УДК 308.4



Кшиштоф Камінський, аспірант Люблінського Католицького Університету Івана Павла II, Польша

ПРОФІЛАКТИКА ПРОФЕСІЙНОГО ВИГОРАННЯ В СОЦІАЛЬНИХ ПРАЦІВНИКІВ (ДОСВІД ПОЛЬЩІ)

Prevention of occupational burnout in social workers

Мета статті полягає в представленні результатів досліджень феномена професійного вигорання серед соціальних працівників Міського Центру Допомоги Сім'ї в Білостоці, беручи до уваги, зокрема, запобігання цього явища. Соціальні працівники, робота яких характеризується контактами з людьми, які знаходяться в кризових ситуаціях, наражає їх часто на стрес, який може призвести до професійного вигоряння. Дослідження показали, що з метою запобігання таким ситуаціям у першу чергу потрібно реформувати систему соціального забезпечення, ознайомити працівників з тими ж причинами вигорання, скоротити надмірний обсяг роботи й уможливити їм супервізії.

Ключові слова: соціальна робота, професійне вигорання, стрес.

Цель статьи заключается в представлении результатов исследований феномена профессионального выгорания среди социальных работников Городского Центра Помощи Семьи в Белостоке, принимая во внимание, в частности, предотвращение этого явления. Социальные работники, работа которых характеризуется контактами

с людьми, находящимися в кризисных ситуациях, подвергает часто их самих на стресс, который может привести к профессиональному выгоранию. Исследования показали, что с целью предотвращения таких ситуаций в первую очередь нужно реформировать систему социального обеспечения, ознакомить работников с теми же причинами выгорания, сократить чрезмерный объем работы и сделать возможными им супервизии.

Ключевые слова: социальная работа, профессиональное выгорание, стресс.

The purpose of the present article is to provide a detailed overview of the research results into the syndrome of occupational burnout in social workers at the Municipal Family Welfare Centre in Bialystok, with special emphasis placed on its prevention. Social workers, whose work inevitably involves contact with people in crisis or specific need, are often exposed to stress which is difficult to cope with and which can possibly trigger occupational burnout. Recent survey data have revealed that its incidence can be best decreased by undertaking a reform of the social welfare system, familiarising employees with the factors underlying the syndrome, reducing excessive workloads and providing supervisions.

Keywords: social work, professional burnout, stress.

Work constitutes one of the most fundamental spheres of human life. It consists in people transforming natural resources and forces of nature in order to produce material goods, cultural values and society-wide services. Work enables humans to obtain the means necessary to satisfy their needs: biological, material, economic, intellectual, cultural and spiritual. It influences our moral progress and formation of social bonds. Work constitutes a human need as it assists, especially adult people, in self-development and personality building. It determines human existence, economic development of countries, as well as individual prosperity. Finally, it ensures the creation of social links indispensable for the fulfilment of higher level needs, inter alia, cultural and spiritual.

Work has always triggered both positive and negative associations, the latter being due to the hardship load and strain it imposes. Stress related not only to work but also to private life, financial standing and environmental conditions has become ubiquitous and, therefore, the present day has well deserved the name of a stress era. People are growing both ever more confused and overstressed. In some circumstances, stress can be beneficial, prompting us to embrace new challenges. However,

having exceeded a certain level, it limits a person's ability to cope with problems.

Stressful situations are very frequently associated with the work one does. Civilisational changes and constantly rising standards that workers are expected to meet have increased the magnitude of social and psychological costs carried by employees. Stress underlies not only the very nature of a given occupation but also the difficulty of finding and maintaining employment. At present, plenty of people are striving to derive the meaning of life from work. Yet one may fail in their duties merely due to the fact of being a human. Be this the case, a gradually deteriorating state of chronic stress, related equally to other difficult factors ensuing from the nature of one's job, as well as from both the working and living environment, can lead to a problem which, since the pioneering article by H. Freudenberg, has come to be termed occupational burnout [1, p. 161].

It is especially employees within the human service professions, whose job involves contact with people, in particular when the latter are in need or in crisis, who are exposed to an incomparably high level of stress at work. This category embraces teachers, nurses, social workers, emergency services personnel, police officers etc. [2, pp. 7–8]. The type of stress that the representatives of the above-mentioned professions experience is particularly exhausting and difficult to cope with, resulting in permanent fatigue and reduced job satisfaction. Eventually, it may trigger a variety of disorders and dysfunctions, both mental and social. The accompanying symptoms and processes are likely to lead to the condition called occupational burnout.

The metaphor of burnout draws on the extinguishing of a candle or the smothering of a fire. With respect to the professional career, the notion refers to an inwardly perceived lack of energy, discouragement and exhaustion. This phenomenon is characterised by a simple principle: burning out must be preceded by 'burning'. 'Burning' are those who set themselves high standards and ambitious goals, and subsequently pursue them with enthusiasm and commitment. Those who are strongly motivated and fully identify with their job, expecting it to furnish them with a raison d'ktre, 'burn out' when the accomplishment of their career objectives turns out to lie beyond reach [3,pp. 215–230].

The steadily increasing incidence of the occupational burnout syndrome renders the phenomenon particularly interesting and worth investigating. Currently, in the near absence of studies conducted from the sociological and especially empirical perspective, it is mainly psychologists to scrutinise this problem.

The present paper will set forth the results of a research into the occupational burnout syndrome in social workers at the Municipal Family Welfare Centre in Bialystok, with special emphasis placed on its prevention.

Thearticlewill also present therole of seniority in tailoring preventive measures. It will reveal whether short-serving employees (with less than 15 year's work experience) favour the same preventive actions as long-serving employees (with more than 15 year's work experience). Furthermore, the study will demonstrate whether prevention is perceived similarly by workers who were fully aware of the career they embarked on (the so-called 'employees by vocation') and those who were offered the job by virtue of happenstance or who accepted it for the lack of other opportunities (the so-called 'employees by chance').

However, before the obtained answers are presented, it is worth attempting to arrive at the very essence of the phenomenon and its source. The term occupational burnout, which designates a particular, specifically determined state of work exhaustion in careers which involve assisting people, and therefore not exclusively in social work, has been in use since the 1970s. During this time, the literature on the subject has offered numerous suggestions with regard to the understanding of the specificity and conditioning of the syndrome [4, p. 7].

According to H. Freudenberger, a psychologist who first used the term, and G. Richelson, burnout is "a state of fatigue or frustration resulting from the commitment to a certain cause, the lifestyle or a relationship which fails to reward as expected" [5, p. 276]. This definition indicates the existence of the following components of burnout: a sense of exhaustion, isolation, loss of interest, cynicism, impatience, irritability, an attitude of superiority and infallibility (omni potence), a sense of being unacknowledged, suspiciousness, suppression of feelings, disorientation and psychosomatic problems [1, p. 161].

W. G. Emener defines occupational burnout as "a state of physical and mental exhaustion stemming from long-term negative emotions that arise in relation to the workplace and one's own image" [6, p. 85]. On the other hand, Ch. Maslach, one of the first researchers to have created a tool for measuring the phenomenon of occupational burnout, together with S. Jackson concluded that it is "a syndrome of emotional exhaustion, depersonalisation and reduced personal accomplishment, which can affect employees working with other people in a certain defined manner" [7, p. 15].

M. Pines and E. Aronson, in turn, place special emphasis on the existential perspective. To their understanding, burnout is "a state of physical, emotional and mental exhaustion, resulting from a long-term involvement in emotionally charged situations" [8, p. 35].

The settings in which social workers carry out their duties are so varied that it appears to be rather problematic to identify unambiguously thecauses of occupational burnout. Some employees work in very difficult institutional conditions, providing treatment to the most severe cases. Others conduct repetitive administrative tasks. Nevertheless, bearing in mind the imperative need to establish the main source of the condition, it appears only right to follow Ch. Maslach's claim stating that it is the incompatibility that exists between a person and their working environment which contributes to the accumulation of work-related stress, leading in turn to occupational burnout. The incompatibility at issue may manifest itself at six levels.

- 1. Work overload occurs when employees are presented with too high requirements that they cannot possibly meet or when they are allocated too little time to complete a task.
- 2. Lack of control and absence of a joint decision-making process refers to a situation in which employees are not allowed to participate in the slightest in the decision-making process concerning working methods, when they are closely monitored or, to the contrary, when they work in chaos. As a result, the exerted effort is not commensurate with the outcome.
- 3. Insufficient reward stems from the lack of recognition, which belittles employees and their work. Reward shall be understood both as pecuniary remuneration and internal satisfaction.
- 4. Breakdown of community occurs when the number of unresolved conflicts among the employees increases, which subsequently leads to the loss of meaningfulness of work and a reluctance to maintain positive interpersonal relationships.
- 5. Injustice manifests itself especially in the lack of clear-cut rules and principles ensuring mutual respect and recognition, an even distribution of duties and fair compensation.
- 6. Conflict of values occurs when in order to fulfil their supervisors' or clients' expectations, employees are compelled to act against their cherished values: they behave unethically, lie or deceive [9, pp. 74–75].

Due to the type of recipients, social work falls into the category of human service professions. The clients of care providers are people who,

in view of the situation they often undeservedly find themselves in are constrained to seek the assistance of social workers and who express their heartfelt gratitude for the received support. More frequently, however, these are individuals who perpetually rely on the provision of social services; people suffering from nervous breakdowns, demanding, exhibiting a negative attitude towards civil servants, emotionally infantile and reserved, as well as unacquainted with the legal and factual possibilities of dealing with their predicament. In addition, they frequently display aggression or abuse alcohol. [10, p. 115]. Therefore, if we couple the aforementioned traits of clients with the aspects that mark social work itself, where the latter requires to the same extent both being professional and engaging one's own personality as a sort of work tool, we are then able to discern barriers which contribute to the fact that social workers have been distinguished as a group of people particularly subject to failure, professional inefficacy and reluctance to work, thereby also to occupational burnout [11, pp. 169-178; 12, pp. 385-398].

In the prevention and fight against burnout it is necessary to analyse the condition with reference to both one's existential and professional sphere [13, p. 13-15]. In order to do it, one needs to be knowledgeable about the phenomenon of burnout and its dynamics as the methods of prevention overlap with the ability to recognise its causes and effects. It is largely through gaining insight into one's personality in the context of one's particular working environment that the consequences of burnout can be erased [14, p. 308; 15, pp. 47-60].

Among the causes, one ought to scrutinise above all the motives for accepting the job offer, one's ability to benefit from the social support, as well as to maintain mental hygiene. Rediscovering the initial drive to undertake the job appears to constitute an effective means of uncovering the roots of burnout [3, p. 228].

Another useful method of prevention is to acquire emotional distance, which comprises such techniques as the semantics of work, intellectualisation, isolation of situations, retreat from work and changing one's lifestyle. Emotional distancing leads to objectifisation of one's job situation [14, pp. 86–95; 16, pp. 86–95.]. It could be understood as regaining one's mental hygiene through allocating a specific period of time for relaxation and learning to put aside thoughts related to work. Discovering a new hobby or new life passions might prove helpful in gaining emotional distance. It ought also to be borne in mind that relaxation should take the form both of a longer holiday and of a fixed amount of time dedicated to leisure every day. Mental hygiene entails

changes in one's sleeping and eating habits, too. It might be useful to set oneself a specific time for sleep and regular meals [3,p. 228].

What is of paramount importance, however, is to attain the highest possible level of harmony and authenticity in everyday life. Optimism and a good sense of humour have proved to work best on multiple occasions, ensuring a healthy and happy life. Contented people more often develop a successful professional career. Contrary to pessimists, who focus on avoiding failure, optimists invest a lot more energy and enthusiasm in their work. The close connection between optimism and humour and the mechanisms of stress make the former an effective remedy protecting against boredom and monotony, as well as against qualitative and quantitative work overload [14, p. 308; 17, pp. 15–17; 18, pp. 31–34]. According to researchers, people who are satisfied with their lives are far better at dealing with stress.

As far as believers are concerned, their faith constitutes an additional source of support in the battle against burnout, especially in the mental sphere. Prayer and reflection provide them with a day-to-day opportunity to express their problems, emotions and doubts. Another type of prayer is the daily examination of conscience, a reflection on the day which enables these people to discern the initial signs of waning motivation or the loss of concern for another person. Annual religious retreats may also bring about changes in habits and aberrations developed throughout the year [3, pp. 228–229].

Another powerful method of combating burnout is to find a way to express one's emotions. It might take the form of a diary or, even more effectively, a conversation with a friend. Co-workers or a self-help group may also prove of tremendous help in the process of recovering from the condition [3, p. 228]. Clinical supervision, which is a form of psychological and social counselling, aimed in particular at the people working within the human service professions may also be found beneficial. Its main purpose is to relieve the patient, explain his or her professional identity, as well as maintain and enhance his or her activity. The object of clinical supervision is the supervisee's professional work and especially the attitude he or she adopts towards people he or she is supposed to assist. The method consists in the patient presenting incidents from their workplace and a subsequent joint analysis of problematic situations. Thereby, the supervisee can, at least for a while, put himself or herself in the position of a person seeking assistance and support. The idea behind clinical supervision is to find a safe way of sharing doubts related to one's competencies and practices. It is a professional and friendly form of control delivered by an expert [19, pp. 270-271; 20].

Other situations which safeguard employees from occupational burnout, but which can also become a source of burdening, shall there be no willingness to cooperate, are as follows: support received from one's colleagues, teamwork, partnership and a circle of friends, success at work, a pleasant working atmosphere and further training [21, pp. 35–36]. In addition, a change in the range of duties, relieving the employee in some spheres and providing him or her with the possibility to choose certain responsibilities while forgoing others may also help. Shall it be of no consequence, however, one is often advised to change the job if possible [3, p. 228].

One of the factors conducive to the process of burnout is the hardship associated with the profession, alleviation of which may constitute a preventive measure. In the opinion of the employees of the Municipal Family Welfare Centre in Bialystok, it is necessary to reform the social welfare system, if the hardship of social workers is to be eased. Over half of the respondents (56,7 %) were in favour of this idea. Around 40,4 % of the employees concluded also that it would be beneficial to increase the number of social workers, which may imply an excessive workload. Every third respondent (33,7 %) pointed to the social acknowledgement and every fourth (23,1 %) to higher wage rates as possible solutions. Workers 'by vocation' considered the following factors to play a crucial role in alleviating the hardship inherent in the job: increasing the number of social workers (43,5 %), social acknowledgement (39,1 %) and pleasant clients (10,9 %). Workers engaged 'by chance', on the other hand, more often recommended a reform of the social welfare system (61,4%) and higher wage rates (26,3%).

Taking into consideration the criterion of seniority, more younger employees favoured the idea of reforming the social welfare system than older ones did (64,8 % vs. 49,0 %, respectively). The latter, however, more frequently pointed to an increase in the number of social workers and social acknowledgement as means of overcoming the difficulties (53,1 % and 44,9 % vs. 27,8 % and 24,1 %, respectively).

In the view of the social workers, training sessions on burnout (18,3%) and reductions in the range of responsibilities (16,3%) constitute the most effective preventive measures. The second on the list are as follows: a reform of the social welfare system (10,6%), supervisions (9,6%), convalescent leaves (9,6%), higher wage rates (9,6%) and support groups for employees (8,6%). Further down the list there are physical

activity (6,7%), more frequent relaxation (6,7%) and simplification of aid procedures (6,7%). Hardly any respondent chose such answers as higher prestige of the social work (4,8%), consultations with a psychologist (4,8%), developing one's hobby and passions (3,8%), good cooperation with one's superiors (2,9%) or praise and recognition from one's employer (2,9%).

With regard to the treatment of burnout, empirical studies have revealed that employees 'by vocation' more readily opt either for techniques that can be implemented in cooperation with their colleagues or those that require their own personal commitment. These are, in particular, workshops devoted to the problem of burnout (23,9 %), supervisions (15,2 %), support groups, more frequent relaxation (13,0 %) and physical activity (8,7 %). On the other hand, employees engaged 'by chance' favour to a greater degree methods related to the activities of the organisation, i.e. reductions in the range of responsibilities (19,3 %), higher wage rates (14,0 %), a reform of the social welfare system (12,3 %), convalescent leaves (12,3 %) and simplification of aid procedures (8,8 %).

There is no such clear-cut division between younger and older employees. Younger workers support in particular workshops devoted to burnout (24,1%), reductions in the range of responsibilities (22,2%), supervisions (14,8%), convalescent leaves (11,1%) and higher wage rates (11,1%). Older employees most often recommend support groups for workers (14,3%), a reform of the social welfare system (12,2%) and workshops devoted to burnout (12,2%). They also advocate reducing the number of responsibilities (10,2%) and more frequent relaxation (10,2%).

The respondents were also asked the following question: What does a social worker wish for? This was done due to the fact that the sphere of wishes often highlights problems which social workers have to contend with. Indirectly, it also indicates matters to be taken into account in the fight against burnout. The workers most often wished for early retirement (44,2 %), patience and perseverance (42,0 %), as well as a better social acknowledgement of their profession (36,5 %). A slightly lower number of employees wished for pleasant clients (15,4 %) and lasting acts on social assistance (12,5 %). It is also interesting and surprising, in the good sense of the word, to note that nearly one in four workers pointed to wages (23,1 %) when asked about factors that could alleviate the hardship associated with the profession. However, only 2,9 % of the respondents wished for higher wage rates.

The first item on the wish list of social workers 'by vocation' is patience and perseverance (47,8%). To the same extent, they would also welcome early retirement (34,8%) and a better acknowledgement of the profession (34,8%). Further down the list there are pleasant clients (13,0%) and lasting acts on social assistance (10,9%). None of these employees wished for higher wage rates. On the other hand, the wish list of workers engaged 'by chance' comprises the following items: the top of the list is occupied by early retirement (52,6%), further down there is a better social acknowledgement (38,6%), patience and perseverance (36,8%), pleasant clients (17,5%), lasting acts on social assistance (14,0%) and higher wage rates (5,3%).

A brief analysis of the age structure reveals that younger employees, however surprisingly, wish most of all for early retirement (42,6%), patience and perseverance (37,0%), a better acknowledgement of the profession (31,5%), and, to an equal extent, pleasant clients (14,8%) and lasting acts on social assistance (14,8%). As opposed to older workers, they would also welcome higher wage rates (5,6%). Senior employees feel mostly in need of early retirement (46,9%), patience and perseverance (36,9%) and, almost to the same degree, a better social acknowledgement of the profession (42,9%). Such items as pleasant clients (16,3%) and lasting acts on social assistance (10,2%) occupy the bottom of their list.

The study has shown that in the opinion of the personnel of the Municipal Family Welfare Centre in Bialystok, occupational burnout prevention can be achieved by reforming the social welfare system. It is also believed necessary to increase the number of social workers, thereby alleviating the hardship associated with the profession and, consequently, reducing the risk of burnout. This may unfortunately prove to be unfeasible owing to the fact that the interests of the social welfare system administration, largely limited by the current social policy, contradict the interests of social workers, who wish to fulfil their mission in accordance with their conscience and the adopted code of ethics.

In addition, it may also be advisable to put greater emphasis on familiarising employees with the factors leading to occupational burnout and to allow supervisions as one of the most effective methods of burnout prevention. What seems to be equally significant, especially in the light of the fact that the employees feel burdened and that nearly half of them dream of early retirement, is the alleviation of hardship. In the opinion of D. popnierczyk, it is also necessary to focus on the

individual prevention strategies since identical working conditions are perceived differently by workers, as corroborated by the empirical analysis [22, p. 9].

The results of the sociological study concerning the effects of burnout have demonstrated employees 'by vocation' to be both less susceptible to the condition and more eager to overcome an emerging burnout. These workers predominantly act on their own, seldom relying on assistance from their colleagues, unlike employees engaged 'by happenstance', who expect the institution to take action. The age structure has a clear impact on the effects of burnout and methods of prevention. Senior personnel are slightly more affected by the work overload and, therefore, hope for an increase in the number of employees and early retirement.

List of references:

- 1. Aouil B. Determinanty wypalenia zawodowego pracowników socjalnych, w: Edukacja zawodowa w aspekcie przemian społecznogospodarczych. Wyzwania, szanse, zagrożenia / B. Aouil ; red. R. Gerlach. Bydgoszcz: Wydawnictwo Uniwersytetu Kazimierza, 2007. Pp. 161–181.
- 2. Sęk H. Wypalenie zawodowe. Przyczyny, mechanizmy, zapobieganie / H. Sęk. Warszawa: Wydawnictwo Naukowe PWN, 2004.
- 3. Seredyńska A. Wypalenie zawodowe objawy, przyczyny i sposoby zapobiegania, w: Oblicza pedagogii / A. Seredyńska; red. K. Jarkiewicz. Kraków: Wydawnictwo WAM, 2005. Pp. 215–230.
- 4. Szmagalski J. Stres i wypalenie zawodowe pracowników socjalnych / J. Szmagalski. Warszawa: Instytut Rozwoju Służb Społecznych, 2009.
- 5. Terelak J. F. Psychologia organizacji i zarządzania / J. F. Terelak. Warszawa: Difin, 2005.
- 6. Fengler J. Pomaganie męczy: wypalenie w pracy zawodowej / J. Fengler. Gdańsk: Gdańskie Wydawnictwo Psychologiczne, 2000.
- 7. Maslach Ch. Wypalenie w perspektywie wielowymiarowej, w: Wypalenie zawodowe: przyczyny i zapobieganie / Ch. Maslach ; red. H. Sęk. Warszawa: Wydawnictwo naukowe PWN, 2004. Pp. 13–31.
- 8. Pines A. M. Wypalenie w perspektywie egzystencjalnej, w: Wypalenie zawodowe: przyczyny i zapobieganie / A. M. Pines ; red. H. Sęk. Warszawa: Wydawnictwo naukowe PWN, 2004. Pp. 32–57.
- 9. Ogińska-Bulik N. Stres zawodowy w zawodach usług społecznych. Źródła, konsekwencje, zapobieganie / N. Ogińska-Bulik. Warszawa: Difin, 2006.

- 10. Żukiewicz A. Praca socjalna ośrodków pomocy społecznej / A. Żukiewicz. Wrocław: Wydawnictwo Uniwersytetu Wrocławskiego, 2002.
- 11. Surin I. Przejawy wypalenia zawodowego u pracowników socjalnych zatrudnionych w hospicjum, w: Pedagogika społeczna. Współczesne obszary / I. Surin, B. Baranowska; red. I. Surin. Słupsk: Wydawnictwo Naukowe Akademii Pomorskiej, 2008. Pp. 169–178.
- 12. Golińska L. Temperamentalne i osobowościowe determinanty wypalenia zawodowego u nauczycieli / L. Golińska, W. Świętochowski // "Psychologia wychowawcza". 1998. Nr 5. Pp. 385–398.
- 13. Woźniak-Krakowian A. Syndrom Boga / A. Woźniak-Krakowian // "Niebieska Linia". 2004. Nr 4. Pp. 13–15.
- 14. Bańka A. Psychologia Pracy, w: Psychologia. Podręcznik akademicki. Jednostka w społeczeństwie i elementy psychologii stosowanej / A. Bańka; red. J. Strelau. Gdańsk: Gdańskie Wydawnictwo Psychologiczne, 2000.
- 15. Trawkowska D. Wypalenie zawodowe wśród pracowników socjalnych i sposoby przeciwdziałania, w: Praca socjalna wobec współczesnych problemów społecznych / D. Trawkowska ; red. S. Pawlas-Czyż. Toruń: Wydawnictwo Edukacyjne Akapit, 2007. Pp. 47–60.
- 16. Sztompka P. Trauma wielkiej zmiany. Społeczne koszty transformacji / P. Sztompka. Warszawa: Instytut Studiów Politycznych Polskiej Akademii Nauk, 2000.
- *17. Bilska E.* Profilaktyka wypalenia zawodowego. Cz. 1 / E. Bilska // "Niebieska Linia". 2008. Nr 5. Pp. 15–17.
- *18. Bilska E.* Profilaktyka wypalenia zawodowego. Cz. 2 / E. Bilska // "Niebieska Linia". 2008. Nr 6. Pp. 31–34.
- 19. Willan-Horla L. Wypalenie zawodowe u pracowników socjalnych, w: Działanie społeczne w pracy socjalnej na progu XXI wieku / L. Willan-Horla ; red. E. Kantowicz, A. Olubiński. Toruń: Wydawnictwo Edukacyjne Akapit, 2003. Pp. 261–273.
- 20. *Szmagalski J.* Superwizja pracy socjalnej. Zastosowania i dylematy / J. Szmagalski. Warszawa: Ex Libris, 2011.
- 21. Gordon T. Jak dobrze żyć z ludźmi / T. Gordon, N. Bursch. Warszawa: Pax, 2001.
- 22. *D. Żołnierczyk,* Dlaczego indywidualne, a nie organizacyjne strategie radzenia sobie ze stresem w pracy? / D. Żołnierczyk // "Bezpieczeństwo Pracy. Nauka i Praktyka". 2000. Nr 6. Pp. 8–11.