Supplementary table 1 Involvement activities

	PUBLIC INVOLVEMENT		ІМРАСТ		
Activity	Level of	Study level	Competencies	Behaviour	Daily life
~ .	involvement		, awareness		
Co-creation					
workshop: information about				Shared goals	
study design, data				Framework	
co-analysis,		Study design	Appreciation,	conditions	
music and		Stady design	perspective	Shared vision	
exercise co-				Initiatives	
selection, and co-					
writing of articles					
Co-preparation of	T		S -16 - ff	Shared goals	
focus groups and	Involve, collaborate		Self-efficacy	Shared vision	
interviews	conadorate		Knowledge about needs	Co-design	Research
			about needs	initiatives	quality
Co-recruitment of					Practical
participants for		Data collection	Motivation	Shared vision	use
focus groups and				Shared goals	Meaning
interviews				<u> </u>	Network
Co-conduct of interviews and			Self-efficacy	Shared goals Shared vision	
focus groups			Knowledge	Co-design	
locus groups			about needs	Initiatives	
Co-development	Consult	Research	Self-efficacy	Shared goals	-
of the exercise	Involve	question	Appreciation	Shared vision	
programme and	Collaborate	Study design	Competencies	Shared	
co-selection of	Own	Data inter-	Motivation	ownership	
suitable music		pretation	Information	Co-design	
			Perspective	Initiatives	
			Knowledge		
			about needs		
Co-development	Consult		Self-efficacy	Shared goals	
of first drafts	Involve		Appreciation	Shared vision Shared	
(videos) of the exercise	Collaborate Own	Research	Competencies Motivation	ownership	Domutation
programme	Own	question	Knowledge	Co-design	Reputation Research
programme		Data inter-	about needs	Initiatives	quality
Co-creation of	Involve	pretation	Self-efficacy	Shared	Network
the exercise	Collaborate	1	Appreciation	ownership	Meaning
programme	Own		Competencies	Co-design	Practical
(dance-part)			Motivation	Initiatives	use
Co-evaluation of	Consult	Research	Information	Shared goals	
the exercise	Involve	question	Perspective	Shared vision	
programme	Collaborate	Study design	1 or opposition		

		Data collection	Knowledge about competencies Knowledge about needs	Shared ownership Co-design Initiatives	
Co-analysis of data from interviews and focus groups	Inform Consult	Research - question Data analysis	Appreciation Motivation Information Perspective Knowledge about needs	Framework conditions Shared goals Shared vision Co-design	Reputation Research quality Practical use
Co-refinement and co-analysis of exercises and music selection	Consult Involve Collaborate Own		Self-efficacy Appreciation Competencies Motivation	Shared goals Shared vision Co-design Initiatives	Reputation Research quality Practical use Network
Active involvement in video production: video recording of the dance part; conducting interviews to guide the exercise performance and provide information on safety aspects; supporting the organisation	Consult Involve Collaborate Own	Research question Study design Data inter- pretation	Self-efficacy Appreciation Competencies Motivation Information Perspective Knowledge about needs	Framework conditions Shared goals Shared vision Shared ownership Co-design Initiatives	Visibility Reputation Research quality Network Meaning Practical use
Co-creation of posters for scientific conferences	Inform Consult Involve	Study design Data analysis Data inter- pretation Dissemi- nation of results	Self-efficacy Appreciation Motivation Information	Shared goals	Visibility Reputation Research
Co-presentation of scientific posters at events (World-MS-day, OIS-Zam Meeting)	Consult Involve Collaborate Own	Appreciation Co-d	Shared vision Co-design Initiatives	quality Network Meaning Practical use	

Co-organising closing events including the co- creation of flyers, posters, or presentation, and co-presentation at the events	Inform Consult Involve Collaborate Own	Study design Data Inter- pretation Dissemi- nation of results	Knowledge about needs Motivation Information Perspective Knowledge about needs Self-efficacy	-	
Co-writing articles for MS patient magazine 'Neue Horizonte'	Collaborate Own	Study design Dissemi- nation of results	Self-efficacy Appreciation Competencies Motivation Information Perspective Knowledge about competencies Knowledge about needs	Shared goals Shared vision Shared ownership Co-design Initiatives	
Participating in focus groups/interviews	Inform Consult	Research question Study design Data collection	Self-efficacy Appreciation Competencies Motivation Information Perspective Knowledge about needs	Shared goals Shared vision	Research quality Network Meaning Practical use
Giving interviews for MS magazines, social media, and radio	Involve Collaborate Own	Dissemi- nation of results	Appreciation Motivation Information Knowledge about needs	Shared goals Shared vision Shared ownership Co-design Initiatives	Visibility Network Meaning Practical use