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Occupational Medicine in Taking over Work Injuries from Family Practice – A One-Year Follow-Up

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A B S T R A C T

Occupational medicine has taken over from Family practice the treatment of work injuries and occupational diseases in the Republic of Croatia since January 1, 2008. The reason was too many long-lasting sick leaves which general practitioners were unable to curb adequately. The research objective was to show the results of the one-year follow-up of the carried out reform, i.e. the efficiency of Occupational medicine in the new function. The methods of data comparison and McNemar statistics were used of one-year follow-up in an Occupational medicine surgery that cares for 5800 employees in Littoral-Mountainous County. From 32 patients in February 2008, 30 work injuries and 2 occupational diseases, the overall number diminished in February 2009 to 13 patients with work injuries and no diagnosed occupational disease, $p<0.001$ for work injuries. Also the number of patients on sick leave over three months fell from 14 to 4. Occupational medicine has proved to be more efficient than Family practice in assessing sick leave. This does not mean that family practice, due to a number of reasons mentioned in the research, is of less importance. For the patient can always return to his general practitioner for further treatment, and sick leave if necessary, but not on the grounds of work injury and occupational disease.

Key words: *occupational medicine, family practice, sick leave*

Introduction

Sickness certification is a complex task requiring of the physician a very serious multidisciplinary approach[1]. It may cause a conflict between the physician and his patient. A complex assessment requires studying the functional status, mental abilities, but also the patient's social position[2]. The general practitioner is often in agreement with the patient, although the physician makes his assessment on the basis of the patient's condition while the patient makes a self-assessment regarding his job, which he thinks he is unable to cope with[3].

There are few cases in which general practitioner declines certification for sick leave[4]. The physician's personality, his attitude towards work and sick leave plays an important role in assessing ability for work. Depending on one's own view and experience, for some physicians' sickness certification causes a great burden, sometimes even a dilemma, while for some it makes no problem[5]. But each physician as a professional will base his assessment on probable functional limits in regard to the work place, that is to the assessment of medical factors rather than on somatic disorders claimed by patient[6]. The major problem in assessing temporary disability is in the relation between general practitioners and specialists such as orthopedists and surgeons[7]. It is most difficult to decide on temporary disability regarding work injury and occupational disease. So, in order to diminish the pressure on general practitioners, but also to decrease the number of unnecessarily lost working days the Croatian Institute for Workers´ Health Protection was founded, starting from January 1, 2008. Since then work injuries and occupational diseases have been in the domain of occupational medicine. Work injury is the injury that can be caused by direct and short mechanical, physical or chemical impact, sudden change of the body position or other changes in the body physiological condition if it is job related. Work injuries include also those occurring on the way to the working place and back[8]. The new Institute took over also the function of epidemiologi-

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cal monitoring of such injuries, based on international criteria[9]. In case of work injury or occupational disease all employees in Croatia have specific health protection provided by occupational medicine. During extended sick leave the workers are compensated also by other ways of help, e.g. reimbursements from basic and supplementary insurance, trade union funds and means from specific associations[10].

The research aims to show the one-year results of the change, i.e. the taking over the treatment and temporary disability assessment by Occupational medicine, which used to be in the domain of Family practice. The result of the change was tested by the duration of sick leave after the reform, i.e. by the number of working days lost due to work injuries and diagnosed occupational diseases. This was done by analyzing the situation in an average occupational medicine team in the Republic of Croatia in the course of one year.

Examinees and Methods

A one-year follow-up of sick leaves due to work injury and occupational disease was carried out in an Occupational medicine surgery in Rijeka, Littoral-Mountainous County that cares for 5800 employees.

Treatment and assessment of temporary disability in Croatia began in January 2008. Two months have been compared, February of 2008 and February of 2009.

Work injuries were confirmed according to the accepted definition established by Croatian Institute for Health Insurance of Workers´ Health Protection.

Results

In February 2008 there were 32 patients on sick leave, 30 because of work injury and 2 patients with occupational disease. Their mean age was 49 (range 30–64). Out of the total number of patients 26 were women and 6 men.

In February 2009 the total of patients was 13, all because of work injury. Their mean age was 48 (range 30–62). There were 10 women and 3 men.

It presents for work injury significant statistical difference, p=0.007, p<0.001 (Table 1).

There were no patients on sick leave due to occupational disease in 2009. In 2008, there were only 2 patients on sick leave, so statistical difference was no significant, p=0.479.

Up to 1 month, there were on sick leave due to work injury in 2008 – 9 patients, and in 2009 – 1 patient, what presents significant difference, p=0.026, p<0.001.

One to three months sick leave period used 9 patients in 2008, and 8 in 2009, what does not represent significant difference, p=0.808.

Of the other patients on sick leave in 2009 only 4 patients are on sick leave over 3 months, while in 2008 there were 14, p=0.033, p<0.001 (Figure 1).

Individual cases describe on the best way assessment of sick leave done by Occupational medicine.

An employee was declined the sick leave after she was 7 years on sick leave because of monoclonal gamma-globulins changes, and she was working in an ionizing radiation zone. After an autoimmune process was proved the sick leave was closed as it was proved that the exposure to the low doses of ionizing radiation did not cause the process in her body. Also a medical radiology engineer (a chain smoker) was not granted sick leave on the basis of glottis cancer. Furthermore, a work injury due to lumbar hernia was reassessed because the patient had her discus hernia operated once before the fall. She fell while working, in a few days discus hernia was reoperated, and after that she was on sick leave for three years. Her work injury was reassessed because it was the matter of a chronic disease, which could not have been caused by the fall from the same level (on the floor). The employee in this case was a cleaning woman in the Clinical hospital cen-

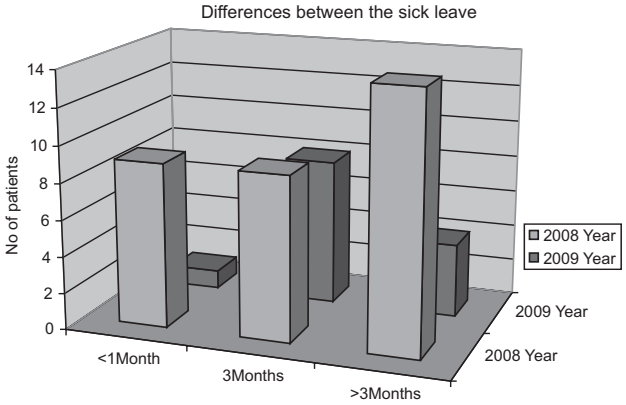

Fig. 1. Differences between the sick leave in 2008 and 2009 year.

TABLE 1
DIFFERENCES BETWEEN THE PATIENTS ON SICK LEAVE IN 2008 AND 2009 YEAR, TOTAL OF PERSONS UNDER THE CARE OF OCCUPATIONAL MEDICINE SURGERY, N=5800

No. of patients on sick leave		Age Mean	Sex M	Sex F	Work injury	Prof. illness	Sick leave < 1 month	Sick leave up to 3 months	Sick leave >3 months
2008	32	49	2	30	30	2	9	9	14
2009	13	48	3	10	13	0	1	8	4
p	0.007				0.014	0.479	0.026	0.808	0.033

tre. Another case was a whiplash injury in a traffic accident when a patient asked for sick leave to undergo rehabilitation program two years after the injury, while four years earlier he had neck discus hernia caused by a chronic degenerative illness. The court policeman in question was denied sick leave on the basis of work injury.

Discussion

It is obvious that Occupational medicine has been successful in carrying out the task, i.e. has reduced the sick leave due to work injury and occupational disease.

The total number of patients on sick leave significantly diminished in 2009, as well as the number of patients on sick leave up to 1 month, and above 3 months period. It is normal to expect, that the period 1–3 months did not change significantly, because it is a period, which is necessary to cover fractures, i.e. for healing period. The most of patients on sick leave were for serious reason of fractures occurred during the working period.

In fact, after one-year there was no one on sick leave because of occupational disease. Why is it so? First of all, it is the question of diagnosing an occupational disease correctly. For an occupational disease it is necessary to prove that it is the working process that causes the employee's illness.

It is known that patients with discus hernia often have low motivation for work depending on intensity of pain in the small of the back and extremities[11]. Besides, the patient is in no hurry back to work if he is granted work injury which gives him 100% compensation of his pay, while in case of a minor injury or illness compensation is much lower, about 70% of the pay, which he gets if sick leave is approved by his general practitioner[12]. The attitude of the injured person in the surgery differs if he is employed by a state institution, or by a private owner when he is eager to go back to work as soon as possible. Even in case of a work injury the private owner insists on the worker's quick return to work, to avoid taking a replacement, and the employee is afraid of losing the job. In any case the physician must remain objective in assessing the sick leave duration. Various rules prescribed by relevant ministries shorten the sick leave duration, and though they cannot be considered inadequate one has to keep in mind that each patient is an individual. Sometimes there is a prolonged healing of the wound, complications etc. that cannot be assessed by strict regulations on sick leave duration established by the authorities[13,14]. Regardless of the fact that the Occupational medicine physician is not chosen by the patient but by his company, he must be supporting the injured worker. It is particularly true when the sick leave is long, when rehabilitation treatment for quick recovery is desirable by classical physical therapy and other support like cognitive-behavioral therapy teaching the right behavior, thinking and understanding the illness, encouraging the return to work[15]. Such therapies may be successful in preventing long chronic disabilities[16]. Every communication with the patient is useful, information and education by means of booklets will enhance the patient's knowledge and satisfaction[17]. To help the patient to regain his work ability the physician should be permanently engaged in research, studying multifunction, environment and work place[18]. Being on sick leave my have positive but also negative consequences[19]. While on sick leave the patient is expected to rest, at least in the first phase while the body is being restituted, when the functional ability is being restored, e.g. after fractures, dislocations, ruptures, physical therapy is required, often by balneotherapy.

But if the treatment lasts long the patient loses contact with his fellow-workers, his skills decreases and with the time he loses motivation for work. The so-called non-occupational burdens are more frequent with women[20]. And if they also have children at home with no one to look after them, if they live relatively far from the work place, they will try for non-medical reasons to prolong their sick leave that they got of the grounds of work injury.

Generally, the health risk factors diminish workers´ productivity[21]. Repeated stress, dissatisfaction with life and poor health perception cause more frequent use of the term presenteeism[22]. The terms absenteeism and sick leave have been known for a long time. When a worker is absent it is conspicuous, but the recently used term presenteeism means that the worker is physically present, but the scope of his physiological work abilities varies. Also certain body conditions as nowadays-omnipresent allergies, arthritis, overweight increase presenteeism[23]. It influences relations among fellow-workers, diminishes productivity, has an impact on product quality, may lead to the increased possibility for work injury[24]. If we consider just medical profession, an insufficiently concentrated surgeon, or a doctor in another department, although he does his shift, may cause immeasurable consequences for his patient, so it can be said that he fatally endangers his life. So time has come for occupational medicine, as well as for many branches of medicine, to face the problem of presenteeism seriously. Every country keeps the record of jobs absenteeism, that is the economic impact caused by health problems. In Korea a paper has been published stating the figures resulting from presenteeism[25]. One should not agree with the conclusion that substitution of workers with presenteeism is of less importance then substitution in absenteeism[26]. It is true that in absenteeism the worker is not present at his work place and that substitution is necessary, but often a worker of impaired abilities may be in the way, i.e. may potentially be dangerous in the work place, especially when demanding work places are in the question. Old workers, but also too young workers, can often be inadequate at a certain work place[27]. High demand jobs are the jobs of firemen, paramedical staff, physicians, policemen, astronauts, submarines, rescue personnel and miners[28,29]. Psychophysical tests have been shown that workers in advanced age are unable to meet the requirements of high-demand jobs[30,31].

In conclusion, the one-year monitoring of the taking over the treatment and assessment of temporary disabil-

ity due to work injury and professional disease has shown a considerable decrease in the number of absent workers as well as in sick leave over 3 months. It cannot be said that Family practice was performing its task poorly as their position has to be considered. A general practitioner is a chosen physician, and if he »antagonizes« the patient he will go to another doctor. In that way a general practitioner may lose a relatively large number of patients and he can even jeopardize his job that is the means he receives from the Institute of health insurance that depend on the number of his patients. On the other side, an occupational medicine specialist is a company physician, i.e. he covers the employees in his area. In that way he is unburdened in an objective assessment of work ability or temporary disability.

Furthermore, the occupational medicine specialization itself deals in a major part with the ways of assessing work ability or disability, so that gives the advantage to the occupational medicine specialist. Besides, in Croatia at least, occupational medicine specialists are mainly elderly doctors who specialized after working many years in general medicine or elsewhere and so acquired substantial experience. Moreover, an occupational medicine specialist visits his area coordinating the worker's biological abilities with his work place, assessing it as well, which is not the case with general practitioners.

Besides working in the surgery, many occupational medicine specialists are court experts, insurance company physicians for damage assessment, members of scientific institutes and universities, who are highly skilled in assessing work ability based on the remaining functional capacity[32]. Evaluation of a »healthy« workplace is also a particular and complex process in which occupational medicine specialists participate following the worked out schemes[33].

Besides knowledge, thoroughness is important, because in assessing the worker's work ability an occupational medicine physician must not fail to observe his physical and psychical defects especially at the preliminary examination, as they may lead to work accidents with irreparable consequences[34].

Family practice remains to be the basic pillar of health of equal importance, to which the worker may always return for further treatment and even sick leave, but not on the basis of work injury and occupational disease.

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MEDICINA RADA U PREUZIMANJU OZLJEDA NA RADU OD OBITELJSKE MEDICINE – JEDNOGODIŠNJE PRAĆENJE

S A Ž E T A K

U Republici Hrvatskoj od 1. siječnja 2008. Medicina rada preuzela je liječenje ozljeda na radu i profesionalnih bolesti od Obiteljske medicine. Razlog je bio preveliki broj dugotrajnih bolovanja s kojima se liječnici Obiteljske medicine nisu uspijevali adekvatno nositi. Ciljevi istraživanja bili su prikazati rezultate jednogodišnjeg praćenja provedene reforme, odnosno uspješnost medicine rada u novopreuzetoj funkciji. Korištena je metoda usporedbe podataka jednogodišnjeg praćenja i deskriptivne statistike kod jedne ordinacije Medicine rada u Primorsko-goranskoj županiji koja skrbi za 5800 zaposlenika. Ukupan broj od 32 pacijenata, u veljači 2008. godine, 30 zbog ozljede na radu i 2 zbog profesionalne bolesti, pao je u veljači 2009. na 13 pacijenata zbog ozljede na radu, a nije bilo ni jedne dijagnosticirane profesionalne bolesti. Također, broj pacijenata na bolovanjima dužim od 3 mjeseca pao je od 14 na 4. Medicina rada pokazala se nadmoćnom nad Obiteljskom medicinom u ocijenjivanju dužine trajanja bolovanja. Međutim, to ne znači da je Obiteljska medicina koja zbog niza razloga navedenih u daljnjem tekstu istraživanja, manje važna grana medicine, jer Obiteljskom liječniku se uvijek može vratiti pacijent kao svom izabranom liječniku na daljnje liječenje, a i bolovanje, ako je potrebno, ali ne s osnova ozljede na radu i profesionalne bolesti, ako je tako ustanovljeno.