

Logic model for a persistent and disabling low back pain self-management program designed to foster sustainable return to work

Ultimate goal: Foster the sustainable return to regular work of workers following long-term sick leave due to persistent and disabling low back pain



General objective: Foster the self-management of the workers' symptoms and disabilities in order to meet their job's requirement while staying healthy.



Intermediate objective: Perform a problem-solving process in order to maintain the workers' margin of maneuver.



Specific objectives

1. Foster a representation of the workers' health condition that allows them to apply effective coping strategies

1.1 Foster the self-assessment of the workers' representation of their health condition

1.2 Facilitate, by the workers', the internalization of a coherent representation of their health condition



2. Foster the planning of meaningful objectives and implementation of appropriate actions by the workers.

2.1 Set objectives that are measurable in time and consistent with their representation of their health condition and life goals

2.2 Facilitate the workers' identification of appropriate actions that will enable them to achieve their objectives



3. Foster appropriate use of personal, material and organisational resources by the workers

3.1 Facilitate the identification of appropriate and accessible resources by the workers

3.2 Foster the use of resources, by the workers, designed to support the adoption of effective coping strategies, in light of their pre-defined objectives



4. Foster the assessment, by the workers, of the outcomes of their actions

4.1 Facilitate the feedback process of the actions taken by the workers

4.2 Facilitate the modification, by the workers, of ineffective coping strategies, in light of their pre-defined objectives



Components

Assessment

Intervention

Activities and tasks in a persistent low back pain self-management program designed to support sustainable return to work

Specific objective	Sub-objective	Activities	Tasks	Component	Suggested resources
<p>1. Foster a representation of the workers' health condition that allows them to apply effective coping strategies</p>	<p>1.1 Foster the self-assessment of the workers' representation of their health condition</p>	<p>Completing a self-administered questionnaire</p>	<p>Assess:</p> <ul style="list-style-type: none"> ○ Representation of the workers' health condition as it relates to: <ul style="list-style-type: none"> ▪ Identity ▪ Causes ▪ Consequences ▪ Phase (acute, subacute, chronic) ▪ Perceived control over their condition (perceived self-efficacy and treatment efficacy) ○ The workers' perception of what health means (healthy lifestyle) ○ The workers' work disabilities ○ The workers' knowledge of pain in the context of persistent low back pain <p>Identify the factors that facilitate and hinder a functional representation of their health condition</p>	<p>Assessment</p>	<p>User portal</p> <p>Questionnaire on illness representation</p> <p>Tools for assessing persistent pain and disabilities (e.g., SBST, QRIT)</p>
	<p>1.2 Facilitate, by the workers', the internalization of a coherent representation of their health condition</p>	<p>Watching short educational videos, using audio-visual supports</p> <p>Reading texts</p> <p>Participating in interactive games</p> <p>Doing quizzes and exercises</p>	<p>Identify the components of the workers' representation that do not promote effective adaptation:</p> <ul style="list-style-type: none"> ○ Neuroscience of pain in the context of persistent low back pain ○ Modulation of pain by cognitive-affective factors ○ Management of potential recurrence factors associated with low back pain ○ Importance of healthy lifestyle habits related to low back pain ○ Their role and how they function in the compensation system ○ The influence of contextual factors on their work disabilities 	<p>Intervention</p>	<p>Tailored educational resources related to ICTs:</p> <ul style="list-style-type: none"> ○ Short videos ○ Audio-visual supports ○ Texts ○ Interactive games ○ Quizzes ○ Exercises ○ Case studies ○ Role-plays

Activities and tasks in a persistent low back pain self-management program designed to support sustainable return to work

Specific objective	Sub-objective	Activities	Tasks	Component	Suggested resources
2. Foster the planning of meaningful objectives and implementation of appropriate actions by the workers.	2.1 Set objectives that are measurable in time and consistent with their representation of their health condition and life goals	<p>Completing a self-administered questionnaire</p> <p>Reading texts (e.g., example of objectives)</p> <p>Doing exercises</p> <p>Writing down a list of objectives</p>	<p>Assess:</p> <ul style="list-style-type: none"> The workers' pre-defined objectives in light of their health condition The workers' perception of the objectives of a self-management program and its role in supporting their stay-at-work process <p>Identification of meaningful, realistic and measurable objectives by the workers</p> <p>Foster the prioritization of objectives by the workers</p>	<p>Assessment</p> <p>Intervention</p>	<p>Objective self-exploration questionnaires: What is most important to you? Have the actions you have taken helped you achieve the intended goal?</p> <p>Examples of resources:</p> <ul style="list-style-type: none"> Texts related to the planning of objectives Exercises that involve developing objectives Examples of concrete objectives
	2.2 Facilitate the workers' identification of appropriate actions that will enable them to achieve their objectives	<p>Complete a self-administered questionnaire</p> <p>Watch educational short videos</p> <p>Read texts</p> <p>Participate in interactive games</p> <p>Perform exercises</p> <p>Perform formative quizzes</p>	<p>Assess:</p> <ul style="list-style-type: none"> The workers' actions they have taken to move closer to achieving their objectives The adequacy between the actions taken by the workers and their achievement of their objectives The workers' perceived self-efficacy and their level of motivation as it pertains to achieving their action plan. <p>Support the worker's implementation of an action plan aimed at applying diversified adaptation strategies to promote better self-management in his daily life:</p> <ul style="list-style-type: none"> Negative emotions Behaviors and representations that do not promote adaptation Physical symptoms <p>Promote effective communication of the workers' signs and symptoms to the people around them (friends, family, work environment)</p>	<p>Assessment</p> <p>Intervention</p>	<p>Questionnaire aimed at inducing the workers to reflect on the actions they have taken and the means they have used to move closer to their objectives</p> <p>Tailored educational resources related to ICTs:</p> <ul style="list-style-type: none"> Short videos Audio-visual supports Texts Interactive games Quizzes Exercises Case studies Role-plays

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3. Foster appropriate use of personal, material and organisational resources by the workers	3.1 Facilitate the identification of appropriate and accessible resources by the workers	<p>Completing a self-administered questionnaire</p> <p>Reading texts</p> <p>Watching short educational videos</p>	<p>Assess:</p> <ul style="list-style-type: none"> Internal and external resources currently used by the workers to take actions The workers' knowledge of the various resources available for their health condition <p>Identification of the resources potentially available to the workers, depending on their social and work context (external resources)</p> <p>Identification of the workers' own personal resources (communication skills, assertiveness) that they can put to use</p>	<p>Assessment</p> <p>Intervention</p>	<p>Questionnaires related to available external resources and to their level of knowledge</p> <p>Questionnaires on their own personal resources:</p> <ul style="list-style-type: none"> Communication skills Assertiveness, ability to set limits
	3.2 Foster the use of resources, by the workers, designed to support the adoption of effective coping strategies, in light of their pre-defined objectives	<p>Watching short educational videos</p> <p>Reading texts</p> <p>Participating in interactive games</p> <p>Doing quizzes</p> <p>Participating in case studies, role-plays</p>	<p>Education on the proper use of the different resources available to the workers (advantages and disadvantages):</p> <ul style="list-style-type: none"> Rationale behind their use How to use (dose, frequency, intensity, when) <p>Support the decision-making process of the workers to select the appropriate resources</p> <p>Facilitate the use of communication and negotiation strategies by the workers with the people around them specifically in a work context (friends, family, employer, colleague)</p>	Intervention	<p>Tailored educational resources related to ICTs:</p> <ul style="list-style-type: none"> Short videos Audio-visual supports Texts Interactive games Quizzes Exercises Case studies Role-plays

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4. Foster the assessment, by the workers, of the outcomes of their actions	4.1 Facilitate the feedback process of the actions taken by the workers	<p>Reading texts (e.g., examples of possible questions to ask to gather feedback)</p> <p>Filling out a logbook</p> <p>Filling out a visual analog scale (VAS)</p>	<p>Assess:</p> <ul style="list-style-type: none"> ○ The workers' level of satisfaction in light of the results of their actions. ○ The workers' environment in order to obtain constructive feedback on the maintenance of their margin of maneuver. ○ The workers' evolution of their self-management skills through time. <p>Education on the benefits and usefulness of assessing the effects of the workers' self-management strategies in terms of achieving their objectives</p> <p>Promote the documentation of the effects of the actions taken by the workers to achieve their objectives</p> <p>Facilitate the critical assessment of the effectiveness of the actions taken by the workers in terms of achieving their objectives</p>	<p>Assessment</p> <p>Intervention</p>	<p>Tailored educational resources related to ICTs:</p> <ul style="list-style-type: none"> ○ Short videos ○ Audio-visual supports ○ Texts ○ Interactive games ○ Quizzes ○ Exercises ○ Case studies ○ Role-plays ○ Logbook ○ VAS
	4.2 Facilitate the modification, by the workers, of ineffective coping strategies, in light of their pre-defined objectives	<p>Watching short educational videos</p> <p>Reading texts</p> <p>Participating in case studies</p> <p>Doing exercises</p>	<p>Support the workers' autonomy in choosing the actions to take</p> <p>Exploration of alternative actions that the workers can achieve that might allow them to move to achieving their pre-defined objectives</p> <p>Optimization the workers' ability to assess the level of effectiveness of the actions chosen</p>	Intervention	