Editorial

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Work modification as a treatment for low-back pain

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Work modification as a treatment for low-back pain

Work modification is considered as an essential element in enhancing return to work (RTW) among persons with musculoskeletal problems (1) although systematic reviews have called for more studies (2) and pointed out that the net gain in sickness absence days has been only modest and economic effects uncertain (3). Loisel and his co-workers (4) showed for the first time that an occupational intervention – and especially an occupational intervention combined with a clinical intervention – was associated with a faster RTW compared with clinical intervention alone or usual care. The developed Sherbrooke model has been tested with a randomized controlled trial (RCT) in the Netherlands. Workers sick-listed for 2–6 weeks due to low-back pain (LBP) were first randomized into a workplace intervention or usual care, and those who had not returned to work by 8 weeks were further randomized to graded activity or usual care. Workplace intervention was shown to enhance RTW, whereas graded activity did not (5). Loisel has suggested that the subacute phase of low-back disability is the "golden hour" for prevention of further disability, when unnecessary measures can be avoided and focus can be placed on those with risk for prolonged disability (6). Van Duijn et al (7) calculated the potential gain in sickness absence days and the cost-benefits of hypothetical interventions based on information of RTW rates and effectiveness of various types of interventions. They concluded that only low-cost and quickly administered interventions (eg, workplace modifications) have the potential to be cost-beneficial at an early stage of disability, whereas the optimal time window for more complex interventions would be 8–12 weeks (7).

Currently many healthcare providers agree that the Sherbrooke model has a sound basis. However, refraining at an early stage of disability from larger diagnostic procedures to arrive at a specific diagnosis at tissue level and medication believed to cure or alleviate a disease, and instead providing suitable workload through work modification to prevent further disability has not yet been adopted into medical practice. Prescribing work modification as a treatment is not straightforward either. In this issue of the *Scandinavian Journal of Work Environment & Health*, the Fassier et al paper (8) looks at the barriers and facilitators in the implementation of the Sherbrook model with a qualitative approach. Representatives of the healthcare, health insurance, and the workplace systems each identified barriers and facilitators that were structured in their external, organizational, and individual context. The authors note that, due to the existence of barriers at multiple levels (from workplace to broader systems), interventions that are limited to one particular level are unlikely to be successful. They draw attention to the importance of a systems approach in RTW interventions in order to address the interplay between local behavior and broader structural conditions. The result is that the implementation of the model is discussed in detail, demonstrating well the complexity of the issue and all phases where the implementation may fail.

The healthcare providers – paid by time or "piece-rate" have to decide on a trade-off between diagnostic examinations and documentation, on the one hand, and searching and discussing solutions at the workplace, on the other. Adopting this kind of social role may be felt as a proper professional role for some but not all, and it may come at a cost to physician income. For the health insurance system, there is the challenge of keeping on track in order not to lose the appropriate time window for potentially effective interventions. At the workplace, crucial aspects are having enough competence in ergonomics and policies of work accommodation, providing responsibility, and maintaining well-functioning interpersonal collaborations.

Goodwill and trust at all levels can facilitate RTW interventions (9). A component of achieving these conditions is understanding and acknowledging the roles and efforts of key individuals involved in the RTW process. For instance, the hidden but important role of co-workers in the success or failure of

RTW is increasingly recognized at the workplace level (10, 11). An ongoing challenge to communication between stakeholders at various levels (eg, workplace, healthcare, insurance) is the privacy legislation common across jurisdictions that guards different parties from accessing medical information about the worker. Workers require privacy; at the same time, incomplete information for key decision-makers, such as workplace managers, can lead to misdirected rehabilitation approaches, especially when health conditions (such as poor mental health or chronic pain) are not immediately visible. As suggested by Fassier et al, patient disclosure is a practical solution implementable within current conditions. This also calls for good will and trust as it requires engaging the patient in planning the RTW process in a way that they feel confident about the procedural fairness with which their information will be handled by RTW parties (12, 13). In workplaces with rapid turnover of workers and supervisors, external expert advisers may be useful for providing workplaces with consistent and continuous support with RTW planning and processes (14).

National health insurance and occupational legislation can support efforts to organize work modifications and enhance RTW. Indeed, changes have been made in the national legislation in several countries. For instance, the possibility to work part-time for a restricted period due to health reasons has existed in some Nordic countries for several years, and this has been recommended as the first option when considered as a safe alternative by the medical assessment in some of these countries. Assessments of the effects of partial sick leave have in general concluded that it enhances RTW and is well-received by its users (15). In Finland, the introduction of partial sickness benefit (to compensate for earnings losses due to part-time sick leave) was made as late as 2007. Assessed as a quasi-experiment with difference-in-differences and propensity score analyses, the use of partial sickness benefit was associated with a considerable increase in work participation (16). In Denmark, a national RTW program was launched in 2008, including provision of a tailored and multidisciplinary program with a RTW coordinator and extensive support for persons with work disability lasting >8 weeks and poor perspectives to resume work within the next 3 months. An RCT assessing the effect of this program in three municipalities found it to be effective in one but not the other municipalities (17). Similarly, the Norwegian Inclusive Working Life Program, taking place for the first time in 2001, was not found to reduce the overall long-term sickness absence rate in companies that had adopted the agreement (18). These somewhat contradictory results may indicate that decisions to prescribe sick leave or look for RTW alternatives may not be easily changed by legislation. Moreover, such legislation may require changes in attitudes among several stakeholders – especially those at the workplace – to be implemented in a way that bring about the expected result. A beginning point may be at the level of health policy changing how the work of physicians is organized and compensated so that incentives to participate in RTW processes are encouraged.

The development and testing of the efficacy of the Sherbrooke model has represented a new way of thinking in disability prevention associated with LBP, putting forward the importance of the workplace context. At the same time, the role of medication and many other forms of conservative therapy as well as surgery have been redefined. This has resulted in revolutionary changes in the prevention and treatment of LBP, introducing work modification as both a preventive and therapeutic tool. LBP is multifactorial and can only partly be prevented. Preventing consequences of LBP (eg, work disability) has proven to be challenging – but rewarding when successful.

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