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Employee Wellbeing. Vocational Activation Programme – Case Study of the “Efficient Worker” Project

Creating an inclusive organisational culture in the work environment is an increasingly current and even required process. From the point of view of implementing HR policies in the work environment, a catalogue of “good practices” reflecting the organisation’s social (human-related) goals is required. However, the true indicator of an employee’s wellbeing is his or her both mental and physical condition – mutually affecting each other. Individuals with impaired performance are at risk not only of reduced effectiveness at work, but also of poorer wellbeing. The paper will be based on the documentation of the project entitled “Efficient Worker – Measures for Persons with Musculoskeletal Dysfunctions Making It Difficult to Perform Work” co-financed by the European Union from the resources of the European Social Fund, the beneficiary of which is the Prof. Bogusław Frańczuk Małopolski Szpital Ortopedyczno-Rehabilitacyjny in Kraków. The discussion is accompanied by the objective of the program description as well as a practical objective, which constitutes an attempt to assess the correlation between the achieved wellbeing of the Project Participant (the employee returning to work) and the health effects of rehabilitation.

Keywords: inclusive organisational culture, musculoskeletal dysfunctions, occupational medicine, organisation

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Change one thing, change everything.
“The Butterfly Effect”

Introduction

The organisations to which today's companies and businesses belong consist in complex organisations that live, grow, and undergo constant change. A “healthy organisation” improving its business operations ensures that its employees are not only employable and able to meet the basic needs of life, but that the ecosystem of the working environment is maintained at a high qualitative level. Currently, the importance of an inclusive organisational culture, an important space for creating employee wellbeing, is being emphasised. This means not only taking care of an exceptional atmosphere, a well-organised workplace and a formulated wellbeing strategy. All activities under the “inclusive culture programme” should provide employees with balance in four dimensions: social, work activity, improvement and maintenance of health, work-life harmony. Wellbeing is related to all the areas mentioned above, and indicators of the state perceived in such a way consist in happiness, satisfaction, and a sense of quality of life. Any organisation that promotes the wellbeing of its employees is thereby investing in its human resource potential. The benefits resulting from having an impact on an organisation's social objectives – an increase in their happiness and job satisfaction, better mental and physical health of employees – means that business objectives are met more quickly. An employee constitutes the highest cost in an organisation, and therefore it is essential that he or she constitutes an investment that balances out with profit. Therefore, it is important for employees to feel good in their environment, to feel a sense of satisfaction, contentment, and even a sense of happiness at work – referring to Martin Seligman's concept. Investing in the management of workload, both in the physical and mental aspect, valuable enriching relationships, a sense of meaningful work, positive emotions, the employee's ability to achieve goals – these are the five dimensions of wellbeing that determine the engagement in the work process. This constitutes one of the contemporary challenges for an employer – the health and wellbeing of the employee. When achieving an organisation's social objectives, attention should be paid to the individualised needs of an employee as well as adequate benefits. Long-term value for business goals will only come from providing solutions that foster a culture of openness, good communication and counteracting workload.

Healthy worker – healthy workplace project

The person-work-organisation triad stands for a holistic view of social and business goals as well as the ability to combine the private and professional spheres. The idea of an inclusive organisational culture and wellbeing is no longer just functioning as a declarative action, but progressively implemented good practice. Even though defining “employee wellbeing” is just as difficult as “individual wellbeing” and we still cannot refer to a clear definition (Jaworek 2021: 25), there is no doubt that wellbeing is now, and will continue to be in the future, a significant trend and subject of interdisciplinary research. The position of a wellbeing specialist, not yet obvious today, may soon be included in an organisation’s job catalogue. The reasons for this are social and ethical (cf. Mamak-Zdanecka 2020), but also purely economic and business (Dzięgielewski 2022). An employee in poor health, with poor wellbeing, will not be motivated to think about professional success, company profits, as he or she is thinking first and foremost about his or her own health. Stress is of course at the top of the list of threats to mental and physical wellbeing, especially when it is prolonged. Stressors may include physical and psychological factors understood as an excess of stimuli in the work environment, physical work overload, quantitative and qualitative overload of work tasks, lack of attention to ergonomics at the workstation, such as: forced static posture during long hours of work, lack of adaptation of stress-relieving methods and tools to the psychophysical capabilities of an employee, as well as insufficient minimisation of fatigue and stress reduction (Jaworek 2021). The human body should experience neither maximum load (overload) nor underload (Erdmann 2016: 50).

Creating an effective and supportive workplace allows employees to develop and achieve a state of what Mihály Csíkszentmihályi calls “flow” (1996). A report published by the Roche pharmaceutical company concerning the work and wellbeing of its employees is one of the voices in the discussion on employee absenteeism and presenteeism caused by poor health and wellbeing. Workers in poor health are twice as likely to take sick leave, have 25% higher levels of presenteeism, i.e. significantly lower engagement at work, and three times higher exposure to stress, in contrast to workers in good health. Roche has implemented activities in more than 140 sites in 80 countries to support the *Live Well – Find Your Balance* initiative, investing in the wellbeing of its employees (Career Trends 2019: 3). The problem of sickness absence is very complex, and the phenomenon of presenteeism is at the opposite end of the spectrum. The employee remains at work, but his or her presence is characterised by low commitment and low work efficiency, due to the illness and often accompanying perceived pain. Employers are already aware that the health problems of their employees stand not only for the cost of absenteeism and

job replacement, they also mean presenteeism, resulting in reduced efficiency and quality of work.

The idea of wellbeing, introduced by Martin Seligman in terms of the concept of positive psychology, refers to the mental, physical, and social state in experiencing comfort and autonomy, a sense of meaning, security and support in the workplace (see Seligman 2005). The concept of wellbeing has significantly entered the vocabulary of the work and business environment as a two-way relationship between health and work (Fig. 1). Such an understanding of wellbeing was proposed by Gordon Waddell and Kim Burton in their publication *Is Work Good for Your Health and Well-Being?* (2006: 2).

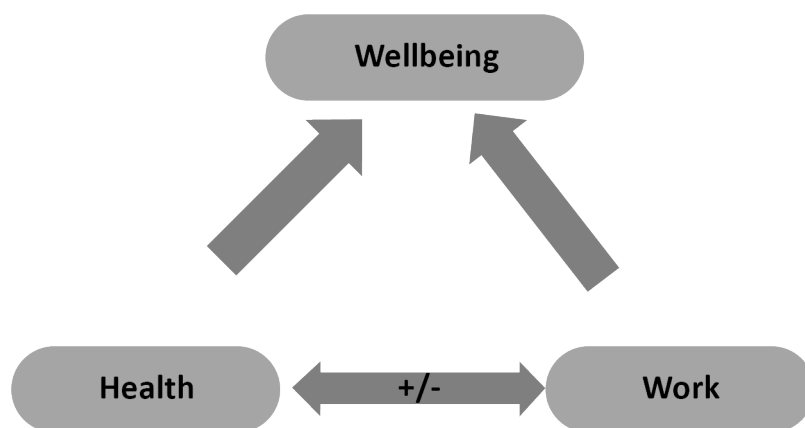


Figure 1. Possible links between health and work with wellbeing in terms of beneficial and negative effects

Source: own elaboration based on: (Waddell, Burton 2006).

Wellbeing is presented in definitions concerning health in a similar way but in a broader dimension. The 1998 Declaration of the World Health Assembly (WHA) maintains that health, and its highest attainable standard, constitutes one of the fundamental rights of every human being. It is a confirmation of value, dignity, equal rights and responsibilities, as well as shared responsibility. Priorities for action concerning health promotion already identified in 1997 in the Declaration of the International Conference on Health Promotion in Jakarta referred to the actions of the public and private sector setting out directions such as: avoiding harmful activities to people and the broadly understood environment; ensuring the safety and security of a worker in the work environment; investing health and health promotion (Karski 2023: 253–256), among others.

The wellbeing of an individual should be considered in a multifaceted way: in psychological, social, and physical dimensions. However, wellbeing is not perceived

just as treating pre-existing illnesses or compensating for excesses and impairments, but as promoting health (Karski 2011: 9). We find this notion in the World Health Organization (WHO) definition of health, contained in the Constitution of the WHO signed and ratified on 22 July 1946 in New York. The concept of health as the most important analytical category in medical care has been defined as the health of an individual rather than the absence of a disease:

Health constitutes a state of complete physical, mental, and social wellbeing, not merely the absence of a disease or infirmity. Taking advantage of the highest attainable health constitutes one of the fundamental rights of every human being regardless of race, religion, political belief, economic or social conditions (WHO 2020: 1).

It should be emphasised that issues concerning health and coping with illness have been treated as an experienced level of socio-cultural development since ancient times. According to ancient Roman philosophers, health and wellbeing, versus illness and ill-being, was determined by community-based variables and individual lifestyles, nutrition, work, and rest (Karski 2023: 9–10). Health and wellbeing are closely connected aspects, which implies a hybrid approach – focusing on mental and physical health. Wellbeing, or the lack of it, is not only a found state, but also a preceding state – in the employee’s cognitive, emotional, and executive spheres. As reported by the WHO, chronic illnesses are more and more often and employers are increasingly realising that looking after employee wellbeing is about both physical and mental health (*Career Trends* 2019: 2).

A science that is particularly focused on worker wellbeing consists in occupational medicine. This is an area of joint work between both occupational disease physicians and occupational and organisational psychologists with an interest in employee mental health and community-based conditions. Poland’s current system for collecting data concerning cases of occupational diseases (by classification of disease entities) and the socio-demographic variables determining them is the Central Register of Occupational Diseases. Data is presented in absolute numbers and incidence rates for individual disease entities per 100 000 working and 100 000 employed. The most recent published data for Poland for 2022 indicate 2637 cases of occupational disease (Świątkowska, Hanke 2023), with those of interest from the point of view of the analysed “Efficient Worker” project case study being chronic diseases of the peripheral nervous system and chronic diseases of the musculoskeletal system.

Diseases of the peripheral nervous system and diseases of the musculoskeletal system constitute a large group of diseases in occupational medicine referred to as overload syndromes (OS). They constitute a consequence of a number of factors, categorised as occupational risks, psychosocial, organisational, and individual factors

(Bugajska et al. 2007: 356). Occupational risks such as: forced body position – lack of natural posture when performing work, static effort, repetitive movements, localised mechanical pressure as in sitting and standing work, vibrations, unsuitable temperature and humidity, as well as the sum of overload and micro-injuries to these systems should be identified initially. The induced changes include “tendon lesions (e.g. de Quervain syndrome), enthesopathies (e.g. tennis elbow syndrome), bursitis, peripheral nerve compression lesions (e.g. carpal tunnel syndrome, tennis elbow syndrome), discopathies and others” (Bugajska et al. 2007: 356). The psychosocial factors include lack of satisfaction from work and a sense of agency, disturbance of social insecurity, job insecurity, as well as the stress of acquiring new skills. The group of organisational factors includes routinisation, habitual performance of tasks, lack of task delegation, and poor organisation of working time. The group of individual factors includes: age and gender structure, the body’s hormonal and metabolic balance, suffered injuries (Bugajska et al. 2007: 356).

Problems with forced posture and repetitive movements are at the forefront of occupational risks determining upper and lower limb overload syndrome – diseases of the musculoskeletal system and the peripheral nervous system. Currently, due to the changing work environment and its conditions, an employee spends approximately nine hours a day at a computer, while physiologically humans are “not made for sitting” (Soszyński 2019). The World Health Organization recommends weekly physical activity of at least 150 minutes of moderate-intensity exercise or 75 minutes of intense exercise. Moderate activity in the form of daily walking (4,000 steps) is recommended as health-promoting. In addition to prevention and care in the workplace, another issue consists in properly organising the workplace and its ergonomics (Soszyński 2019). The HealthDesk report (2019) states that nearly 80% of office workers in Poland suffer from pain and 50% of workers mention back pain, 30–50% shoulder and neck pain, and 35% headaches. The situation is similar in other European countries. According to data from the *OSH in Figures: Work-Related Musculoskeletal Disorders in the EU – Facts and Figures* report, current working conditions result in employees being less physically active and taking less care of their health, and pain problems due to work overload are recorded in all European work environments. According to findings published in the *Work-Related Musculoskeletal Disorders – Facts and Figures* report (EU-OSHA 2020: 16–18), health problems are declared by employees depending on the economic sector. Higher levels of musculoskeletal complaints are reported especially in sectors such as: construction, agriculture, industry, transport, healthcare, and education (EU-OSHA 2020: 19).

The general view of the state of occupational diseases is worrying, as the incidence remains high in the context of many years of observation. Health care constitutes knowledge and art of preventing diseases. In this context, the least

costly element of health promotion on the part of the employer is to invest in health education. “Health promotion is carried out by the people and with the people, not directed at the people or to the people” (Karski 2023: 256).

Taking into consideration the introduction to the topic of worker wellbeing, mental and physical health, the systematic classification of occupational diseases and their sources, what occupational medicine deals with – it is worth focusing on defining the aim of the research on the case study of the “Efficient Worker” project and the areas of applicability of the research conclusions. Many of the designed social measures for the wellbeing of an individual aim to implement behavioural change in people, e.g. that they benefit from health education and lifestyle change programmes, preventive screening programmes, rehabilitation, co-create an ergonomic work environment (reducing occupational risk factors), as well as co-create valuable relationships and positive emotions. Changing behaviour that requires unlearning habits is most often very difficult. It is not enough to tell an employee to smile, to exercise systematically, to eat healthily, to prevent illnesses instead of treating them later, not to just take painkillers, supplements, but to use specialist clinics. Therefore, choosing the “Efficient Worker” project as the subject of this research, due to its innovation, comprehensiveness, and personalised approach to the patient, constitutes a qualitative study that can provide an answer to the question of how an employee in the role of a patient perceives the offer of individualised health-promoting measures in physical and mental aspects – not declaratively, but practically, assessing the therapeutic effects on his or her own professional activity. The main objective of the research, based on project documentation made available by the Prof. Bogusław Frańczuk Małopolski Szpital Ortopedyczno-Rehabilitacyjny was to determine the medical and systemic effects as restoration of function in musculoskeletal disorders of Project Participants (PPs). The aim of the discussions in this article, based on the selected project case, is to notice the links between the facts and observed patterns and the applicability of the knowledge and skills learned from implementing and evaluating the “Efficient Worker” project, for creating good wellbeing practices and exemplifying them – vocational activation of persons with musculoskeletal dysfunctions.

Research procedure and selected methods

The inspiration for the research and this article consisted in the personalised rehabilitation programme for people with musculoskeletal conditions and identifying good practices that can have an impact on the wellbeing of a worker receiving support such as personalised rehabilitation for musculoskeletal conditions, resulting in a return to their work tasks. The “Efficient Worker” project, implemented at

the Prof. Bogusław Frańczuk Małopolski Szpital Ortopedyczno-Rehabilitacyjny in Kraków from 2018–2021, constitutes a unique undertaking with such a profile of medical rehabilitation and physiotherapy – in addition to the services available under the National Health Fund. In the course of the “Efficient Worker” project for the vocational activation of people with musculoskeletal disorders, people with an impairment or disability were covered by a comprehensive range of health-promoting measures. A key differentiator of the project consisted in the individual care of a highly qualified rehabilitation team for patients on an outpatient rather than hospital basis – due to the diagnosed degenerative changes and musculoskeletal injuries that hinder work performance. The programme covered 240 patients, qualifying people of various ages, representing secondary, post-secondary, and tertiary education, with a variety of occupations and employed by companies, institutions, or self-employed. The socio-demographic profile of the UP included the performed occupation, place of employment, membership of an ethnic minority, national minority, disability, assessment of favourable/unfavourable social situation, status of the person on the labour market at the time of entering the project, professional situation at the end of the project.

The main idea behind the research work on the documentation of the “Efficient Worker” project was to recognise the situation, how the project was implemented, with what assumptions, objectives, and outcomes, which allowed a reasonable decision to design the research in a paradigm for qualitative research, to which the case study method was subordinated (Yin 2015; Creswell 2013). By adopting a case study as the research strategy, a distinction had to be made as to whether the study would include one or more cases. Due to the specificity of the “Efficient Worker” project, it was correct to adopt a single case study, treating as an exploratory case, an action situation that has been outside the scope of empirical research to date, hence the descriptive and analytical approach here is exploratory (Yin 2015: 85). In the planned qualitative study, based on the case study method, the research questions were exploratory and explanatory. The significance of individualised rehabilitation and therapeutic care as good practice in health promotion activities – in building employee wellbeing – was cognitively interesting. At a greater level of detail, which of the project’s medical and educational procedures had a determining effect on decreasing pain and increasing PP’s level of fitness – thus greater psychological comfort, improved wellbeing, and a desire to return to work activities. In order to answer a research questions defined in such a way, it was necessary to refer to the qualitative and quantitative data of the documentation from the “Efficient Worker” – *Actions for People with Musculoskeletal Dysfunctions Hindering Their Work Performance*. Co-financed by the European Union from ESF funds as part of the Regional Operational Programme of the Malopolska Voivodeship 2014–2020, it was implemented in the city of Kraków and at the institution of the

Prof. Frańczuk Małopolski Szpital Ortopedyczno-Rehabilitacyjny in Kraków. The beneficiary of the project consisted in the already mentioned Małopolski Szpital Ortopedyczno-Rehabilitacyjny, and the ultimate beneficiaries were the Project Participants. Implementing the program took place between 1st September 2018 and 31st August 2021, with a final project completion date of December 2021. The study, with special ethical principles, was carried out on the premises of a medical facility, the outpatient rehabilitation department of the Małopolski Szpital Ortopedyczno-Rehabilitacyjny due to the need to protect the subjects of the study: the personal data records of the Project Participants, the clinical diagnosis, the applied treatment, and the individual rehabilitation progress assessment sheets. The research procedure consisted of a step-by-step collation and classification of the data. It also required going into the everyday reality of the situation (the course of implementing the rehabilitation program of the individual participants of the “Efficient Worker” project), giving space for interpretation of the observed, studied, and analysed social situations or events. It should be noted that analysing the data required going deep into a qualitative study – a quantitative study (the documentation analysed included a set of project outcome indicators in addition to a description of the condition diagnosed, procedures dissected). Evaluating the project in terms of the program’s key medical and social performance indicators resulted in extending the project from 31 August 2021 to December 2021.

The “Efficient Worker” project – quantitative and qualitative analysis

The main research question is how a personalised program of rehabilitation services (kinesitherapy, physiotherapy, therapeutic massage), aimed at reducing pain or, if possible, eliminating the cause of pain, enables the employee to return to work and thus to return to wellbeing. Additional questions (sub-questions), include assessing whether the completed project may have an application value for employers and employees as an investment in health promotion and employee wellbeing. To what extent such a benefit may be of interest to employees and how to implement a rehabilitation and physiotherapy programme – in addition to the benefits of the offered “Medical Package”. The answer to the main question is provided by project-specific indicators, linked to measures such as: the Numerical Rating Scale (NRS), Activity Level Questionnaire, and the TIMED and GO test (TUG)³. Regardless of analysing the outcome indicators in the project, it is

³ Source of clarification: documentation of the “Efficient Worker” project. The TUG test – TIMED and GO – is an assessment of gait, mobility, and risk of falling. The procedure for conducting the test consists in taking a chair with a backrest (seat height at 46 cm). At the command “Start”, the test subject should: get up from the chair as quickly as possible, walk on a flat ground at a normal

important to evaluate the program by the patients themselves, in terms of their sense of satisfaction and care during implementing services of the prevention and rehabilitation program, restoring fitness and physical activity, reducing pain, but also changing previous habits and health-promoting behaviour.

Analysing the source materials for the 240 participants in the 2018–2021 project, we are provided, as an intermediary in the research process, with documents that reflect communication with individuals who, when they report to the project, have their own motivations, expectations, assessments of their own health and treatment outcomes. The qualitative data included in the project documentation, amounting to approximately 50 pages for each participant, is divided into five categories in the project database: socio-demographic data, proof of employment or self-employment, O-R Efficient Worker Hospital Treatment Information Sheet (including information concerning the patient's personal data, diagnosis, period of participation in the project, diagnosis of illnesses, applied treatment, kinesitherapy and physical therapy procedures, episodes, doctor's recommendations and discharge at the end of the therapeutic process), a questionnaire measuring physical activity of a PP, filled in at project entry and at the end of treatment, a sheet for individual assessment of rehabilitation progress (assessment of pain level, fitness, and physical activity).

After presenting the data of the descriptive structures, a “data game” (Yin 2015: 202) can be undertaken, building lists of the impact indicators of the undertaken therapeutic procedures and effectiveness from the point of view of the assumptions for the project. So let us take a look at some of the data obtained from the archived project documentation. The first constitutes a tabulation of the key indicators in the projection: product (point 1–2) and result (point 3), and specific indicators (point 4–8).

Table 1. Indicators of the project “Efficient Worker” – programme for professional activation of people with musculoskeletal dysfunctions from 2018 to 2021

Indicator name	Total	2018	2019	2020	2021
Number of people included in the health programme through the ESF	240 people	26	80	80	54
Number of people aged 50 and over covered with support in terms of the programme	72 people	6	24	24	18
Number of persons who started working or continued working after leaving the programme	128 people	13	43	43	29

pace for a distance of 3 metres, reaching the line marking the boundary, then, make a 180-degree turn, return to the chair again and sit down. The result of the test consists in the time needed to complete the task.

Table 1. cont.

Indicator name	Total	2018	2019	2020	2021
Number of people with a reduction in pain intensity based on the NRS scale – reduction in pain by at least 20% of Project Participants	48 people	6	16	16	10
	W (24)	3	8	8	5
	M (24)	3	8	8	5
Number of people found to have increased their level of physical activity – achieving a minimum level of physical activity in at least 50% of Project Participants and increasing the level of physical activity by at least 20% in at least 50% of Project Participants	120 people	13	40	40	27
	W (60)	6	20	20	14
	M (60)	7	20	20	13
Number of people found to have increased physical fitness – improvement in fitness in at least 20% of Project Participants	48 people	6	16	16	10
	W (24)	3	8	8	5
	M (24)	3	8	8	5
Number of people with an increase in knowledge concerning musculoskeletal disease prevention on the basis of a questionnaire on the level of knowledge of musculoskeletal disease prevention – an increase in knowledge concerning musculoskeletal diseases in at least 20% of Project Participants	48 people	6	16	16	10
	W (24)	3	8	8	5
	M (24)	3	8	8	5
Number of people satisfied with participating in the programme on the basis of a satisfaction survey and evaluation of the quality of services of Project Participants – at least 80% of Project Participants satisfied with participation in the programme	192 people	21	64	64	43
	W (96)	10	32	32	22
	M (96)	11	32	32	21

Source: Internal material. Documentation of the project “Efficient Worker” – programme for the vocational activation of people with musculoskeletal dysfunctions.

- The measurement of the output indicator was based on the register of participants on the Programme list, a statement submitted by the person, a certificate confirming pre-qualification including medical records – required diagnostic tests at the time of entry to the form of support.
- The measurement of the outcome indicator was constructed on the basis of employment data, measured up to 4 weeks after a Project Participant (PP)

had completed participation in the project. Whereas, specific indicators were linked to measures such as the Numeric Rating Scale (NRS), activity level questionnaire, and the TIMED and GO test (TUG).

- The measurement using the NRS numerical scale was very important for assessing the individual's health and the severity of pain. During the medical examination, each PP was asked at the beginning of participation and at the final stage to rate the severity of pain on an 11-point scale, where 0 means no pain at all and 10 means the worst imaginable pain. The measurement was carried out twice (in justified situations, e.g. prolongation of rehabilitation – three times).

Assessing the extent of physical activity measured by the activity level questionnaire the structure of the questionnaire covered three areas:

1. Light physical effort such as: walking min. 30 minutes, light gymnastics min. 15 minutes, other activities to be completed by the PP.
2. Moderate physical effort such as: Nordic walking min. 30 minutes, walking or jogging min. 30 minutes, intense gymnastics min. 15 minutes, cycling min. 30 minutes, gentle swimming min. 30 minutes, other activities to be completed by the PP.
3. Intense physical effort such as: running min. 30 minutes, cycling min. 30 minutes, intense physical exercise min. 30 minutes, intense swimming min. 30 minutes, other activities to be completed by the PP.

The Project Participants completed the “Physical Activity Questionnaire” on two occasions, specifying their activity on a weekly basis, which allowed the minimum and maximum activity levels of each individual to be assessed by correlating the multiple of weekly activity and the corresponding number of points for each level of effort. Measurement during the initial and final physiotherapy examination, allowed to confront the extent to which the four-week targeted rehabilitation had an impact on reducing pain, increasing physical activity, which should be a motivation to change habits and lifestyle. The adoption of achieving a level of physical activity, in at least 50% of PPs, and increasing the level of physical activity by at least 20% in at least 50% as an important criterion in the project constitutes a very good step towards correcting the habits of people with musculoskeletal conditions, but also thinking about a healthy lifestyle.

One of the activities included in the project, and mandatory for all PPs, was a series of two educational classes. The aim of the meetings was to raise awareness of how to “listen” to one's own body, how to change daily habits, how to correct one's posture while sitting at a desk at work for example, while performing various work activities, or even while using a smartphone. Kinesiotherapy and physiotherapy treatment with assigned procedures (among others, isometric, balance, and relaxation exercises were a key element) and completing the therapeutic condition,

in addition to the main goal of improving the general state of health, was to result in adherence to learned movement patterns, continuation of exercises according to the instructions received, and a recommendation for further rehabilitation.

Let us refer to another specific indicator of the already mentioned TUG test. To assess to what extent and for how many PPs the rehabilitation resulted in improving physical fitness – assuming an improvement of at least 20% – the means of measurement on two occasions at the initial and final physiotherapy examination was the TIMED and GO test (TUG) and the dynamometric measurement of global hand grip strength.

The “Individual Rehabilitation Progress Assessment” sheet for each PP included: tabulated data concerning pain assessment (by medical examination) according to the NRS, physical fitness assessment (physiotherapy examination) according to TUG, physical fitness assessment (physiotherapy test) – dynamometry test, and physical activity assessment (physiotherapy test) – questionnaire completed by the subject. For the purposes of rehabilitation effectiveness, the interpretation of a PP’s rehabilitation results is important. A detailed breakdown of the pain score scale by measurement using the Numeric Rating Scale (in the initial examination (NRS 1) and the final examination (NRS 2) for the individual years of implementing the project) shows the validity of the medical procedures and the manner of working with the patient. The data in the table illustrate the extent to which there was an improvement in the wellbeing of rehabilitated people, according to their own assessment (Table 2).

Table 2. PP assessment of pain as measured by the NRS numerical scale (at the initial examination (NRS 1) and final examination (NRS 2)

Year of implementing the project	Pain assessment (initial examination) NRS 1 Pain assessment (final examination) NRS 2	
	Yes (reduced discomfort)	No (no reduction in discomfort)
2018	24 PP	8 PP
2019	75 PP	10 PP
2020	71 PP	9 PP
2021	17 PP	1 PP
Year of implementing the project	Pain assessment (initial examination) NRS 1	Pain assessment (final examination) NRS 2
2018	point 9 (0 PP), point 8 (5 PP), point 7 (4 PP), point 6 (5 PP), point 5 (8 PP), point 4 (3 PP), point 3 (3 PP), point 2 (2 PP), point 1 (3 PP), point 0 (1 PP)	point 9 (0 PP), point 8 (0 PP), point 7 (3 PP), point 6 (1 PP), point 4 (3 PP), point 3 (8 PP), point 2 (4 PP), point 1 (6 PP), point 0 (5 PP)

2019	point 10 (2 PP), point 9 (1 PP), point 8 (7 PP), point 7 (12 PP), point 6 (12 PP), point 5 (17 PP), point 4 (12 PP), point 3 (3 PP), point 2 (1 PP), point 1 (2 PP), point 0 (1 PP)	point 10 (0 PP), point 9 (1 PP), point 8 (7 PP), point 7 (12 PP), point 6 (12 PP), point 5 (17 PP), point 4 (12 PP), point 3 (13 PP), point 2 (13 PP), point 1 (8 PP), point 0 (9 PP)
2020	point 10 (0 PP), point 9 (0 PP), point 8 (10 PP), point 7 (10 PP), point 6 (13 PP), point 5 (15 PP), point 4 (15 PP), point 3 (4 PP), point 2 (6 PP), point 1 (0 PP), point 0 (1 PP)	point 10 (0 PP), point 9 (1 PP), point 8 (1 PP), point 7 (4 PP), point 6 (3 PP), point 5 (4 PP), point 4 (21 PP), point 3 (16 PP), point 2 (13 PP), point 1 (12 PP), point 0 (6 PP)
2021	point 10 (0 PP), point 9 (1 PP), point 8 (2 PP), point 7 (3 PP), point 6 (5 PP), point 5 (3 PP), point 4 (3 PP), point 3 (1 PP), point 2 (0 PP), point 1 (0 PP), point 0 (0 PP)	point 10 (0 PP), point 9 (0 PP), point 8 (0 PP), point 7 (1 PP), point 6 (0 PP), point 5 (0 PP), point 4 (2 PP), point 3 (6 PP), point 2 (3 PP), point 1 (5 PP), point 0 (0 PP)

Note: The assessment of the level of the experienced pain is provided in the table as NRS scale scores and the level declared by PP at the initial examination and final examination, with notation in brackets.

Source: Internal material. Documentation of the project "Efficient Worker"...

By juxtaposing the results of the same examinations and tests at initial examination (NRS 1) and final examination (NRS 2), it is possible to assess whether there has been a reduction in pain and an improvement in mobility or active stabilisation. The tabulated data (Table 2) constitutes an illustration of reducing or not reducing pain among PPs, in each of the years of the treatment benefit. When interpreting the effects of the rehabilitation service, it is important to consider the individual predispositions of PPs, the general state of health and co-morbidities, as well as commitment and regularity especially in therapeutic gymnastics (kinesitherapy) and conditions of the social environment. Sometimes the treatment procedure was prolonged due to unsatisfactory results.

A requirement for documenting the quality of physiotherapy and kinesiotherapy services in the course of the program consisted in an anonymous PP satisfaction questionnaire, including categories of questions relating to: self-assessment of health status (for spine, shoulder, hip, knee joint, and other conditions), level of satisfaction with the course of rehabilitation, assessment of increase in physical activity, change in health status, as well as planned professional activity and continued employment. The feedback from PPs definitely constituted an acceptance of the quality and delivery of the treatment program. The assessment of the applied conservative treatment – based on the use of physiotherapy treatments aimed at: analgesic, anti-inflammatory, anti-oedema, and muscle relaxation, preventing

muscle atrophy, and improving blood supply – was at a high and satisfactory level. When answering the question concerning factors determining such positive opinions, it is necessary to emphasise the role of the rehabilitation team's individual work with the patient, constant access to medical and physiotherapist advice and educational measures to change habits in the treatment of one's own organism and health. Reviewing the effectiveness of the treatment implemented in the project for the 240 participants, let the satisfaction rate of participation in the rehabilitation program be a recommendation, which resulted in extending the program for the economic activation of people with musculoskeletal diseases from its planned completion in August 2021, to the end of December of the same year.

Summary

The qualitative research undertaken using the case study method acts as a contextual study. Analysing the project documentation focused on a deeper understanding of the case study, not only analysing quantitative data (indicators for the project), extending to a broader spectrum of qualitative data (medical history, social and occupational situation of the Project Participants, subjectively perceived complaints related to musculoskeletal dysfunctions, and sense of satisfaction with rehabilitation services). The project has not been, and will not be, repeated, but the good practices of the activities implemented as part of the project can be disseminated as a program funded in external medical facilities in favour of promoting employee health, and appreciated by the employees themselves as a valuable benefit offered – an investment in their own health.

A very important aspect of analysing the title case study consists in looking for the relevance of information and opinions concerning the “Efficient Worker” project in the context of other information and opinions coming from the work environment of contemporary companies, in terms of work-related wellbeing and its determinants. The experiences gained during the project and the developed good practices of various, personalised management in individualised patient care can become important practical knowledge for constructing health-promoting, preventive programs included in the “Employee Health Calendar”. The individualised manner of the rehabilitator and physiotherapist's work with the patient is central to the “Efficient Worker” project. It should be emphasised that participation in the outpatient rehabilitation program – a four-week programme delivered four days a week – did not entitle employed persons to sick leave and therefore did not result in absenteeism from the workplace.

The time-consuming analysis of the documentation concerning the rehabilitation service of 240 patients, entitles us to make the following conclusions. Firstly,

it is important to point out that externally funded prevention and rehabilitation programs constitute a very good and effective practical and educational support for health promotion, but not cyclical. Creating a shared value consisting in an openness policy and building employee wellbeing, benefiting the employer and employees – requires continuous and cyclical investment in health promotion and disease prevention programs leading to increased occupational illness and disability, absenteeism or at an earlier stage of presenteeism. Following the “Efficient Worker” project, thereby maintaining high standards of healthcare delivery, good practice can be built on existing capabilities within companies. This type of support consists in the funding of benefits for employees at external rehabilitation centres or through the benefit included in the personnel policies of companies, such as care at private medical centres. The level of acceptance of funded health care packages for employees and their families by beneficiaries, is at a high level. Unfortunately, this applies mainly to employees of large and medium-sized companies, to a much lesser extent to those working in small companies and public institutions. The real value of medical packages is greater the less efficient the public health service is. The “Efficient Worker” project in the context of employee motivation and engagement will constitute an example of rehabilitation care, the type of which can be classified as an external private medical service. The second conclusion concerns the relationship between musculoskeletal disorder prevention, medical care programmes and the risk of an increasing proportion of people moving from a state of incapacity to a state of disability. Osteoarthritis, rheumatic diseases, osteoporosis, and spinal diseases, most commonly in the diagnoses of participants of the “Efficient Worker” project, run a slow course, initially giving little pain symptoms. Therefore, diagnosing the condition, implementing preventive treatment, occupational and vocational therapy, sensitising lifestyle changes, and ergonomic prevention in the workplace are very important. Diseases of the musculoskeletal system are costly, not only for the patients themselves, but also for the companies with employees who are sick and on sick leave. The least costly for employers seems to be to offer participation in “knowledge days” with advice from doctors and rehabilitation specialists; to pay for subscriptions, but to actively take advantage of external leisure centres or to equip their own premises with simple rehabilitation equipment. Musculoskeletal disorders cannot be cured with a pill and good advice, they are serious and can lead from inability to disability.

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