



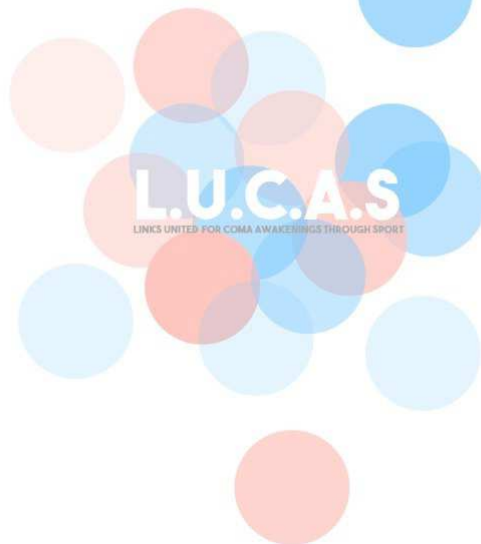
# *LUCAS*

*Links United for Coma Awakenings through Sport*

## **PILOT ACTIONS**

**Country: Lithuania**

**Organization: Siauliai University**



## 1. PARTICIPANTS RECRUITED

	<b>N.</b> <i>(Everyone involved even if they have not attended all lessons)</i>	<b>Age</b> <i>(age group)</i>	<b>Characteristics</b>	<b>N. of which had done motor / physical / sporting activity before acquiring disability</b>
<b>People with disability (TBI or SCI)</b>	10	23-35	Coma after road accident, Trauma in the street (fighting), Trauma in the street, Coma after sinking, Coma after fire, Coma after water jump,	4
<b>Caregivers</b>	10	45-68	<i>Healthy</i>	2

## 2. OPERATORS INVOLVED (who has worked to implement the methodology: TECHNICAL = who conducted the lessons)

<b>For:</b>	<b>Educational qualification</b>	<b>Specific training</b>	<b>Professional experience</b>
<b>People with disability (TBI or SCI)</b>	Degree in Physical Education	<i>Specialized in adapted activities for the disabled</i>	Hypotherapists
<b>Caregivers</b>	Degree in Physical Education Degree in Psychology	Specialized in adapted activities for the parents/caregivers	Psychologist, Sport trainers, Specialists of Applied Physical education

### 3. OTHER PROFESSIONALS INVOLVED IN THE PROJECT AND HOW *(add rows, if necessary)*

For:	Educational qualification	Job	Role in the project
<b>People with disability (TBI or SCI)</b>	<i>Hypotherapy specialists</i>	University Teacher	Work during pilot activities
	Expert researcher	University Teacher	He has selected families to be involved,  Coordination of the pilot activities
	Social educator	Socioeducational activities aimed for development of communication skills	Work with persons with disability on their development of communication skills
	Physician - neurologist	Neurologist	He has selected families to be involved
	Social worker, volunteer	Social worker	Work during pilot activities in university rehabilitation center and in the center of hypotherapy, work on social inclusion
	Physician	Physician	Health assessment, monitoring of health status during pilot activities
	Physiotherapists	University teacher	Work during pilot activities in university rehabilitation center and in the center of hypotherapy;  Individual health promotion work with parents
	Psychologist	University teacher	He has selected families to be involved
<b>Caregivers</b>	Expert researcher	University Teacher	He has selected families to be involved,  Coordination of the pilot

<b>For:</b>	<b>Educational qualification</b>	<b>Job</b>	<b>Role in the project</b>
			activities
	Social educator	Socioeducational activities aimed for development of communication skills	Work with family members on their development of communication skills
	Physician - neurologist	Neurologist	He has selected families to be involved due to the neurological impairments that occur during taking care about persons awakening after coma
	Social worker, volunteer	Social support and information for parents	Work during pilot activities in university rehabilitation center and in the center of hypotherapy, work on social inclusion
	Physiotherapists	University teacher	Work during pilot activities in university rehabilitation center and in the center of hypotherapy;  Individual health promotion work with parents
	Psychologist volunteer	University teacher	He has selected families to be involved

#### 4. VOLUNTEERS INVOLVED IN THE PROJECT AND HOW

N. volunteers	Role in the project
16	Takes care on the implamentation of prepared individual programs for caregivers for individual development of physical skills, participates in the sessions of teaching of basics of ergonomics taking care about their adult information; facilitated social reintegration creating new relationships that helps families to feel more confident in environment; participate in the team work creating and providing new methods of approach and skills for the sport trainers who work with people with disability. Work during pilot activities in university rehabilitation center and in the center of hypotherapy, work on social inclusion.

#### 5. PERIOD OF IMPLEMENTATION (from - to)

For:	N. of months (overall duration)	N. sessions per week	Average % of participants rate
People with disability (TBI or SCI)	8	2	73
Caregivers	8	2	70
All together	8	2	71,5

#### 6. ORGANIZATION OF THE ACTIVITY SESSIONS (includes LESSON)

For:	Welcome time (yes/no)	Duration of the lesson Options envisaged:	Closing time - greetings (yes/no)
		a) 60 minutes disables /60 min caregivers + 30 min all together  b) 15 min all together + 60 minutes disables /60 min caregivers +15 min all together	

<b>For:</b>	<b>Welcome time (<u>yes/no</u>)</b>	<b>Duration of the lesson</b>  <b>Options envisaged:</b>  a) 60 minutes disables /60 min caregivers + 30 min all together  b) 15 min all together + 60 minutes disables /60 min caregivers +15 min all together	<b>Closing time - greetings (<u>yes/no</u>)</b>
<b>People with disability (TBI or SCI)</b>	5 min.	<i>a)</i>	5 min.
<b>Caregivers</b>	5 min		5 min.
<b>All together</b>	5 min.		5 min.

## 7. PLACE OF EXECUTION OF THE LESSONS (gyms / environments / outside ...)

<b>For:</b>	<b>Please describe the place (gym, park, pitch, etc) in which the activity was carried out</b>
<b>People with disability (TBI or SCI)</b>	Siauliai University Hall of Kinezitherapy, Center of Hypotherapy (Kurtuvenai Regional Park)
<b>Caregivers</b>	Siauliai University Hall of Kinezitherapy, Center of Hypotherapy (Kurtuvenai Regional Park)
<b>All together</b>	Siauliai University Hall of Kinezitherapy, Center of Hypotherapy (Kurtuvenai Regional Park)

## 8. PERFORMED PROGRAM (type of activity)

For:	<b>Physical activity / motor activity</b> (indicate whether with aids)	<b>SPORT</b> (sportive disciplines done by participants - indicate whether with aids)
<p><b>People with disability (TBI or SCI)</b> [Please provide information about the organized activities: individual or group activity, adapted sport]</p>	<p>Patients works on own physical problems with trainers on betterment of movement or motor functions. They taught right ways of motion, collaboration with caregiver during physical activity.</p> <p>Hypotherapy session under the guidance of sport trainer/horse therapist/ergo therapist. The session consist of 3 phases: first – preparation phase: patient is warmup and prepared for sport activity. It takes about 15 min. Second phase: hypotherapy session (about 30 min.) and third phase: end of session – about 15 min. Patient get out from horse, take of safety equipment, gets into wheel chair and doing relaxing exercises.</p>	<p>Common applied sport activities: basketball, rope pulling, volleyball (players are patients and family members), riding</p>
<p><b>Caregivers</b> [Please provide information about the organized activities: individual or group activity, adapted sport]</p>	<p>Parents have consultations and trainings with specialists and discuss effective ways how to involve and keep achieved results at home. They learn new ways of exercising, in order to prevent own physical trauma's, to reveal already existing physical problems, to plan individual work.</p> <p>Parents participate in self-support group under the guidance of psychologist volunteer. They are working according to the plan that</p>	<p>Applied sport activities: basketball, rope pulling, volleyball (players are patients and family members).</p>

<b>For:</b>	<b>Physical activity / motor activity</b> (indicate whether with aids)	<b>SPORT</b> (sportive disciplines done by participants - indicate whether with aids)
	developed after the assessment of parent problems in the pilot research that took place in 2015.	
<b>All together</b> <i>[Please provide information about the organized activities: individual or group activity, adapted sport]</i>	Participants under the guidance of specialists perform exercises, standing/sitting/laying in pairs. Additional equipment's (balls, ropes, skittles, and mats) were used. Sensor reinforcement such as music added. Together with patients, performed exercises devoted preventing spine hernia, to strengthen spine muscles, to keep balance, to increase motion range. Another group of exercises devoted for strengthening of legs and knees, tarsus tendons and muscles. Together with parents/caregivers performed exercises devoted preventing contractures, strengthening spine muscles, keeping balance, increasing trunk motion range. Other exercises were devoted for strengthening legs and knees, tarsus tendons and muscles, hands and arms strength and motions.	Common applied sport activities: basketball, rope pulling, volleyball (players are patients and family members).

## 9. ARISEN CRITICAL POINTS AND SOLUTIONS

<b>For:</b>	<b>CRITICAL POINTS ARISEN</b>	<b>SOLUTIONS FOUND</b>
<b>People with disability (TBI or SCI)</b>	During pilot action we face with unforeseen situations concerning client's health condition. To meet twice a week for someone was challenge and it became evident during two last months of pilot action. They	We try to solve situations trying to add new activities for clients (except hypotherapy), to offer parents topics that are interesting and actual for them in everyday routine; we try to involve parent into their hobby activities – just



<b>For:</b>	<b>CRITICAL POINTS ARISEN</b>	<b>SOLUTIONS FOUND</b>
	<p>feel tired; sometimes they were not motivated for activities.</p> <p>Another issue is very strict routine for the family members: they shared time in project activities and sometimes there were not enough time for them to do everyday plans. Some parents are in job relationships so it was hard for them to find time for project activities.</p> <p>We think that sessions twice a week are too much for clients and family members.</p>	<p>encouraging them to communicate, to develop self-expression and later to join discussion that were foreseen in the schedule of project activities.</p>
<b>Caregivers</b>	<p>Sometimes for parents it was a problem to participate in sessions during so long period of pilot activity.</p>	<p>Parents cooperated taking patients to pilot action sessions</p>
<b>All together</b>	<p>It was too intensive activity because it took place together with all other everyday routine and for both it was tedious.</p>	<p>Sometimes they missed pilot action activities</p>

**10. ADDED VALUE OF THE WHOLE EXPERIENCE THAT YOU HAVE RECORDED (please describe)**

<b>For:</b>	<b>Description</b>
<b>People with disability (TBI or SCI)</b>	<p>It was promoted voluntary activities in sport (sport activities in sport hall, hypotherapy) together with social inclusion, equal opportunities and awareness of the importance of health-enhancing physical activity through increased participation in, and equal access to, sport for all. (May be it was not voluntary activities, because they had strict schedule and certain kind of exercises).</p> <p>During pilot action it was enhanced the role of sport in education and training. The values conveyed through sport help develop knowledge, motivation, skills and readiness for personal effort. Clients get new knowledge, became more motivated in creating relationships with other ones, start to encourage others for more active social life, create self-support groups.</p> <p>Applying combined sport activities it was facilitated process of physical rehabilitation through the improvement of motor aspect (improvement of the general physical state and acquisition of specific skills of the practiced sport/motor activity). It was proved by measurement of changes of muscle tension before and after hypotherapy activities.</p> <p>To improve the perception of quality of life and psychophysical well-being. People after awakening from coma realized and understood some more new aspects of life after moment that changed their lives. They understood that they can be active, involved into social activities, be recognized by others and influence organization of</p>

<b>For:</b>	<b>Description</b>
	<p>everyday routine.</p> <p>It was facilitated social reintegration and persons after coma create relationships that help to get out of loneliness. This point was most visible and important achievement of the project. Psychosocial health of clients became more stable; they demonstrated enlarged level of motivation, developed activities wider than project schedule.</p> <p>It was improved the quality of the relationship between the people with acquired disability and his/her family / caregiver. Situations where people with acquired disabilities and their parents were going to perform joint tasks let them to assess another kind of collaboration, let them to find or to remember activities that were performed before accidents. People awakening after come find their parents as friends, because usually they act as caregivers.</p>
<b>Caregivers</b>	<p>It was promoted voluntary activities in sport (sport activities in sport hall, hypotherapy) together with social inclusion, equal opportunities and awareness of the importance of health-enhancing physical activity through increased participation in, and equal access to, sport for all. (May be it was not voluntary activities, because they had strict schedule and certain kind of exercises).</p> <p>During pilot action it was enhanced the role of sport in education and training. Caregivers become more physically active they have opportunity to cure their own health problems associated with nursing of their children. The values conveyed through sport help develop knowledge, to acquire new communication skills and new physical capacities. Caregivers get new knowledge, became more motivated in creating relationships with other ones, start to encourage others for Applying combined sport activities it was facilitated process of physical rehabilitation through the improvement of motor aspect (improvement of the general physical state and acquisition of specific skills of the practiced sport/motor activity). Caregivers get program for individual development of physical skills, get information about right ways of taking care about their children.</p> <p>To improve the perception of quality of life and psychophysical well-being. Caregivers learned some more new aspects of life after moment that changed their lives. They understood that they can be active, involved into social activities, communicate with other families, share experience and knowledge.</p> <p>more active social live, create self-support groups.</p> <p>Applying combined sport activities it was facilitated process of physical rehabilitation through the improvement of motor aspect (improvement of the general physical state and acquisition of specific skills of the practiced sport/motor activity). Caregivers get program for individual development of physical skills, get information about right ways of taking care about their children.</p> <p>To improve the perception of quality of life and psychophysical well-being. Caregivers learned some more new aspects of life after moment that changed their lives. They understood that they can be active, involved into social activities, communicate with other families, share experience and knowledge.</p> <p>Applying combined sport activities it was facilitated process of physical rehabilitation through the improvement of motor aspect (improvement of the general physical state</p>

<b>For:</b>	<b>Description</b>
	<p>and acquisition of specific skills of the practiced sport/motor activity). Caregivers get program for individual development of physical skills, get information about right ways of taking care about their children.</p> <p>To improve the perception of quality of life and psychophysical well-being. Caregivers learned some more new aspects of life after moment that changed their lives. They understood that they can be active, involved into social activities, communicate with other families, share experience and knowledge.</p>
<b>All together</b>	The main outcome is the improvement of disease awareness about his/her relative and prevention of symptoms associated with physical tiredness; development of interrelations and social inclusion; improvement of the quality of physical health.
<b>Operators</b>	<p>It was organized activities in sport (sport activities in sport hall, hypotherapy) together developing social inclusion, equal opportunities and awareness of the importance of health-enhancing physical activity through increased participation in, and equal access to, sport for all.</p> <p>During pilot action it was enhanced the role of sport in education and training. Operators get opportunity to learn more about different sequences of coma awakening, they learned more about physical activities that could be applied for this target group. Working together with people after coma and his/her family operators acquired more psychological knowledge and enlarges their communication skills.</p> <p>Applying combined sport activities it was facilitated process of physical rehabilitation through the improvement of motor aspect (improvement of the general physical state and acquisition of specific skills of the practiced sport/motor activity). Operator's prepared individual programs for caregivers for individual development of physical skills, teach them basics of ergonomics taking care about their adult information about right ways of taking care about their children.</p> <p>Operators facilitated social reintegration creating new relationships that helps families to feel more confident in environment.</p> <p>Operators provided new methods of approach and new skills for the sport trainers who work with people with disability.</p>

## 11. NOT PREDICTABLE ACHIEVED RESULTS – (please describe)

<b>For:</b>	<b>Description</b>
<b>People with disability (TBI or SCI)</b>	In the framework of the project it was not planned to establish close groups between clients and parents. At the end of the project there were 2 groups of 2 families and their son's and one group of 3 clients that created close relationship. It means that communication is one of the most important issues in people awakening after coma life.
<b>Caregivers</b>	Caregivers find new aspects in communication with their children; Caregivers joint close relationships between families
<b>All together</b>	They start to be more visible in the society and social events, start to share actual information concerning rehabilitation, communication learning opportunities

<b>For:</b>	<i>Description</i>
<b>Operators</b>	Find new ways of support and motivation in rehabilitation process working together with the family (egz. Common games, common exercises).

**12. PLEASE DESCRIBE THE ACHIEVED RESULTS (please describe)**

<b>For:</b>	<i>Description</i>
<b>People with disability (TBI or SCI)</b>	<p>For the first time when patients came to the center of Hypotherapy they were uncommunicative, reserved and unsociable. However, already after the first hippotherapy sessions patients became more courageous, few minutes after they had got up on the horse they would start to communicate, make jokes. Soon caregivers began to notice their children emotional changes and were very happy about them. Beginning with the third session the trunk control and balance while sitting on the horse were evidently improving, a sitting position improved, the spasticity of the left side of the body while riding a horse decreased. Patients were glad about the changes in his everyday life, they stated that the evenings were different, coming back home after a hippotherapy session they felt more relaxed, they would overcome unpleasant thoughts and control they anger more easily. The motivation to “stand up and go” was increasing. During a hippotherapy session they and caregivers got acquainted with other participants of the research, exchanged the contacts, communicated not only at hippotherapy centre but also at another time.</p> <p>During kinesitherapy sessions patients motivation was also increasing, they were striving to independently perform tasks, were motivated. They paid much attention to the tasks that were focused on a certain result, to “reach”, “grip”, “push”, “move” a thing (a ball, a cup, etc.) with the left hand. These exercises were performed at the end of the sessions.</p> <p>The emotional condition were improved. Patients and caregivers has become more cheerful, shared they smile and impressions more often, willingly communicated, anger outbursts have become less frequent.</p>
<b>Caregivers</b>	<p>We realized that when parents and clients are involved into the activity that they like, they don't mind time, and want to continue activities longer than 30 min.. Talking about hypotherapy they ask to organize 1 hour session instead of 30 min. It was interesting to see how parents react on the clients wish to continue hypotherapy: they were relaxed and happy looking at their relative who demonstrated positive emotions. Many parents pointed out that such view is the best reward for their attempts. The view of happy son (daughter) is rare in family's everyday routine.</p> <p>We find out that during hypotherapy sessions parents expressed with to be together in riding field and they promise to talk with specialists later.</p> <p>1. Parents taking care about their adult children awakening from coma live in the situation of permanent stress state that reflects and influences communication processes within all family members. At any age the situation of child's disability, even if the child is already a young adult, provoke experiencing long-term stress for parents. Older parents experienced more stress (in eight cases) than younger ones.</p>

<b>For:</b>	<i>Description</i>
	<p>2. It was revealed that parents have no particular ways to cope with stress. Mostly they are connected with everyday life routine. Cultural activity was mentioned more often than other ones as a way to cope with stress for both women and men. Traveling reflects a couple's need to change everyday routine, experiences and different emotional situations that could help to cope with problems.</p> <p>3. Couples use different ways to solve communication problems in the family. The respondents indicated three categories of communication: constructive dialogues, way of persuasion, ignoring communication problems. Most of the respondents mentioned the way of persuasion in the solving of communication problems in a couple's interrelationship.</p>
<b>All together</b>	<p><b>The main outcome</b> is the improvement of disease awareness about his/her relative and prevention of symptoms associated with physical tiredness; development of interrelations and social inclusion; improvement of the quality of physical health.</p>
<b>Operators</b>	<p>Hypotherapy as significant sport method in rehabilitation of social skills and physical improvement of patients after brain and spine cord injury.</p>

