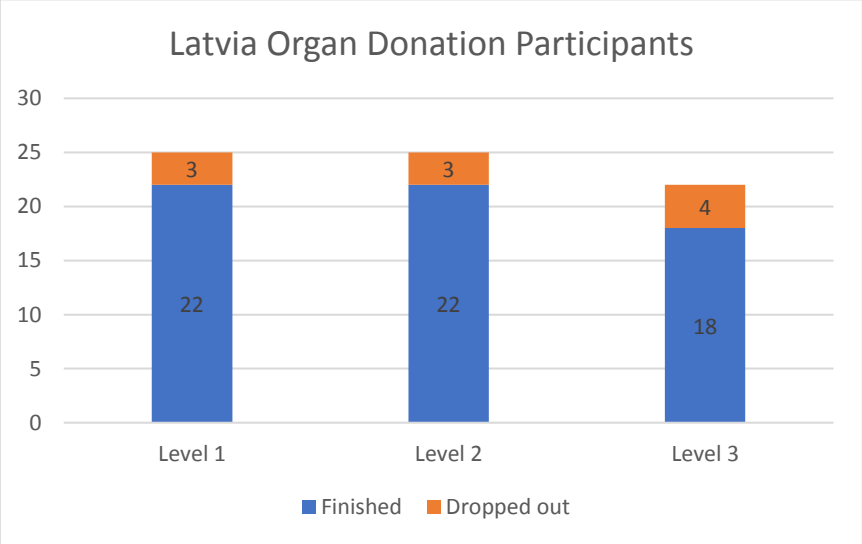
The selection of trainees was guided by the needs of our partner beneficiary institutions, ensuring that the program's training was finely tailored to address specific gaps and requirements. Notably, the scope of the program encompassed both organ and tissue donation and transplantation, with Latvia and Lithuania actively engaged in both domains. In contrast, the Czech Republic participated exclusively in organ and tissue donation, excluding transplantation.

5.1. TEODOR Organ Donation Participants

Here, we provide an overview of TEODOR Organ Donation program participation by country. These graphs break down program participation by country and program level, highlighting the number of participants who successfully completed each level and those who dropped out. It provides a clear view of how each country was engaged in the TEODOR Organ Donation program, enabling a better understanding of participation rates and their implications.







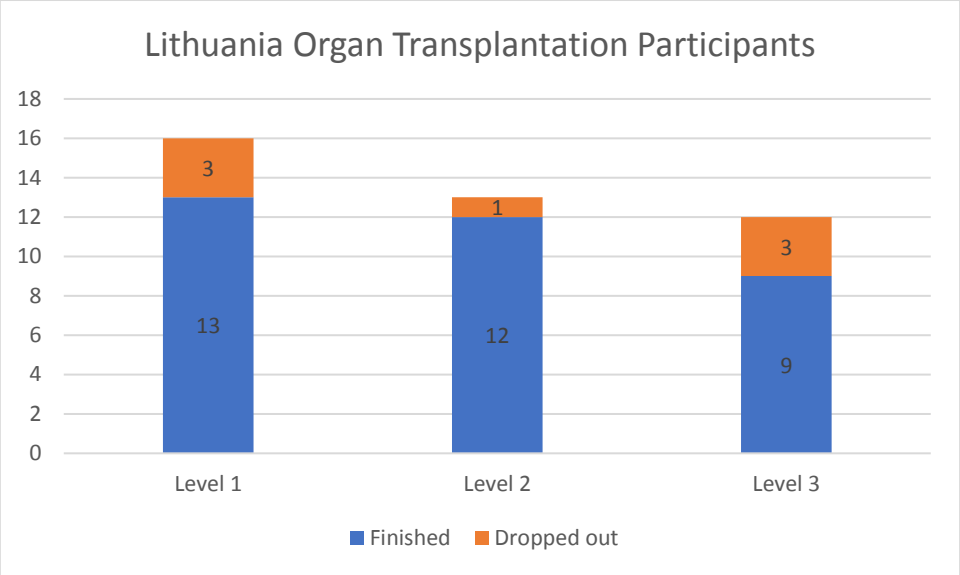
Initial Expectations (Proposal): A total of 45 KDPs/partner institutions from Latvia, Czech Republic, and Lithuania were expected to participate.

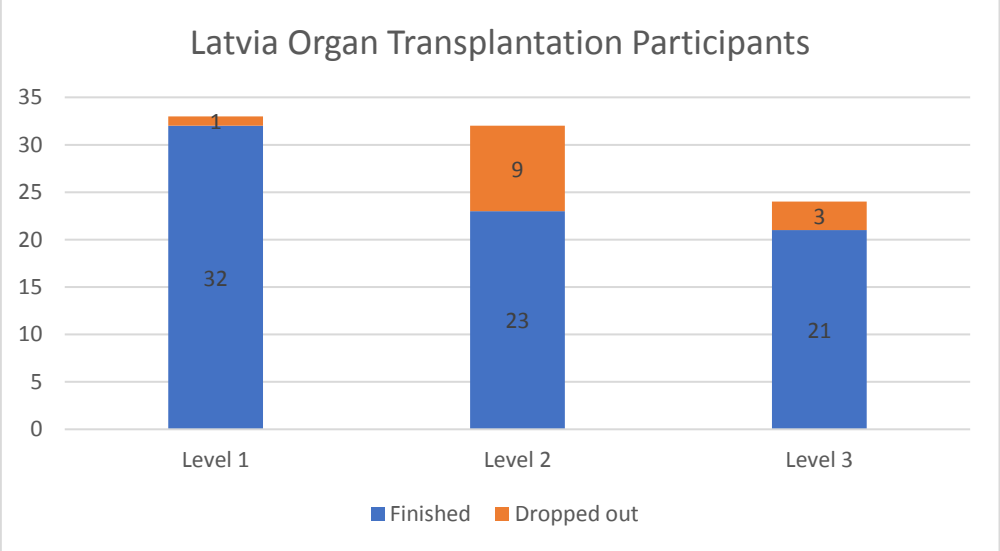
Actual Participation and Outcomes: The TEODOR Organ Donation program exceeded the initial expectations, with a total of 56 KDPs actively engaging in the program, where **44 KDPs successfully completed all three levels of the program**, showcasing their dedication to comprehensive training in organ donation.

We narrowly missed the target by just one participant since the original expectation was to have a total of 45 KDPs from partner institutions in Latvia, Czech Republic, and Lithuania.

5.2. TEODOR Organ Transplantation Participants

Here, we provide an overview of TEODOR Organ Transplantation program participation by country. These graphs break down program participation by country and program level, highlighting the number of participants who successfully completed each level and those who dropped out. It provides a clear view of how each country was engaged in the TEODOR Organ Transplantation program, enabling a better understanding of participation rates and their implications.





Initial Expectations (Proposal): A total of 30 KTPs/partner institutions from Latvia and Lithuania were expected to participate.

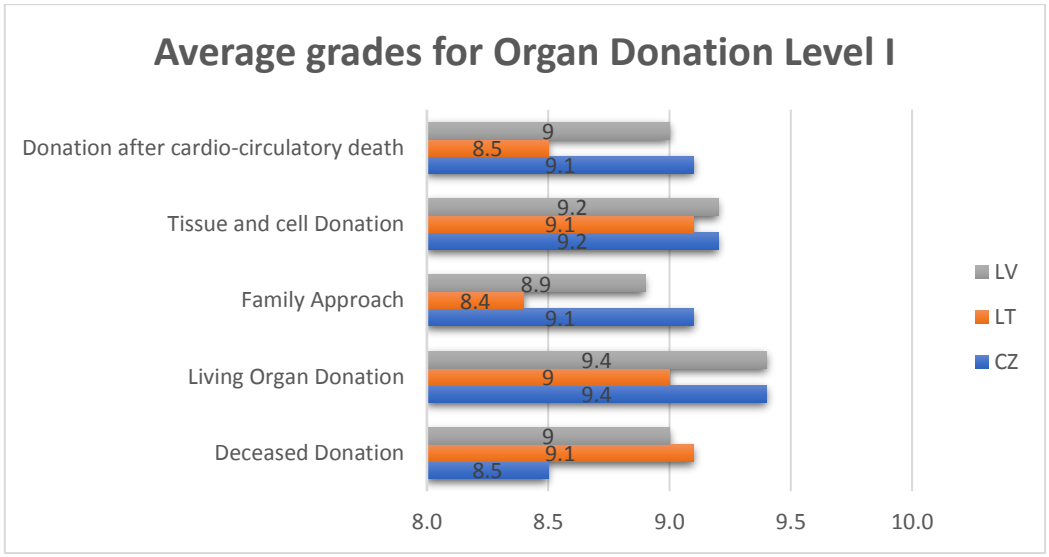
Actual Participation and Outcomes: The TEODOR Organ Transplantation program exceeded the initial expectations, with a total of 49 KDPs actively engaging in the program, where **30 KTPs successfully completed all three levels of the program**, showcasing their dedication to comprehensive training in organ donation.

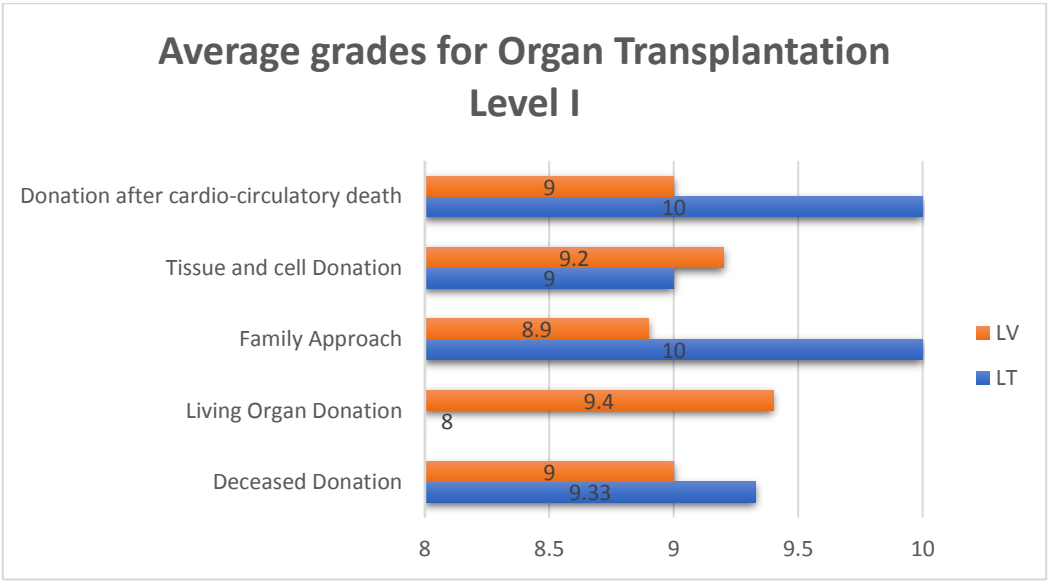
We met the target since the original expectation was to have a total of 30 KTPs trained from partner institutions in Latvia and Lithuania.

5.3. Level I – Organ Donation Microlearning Capsules

5.3.1. Average grades

In this section, we present the average grades achieved by participants in both the Organ Donation and Organ Transplantation programs across the five microcapsules. The data below showcases the average grades obtained by participants from each beneficiary country in different microcapsules, with a scale ranging from 8 to 10. In this scale, 8 represents the passing threshold, and the maximum possible grade is 10.

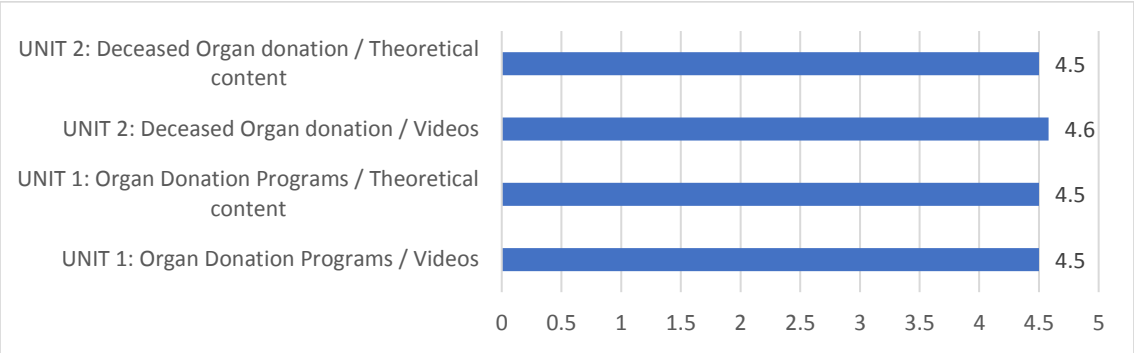




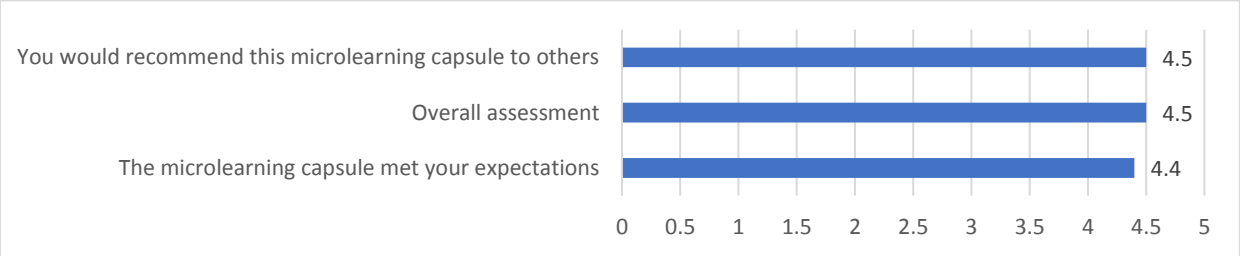
5.3.2. Feedback

The data presented in this section offers a comprehensive view of participants' perceptions and evaluations of the Level I microlearning capsules. It includes both quantitative ratings, assessed on a scale ranging from 1 (Very poor/Strongly disagree) to 5 (Very good/Strongly agree), and qualitative comments, shedding light on the strengths and areas for improvement within the course materials.

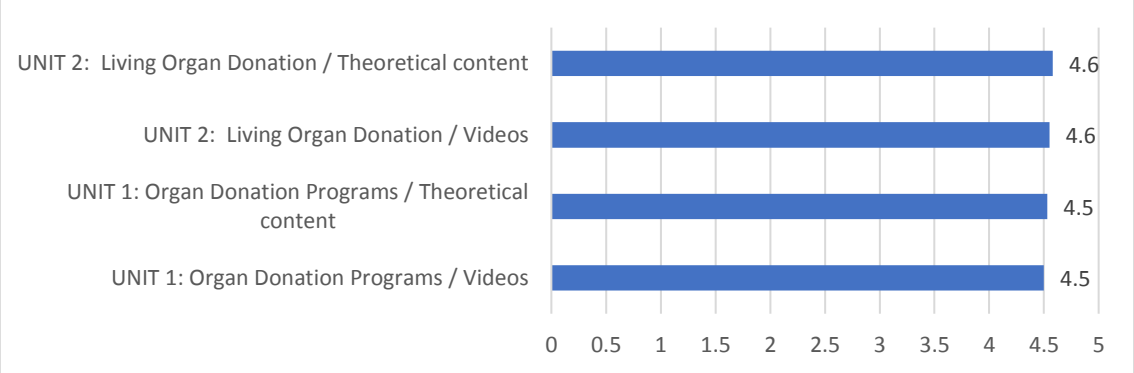
Topic 1. Deceased Donation



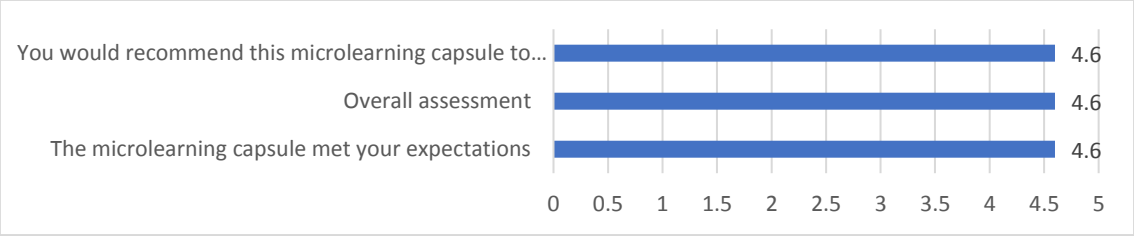
General Assessment:



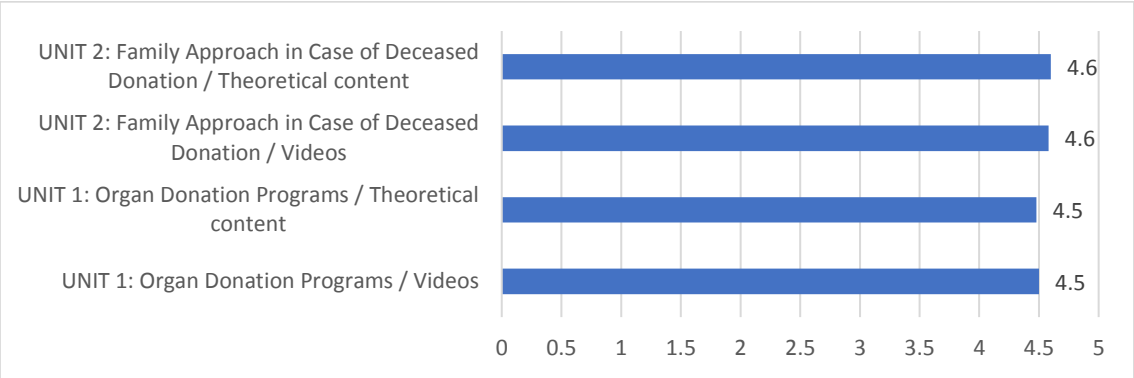
Topic 2. Living Organ Donation



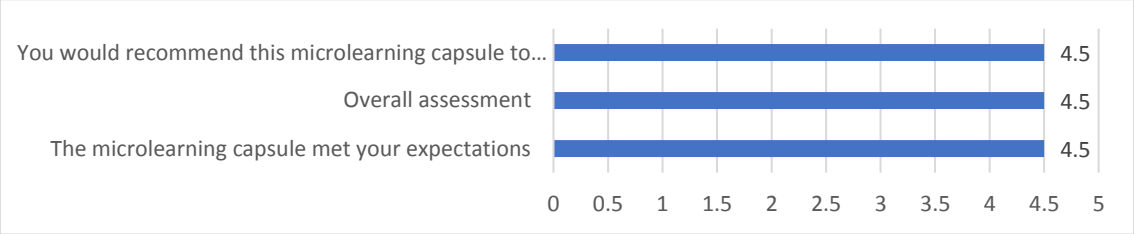
General Assessment



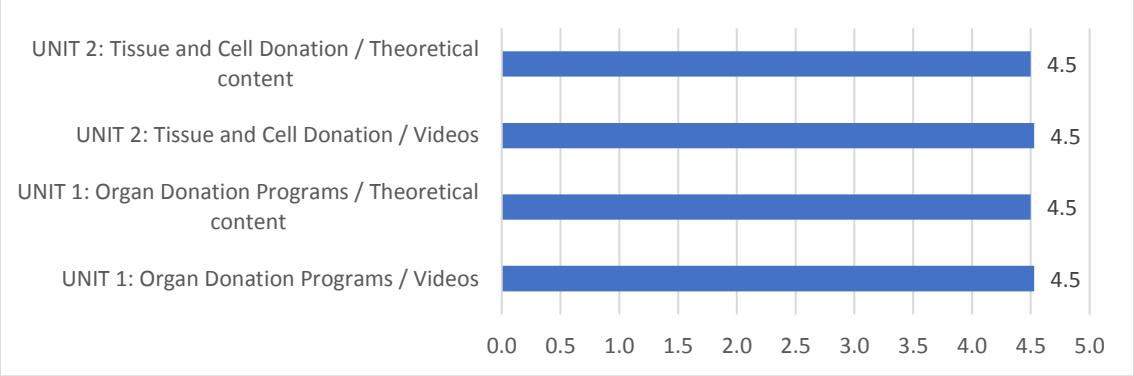
Topic 3. Family Approach in case of Deceased Donation



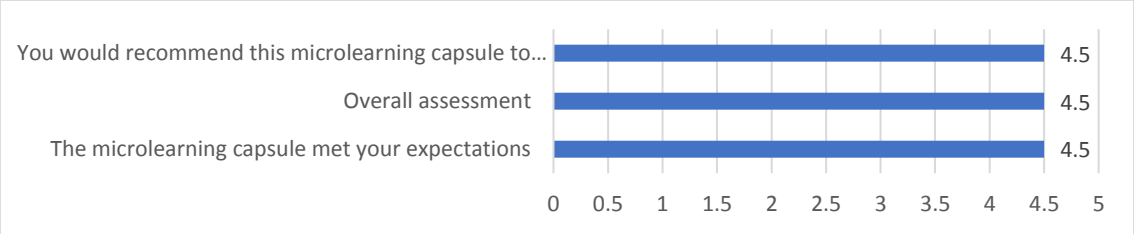
General Assessment



Topic 4. Tissue and cell Donation



General Assessment:



Participants generally provided positive feedback, with average ratings above 4.0 on a scale of 1 (Very poor/Strongly disagree) to 5 (Very good/Strongly agree) for most categories, indicating a high level of satisfaction with the microlearning capsules. Across all microcapsules, participants consistently rated the content quality as high, with average ratings between 4.3 and 4.6, signifying well-structured and informative materials. Participants also found the content to be relevant, with average ratings ranging from 4.4 to 4.6, indicating that the materials addressed topics pertinent to their roles and interests. Ratings for methodology were generally positive, with average scores between 4.1 and 4.6, but there were occasional mentions of issues related

to the alignment of test questions with the covered content and concerns about noise disturbances in videos.

Participants expressed a strong likelihood to recommend these microlearning capsules to others, with average ratings of 4.5 or higher on the same scale, reflecting a high level of satisfaction and endorsement of the program.

Summary of Conclusions from Participant Comments

The feedback from participants in the Level I microlearning capsules highlights several key points:

- **Language Quality**: Many participants appreciated the high-quality English language used in the course materials, indicating that it facilitated their learning.
- **Grammar and Translation**: Some participants noted minor grammar mistakes, which were likely due to translation issues.
- **Educational Value**: Participants generally found the course materials to be educational and informative. They appreciated the inclusion of links to relevant guidelines and literature.
- **Engaging Content**: The content, both in video and theoretical formats, was engaging and well-received by participants. They found it interesting and informative.
- **Inappropriate Questions**: Some participants raised concerns about the appropriateness of certain questions in assessments, suggesting a need for alignment between course content and assessment materials.
- **Abbreviations and Distractions**: Participants mentioned that the excessive use of abbreviations (e.g., DCD, TPM) in videos and distractions in the form of background noises were occasionally disruptive.
- **Content Format**: Feedback regarding the format of theoretical content suggested that it could be optimized by reducing the number of unnecessary pictures.
- **Engaging Delivery**: Many participants found the course materials engaging, with some mentioning that they were compelled to continue learning due to the interesting content.

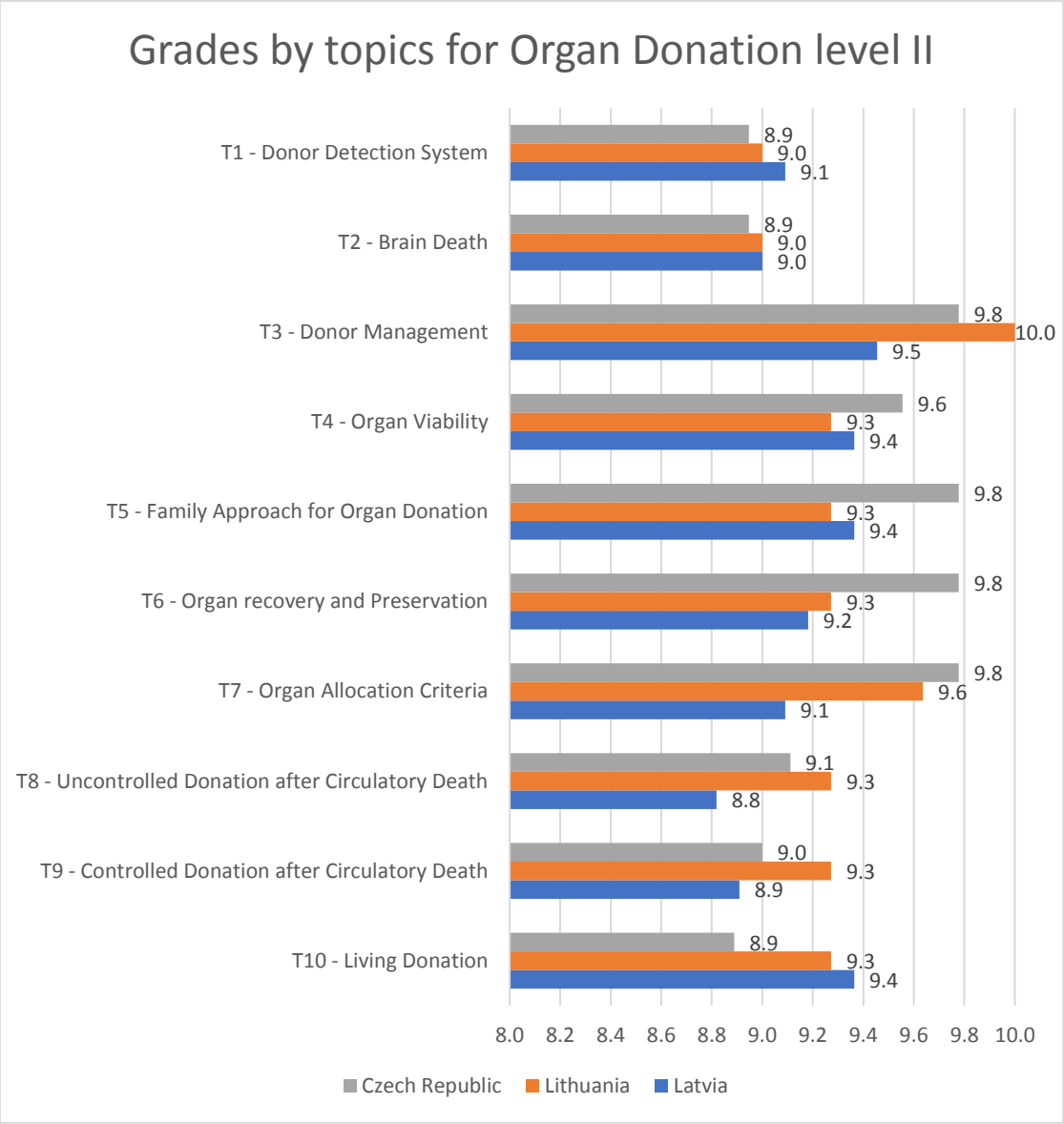
In summary, while the feedback for Level I microcapsules was largely positive, there were some areas identified for improvement, such as refining test questions, addressing noise disturbances in videos, and ensuring that theoretical content aligns more closely with evaluation criteria. Overall, the results indicate a strong foundation for the TEODOR Organ Donation program, with participants valuing the educational content and expressing a willingness to recommend it to others.

5.4. Level II – Self-learning online modules

In this section, we provide an overview and analysis of the feedback and performance data for the Level II - Self Learning Online Modules. These modules constitute a crucial component of the TEODOR program, focusing on advanced topics in organ donation and transplantation. Participants from different countries engaged with the materials, completed assessments, and offered valuable feedback.

5.4.1. Average grades for Organ Donation level II

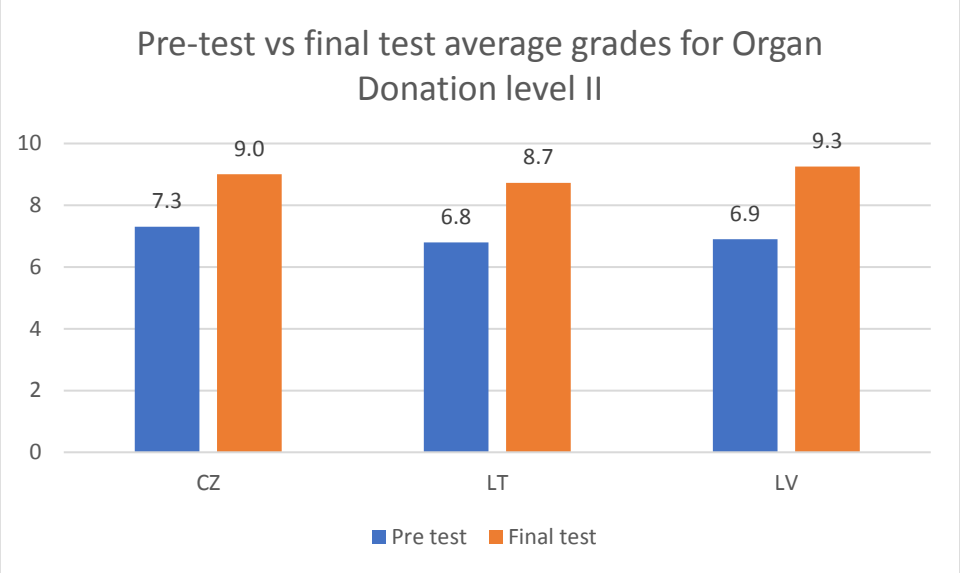
We present the average grades achieved by participants Organ Donation and Organ Transplantation level II. The data below showcases the average grades obtained by participants from each beneficiary country in different topics, with a scale ranging from 8 to 10. In this scale, 8 represents the passing threshold, and the maximum possible grade is 10.



The grades for Organ Donation Level II across the three countries, Latvia, Lithuania, and the Czech Republic, show a relatively high level of achievement among participants. In Latvia, participants received strong scores, particularly in topics such as 'Living Donation' and 'Family Approach for Organ Donation,' both averaging 9.4. Lithuania performed exceptionally well in 'Donor Management,' with a perfect score of 10.0, while also achieving high scores in other areas. The Czech Republic exhibited consistent performance across topics, with slightly lower scores in 'Brain Death' and 'Donor Detection System.' Overall, these grades reflect the dedication and progress made by participants in mastering the intricate aspects of organ transplantation, contributing to better healthcare practices in their respective regions.

Pre-test vs final test

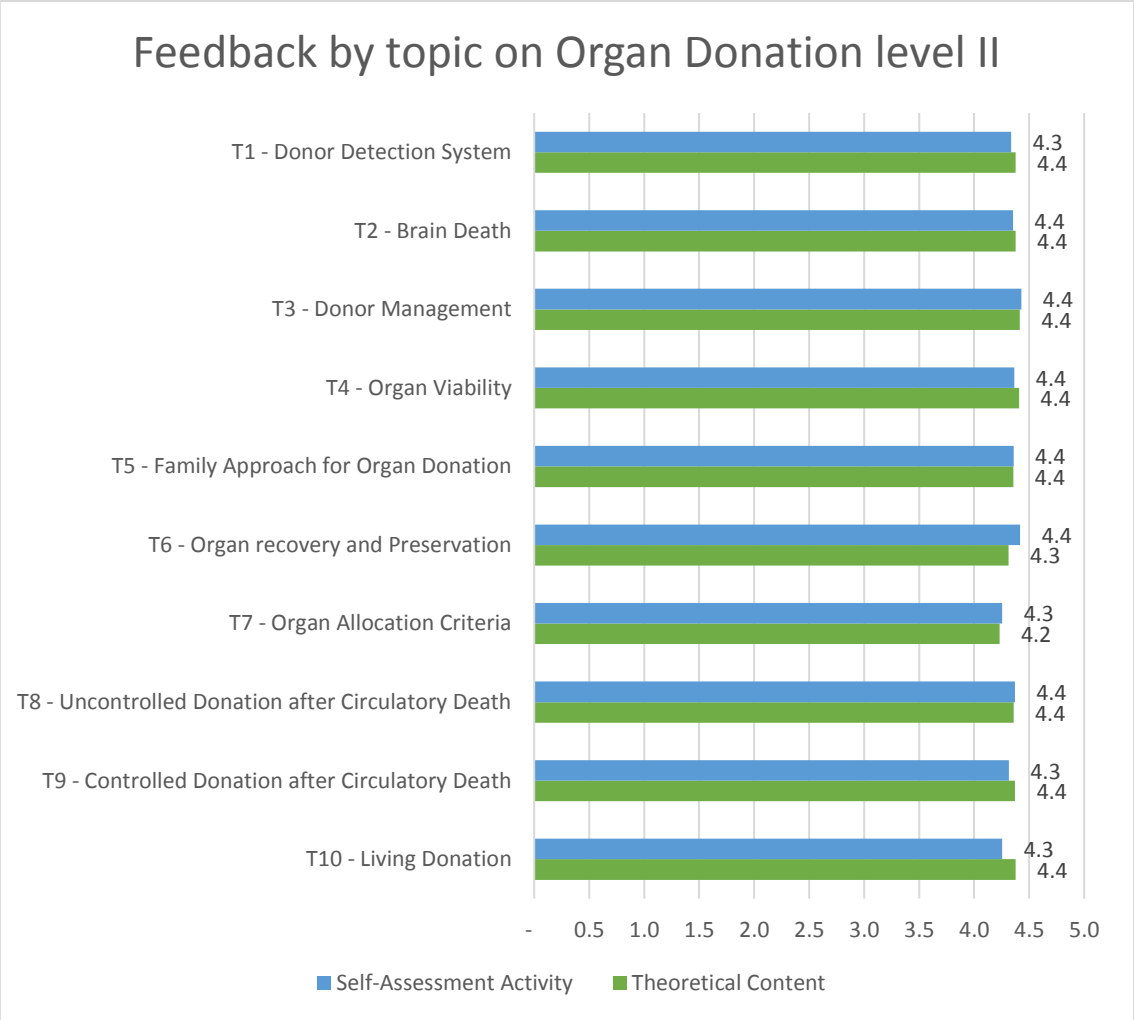
This part presents the performance of participants in the Organ Donation Level II program, focusing on the transition from pre-test to final test of participants from the Czech Republic (CZ), Lithuania (LT), and Latvia (LV) to assess the effectiveness of the educational modules and the progress made by participants in acquiring knowledge and competencies.



It is noteworthy that across all three countries, participants demonstrated a remarkable and statistically significant improvement in their knowledge and understanding from the pre-test to the final test. This substantial increase in scores serves as a clear indicator of the effectiveness of the online modules in facilitating meaningful learning and knowledge acquisition among participants.

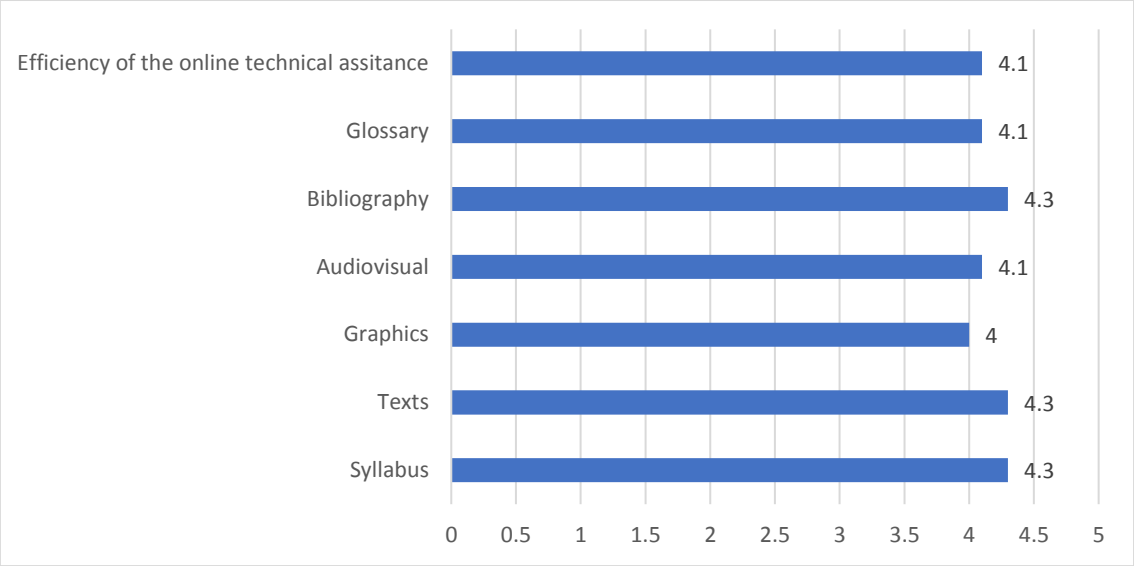
5.4.2. Feedback on Organ Donation Program level II

Feedback provided by participants who completed the Organ Donation Level II program covers two significant aspects: the theoretical content and self-assessment activities. Participants provided ratings on a scale from 1 (very poor) to 5 (very good) for each topic covered in the program.



The feedback collected for Organ Donation Level II reflects participants' high satisfaction with the course content and self-assessment activities. Ratings consistently fall within the 'Good' to 'Very Good' range, indicating an overall positive reception. Notably, topics like 'Organ Viability,' 'Donor Management,' and 'Living Donation' received particularly commendable feedback, with an average rating of 4.4 for both theoretical content and self-assessment activities. 'Uncontrolled Donation after Circulatory Death' and 'Family Approach for Organ Donation' topics also received strong endorsements, with ratings of 4.4 for theoretical content and 4.4 or 4.3 for self-assessment activities. This feedback underscores the course's effectiveness in delivering high-quality theoretical content and engaging self-assessment activities, contributing to a favourable learning experience for participants.

Resources Assessment



Participants generally rated the resources provided, such as syllabus, texts, graphics, audiovisual elements, bibliography, and glossary, positively. The efficiency of online technical assistance was rated at 4.1, indicating satisfactory support.

General Assessment

The majority of participants indicated that the course met their expectations (94%). An even higher percentage (96%) said they would recommend the course to others. The overall course assessment received an average rating of 4.2, indicating a positive overall experience.

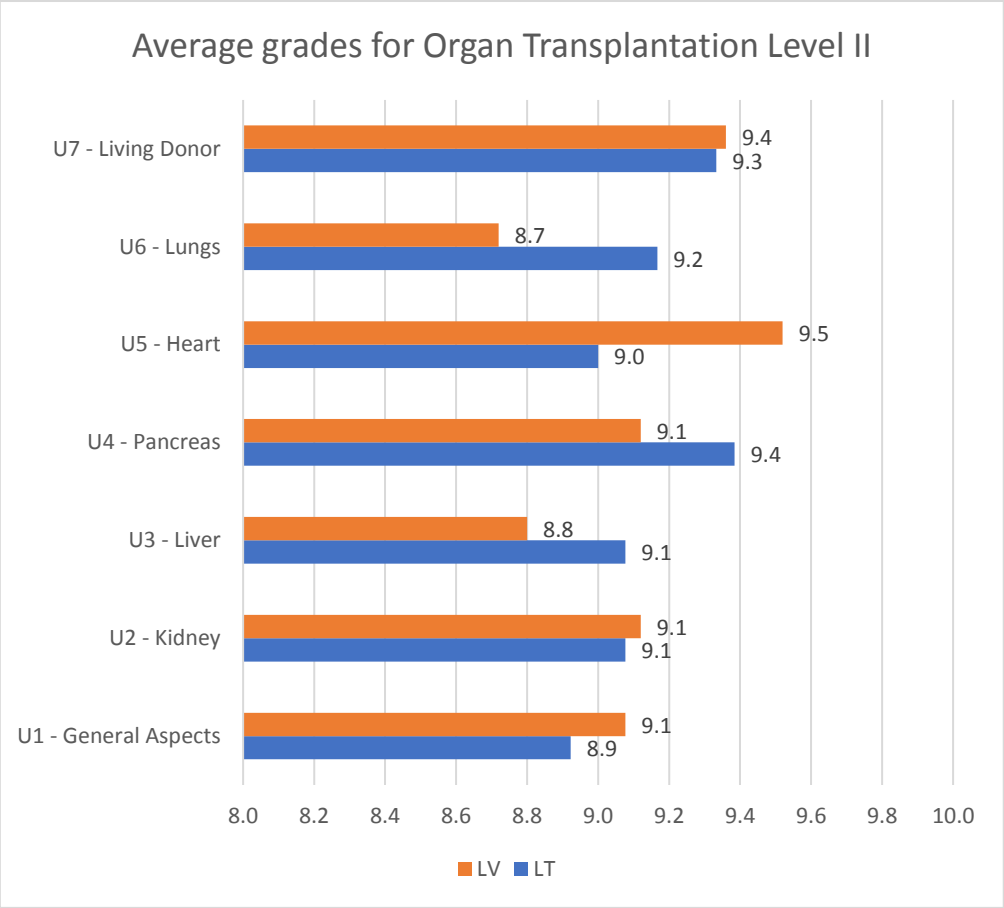
Summary of Conclusions from Participant Comments:

Participants expressed appreciation for the relevant and comprehensive course materials, highlighting the practical value of the course in their work. Some of them mentioned issues with test questions, including ambiguous wording and tricky questions. Concerns were raised about the extensive use of abbreviations and the need for better explanations within the text. Participants recommended including more clinical situations to enhance the course. Some of them has also found the course content overwhelming and challenging, particularly for those without a strong background in the field.

In summary, the Level II online modules received positive feedback overall, with participants showing improvement in their knowledge based on pre-test and final test scores. However, there are areas where enhancements can be made, such as addressing ambiguity in test questions, improving explanations for abbreviations, and considering the course's suitability for participants with varying levels of expertise.

4.4.3 Average grades for Organ Transplantation level II

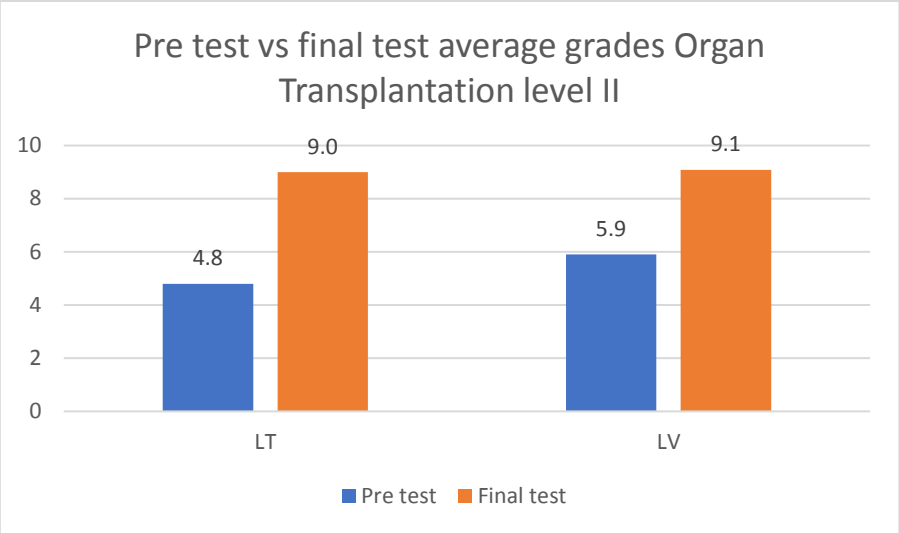
In this section we present average grades for Organ Transplantation Level II. The data reveals the average grades attained by participants from Lithuania (LT) and Latvia (LV) in various subcategories, providing insights into their proficiency in key aspects of organ transplantation. These grades represent the culmination of their efforts and engagement in the course, shedding light on their achievements and the strengths of the program in preparing them for this critical field. It's essential to note that the maximum possible grade was 10, with 8 serving as the passing threshold, which is why the data is presented within the 8 to 10 range.



In the context of Organ Transplantation Level II, Latvia and Lithuania demonstrate commendable performance, showcasing a strong understanding of the subject matter. In Latvia, participants achieved consistently high grades across the various organ-specific topics, with 'Heart' and 'Living Donor' receiving top scores of 9.7. Lithuania equally excelled, particularly in 'Pancreas' and 'Lungs,' both earning high marks of 9.4 and 9.2, respectively. While both countries achieved excellence in their studies, their strengths lie in different organ-related domains. Latvia displayed remarkable proficiency in heart-related transplant knowledge, whereas Lithuania shone in comprehending the nuances of pancreatic and lung transplants. These impressive grades are indicative of the commitment and dedication of participants, contributing to their proficiency in the domain of organ transplantation.

Pre-test vs final test

In this section, we show the performance of participants in the Organ Donation Level II program, focusing on the transition from pre-test to final test. We will analyse the pre-test and final test scores of participants from the Lithuania (LT), and Latvia (LV) to assess the effectiveness of the educational modules and the progress made by participants in acquiring knowledge and competencies.

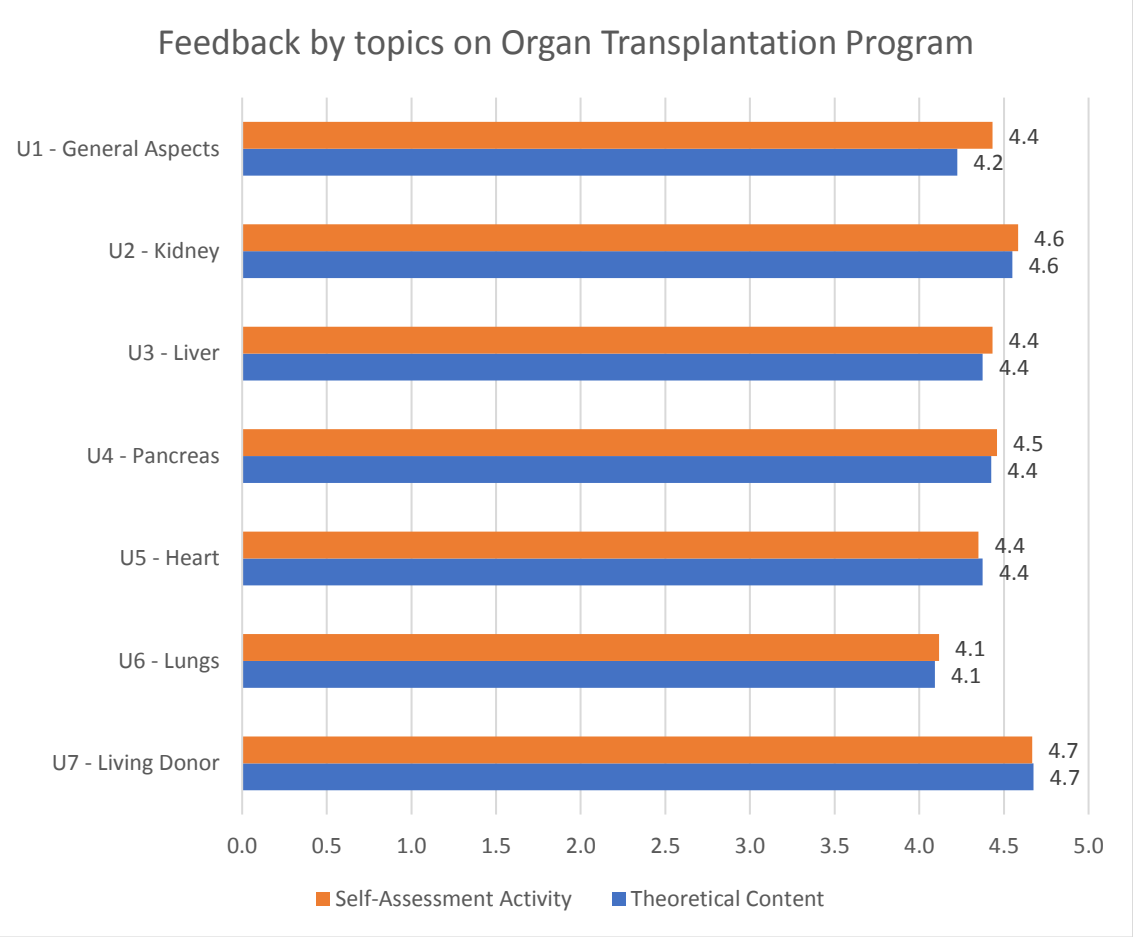


It is noteworthy that across all three countries, participants demonstrated a remarkable and statistically significant improvement in their knowledge and understanding from the pre-test to the final test. This substantial increase in scores serves as a clear indicator of the effectiveness of the online modules in facilitating meaningful learning and knowledge acquisition among participants.

5.4.3. Feedback on Organ Transplantation Program level II

This section presents participant feedback for Organ Transplantation Level II, including ratings on a scale from 1 to 5, where 1 stands for "Very Poor" and 5 for "Very Good." Participants assessed

the program's Theoretical Content and Self-Assessment Activity across various topics.



The feedback for Organ Transplantation Level II, focusing on various transplant organs, highlights varying levels of satisfaction among participants. The 'Living Donor' topic received notably positive feedback, with both theoretical content and self-assessment activities earning high ratings of 4.7, indicating a very good learning experience. The 'Kidney' and 'Liver' topics also garnered favourable feedback, with ratings of 4.6 and 4.4 for both content and self-assessment activities, demonstrating a good overall learning experience. However, the feedback reveals some areas for potential improvement. The 'General Aspects' topic had ratings of 4.2 for theoretical content and 4.4 for self-assessment activities, indicating an average learning experience. On the other hand, the 'Lungs' topic received ratings of 4.1 for both theoretical content and self-assessment activities, suggesting a slightly less favourable experience. In contrast, the 'Heart' and 'Pancreas' topics earned solid ratings of 4.4 for both theoretical content and self-assessment activities, indicating a good learning experience.

Overall, the feedback underscores the need to address specific areas where participants' satisfaction levels vary and make appropriate adjustments to enhance the learning experience across all topics in Organ Transplantation Level II.

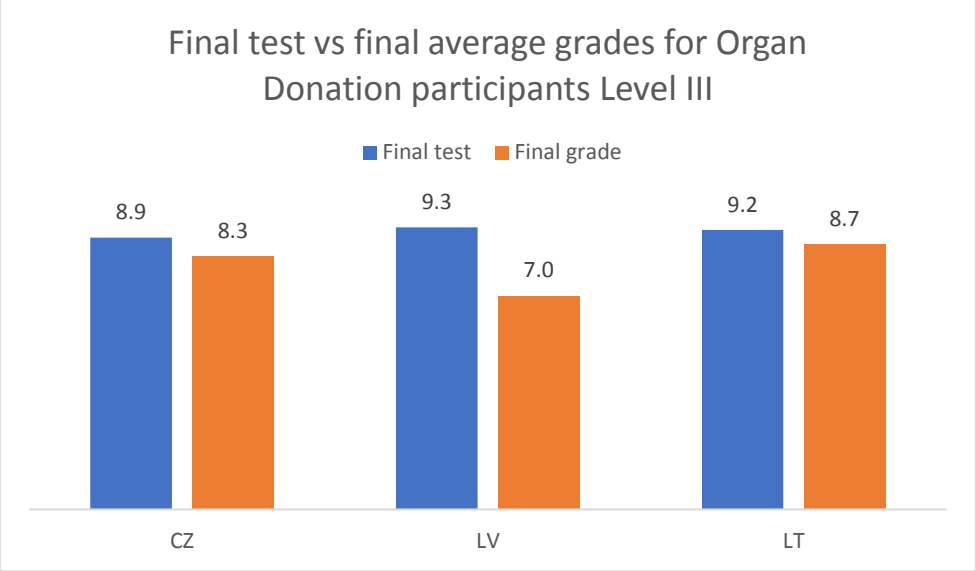
5.5. Level III – Face-to-face learning

In Level III, participants had the opportunity to engage in in-person events and local seminars, providing a unique dimension to their learning journey. This section presents their final grades, the Barcelona F2F event, and feedback from participants across different countries.

5.5.1. Final grades

Organ donation

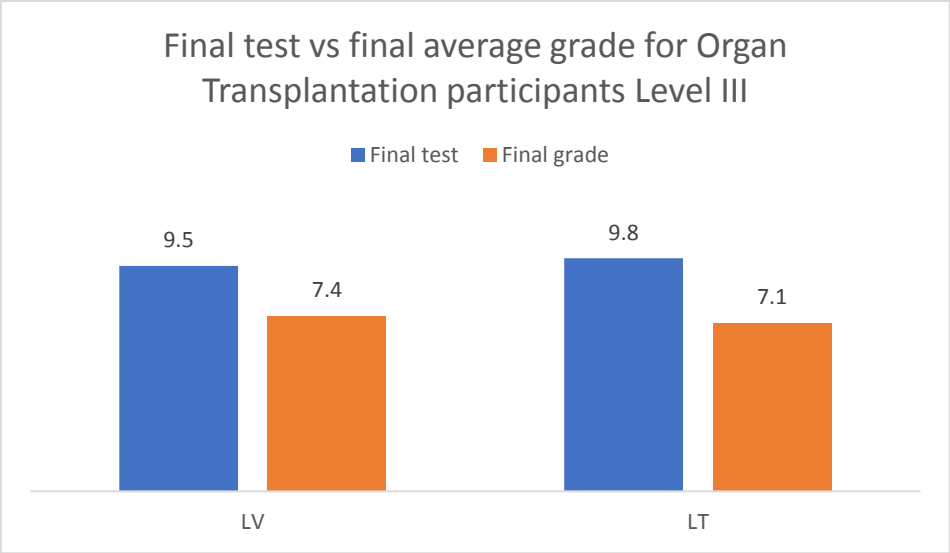
In Organ Donation Level III, the final test scores, and final grades for participants from three different countries - the Czech Republic (CZ), Latvia (LV), and Lithuania (LT) - exhibit variations in terms of performance and achievement. These final grades were determined based on a grading formula, where 20% of the grade is from local seminar attendance and 80% from the Final Test, with a minimum passing grade of 7 required.



Latvia (LV) stands out with the highest final test score of 9.3, which demonstrates a profound understanding of the course material. However, their final grade of 7.0 is notably lower, implying that additional factors might have influenced the ultimate assessment. Lithuania (LT) attained a final test score of 9.2, showcasing a strong command of the subject matter. Their final grade of 8.7 reflects an overall solid performance. The Czech Republic (CZ) achieved a final test score of 8.9, signifying a reasonable level of knowledge and competence in the field. Their final grade of 8.3 signifies a satisfactory level of achievement.

Organ Transplantation

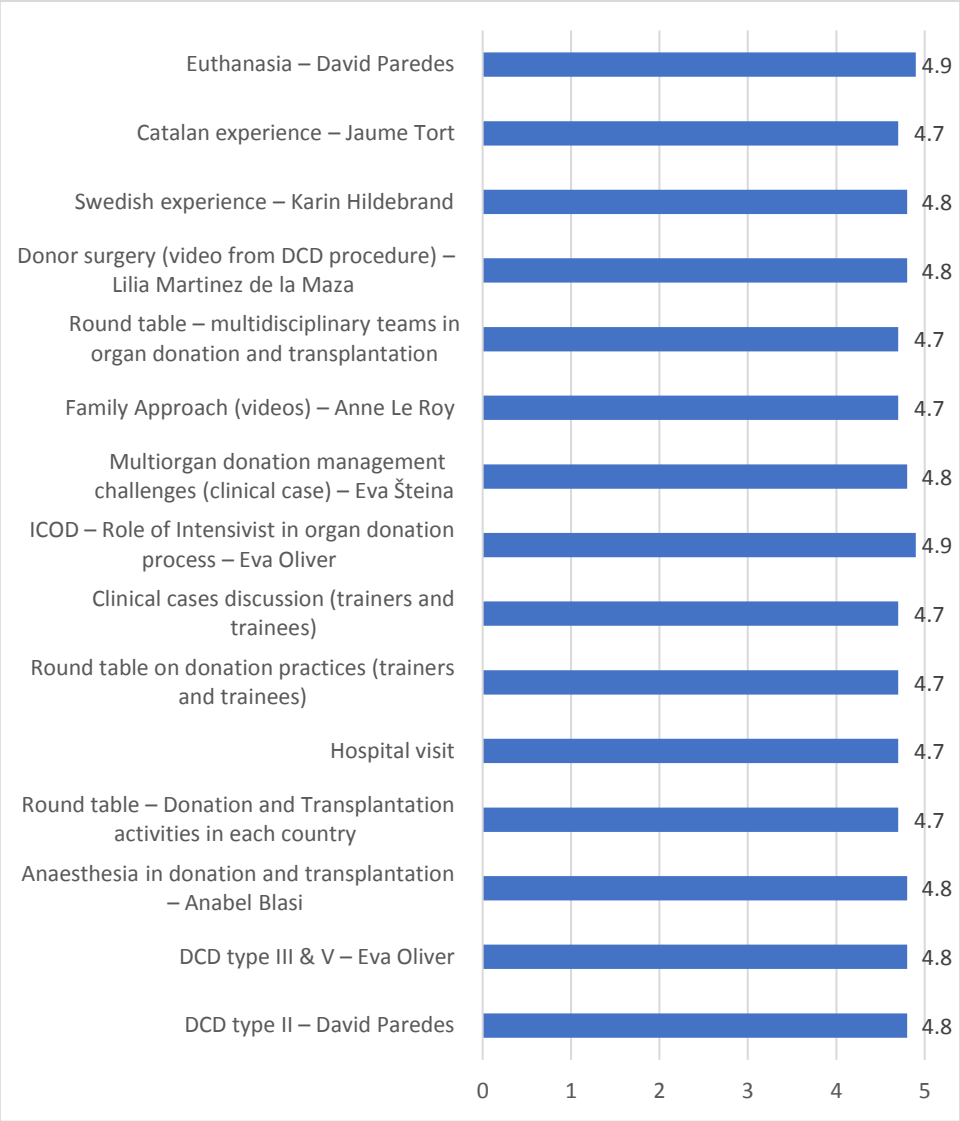
In Organ Transplantation Level III, the final test scores and final grades for participants in Latvia (LV) and Lithuania (LT) exhibit variations in terms of performance and achievement. These final grades were determined based on the same grading criteria as Organ Donation Level III.



Latvia (LV) achieved an impressive final test score of 9.5, demonstrating a deep understanding of the course material. However, their final grade of 7.4 is notably lower, suggesting the potential influence of additional factors on their overall assessment. Lithuania (LT) excelled in the final test with a high score of 9.8, indicating a strong command of the subject matter. Their final grade of 7.1, while slightly lower, still reflects a solid performance in the course.

5.5.2. Barcelona F2F event – Feedback for Organ Donation group

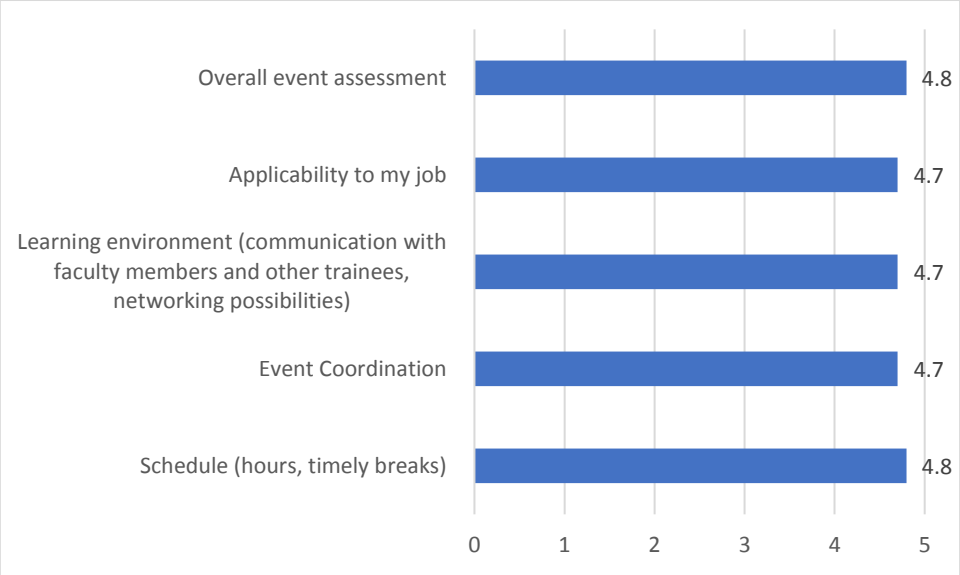
The Barcelona Face-to-Face event, which covered a comprehensive array of topics in organ donation, received encouraging feedback from participants (both participating in person and online), utilizing a rating scale ranging from 1 (Very Poor) to 5 (Very Good). These aspects encompassed content-specific topics, event organization, the learning environment, and overall applicability to participants' professional roles.



Feedback for the Barcelona F2F Organ Donation group indicates a high level of satisfaction and appreciation. Several sessions received commendable ratings, such as DCD type II and III & V, Anaesthesia in donation and transplantation, and ICOD's presentation, all scoring 4.8 or 4.9. Round table discussions, hospital visits, clinical case discussions, and "Family Approach" videos were collectively well-received, earning ratings of 4.7. The sessions on "Swedish experience," "Catalan experience," and "Multiorgan donation management challenges" also received positive feedback. Notably, the session on "Euthanasia" stood out with an exceptional rating of 4.9.

The consistent positive feedback across a wide range of sessions demonstrates the overall success and value of the Barcelona F2F event in enhancing participants' knowledge and skills in organ transplantation.

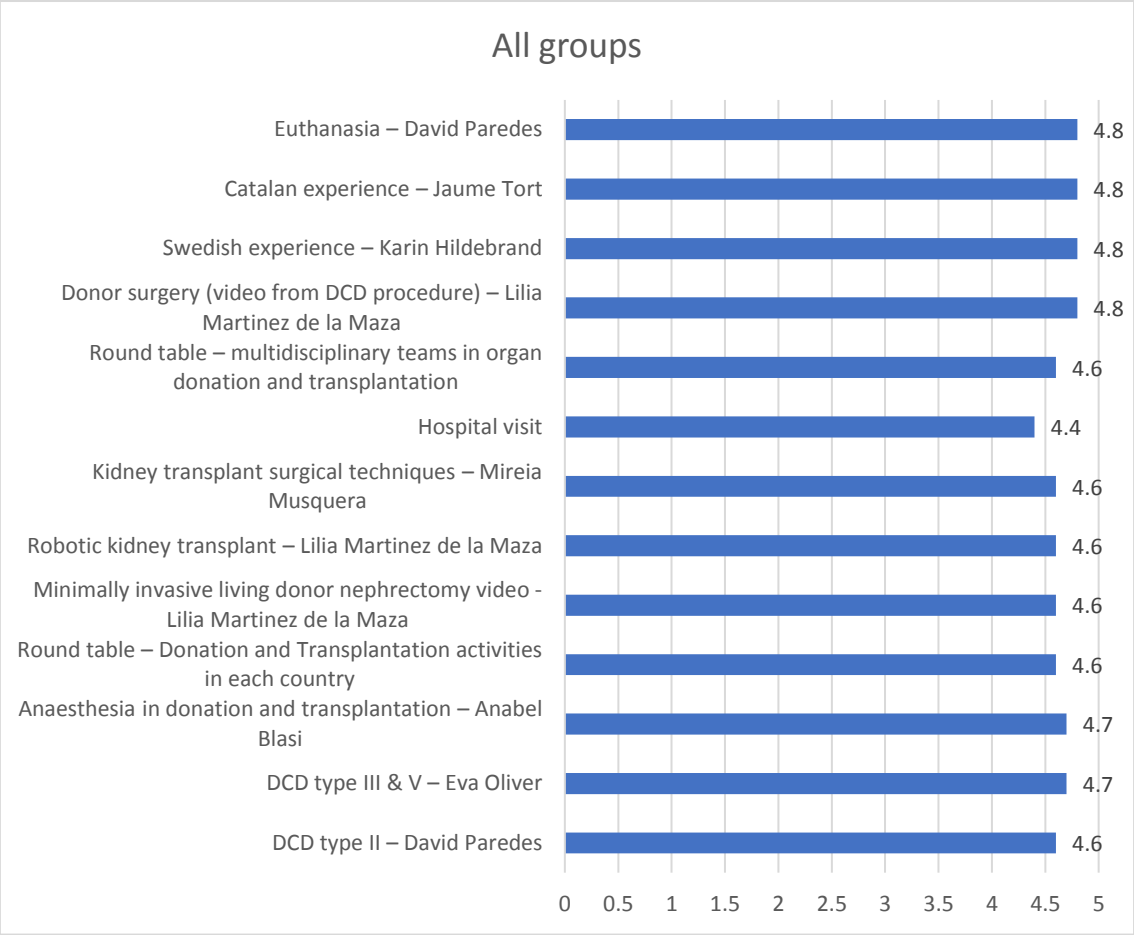
General assessment



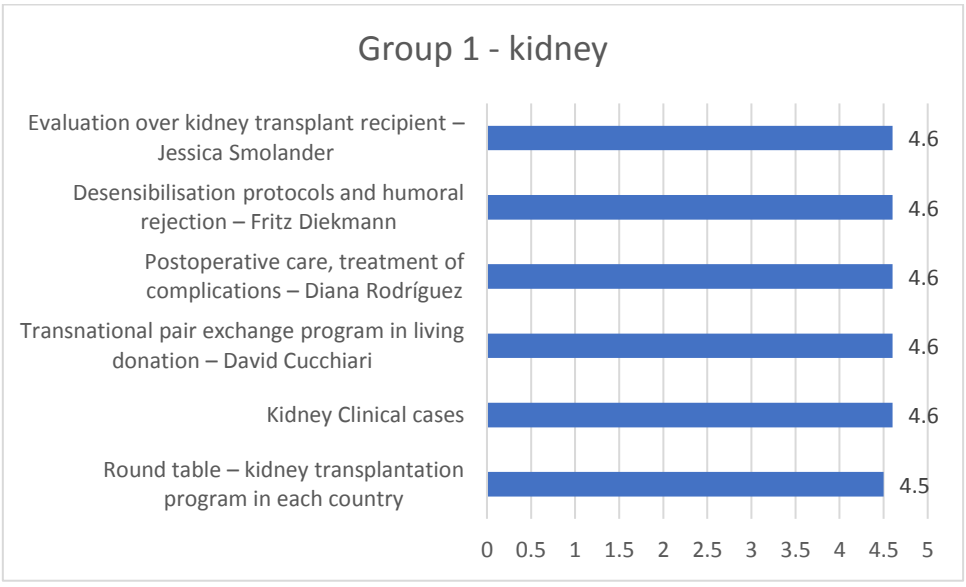
In general assessment the Barcelona F2F event received excellent feedback from Organ Donation group. The schedule and timing earned a high rating of 4.8, indicating effective organization. Event coordination was well-received with a 4.7 rating. Participants appreciated the learning environment, which received a 4.7 rating, emphasizing valuable interactions. The event's applicability to participants' jobs also scored 4.7, reflecting its professional relevance. The overall assessment was very positive, with a 4.8 rating, showcasing high participant satisfaction. In summary, the event was well-organized, relevant, and provided a positive learning environment for participants.

5.5.3. Barcelona F2F event – Feedback for Organ Transplantation group

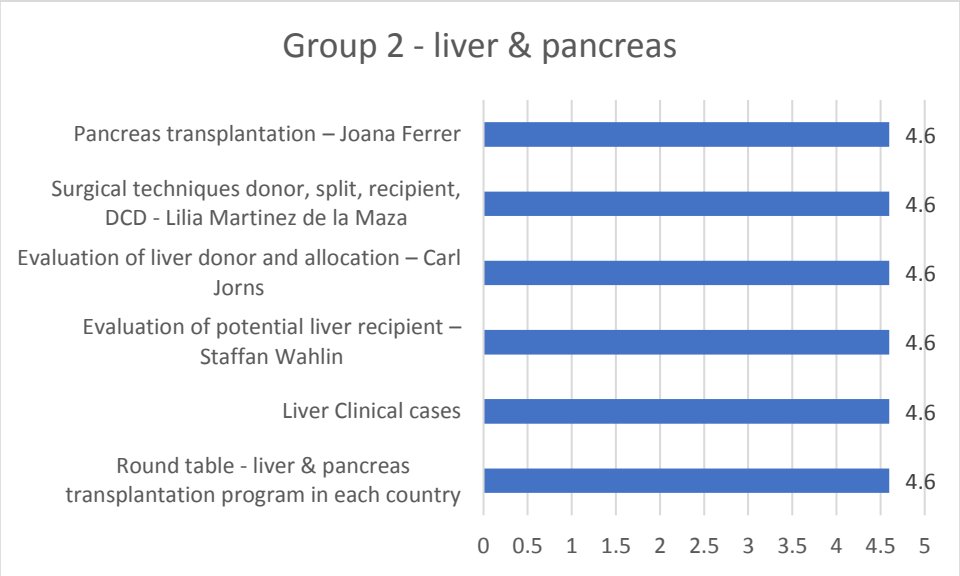
This in-depth analysis of the feedback collected from participants who attended the Barcelona F2F event from Organ Transplantation group is based on a rating scale ranging from 1 (Very Poor) to 5 (Very Good), allowing participants to express their level of satisfaction and evaluation of each session and the overall event.



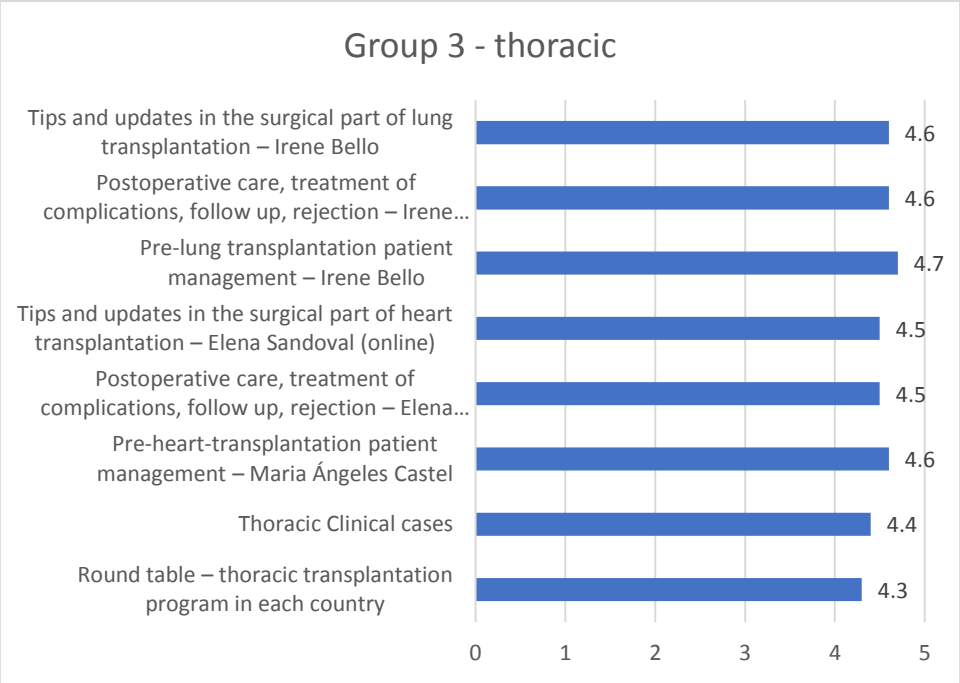
The feedback from the Transplantation group for the Barcelona F2F event was generally positive. Most sessions received ratings ranging from 4.6 to 4.8, reflecting the overall quality of the event. Notably, the sessions on donor surgery (video from DCD procedure), the Swedish experience, the Catalan experience, and euthanasia received particularly high ratings of 4.8, indicating their significance and effectiveness. The hospital visit session received the lowest rating of 4.4 but was still considered positively. Overall, participants in the Transplantation group found the event sessions valuable and informative.



Group 1, focusing on kidney transplantation, provided positive feedback for the specific session for their group. The sessions received ratings ranging from 4.5 to 4.6, indicating that participants found the content valuable and informative. The round table discussion on kidney transplantation programs in each country received a rating of 4.5, while the clinical cases and other sessions on topics such as postoperative care, living donation, desensitization protocols, and recipient evaluation received ratings of 4.6. This feedback suggests that participants found these sessions beneficial and relevant to their interests and professional development.

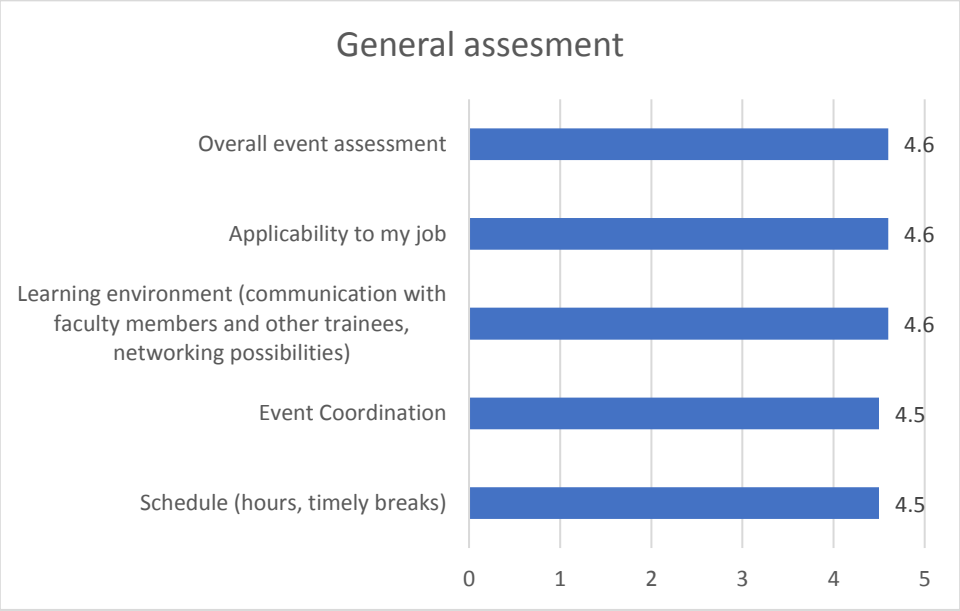


In Group 2, which focused on liver and pancreas transplantation, participants provided positive feedback for their specific sessions, which received ratings ranging from 4.6, indicating that participants found the content highly valuable and informative. The round table discussion on liver and pancreas transplantation programs in each country received a rating of 4.6. Additionally, the clinical cases and sessions covering the evaluation of potential liver recipients, evaluation of liver donors and allocation, surgical techniques, and pancreas transplantation also received ratings of 4.6. This feedback highlights those participants found these sessions to be both beneficial and relevant to their professional development in the field of liver and pancreas transplantation.



In Group 3, focusing on thoracic transplantation, participants offered generally positive feedback regarding their specific sessions, which received ratings ranging from 4.3 to 4.7, indicating participants found the content informative and beneficial to their professional development in the field of thoracic transplantation. The round table discussion on thoracic transplantation programs in each country received a rating of 4.3, and clinical cases in this area were rated at 4.4. Specific sessions, including pre- and post-transplantation patient management, heart and lung transplantation surgical updates, and care for complications and rejections, received ratings ranging from 4.5 to 4.7. This feedback underscores that participants found these sessions valuable for their work in thoracic transplantation and highlighted the importance of patient management and surgical techniques in this field.

General assessment



The Barcelona F2F event garnered positive feedback from transplantation participants. They found the schedule well-organized with a rating of 4.5 and considered event coordination effective. The learning environment was rated at 4.6, indicating successful communication with faculty members and valuable networking opportunities. Participants also found the content applicable to their jobs, with a rating of 4.6. Overall, the event received a high rating of 4.6, highlighting its value for participants' careers in transplantation. This feedback reflects the event's positive organization, content delivery, and opportunities for professional growth.

Summary of Participant Comments on TEODOR level III Barcelona F2F event

Best Aspects:

- **Raising Awareness:** Participants appreciated the program's role in raising awareness about organ donation and transplantation.
- **Collaboration and Knowledge Sharing:** The events fostered collaboration and knowledge sharing among medical professionals and organizations.
- **Organization and Planning:** The well-balanced structure of discussions and lectures received positive feedback.
- **Accessibility and Online Participation:** The ability to watch event videos later and complete the course online were valued.
- **Multinational Experience Exchange:** Participants found value in discussing experiences from different countries, particularly clinical cases.
- **Beautiful Event Locations:** The choice of locations, such as Barcelona, was admired.
- **Networking and Interaction:** Opportunities to network and interact with other specialists were highlighted.

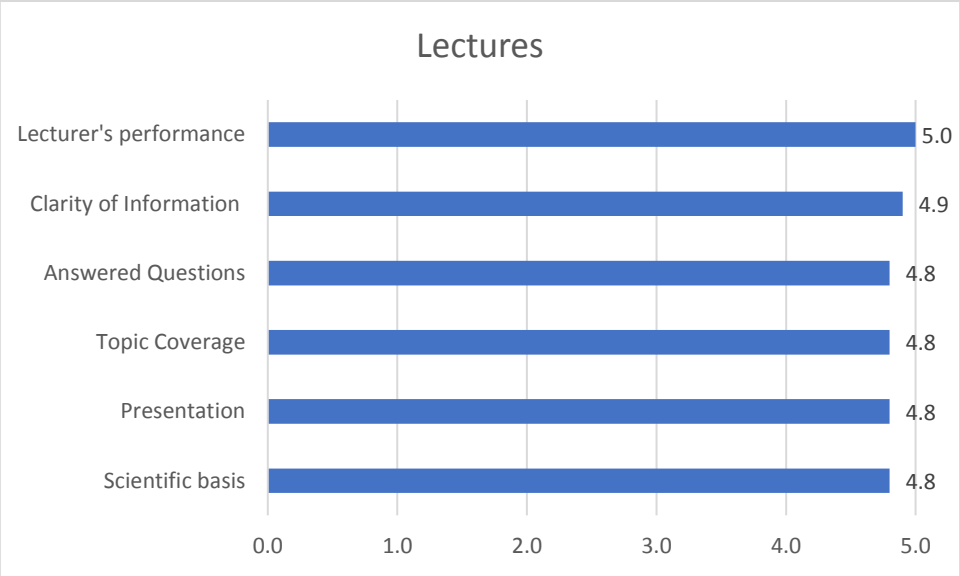
Improvements and Additional Comments:

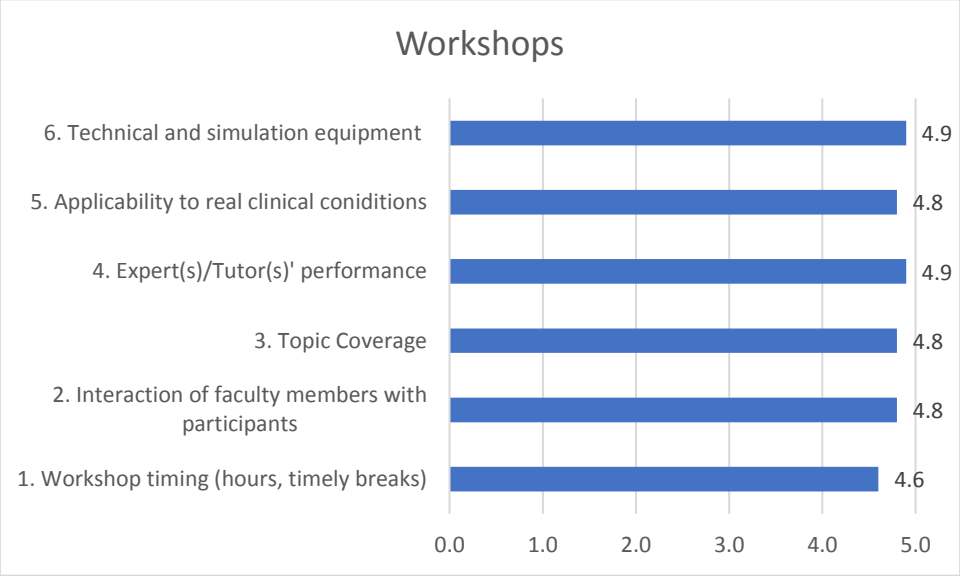
- **Extended Hospital Visits:** Participants requested more time for hospital visits and interactions, including operating room visits and discussions with anaesthesiology teams.
- **Specific Information for Specialists:** Providing more specialized information for certain specialists was suggested.
- **Practical Tips and Clearer Statistics:** Participants recommended offering more practical tips and clearer statistics.
- **Interaction with Hepatologists and Surgeons:** More face-to-face interactions with hepatologists and surgeons were desired.
- **More Information on Lung Transplantation:** Requests were made for additional information on lung transplantation.

These summarized comments highlight the program's strengths and areas for improvement, focusing on enhancing the learning experience and content delivery.

5.5.4. Czech Republic Local Seminars- Participants Feedback

The feedback data is presented in two key categories: Lectures and Workshops. It is based on a rating scale that spans from 1 (Very Poor) to 5 (Very Good), allowing participants to provide their insights on various aspects of the seminars.





The feedback and data from the local seminars in the Czech Republic indicate a generally positive reception of the seminars, with valuable insights for further improvements:

Lectures: the scientific basis, presentation, topic coverage, answered questions, clarity of information, and lecturer's performance all received high ratings, demonstrating the effectiveness of the lecture content and delivery.

Workshop: participants appreciated the workshop but had some suggestions for improvement. Ratings for workshop timing (hours, timely breaks), interaction of faculty members with participants, topic coverage, expert/tutor performance, applicability to real clinical conditions, and technical and simulation equipment were generally positive.

Specific Comments:

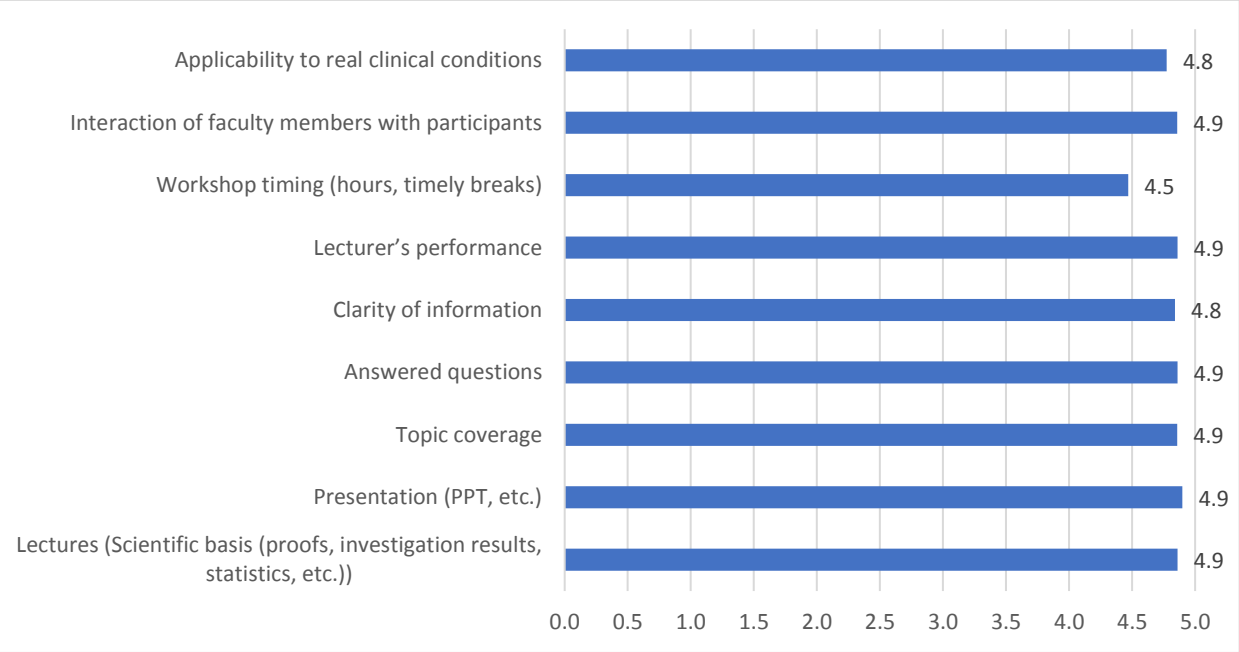
- Participants found the seminars practical and were pleased with the practical approach.
- Some participants felt that the seminar could have been longer to cover more topics thoroughly.
- The best aspects mentioned included practical skills, small groups for interactions, practical simulation, and psychology-related content.

- Improvement areas identified were related to lunchtime arrangements, suggesting adjustments to lunch breaks.
- Overall, participants expressed their appreciation for the well-prepared lectures and highlighted the need for smaller groups and more time for practice.

In summary, the local seminars in the Czech Republic were well-received, providing practical knowledge and skills to participants. Suggestions for improvement mainly cantered on extending the seminar duration and ensuring small-group interactions for enhanced learning. These comments and ratings demonstrate the value of hands-on training and the potential for further refinement in future seminars.

5.5.5. Latvia Local seminars - Participants Feedback

In this section, we present feedback received from participants in Latvia's local seminars. Participants have rated various aspects of the seminars on a scale of 1 to 5, with 5 signifying the highest satisfaction. The extensive feedback covers both the Lectures and Workshops segments and spans a wide array of elements.



The feedback and data from the local seminars in Latvia indicate a positive reception of the seminars, with valuable insights for further improvements:

Lectures: the ratings for scientific basis, presentation, topic coverage, answered questions, clarity of information, and lecturer's performance were very high, reflecting the effectiveness of the lecture content and delivery.

Workshop: participants generally appreciated the workshop, with positive ratings for workshop timing, interaction of faculty members with participants, applicability to real clinical conditions, and expert/tutor performance.

Specific Comments:

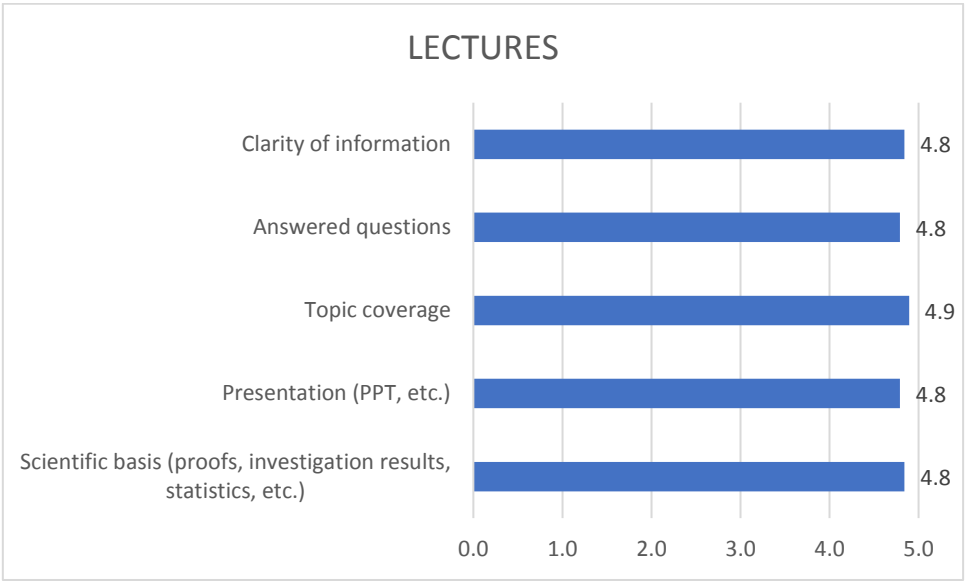
- Participants found the seminars to provide the information they expected to learn.
- Some participants felt that the seminar duration was slightly too long, while others found it just right.

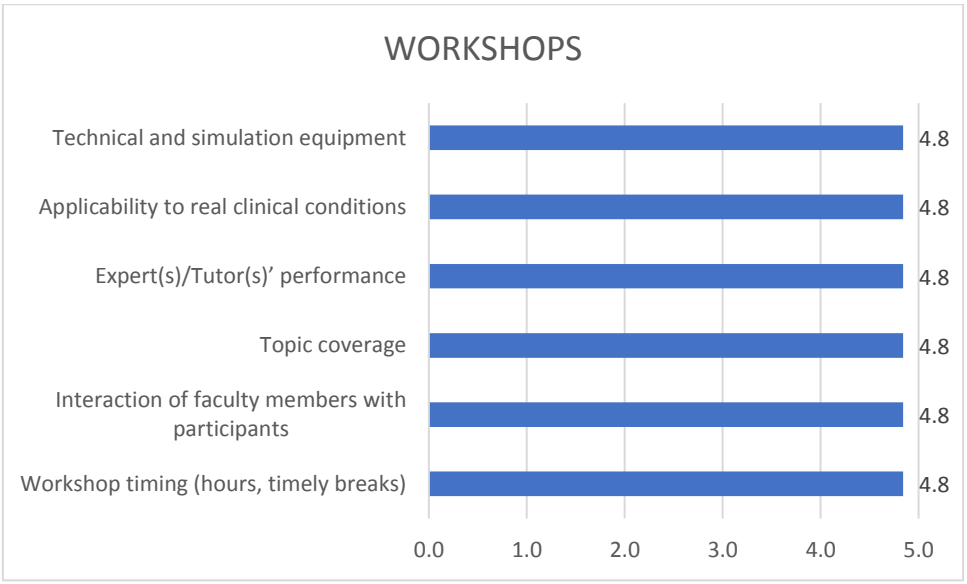
- The best aspects mentioned included diverse coverage of topics, relevance and quantity of information, clear presentation, and the passion shared by speakers.
- Improvement areas identified were related to coordinating with the security department not to check alarms during the seminar and providing confirmation of registration, reminders, and the program in advance.
- Overall, participants expressed their appreciation for the well-prepared lectures and the opportunity to learn about transplantation.

In summary, the local seminars in Latvia received positive feedback and provided participants with comprehensive information on transplantation. While some participants suggested minor adjustments in seminar duration and coordination, the overall response indicates the value of these educational events and the dedication of the speakers.

5.5.6. Lithuania- Participants Feedback

The feedback data is presented in two key categories: Lectures and Workshops. It is based on a rating scale that spans from 1 (Very Poor) to 5 (Very Good), allowing participants to provide their insights on various aspects of the seminars.





The feedback and data from the local seminars in Lithuania also indicate a positive reception of the seminars, with good ratings:

Lectures: The ratings for scientific basis, presentation, topic coverage, answered questions, and clarity of information were consistently high, reflecting the quality and effectiveness of the lecture content and delivery.

Workshops: Participants had positive feedback for workshop timing, interaction of faculty members with participants, topic coverage, expert/tutor performance, applicability to real clinical conditions, and technical and simulation equipment.

Specific Comments:

- Participants found the seminars to provide the information they expected to learn.
- The seminar duration was generally considered appropriate by participants.
- The best aspects mentioned included the comprehensive coverage of topics, clarity of information, and the relevance of the information to clinical practice.
- No specific areas for improvement were mentioned, indicating a high level of satisfaction with the seminar content and organization.

In summary, the local seminar in Lithuania received positive feedback, with participants appreciating the quality and relevance of the content, as well as the interactive and practical nature of the workshops. There were no significant areas for improvement mentioned, indicating a successful educational experience for the participants.

5.6. Conclusions

In conclusion, the TEODOR Organ Donation and Transplantation program has provided several notable results and insights based on participant feedback and performance. The program aimed to train 75 healthcare professionals, encompassing both organ and tissue donation and transplantation, across partner institutions in Latvia, the Czech Republic, and Lithuania. Here are the key takeaways from the program:

TEODOR Organ Donation Participants: The program exceeded initial expectations, with 56 Key Transplantation Persons (KDPs) actively participating and 44 KDPs successfully completing all three levels of the program.

TEODOR Organ Transplantation Participants: The program exceeded the initial expectations, with 49 Key Transplantation Persons (KDPs) actively engaging, and all 30 Key Transplantation Persons (KTPs) successfully completing all three levels of the program.

Level I – Organ Donation Microlearning Capsules: Participants generally provided positive feedback with high ratings for content quality, relevance, and methodology. Some areas for improvement were identified, including addressing ambiguity in test questions, improving explanations for abbreviations, and optimizing theoretical content format.

Level II – Self-learning online modules: Participants demonstrated a remarkable improvement in knowledge and understanding from pre-test to final test, highlighting the effectiveness of the online modules in facilitating meaningful learning. Feedback for Level II modules was largely positive, with some areas for improvement, such as refining test questions.

Level III – Face-to-face learning: Participants in Level III achieved varied but commendable final test scores, demonstrating their understanding of the course material. The Barcelona Face-to-

Face event received positive feedback, with highly rated sessions. Participants found the event to be well-organized, relevant to their jobs, and offered a positive learning environment.

Local Seminars - Participants Feedback (Czech Republic, Latvia, Lithuania): Feedback for lectures was generally positive, indicating the effectiveness of lecture content and delivery. Workshop feedback was positive, emphasizing its practical nature and relevance to clinical conditions. Some participants suggested minor improvements, such as extending seminar duration and coordination.

The TEODOR program has been successful in providing valuable education and training to healthcare professionals in the field of organ donation and transplantation. The feedback and performance data provide insights for further enhancements, particularly in the areas of content clarity, test questions, and seminar coordination. Despite these areas for improvement, the program has laid a strong foundation and holds promise for continued success in addressing critical healthcare needs.

6. Lessons Learned

The journey through the landscape of organ donation and transplantation, as well as the educational initiatives such as the TEODOR project, has provided valuable lessons that resonate with the objectives of improving clinical performance, enhancing patient care, and promoting evidence-based medical education. These lessons emerge from a dual perspective: the analysis of organ donation and transplantation data in respective countries and the feedback gathered from TEODOR participants.

6.1. Lessons Learned from Organ Donation and Transplantation Data in the Respective Countries

Diversity in Legal and Ethical Frameworks: Each nation approaches organ donation and transplantation differently, with variations in consent procedures, donor criteria, and healthcare infrastructure. Recognizing this diversity is crucial when developing international educational programs.

Impact of Public Awareness: The data underscore the pivotal role of public awareness campaigns and initiatives in promoting organ donation. Countries with well-established public awareness efforts tend to have higher rates of organ donation. These findings emphasize the need for ongoing public education on the importance of organ donation.

Availability of Donor Organs: Disparities in organ availability are evident among countries, influenced by factors such as donor consent rates and healthcare infrastructure. Understanding these disparities is essential for designing targeted interventions to address organ shortages and improve transplantation outcomes.

Interdisciplinary Collaboration: Successful organ transplantation relies on interdisciplinary collaboration between medical professionals, transplant coordinators, and healthcare institutions. The data highlight the importance of fostering such collaboration to streamline the transplantation process and enhance patient care.

4.2. Lessons Learned from TEODOR Participant Feedback

Customization of Educational Content: Participant feedback from the TEODOR program underscores the importance of customizing educational content to cover the specific needs and backgrounds of healthcare professionals. Tailoring content to address knowledge gaps and clinical requirements enhances the overall learning experience.

Interactive Learning: Participants highly value interactive learning modalities, such as videos, lectures, and self-assessment activities. These elements engage learners and promote active participation, resulting in a deeper understanding of organ donation and transplantation concepts.

Language Proficiency: Feedback highlights the significance of language proficiency in medical education. English proficiency, in particular, plays a crucial role in ensuring effective comprehension of educational materials, especially in an international program like TEODOR.

Continuous Assessment: Continuous assessment and feedback mechanisms are essential components of effective medical education. TEODOR participants appreciate self-assessment activities and quizzes, as they provide opportunities for self-reflection and reinforcement of learning.

7. Conclusion

The TEODOR Project Knowledge, Hospital & Patient Data Analysis Report has illuminated the multifaceted landscape of organ donation and transplantation, underscoring the significance of knowledge, clinical performance, and continuous education in healthcare. Lessons learned from both the analysis of organ donation and transplantation data in respective countries and participant feedback from the TEODOR program provide valuable insights.

As we conclude this report, we emphasize the importance of recognizing the diversity of legal and ethical frameworks in organ donation and the necessity of interdisciplinary collaboration in transplantation. Moreover, the report highlights the importance of customizing educational content, fostering interactive learning experiences, promoting language proficiency, and implementing continuous assessment in medical education.

The TEODOR Project's report, which encompasses knowledge, hospital & patient data analysis, aligns closely with the objectives outlined in the initial proposal. The proposal aimed to evaluate the impact of the TEODOR educational intervention on learners' knowledge and clinical performance in organ donation and transplantation. The report provides a comprehensive analysis of the knowledge and clinical performance of TEODOR participants. The proposal emphasized the importance of offering an evidence-based tailored learning journey to enhance technical and non-technical competencies, clinical performance, and patient outcomes. The report effectively demonstrates how this was achieved through a systematic methodology, including knowledge evaluation tests and hospital and patient-related questionnaires. Furthermore, the proposal emphasized the need for better visibility and dissemination of results, and the report indicates that these results will be shared in educational and medical conferences, aligning with the proposal's objective of creating a wider impact. The tasks and applied methodology detailed in the proposal were closely followed to conduct the analysis and design questionnaires. This alignment between the proposal and the report underscores the project's seriousness in addressing the educational needs of healthcare professionals and improving patient care in the field of organ donation and transplantation.

8. Appendices

8.1. Additional data

8.1.1. Donation Country data

ND – No Data, N/A - Not Applicable

Country	Latvia		Lithuania		Czech Republic	
Year	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Population	1.971.000	1.971.000	2794.2	2794.1	10 650 000	10 700 000
Hospitals with donation potential per country	-	21	-	ND	-	90
Number of family interviews pmp	17.46	17.46	38.2	40	31.64	23.27
Number of family refusals pmp	7.41	6.88	11.1	11.1	-	-
Age	0.53	1.06			ND	ND
Malignancy	1.06	0.53			ND	ND
Uncontrolled sepsis	1.59	-			ND	ND
HIV	-	-			ND	ND
Others	3.13 (Asystole) 1.59 (CKD)	1.59 (Asystole) 1.06 (Legal) 1.06 (Infection, HCV) 1.59 (No recipient)			ND	ND
Number of utilized donors pmp	19 (19.9)	21 (11.05)	18.6	17.5	27.14	23.3
Number of actual donors pmp	19 (19.9)	21 (11.05)	18.6	17.5	24.98	21.3
Heart	-	2	2.9	3.6	6.94	6.72
Kidney	37	41	36.8	29.3	47.88	41.4
Liver	2	2	6.1	5	18.49	16.07
Lung	-	-	0.4	0.4	3.94	3.27
Pancreas	-	-	-	-	3.84	3.45
Cornea	3	6	15.4	17.1	60.56	95
Intestines	-	-	-	-	0.09	0.09
Other	-	-	-	-	-	-
Number of total active/dedicated KDP per country full time					ND	ND
Number of total active/dedicated KDP per country part time	N/A				ND	ND
Do You have retrieval protocol for anaesthetist?	No		Yes		No	
Do in your country all intensivists are trained during internship in family approach?	No		Yes		No	
Do in your country all doctors are trained during internship about bringing sad news to the family?	No		Yes		No	
Do You have special courses for medical stuff to be trained to bring sad news to the family?	No		No		Yes	

8.1.2. Transplantation Country Data

ND – No Data, NP – No Program

Country	Latvia		Lithuania		Czech Republic	
Year	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Population	1.971.000		2794.2		10 700 000	
Number of kidney transplantations per year (pmp)						
Living	6 (3.13)	3	2.5	1.1	4.61	2.6
Deceased	31 (16.15)	38 (20)	34.3	28.2	43.45	38.81
How long is the waiting list for kidney transplantation?						
Living	0	0	0	0	ND	ND
Deceased	80	60	130	130	ND	ND
What is the mortality rate on the waiting list for kidney recipients?	1	0	0.7	2.9	ND	ND
Number of liver transplantations per year (pmp)						
Living	NP	NP	0	0	0	0
Deceased	2 (1.04)	2 (1.05)	6.1	5	18.57	16.08
How long is the waiting list for liver transplantation?						
Living	NP	NP	0	0	ND	ND
Deceased	ND	ND	85	90	ND	ND
What is the mortality rate on the waiting list for liver recipients?	1	2	5	5	ND	ND
Number of pancreas transplantations per year (pmp)	No Tx program		No Tx program		3.86	3.5
How long is the waiting list for pancreas transplantation?						
Living					ND	ND
Deceased					ND	ND
What is the mortality rate on the waiting list for pancreas recipients?					ND	ND
Number of heart transplantations per year (pmp)	0	2 (1.05)	2.9	3.6	6.97	6.7
How long is the waiting list for heart transplantation?						
Deceased	ND	ND	43	44	ND	ND
What is the mortality rate on the waiting list for heart recipients?	ND	ND	2.9	3.2	ND	ND
Number of lung transplantations per year (pmp)	No Tx program		0.4	0.4	3.98	3.3
How long is the waiting list for lung transplantation?						
Living			0	0	ND	ND
Deceased			8	8	ND	ND
What is the mortality rate on the waiting list for lung recipients?			0.4	0.4	ND	ND
Does your country have separate specialty /residency/ fellowship for transplant surgeons?	Yes – abdominal Tx surgery		No		No	
Please describe pathway to become transplant surgeons (official way to became transplant specialist compare with knowledge from urology, vascular surgery, others)	3 years residency after certification in abdominal surgery		5 years of experience in transplantation surgery		ND	

8.1.3. Hospital Donation Data

Country	Czech Republic		Lithuania										Latvia					
Hospital name	**FNKV Prague**		**Hospital of Lithuanian University of Health Sciences Kauno klinikos**		**Republican Vilnius University Hospital**		**Ukmerges hospital**		**Vilnius University Hospital Santaros Klinikos**		**University Hospital Klaipeda**		**Rigas East University Hospital**		**Vidzemes slimnīca**		**Jelgavas Hospital**	
Year	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Number of beds in the hospital	1113	1113	1760	2249	657	657	100	89	1822	1549	890	878	~2000	~2000	251	257	229	247
Number of ICU beds with MLV in the hospital	43	43	115	127	32	32	5	5	92	97	28	28	57	>63	6	6	6	8
Number of hospital deaths	1172	676	1404	1524	809	876	146	168	1075	1157	971	858	No data	No data	688	729	712	799
Number of deaths in intensive care	505	1369	891	957	244	285	62	72	681	723	563	487	207	171	95	75	91	101
Number of declared brain deaths in ICU	17	15	33	51	22	21	ND	ND	24	19	2	2	~20	~20	2	2	0	0
Does your hospital has? **Neuro-surgery unit** **Polytrauma unit** **Stroke unit** **Coronary unit**	Have all		Have all		Neuro-surgery unit, Polytrauma unit, Stroke unit		Coronary Unit		Neuro-surgery unit Stroke unit Coronary Unit		Neuro-surgery unit Stroke unit		Have all		Stroke Unit		Stroke Unit	
Do you think, are there not recognized potential donors dying in?	Coronary unit		Sometimes emergency area		Stroke unit		-		Emergency area		No		Stroke unit		Emergency department		Emergency Area	

Country	Czech Republic	Lithuania					Latvia		
Hospital name	**FNKV Prague**	**Hospital of Lithuanian University of Health Sciences Kauno klinikos**	**Republican Vilnius University Hospital**	**Ukmerges hospital**	**Vilnius University Hospital Santaros Klinikos**	**University Hospital Klaipeda**	**Rigas East University Hospital**	**Vidzemes slimnīca**	**Jelgavas Hospital**
Do you have protocols about WLST (withdrawal of life-sustaining treatment)?	Yes	No	No	No	Yes	No	No	No	Yes
If you have WLST, do you have cDCD program?	Yes	No	N/a	N/a	Yes	No	No	No	No
Do you have uDCD program?	No	Yes	N/a	N/a	Yes	No	No	No	No
Do you admit patients to the ICU only with the purpose of donation?	No	No	No	No	No	No	?	?	No
If yes, are relatives informed about purpose of donation?	N/a	N/a	N/a	N/a	N/a	N/a	?	?	N/a

Country	Czech Republic	Lithuania					Latvia		
Hospital name	**FNKV Prague**	**Hospital of Lithuanian University of Health Sciences Kauno klinikos**	**Republican Vilnius University Hospital**	**Ukmerges hospital**	**Vilnius University Hospital Santaros Klinikos**	**University Hospital Klaipeda**	**Rigas East University Hospital**	**Vidzemes slimnīca**	**Jelgavas Hospital**
Do you have Internet access in your hospital facilities?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Can you open Zoom session in your hospital?	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Do you have simulation area for learning purposes in hospital/university?	For anaesthetists - intensivists	For surgeons For anaesthetists - intensivists	For anaesthetists - intensivists	No	For surgeons For anaesthetists - intensivists	No	Other	Anesthetists - intensivists	No
Please describe these facilities, training possibilities (dummies, mannequins, animal lab…)	Training centre with smart dummies in full equipped training ICU	Training facilities with mannequins, dummies, and ability to perform teamwork activities	There is a classroom for cardiopulmonary resuscitation training with some adult man CPR mannequins. Also, there are some mannequins for endotracheal intubation training.	-	There is fully equipped facility with mannequins, simulation devices, installed training programs	-	Training facilities with mannequins, dummies	Mannequin Anna	-

8.1.4. Hospital Transplantation Data

NP = No Program N/a = Not applicable

Country	**Lithuania**				**Latvia**	
Hospital	**Hospital of Lithuanian University of health sciences Kauno klinikos**		**Vilnius University Hospital Santaros klinikos**		**P.Stradins CUS**	
Year	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Number of kidney transplantation in your center per year (pmp)						
Living	1 (0.37)	1 (0.37)	6 (2.14)	2 (0.71)	6 (3.13)	3
Deceased	48 (17.57)	40 (14.67)	48 (17.14)	41 (14.64)	31(16.15)	38 (20)
Which kidney transplantation technique are you using most frequently?	Open surgery		Open surgery		Open surgery	
Which kidney explantation technique for living donors are you using most frequently?	Open surgery		Laparoscopy		Open surgery	
Living	100%	100%	100%	100%	100%	100%
Deceased	91.3%	98%	88%	91.7%	96.8%	100%
Patient survival 1 year after kidney transplantation?						
Living	100%	100%	100%	100%	100%	66.6%
Deceased	93.5%	75% (C-19)	94%	97.2%	93.5%	100%
How many patients are added to the kidney transplantation waiting list per year (pmp)?	11 (4.03)	28 (10.25)	63 (22.5)	56 (20)	20.1	20.6
Please describe kidney retrieval team	Surgeons (1+2 residents) Nurses 1 Anaesthetists 1 Coordinator 1		Surgeons 2 Nurses 1 Perfusionists 1 Anaesthetists 1		Surgeons 2 Nurses 1 Coordinator 1 Anaesthetists 1 (local from DH)	
Please describe kidney transplantation team	Surgeons (1+2 residents) Nurses 1 Anaesthetists 1 Anaesthetist assistant 1 Coordinator 1		Surgeons 2 Nurses 2 Anaesthetists 1 Anaesthetist assistant 1		Surgeons 2-3 Nurses 1-2 Anaesthetists 1 Anaesthetist assistant 1	
Living	NP	NP	-	-	NP	NP
Deceased	8 (2.93)	5 (1.83)	9 (3.21)	9 (3.21)	2 (1.04)	2 (1.04)
Which liver transplantation technique are you using most frequently?	Piggy back technique		Piggy back technique		Piggy back technique	

Country	Lithuania				Latvia	
Hospital	**Hospital of Lithuanian University of health sciences Kauno klinikos**		**Vilnius University Hospital Santaros klinikos**		**P.Stradins CUS**	
Year	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Which liver explantation technique for living donors are you using most frequently?	NP		-		NP	NP
Living	NP	NP	-	-	NP	NP
Deceased	85%	100%	37.5	78	0 (0%)	1 (50%)
Living	NP	NP	-	-	NP	NP
Deceased	85%	100%	37.5	78	0 (0%)	1 (50%)
How many patients are added to waiting list for liver transplantation per year (pmp)?	18 (6.59)	20 (7.32)	32 (11.43)	24 (8.58)		
Please describe liver retrieval team	Surgeons 2 Nurses 2 Coordinator 1		Surgeons 2 Nurses 2		Surgeons 2 Nurses 2	Surgeons 3 Nurses 2
Please describe liver transplantation team	Surgeons 2 Nurses 2 Anaesthetists 2 Anaesthetist assistants 2 Coordinators 1		Surgeons 3 - 4 Nurses 2 - 3 Anaesthetists 2 Anaesthetist assistants 2		Surgeons 3 - 4 Nurses 2 - 3 Anaesthetists 2 Anaesthetist assistants 2 Coordinators 1	
Number of pancreas transplantation in your center per year (pmp)	NP	NP	0	0	NP	NP
Which pancreas transplantation type are you using?	NP		Simultaneus pancreas – kidney transplantation		NP	
Which pancreas transplantation technique are you using?	NP		Intraabdominal duodeno-enteral anastomosis for exocrine drainage		NP	
Graft survival 1 year after pancreas transplantation	NP		N/a		NP	
Patient survival 1 year after pancreas transplantation?	NP		N/a		NP	
How many patients are added to waiting list for pancreas transplantation per year (pmp)?	NP		4 (1.43)	2 (0.714)	NP	

Country	Lithuania				Latvia	
Hospital	**Hospital of Lithuanian University of health sciences Kauno klinikos**		**Vilnius University Hospital Santaros klinikos**		**P.Stradins CUS**	
Year	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Number of heart transplantation in your center per year (pmp)	3 (1.09)	3 (1.09)	5 (1.78)	7 (2.5)	0	2 (1.05)
Graft survival 1 year after heart transplantation?	66.7%	33.3%	80%	57%	-	100%
Patient survival 1 year after heart transplantation?	66.7%	33.3%	80%	57%	-	100%
How many patients are added to waiting list for heart transplantation per year (pmp)?	7 (2.56)	3 (1.09)	5 (1.78)	8 (2.86)	2 (1.05)	5
Please describe heart retrieval team	Surgeons 2 Nurses 2 Anaesthetists 1 Anaesthetist Assistant 1 Coordinators 1		Surgeons 2 Nurses 2 Anaesthetists 1 Perfusionist if available		Surgeon-2 Nurse – 1 Anaesthesist -1 Perfusionist - 1	
Please describe heart transplantation team	Surgeons 3 Nurses 2 Perfusionists 1 Anaesthetists 1 Anaesthetist assistant 1 Coordinator 1 Transfusiologist 1		Surgeons 2+2 from retrieval team Nurses 2 Perfusionists 2 Anaesthetists 1 Anaesthetist assistant 1		Surgeon 1 + 2 from retrieval team Nurse - 2 Anaesthesist – 1 Anaesthesist Assistant – 1 Perfusionist - 2	
Number of lung transplantation in your center per year (pmp)	1 (0.37)	1 (0.37)	NP	NP	NP	NP
Graft survival 1 year after lung transplantation?	0%	0%	NP	NP	NP	NP
Patient survival after lung transplantation 1 year?	0%	0%	NP	NP	NP	NP
How many patients are added to waiting list for lung transplantation per year (pmp)?	2 (0.73%)	1 (0.37%)	NP	NP	NP	NP
Please describe lung retrieval team	Surgeons 2 Nurses 2, Coordinators 1 Anaesthetists 1 Anaesthetist assistant 1		NP		NP	

Country	Lithuania				Latvia	
Hospital	**Hospital of Lithuanian University of health sciences Kauno klinikos**		**Vilnius University Hospital Santaros klinikos**		**P.Stradins CUS**	
Year	**2019**	**2020**	**2019**	**2020**	**2019**	**2020**
Please describe lung transplantation team	Surgeons 3 Nurses 2 Perfusionists 1 Anaesthetists 1 Anaesthtetist assistant 1 Coordinators 1 Transfusiologist 1		NP		NP	
Are the same surgeons participating in retrieval and transplantation, if yes in which organ?	Yes - Liver, heart, kidney.		Yes- heart, liver, kidney, pancreas, cornea		Yes – heart, liver	
Do you have Internet access in your hospital facilities?	Yes		Yes		Yes	
Can you open Zoom session in your hospital?	Yes		Yes		Yes	
Do you have simulation area for learning purposes in hospital/university?	For surgeons For anaesthetists - intensivists		For surgeons For anaesthetists - intensivists			
Please describe these facilities, training possibilities (dummies, mannequins, animal lab…)	Training facilities with mannequins, dummies and ability to perform team work activities		There is a fully eqipped facility with mannequins, simulation devices, installed training software programs			

8.2. Developed questionnaires- Organ Donation and Transplantation Data

8.2.1. Teodor ORGAN DONATION AND TRANSPLANTATION ORGANIZATIONAL MODELS

Country Name		**Answer**	*Possible answers*
	Population		*number*
Health care System	Population Coverage		*universal/insurance…*
	Transplant centers		*Public vs Private vs Both*
	Procurement centers		*Public vs Private vs Both*
Legal framework	Transplant Law		*Yes vs No*
	Brain Death regulation		*Yes vs No*
	Consent policy		*Opt in vs Opt out*
Organization system	National organism		*Yes vs No*
	Regional organization		*Yes vs No*
	OPO system		*Yes vs No*
	Intra-hospital unit for organ donation		*Yes vs No*
	Quality program		*Yes vs No*
Key donation person	Profile		*Doctor vs other*
	Clinical spciality		*For example: ICU, nefrologist, none…*
	Responsabilities:		*donor detection, evaluation, family approach…*
	Apointed by:		*hospital director, national organization, OPO…*
Centers (2022)	Nº of procurement centers		*Number*
	Nº of transplant centers		*Number*
	Nº of adult transplant programs		*Number*
	Nº of pediatric transplant programs		*Number*
Activity (2019)	Nº of total deceased organ donors		*Number*
	Nº of brain dead organ donors		*Number*
	Nº of donors after cardiocirculatory death		*Number*
	Nº of living donors		*Number*
	Nº of Kidney transplantations		*Number*
	Nº of Liver transplantations		*Number*
	Nº of Heart transplantations		*Number*
	Nº of Lungs transplantations		*Number*
	Nº of Pancreas transplantations		*Number*
	Survival rate		*Number*
Activity (2020)	Nº of total deceased organ donors		*Number*
	Nº of brain dead organ donors		*Number*
	Nº of donors after cardiocirculatory death		*number*
	Nº of living donors		*number*
	Nº of Kidney transplantations		*Number*
	Nº of Liver transplantations		*Number*
	Nº of Heart transplantations		*Number*

	Nº of Lungs transplantations		*Number*
	Nº of Pancreas transplantations		*Number*
	Survival Rate		*Number*
Activity (2021)	Nº of total deceased organ donors		*Number*
	Nº of brain dead organ donors		*Number*
	Nº of donors after cardiocirculatory death		*Number*
	Nº of living donors		*Number*
	Nº of Kidney transplantations		*Number*
	Nº of Liver transplantations		*Number*
	Nº of Heart transplantations		*Number*
	Nº of Lungs transplantations		*Number*
	Nº of Pancreas transplantations		*Number*
	Survival rate		*Number*
Activity (2022)	Nº of total deceased organ donors		*Number*
	Nº of brain dead organ donors		*Number*
	Nº of donors after cardiocirculatory death		*Number*
	Nº of living donors		*Number*
	Nº of Kidney transplantations		*Number*
	Nº of Liver transplantations		*Number*
	Nº of Heart transplantations		*Number*
	Nº of Lungs transplantations		*Number*
	Nº of Pancreas transplantations		*Number*
	Survival rate		*Number*
Public awareness	Responsible		*Nationa/Regional vs ONG vs OPO vs Health care professionals/institutions*
Financing model	Transplantation funding		*National vs patient insurance*
	Donation procedure (Hospital reimbursement)		*National vs patient insurance*

8.2.2. Donation Survey- Country Data

Country: ☐ Latvia ☐ Lithuania ☐ Czech Republic

☐ Sweden ☐ Spain

Information provided by: _____

Date: _____

Basic information of the country

1. Population (thousands)	2019	2020

2. How many hospitals with donation potential are in your country (2020)?

_____

Donation data

3. Number of family interviews (pmp)	2019	2020

4. Number of family refusals in the country (pmp)	2019	2020

5. Number of medical contraindications from donor side (pmp)	2019	2020
Age		
Malignancy		
Uncontrolled sepsis		
HIV		
Others		

6. Number of utilized donors (pmp)	2019	2020

7. Number of actual donors (pmp)	2019	2020

8. Number of recovered organs (pmp)	2019	2020
Heart		
Kidney		
Liver		
Lung		
Pancreas		
Cornea		
Intestines		
Other		

8. Number of total active/dedicated Key donation person per country full time?

9. Number of total active/dedicated Key donation person per country part time?

10. Do you have retrieval protocol for anaesthetist?

☐ Yes ☐ No

11. Do in your country all intensivists are trained during internship in family approach for organ donation?

☐ Yes ☐ No

12. Do in your country all doctors are trained during internship about bringing sad news to the family?

☐ Yes ☐ No

13. Do you have special courses for medical stuff to be trained to bring sad news to the family?

☐ Yes ☐ No

8.2.3. Transplantation Survey- Country Data

Country: ☐ Latvia ☐ Lithuania ☐ Czech Republic

☐ Sweden ☐ Spain

Information provided by: _____

Date: _____

1. Abdominal Organs

1.1. Kidney

1.1.1. Number of kidney transplantations per year (pmp)	2019	2020
Living		
Deceased		

1.1.2. How long is the waiting list for kidney transplantation?	2019	2020
Living donor		
Deceased donor		

1.1.3. What is the mortality rate on the waiting list for kidney recipients?	2019	2020

1.2. Liver

1.2.1. Number of liver transplantations per year (pmp)	2019	2020
Living		
Deceased		

1.2.2. How long is the waiting list for liver transplantation?	2019	2020
Living donor		
Deceased donor		

1.2.3. What is the mortality rate on the waiting list for liver recipients?	2019	2020

1.3. Pancreas

1.3.1. Number of pancreas transplantations per year (pmp)	2019	2020

1.3.2. How long is the waiting list for pancreas transplantation?	2019	2020
Living donor		
Deceased donor		

1.3.3. What is the mortality rate on the waiting list for pancreas recipients?	2019	2020

2. Thoracic organs

2.1. Heart

2.1.1. Number of heart transplantations per year (pmp)	2019	2020

2.1.2. How long is the waiting list for heart transplantation?	2019	2020
Living donor		
Deceased donor		

2.1.3. What is the mortality rate on the waiting list for heart recipients?	2019	2020

2.2. Lung

2.2.1. Number of lung transplantations per year (pmp)	2019	2020

2.2.2. How long is the waiting list for lung transplantation?	2019	2020
Living donor		
Deceased donor		

2.2.3. What is the mortality rate on the waiting list for lung recipients?	2019	2020

6. Does your country have separate specialty /residency/ fellowship for transplant surgeons?

☐ Yes ☐ No

7. Please describe pathway to become transplant surgeons (official way to became transplant specialist compare with knowledge from urology, vascular surgery, others)

8.2.4. Donation Survey – Hospital Data

Hospital name:

Information provided by:

Date:

1. Number of beds in the hospital	2019	2020

2. Number of ICU beds with MLV in the hospital	2019	2020

3. Number of hospital deaths	2019	2020

4. Number of deaths in intensive care	2019	2020

5. Does your hospital has?

☐ Neuro-surgery unit

☐ Polytrauma unit

☐ Stroke unit

☐ Coronary unit

6. Number of declared brain deaths in ICU	2019	2020

7. Do you think, are there not recognized potential donors dying in?

☐ Emergency Area

☐ Neurological ward

☐ Coronary unit

☐ Stroke unit

8. Do you have protocols about WLST (withdrawal of life-sustaining treatment)?

☐ Yes ☐ No

9. If you have WLST, do you have cDCD program?

☐ Yes ☐ No ☐ N/a

10. Do you have uDCD program?

☐ Yes ☐ No ☐ N/a

11. Do you admit patients to the ICU only with the purpose of donation?

☐ Yes ☐ No

12. If yes, are relatives informed about purpose of donation?

☐ Yes ☐ No ☐ N/a

Technical equipment for educational activities in hospital

13. Do you have Internet access in your hospital facilities?

☐ Yes ☐ No

14. Can you open Zoom session in your hospital?

☐ Yes ☐ No

15. Do you have simulation area for learning purposes in hospital/university?

☐ For surgeons

☐ For anesthetists - intensivists

☐ No

☐ Other

16. Please describe these facilities, training possibilities (dummies, mannequins, animal lab…)

8.2.5. Transplantation Survey – Hospital Data

Hospital name:

Information provided by:

Date:

TRANSPLANTATION DATA

1. Abdominal Organs

1.1. Kidney

1.1.1. Number of kidney transplantation in your center per year (pmp)	2019	2020
Living donor		
Deceased donor		

1.1.2. Which kidney transplantation technique are you using most frequently?

- ☐ Open surgery
- ☐ Hand assisted laparoscopy
- ☐ Laparoscopy
- ☐ Robotic
- ☐ Other

1.1.3. Which kidney explantation technique for living donors are you using most frequently?

- ☐ Open surgery
- ☐ Hand assisted laparoscopy
- ☐ Laparoscopy
- ☐ Robotic
- ☐ Other

1.1.4. Graft survival 1 year after kidney transplantation?	2019	2020
Living donor		
Deceased donor		

1.1.5. Patient survival 1 year after kidney transplantation?	2019	2020
Living donor		
Deceased donor		

1.1.6. How many patients are added to the kidney transplantation waiting list per year (pmp)?	2019	2020

1.1.7. Please describe **kidney retrieval** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	
Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

1.1.8. Please describe **kidney transplantation** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	
Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Anaesthetists assistant	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

1.2. Liver

1.2.1. Number of liver transplantation in your center per year (pmp)	2019	2020
Living donor		
Deceased donor		
We don`t have this program		

1.2.2. Which liver transplantation technique are you using most frequently?

☐ traditional orthotopic liver transplantation with caval replacement.

☐ 2.Piggy back technique

☐ 3.veno-venous by pass

1.2.3. Which liver explantation technique for living donors are you using most frequently?

☐ Living donor liver resection open surgery

☐ Liver resection laparoscopic surgery

☐ Other

1.2.4. Graft survival 1 year after liver transplantation?	2019	2020
Living donor		
Deceased donor		

1.2.5. Patient survival 1 year after liver transplantation?	2019	2020
Living donor		
Deceased donor		

1.2.6. How many patients are added to waiting list for liver transplantation per year (pmp)?	2019	2020

1.2.7. Please describe **liver retrieval** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	

Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

1.2.8. Please describe **liver transplantation** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	
Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Anaesthetists assistant	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

1.3. Pancreas

1.3.1. Number of pancreas transplantation in your center per year (pmp)	2019	2020
We don`t have this program		

1.3.2. Which pancreas transplantation type are you using?

☐ Simultaneous pancreas-kidney transplantation

☐ Pancreas after kidney

☐ Pancreas alone

☐ Other

1.3.3. Which pancreas transplantation technique are you using?

☐ Intraabdominal duodeno-bladder anastomosis for exocrine drainage

☐ Intraabdominal duodeno-enteral anastomosis for exocrine drainage

☐ Retroperotoneal duodeno-duodeno anastomosis for exocrine drainage

☐ Other

1.3.4. Graft survival 1 year after pancreas transplantation?	2019	2020

1.3.5. Patient survival 1 year after pancreas transplantation?	2019	2020

1.3.6. How many patients are added to waiting list for pancreas transplantation per year (pmp)?	2019	2020

2. Thoracic organs

2.1. Heart

2.1.1. Number of heart transplantation in your center per year (pmp)	2019	2020
We don`t have this program		

2.1.2. Graft survival 1 year after heart transplantation?	2019	2020

2.1.3. Patient survival 1 year after heart transplantation?	2019	2020
Living donor		
Deceased donor		

2.1.4. How many patients are added to waiting list for heart transplantation per year (pmp)?	2019	2020

2.1.5. Please describe **heart retrieval** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	
Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

2.1.6. Please describe **heart transplantation** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	
Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Anaesthetists assistant	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

2.2. Lung

2.2.1. Number of lung transplantation in your center per year (pmp)	2019	2020
We don`t have this program		

2.2.2. Graft survival 1 year after lung transplantation?	2019	2020

2.2.3. Patient survival after lung transplantation 1 year?	2019	2020

2.2.4. How many patients are added to waiting list for lung transplantation per year (pmp)?	2019	2020

2.2.5. Please describe **lung retrieval** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	
Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

2.2.6. Please describe **lung transplantation** team

	Yes/No (included)		Number
Surgeons	☐ Yes	☐ No	
Nurses	☐ Yes	☐ No	
Perfusionists	☐ Yes	☐ No	
Anaesthetists	☐ Yes	☐ No	
Anaesthetists assistant	☐ Yes	☐ No	
Coordinators	☐ Yes	☐ No	
Others	☐ Yes	☐ No	

3. Are the same surgeons participating in retrieval and transplantation, if yes in which organ?

☐ Yes ☐ No ☐ Other

_____

_____

_____

4. Technical equipment for educational activities in hospital

4.1. Do you have Internet access in your hospital facilities?

☐ Yes ☐ No

4.2. Can you open Zoom session in your hospital?

☐ Yes ☐ No

4.3. Do you have simulation area for learning purposes in hospital/university?

☐ For surgeons

☐ For anaesthetists- intensivists

☐ No

☐ Other

4.4. Please describe these facilities, training possibilities (dummies, mannequins, animal lab…)

_____

_____

_____

8.3. Developed questionnaires for TEODOR Program Results (Participant Feedback)

8.3.1. Assessment questionnaire level I Deceased Donation

Scale: 1. Very poor 2. Poor 3. Average 4. Good 5. Very good

Course Survey

1 * UNIT 1: Organ Donation Programmes / Videos

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

2 * UNIT 1: Organ Donation Programmes / Theoretical content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

3 * UNIT 2: Deceased Organ donation / Videos

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

4 * UNIT 2: Deceased Organ donation / Theoretical content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

5 * General Assessment

	1	2	3	4	5
The microlearning capsule met your expectations	◉	○	○	○	○	○
Overall assessment	◉	○	○	○	○	○
You would recommend this microlearning capsule to others	◉	○	○	○	○	○

6 COMMENTS

8.3.2. Assessment questionnaire level I Living Organ Donation

Scale: 1. Very poor 2. Poor 3. Average 4. Good 5. Very good

Course Survey

1 * UNIT 1: Organ Donation Programmes / Videos

		1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

2 * UNIT 1: Organ Donation Programmes / Theoretical content

		1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

3 * UNIT 2: Living Organ Donation / Videos

		1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

4 * UNIT 2: Living Organ Donation / Theoretical content

		1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

5 * General Assessment

		1	2	3	4	5
The microlearning capsule met your expectations	◉	○	○	○	○	○
Overall assessment	◉	○	○	○	○	○
You would recommend this microlearning capsule to others	◉	○	○	○	○	○

6 COMMENTS

8.3.3. Assessment questionnaire level I Family Approach

Scale: 1. Very poor 2. Poor 3. Average 4. Good 5. Very good

Course Survey

1 * UNIT 1: Organ Donation Programmes / Videos

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

2 * UNIT 1: Organ Donation Programmes / Theoretical content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

3 * UNIT 2: Family Approach in Case of Deceased Donation / Videos

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

4 * UNIT 2: Family Approach in Case of Deceased Donation / Theoretical content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Relevance	◉	○	○	○	○	○
Quality	◉	○	○	○	○	○
Methodology	◉	○	○	○	○	○

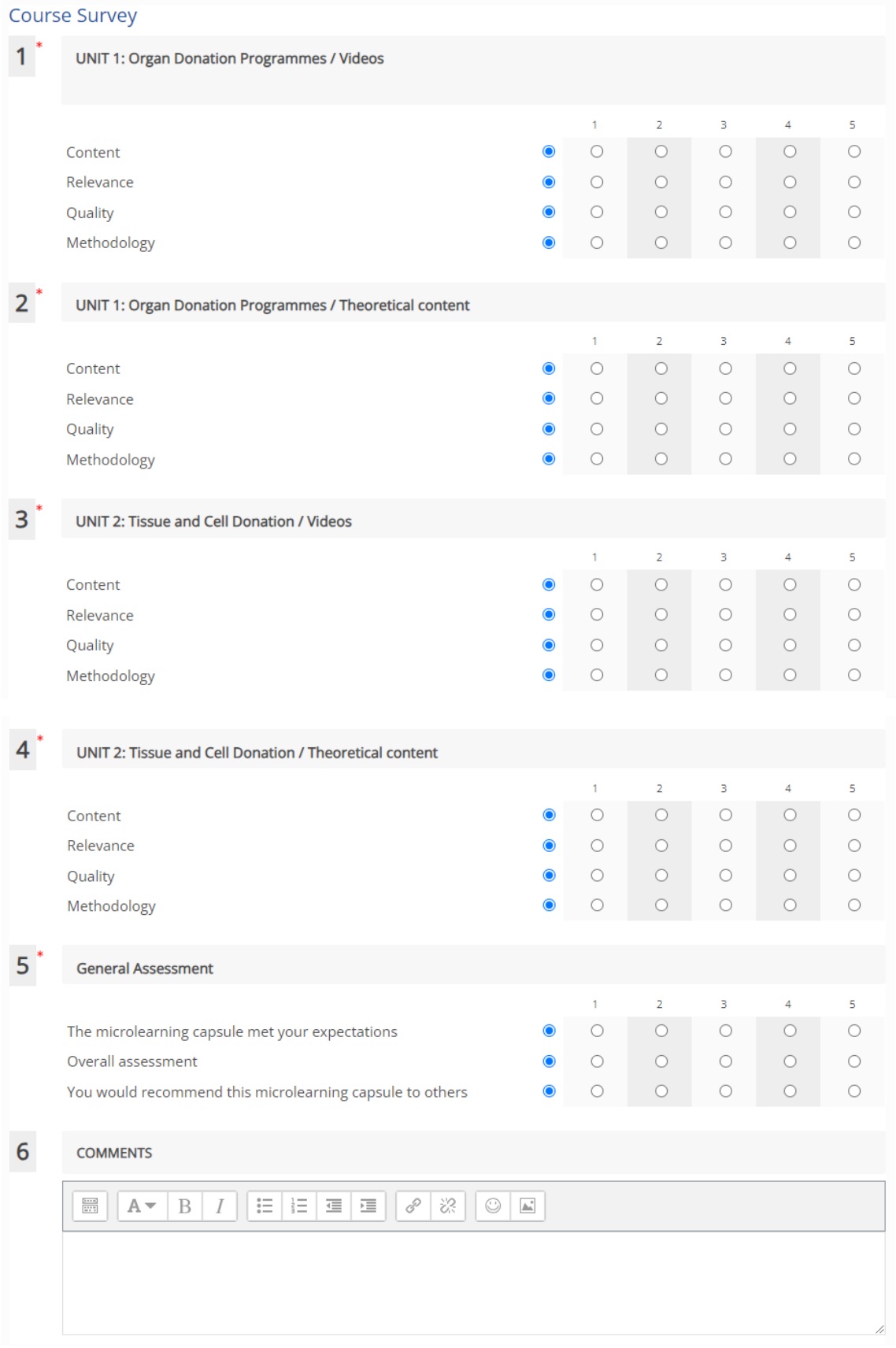
5 * General Assessment

	1	2	3	4	5
The microlearning capsule met your expectations	◉	○	○	○	○	○
Overallassessment	◉	○	○	○	○	○
You would recommend this microlearning capsule to others	◉	○	○	○	○	○

6 COMMENTS

A B I

8.3.4. Assessment questionnaire level I Tissue and Cell Donation



Course Survey

1 * UNIT 1: Organ Donation Programmes / Videos

	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

2 * UNIT 1: Organ Donation Programmes / Theoretical content

	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

3 * UNIT 2: Tissue and Cell Donation / Videos

	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

4 * UNIT 2: Tissue and Cell Donation / Theoretical content

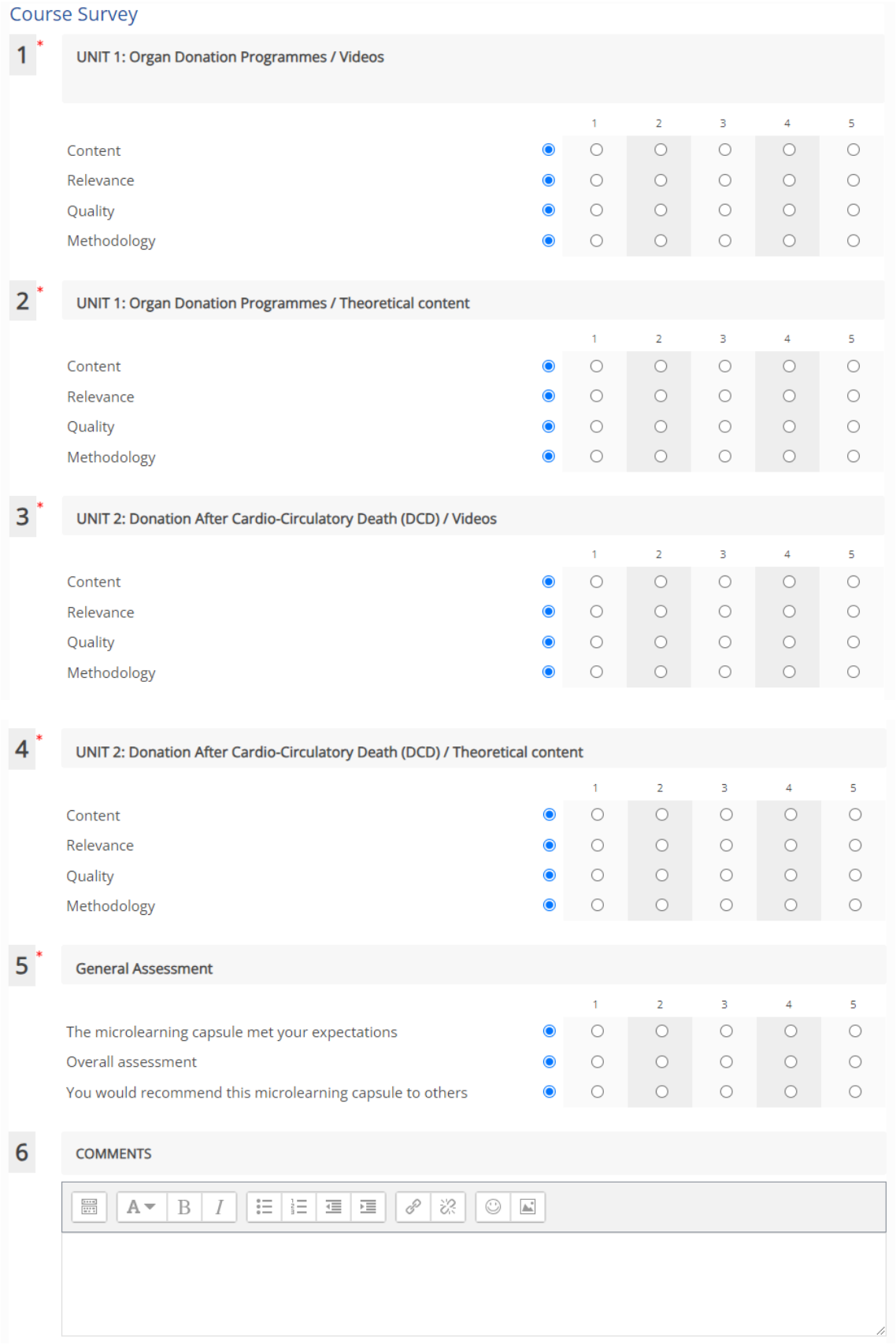
	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

5 * General Assessment

	1	2	3	4	5
The microlearning capsule met your expectations	○	○	○	○	○
Overall assessment	○	○	○	○	○
You would recommend this microlearning capsule to others	○	○	○	○	○

6 COMMENTS

8.3.5. Assessment questionnaire level I Donation After Cardio – Circulatory Death (DCD)



Course Survey

1 * UNIT 1: Organ Donation Programmes / Videos

	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

2 * UNIT 1: Organ Donation Programmes / Theoretical content

	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

3 * UNIT 2: Donation After Cardio-Circulatory Death (DCD) / Videos

	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

4 * UNIT 2: Donation After Cardio-Circulatory Death (DCD) / Theoretical content

	1	2	3	4	5
Content	○	○	○	○	○
Relevance	○	○	○	○	○
Quality	○	○	○	○	○
Methodology	○	○	○	○	○

5 * General Assessment

	1	2	3	4	5
The microlearning capsule met your expectations	○	○	○	○	○
Overall assessment	○	○	○	○	○
You would recommend this microlearning capsule to others	○	○	○	○	○

6 COMMENTS

8.3.6. Assessment questionnaire Level II – Self-learning online modules Organ Donation

ASSESSMENT QUESTIONNAIRE

Please assess the course topics by using the following scoring scale:

1= Very poor; **2**= Average; **3**= Good; **4**= Good; **5**= Very good;

TOPIC 1 - Donor Detection System (DDS)

1 Theoretical Content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

2 Self-Assessment Activity

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

TOPIC 2 - Brain Death (BD)

3 Theoretical Content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

4 Self-Assessment Activity

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

TOPIC 3 - Donor Management

5 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

6 Self-Assessment Activity

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

TOPIC 4 - Organ Viability

7 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

8 Self-Assessment Activity

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

TOPIC 5 - Family Approach for Organ Donation (FAOD)

9 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

10 Self-Assessment Activity

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

TOPIC 6 - Organ Recovery and Preservation

11 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

12 Self-Assessment Activity

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

TOPIC 7 - Organ Allocation Criteria

13 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

14 Self-Assessment Activity

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

TOPIC 8 - Uncontrolled Donation after Circulatory Death (uDCD)

15 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

16 Self-Assessment Activity

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

TOPIC 9 - Controlled Donation after Circulatory Death (DCD)

17 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

18 Self-Assessment Activity

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

TOPIC 10 - Living Donation (LD)

19 Theoretical Content

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

20 Self-Assessment Activity

		1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

RESOURCES

Please assess the course resources by using the following scoring scale:

1= Poor; **2**= Average; **3**= Good; **4**= Very Good; **5**= Excellent;

21 Resources in the course

		1	2	3	4	5
Syllabus	◉	○	○	○	○	○
Texts	◉	○	○	○	○	○
Graphics	◉	○	○	○	○	○
Audiovisual	◉	○	○	○	○	○
Bibliography	◉	○	○	○	○	○
Glossary	◉	○	○	○	○	○
Efficiency of the online technical assistance	◉	○	○	○	○	○

General Assessment

22 The course met your expectations

○ Yes ○ No ◉ No answer

23 Overall course assessment

1	2	3	4	5
○	○	○	○	○

24 You would recommend this course to others

○ Yes ○ No ◉ No answer

COMMENTS

25 Comments and suggestions

8.3.7. Assessment questionnaire Level II – Self-learning online modules Organ Transplantation

ASSESSMENT QUESTIONNAIRE

Please assess the course topics by using the following scoring scale:

1= Poor; **2**= Average; **3**= Good; **4**= Very good; **5**= Excellent;

UNIT 1: General Aspects

1 *

Theoretical Content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

2 *

Self-Assessment Activity

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

UNIT 2: Kidney

3 *

Theoretical Content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

4 *

Self-Assessment Activity

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

UNIT 3: Liver

5 * **Theoretical Content**

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

6 * **Self-Assessment Activity**

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

UNIT 4: Pancreas

7 * **Theoretical Content**

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

8 * **Self-Assessment Activity**

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

UNIT 5: Heart

9 * **Theoretical Content**

	1	2	3	4	5
Content	○	○	○	○	○
Accuracy	○	○	○	○	○
Accomplishment of Objectives	○	○	○	○	○
Interest	○	○	○	○	○

10 * Self-Assessment Activity

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

UNIT 6: Lungs

11 * Theoretical Content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

12 * Self-Assessment Activity

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

UNIT 7: Living Donor

13 * Theoretical Content

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

14 * Self-Assessment Activity

	1	2	3	4	5
Content	◉	○	○	○	○	○
Accuracy	◉	○	○	○	○	○
Accomplishment of Objectives	◉	○	○	○	○	○
Interest	◉	○	○	○	○	○

15 *

RESOURCES

Please assess the course topics by using the following scoring scale:

1= Poor; **2**= Average; **3**= Good; **4**= Very Good; **5**= Excellent;

		1	2	3	4	5
Syllabus	◉	○	○	○	○	○
Texts	◉	○	○	○	○	○
Graphics	◉	○	○	○	○	○
Audiovisual	◉	○	○	○	○	○
Bibliography	◉	○	○	○	○	○
Glossary	◉	○	○	○	○	○
Efficiency of the online technical assistance	◉	○	○	○	○	○

General Assessment

16 * The course met your expectations?

○ Yes ○ No

17 * Overall course assessment

	1	2	3	4	5
Overall course assessment	○	○	○	○	○

18 * You would recommend this course to others

○ Yes ○ No

19 Comments

8.3.8. Assessment questionnaire Level III – F2F Barcelona event Organ Donation

Page 1

Please rate only those sessions you participated. If you did not attend any of the sessions, please mark N/A (not applicable).

Follow the criteria:

1. Very poor 2. Poor 3. Average 4. Good 5. Very good

1 * **Did you participate online or F2F?**

○ Online ○ F2F

2 * **Are you a trainee or a trainer?**

○ I'm trainee ○ I'm trainer

Page 2

LECTURES/WORKSHOPS

3 * **DAY 1**

	1	2	3	4	5	N/A
DCD type II – David Paredes	○	○	○	○	○	○
DCD type III & V – Eva Oliver	○	○	○	○	○	○
Anaesthesia in donation and transplantation – Anabel Blasi	○	○	○	○	○	○
Round table – Donation and Transplantation activities in each country	○	○	○	○	○	○

4 * **DAY 2**

	1	2	3	4	5	N/A
Hospital visit	○	○	○	○	○	○

5 * **DAY 3**

	1	2	3	4	5	N/A
Round table on donation practices (trainers and trainees)	○	○	○	○	○	○
Clinical cases discussion (trainers and trainees)	○	○	○	○	○	○

Page 3

6 * **DAY 3**

	1	2	3	4	5	N/A
Train the trainers	○	○	○	○	○	○

Page 4

7 * **DAY 4**

	1	2	3	4	5	N/A
ICOD – Role of Intensivist in organ donation process – Eva Oliver	○	○	○	○	○	○
Multiorgan donation management challenges (clinical case) – Eva Šteina	○	○	○	○	○	○
Family Approach (videos) – Anne Le Roy	○	○	○	○	○	○
Round table – multidisciplinary teams in organ donation and transplantation	○	○	○	○	○	○

Page 5

8 * **DAY 5**

	1	2	3	4	5	N/A
Donor surgery (video from DCD procedure) – Lilia Martinez de la Maza	○	○	○	○	○	○
Swedish experience – Karin Hildebrand	○	○	○	○	○	○
Catalan experience – Jaume Tort	○	○	○	○	○	○
Euthanasia – David Paredes	○	○	○	○	○	○

Page 6

9 * **ORGANIZATION**

	1	2	3	4	5	N/A
Schedule (hours, timely breaks)	○	○	○	○	○	○
Event Coordination	○	○	○	○	○	○
Learning environment (communication with faculty members and other trainees, networking possibilities)	○	○	○	○	○	○

10 * **GLOBAL EVALUATION**

	1	2	3	4	5	N/A
Applicability to my job	○	○	○	○	○	○
Overall event assessment	○	○	○	○	○	○

11 **What was the best aspect of this event?**

12 **Was there anything that could be improved?**

13 **Other Comments**

8.3.9. Assessment questionnaire Level III – F2F Barcelona event Organ Transplantation

Page 1

Please rate only those sessions you participated. If you did not attend any of the sessions, please mark N/A (not applicable).

Follow the criteria:

1. Very poor 2. Poor 3. Average 4. Good 5. Very good

1 * Did you participate online or F2F?

○ Online ○ F2F

2 * Are you a trainee or a trainer?

○ I'm a trainee ○ I'm a trainer

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LECTURES/WORKSHOPS

3 * DAY 1

	1	2	3	4	5	N/A
DCD type II – David Paredes	○	○	○	○	○	○
DCD type III & V – Eva Oliver	○	○	○	○	○	○
Anaesthesia in donation and transplantation – Anabel Blasi	○	○	○	○	○	○
Round table – Donation and Transplantation activities in each country	○	○	○	○	○	○

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4 * DAY 2

All groups

	1	2	3	4	5	N/A
Minimally invasive living donor nephrectomy video - Lilia Martinez de la Maza	○	○	○	○	○	○
Robotic kidney transplant – Lilia Martinez de la Maza	○	○	○	○	○	○
Kidney transplant surgical techniques – Mireia Musquera	○	○	○	○	○	○

5 * Group 1 (Kidney)

	1	2	3	4	5	N/A
Round table – kidney transplantation program in each country	○	○	○	○	○	○
Clinical cases	○	○	○	○	○	○

6 * Group 2 (Liver, Pancreas)

	1	2	3	4	5	N/A
Round table - liver & pancreas transplantation program in each country	○	○	○	○	○	○
Clinical cases	○	○	○	○	○	○

7 * **Group 3 (Thoracic)**

	1	2	3	4	5	N/A
Round table – thoracic transplantation program in each country	○	○	○	○	○	○
Clinical cases	○	○	○	○	○	○

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8 * **DAY 3**

	1	2	3	4	5	N/A
Hospital visit	○	○	○	○	○	○

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9 * **DAY 3**

	1	2	3	4	5	N/A
Train the trainers	○	○	○	○	○	○

12 * **Group 3 (Thoracic)**

	1	2	3	4	5	N/A
Pre-heart-transplantation patient management – Maria Ángeles Castel	○	○	○	○	○	○
Postoperative care, treatment of complications, follow up, rejection – Elena Sandoval (online)	○	○	○	○	○	○
Tips and updates in the surgical part of heart transplantation – Elena Sandoval (online)	○	○	○	○	○	○
Pre-lung transplantation patient management – Irene Bello	○	○	○	○	○	○
Postoperative care, treatment of complications, follow up, rejection – Irene Bello	○	○	○	○	○	○
Tips and updates in the surgical part of lung transplantation – Irene Bello	○	○	○	○	○	○

13 * **All groups**

	1	2	3	4	5	N/A
Round table – multidisciplinary teams in organ donation and transplantation	○	○	○	○	○	○

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14 * **DAY 5**

	1	2	3	4	5	N/A
Donor surgery (video from DCD procedure) – Lilia Martinez de la Maza	○	○	○	○	○	○
Swedish experience – Karin Hildebrand	○	○	○	○	○	○
Catalan experience – Jaume Tort	○	○	○	○	○	○
Euthanasia – David Paredes	○	○	○	○	○	○

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15 * **ORGANIZATION**

	1	2	3	4	5	N/A
Schedule (hours, timely breaks)	○	○	○	○	○	○
Event Coordination	○	○	○	○	○	○
Learning environment (communication with faculty members and other trainees, networking possibilities)	○	○	○	○	○	○

16 * **GLOBAL EVALUATION**

	1	2	3	4	5	N/A
Applicability to my job	○	○	○	○	○	○
Overall event assessment	○	○	○	○	○	○

17 **What was the best aspect of this event?**

18 **Was there anything that could be improved?**

19 **Other Comments**

8.3.10. Assessment questionnaire Level III – local seminars

Questions to ask after each local seminar with 5 point scale

1 – VERY POOR, 2 – POOR, 3 – AVERAGE, 4 – GOOD, 5 – VERY GOOD

LECTURES

1. Scientific basis (proofs, investigation results, statistics, etc.)
2. Presentation (PPT, etc.)
3. Topic coverage
4. Answered questions
5. Clarity of information
6. Lecturer's performance

WORKSHOPS

1. Workshop timing (hours, timely breaks)
2. Interaction of faculty members with participants
3. Topic coverage
4. Expert(s)/Tutor(s)' performance
5. Applicability to real clinical conditions
6. Technical and simulation equipment

Open-ended questions:

1. Did the seminar provide what you expected to learn? Please explain your answer
2. Was the seminar too short/too long? Was there a specific lecture/workshop that could be adjusted?
3. What was the best aspect of this seminar?
4. Was there anything in this seminar that could be improved?
5. Other Comments

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