OECONOMIÁ COPERNICANA



2013 No 4

ISSN 2083-1277, (Online) ISSN 2353-1827 http://www.oeconomia.copernicana.umk.pl/

Mroczek-Czetwertyńska A., Czetwertyński S. (2013), *Impact of Regulations on Transparency of Spa & Wellness Market in Poland*, "Oeconomia Copernicana", No. 4, pp. 91-102, DOI: http://dx.doi.org/10.12775/OeC.2013.033

Agnieszka Mroczek-Czetwertyńska, Sławomir Czetwertyński*
Wrocław University of Economics

Impact of Regulations on Transparency of Spa & Wellness Market in Poland**

JEL Classification: D82, L51, L83

Keywords: spa & wellness services, uncertainty of quality, market transparency, regulations

Abstract: This paper focuses on the issue of spa & wellness services market transparency in the context of official regulations. The issue is significant, since the entire tourism sector in Poland is generally regulated to a great extent. It concerns, among others, the categories of tourist resorts and the standard of rendered services. Detailed regulations, however, do not cover spa & wellness services, which have been relatively new form of spending free time. No standards on one hand, and no relevant regulations on the other result in this market being characterized by a serious quality span depending on particular service providers. The goal of this paper is an examination of the thesis that no uniform national regula-

[©] Copyright Institute of Economic Research & Polish Economic Society Branch in Toruń

Date of submission: December 9, 2012; date of acceptance: June 19, 2013

^{*} Contact: a.czetwertynska@gmail.com, slawomir.czetwertynski@ue.wroc.pl, University of Economics in Wrocław City, Faculty of Economics, Management and Tourism in Jelenia Góra, ul. Nowowiejska 3, 58-500 Jelenia Góra, Poland

^{**} The research financed by the National Center of Science. Project's title: 'Conditions and perspectives of development of spa & wellness market in Dolny Śląsk area', N N112 394640.

tion of the Polish spa & wellness market is a reason for poor market transparency resulting from information asymmetry which, in turn, results from quality uncertainty. The theoretical thoughts have been proven by the authors' surveys focused on the shape of the spa & wellness services market in the Dolny Ślask area. The first part of the paper presents a theoretical background of the issue related to uncertainty of the quality, information asymmetry and finally – the market transparency. The next part of the paper is focused on the Polish spa & wellness market and it comprises an analysis of the effects caused by poor transparency of the market. Another part reveals the regulations of the tourism market and proves that no uniform regulations pertaining to spa & wellness services makes that the remaining legislation ineffective in the field of shaping high-quality services. The last part of the paper deals with self-regulation of the spa & wellness market and reasons for the insufficient efficiency.

Introduction

The issue of relation between quality and uncertainty in the context of the market theory entered the economics because of George A. Akerlof (1970) and his analysis of impact of information asymmetry on the market equilibrium point. Akerlof proves (1970, p. 490) that a price at which transactions are made in case of information asymmetry responds to a price at average quality of exchange object; de facto beyond its real value. It is an effect of varied knowledge extent held by particular market participants. A consequence of this is a market failure, since a transaction is not an equivalent one – either the subject of transaction is overpriced in relation to the effective market price, or underpriced.

Quality uncertainty significantly affects the transparency of a market, since by disturbing of comparability of a product/service it produces a false image of transactions on the market. Transparency of the market is usually deemed to be the extent of knowledge about the market environment that market participants have. The higher extent of the knowledge the higher transparency degree (Forlicz 2002, p. 5). However, it is assumed that this knowledge is of objective nature. Fact of existence of information asymmetry makes this assumption wrong and consequently, it means that the growth in knowledge results in lower degree of market transparency and not reversely.

Normally, concentration of the information asymmetry and thus – quality uncertainty – and then – market transparency, shall affect efficiency of market mechanism's operation. It shall mean proper allocation of goods, equivalence of transactions and existence of competitors. Market failure resulting from insufficient market transparency may be generally observed

on most of the markets starting from second-hand goods and ending with financial derivatives. In order to assure the required extent of transparency, market participants make efforts aimed at increasing the knowledge extent and its reliability, or they rely on statutory regulations. In case of newly-shaped markets, such as the spa & wellness market which is subject-matter of this paper, clarification of market transparency is of process nature, depending on market environment's attributes or critical incidents (e.g. market failure or innovations).

The spa & wellness services market, as a part of the tourist services market, is generally exposed to poor market transparency, since the subject of transaction is of experimental character and frequently, it is heavily subjective. Only the consumption of a service results in a clear picture of it; moreover, such services are frequently of non-repeatable nature. Obviously, this type of problems exists also on a number of other markets, and they are overcome in varied ways. Provided that a market is self-regulated by market participants, an intervention of an official regulating body is not necessary. However, in the case of the spa & wellness market, and particularly – domestic spa & wellness market, the self-regulation seems to be insufficient, or it results in other effects than the expected ones.

Therefore, in this paper the thesis is formed that no uniform national regulation of the Polish spa & wellness market is the reason for poor market transparency, which depends on information asymmetry and, in turn, results from quality uncertainty. The thesis formed in this way points out, on one hand, that the poor transparency of the spa & wellness market is a generic attribute of this market. On the other hand, it assumes that the market transparency cannot be extended without an intervention of an official body (obviously, significant intervention, which could not be classified as insignificant factor). The goal of this paper is a presentation of the issue of the spa & wellness market transparency and a verification of the aforeformed thesis. In order to perform the assumptions, the authors conducted surveys in the form of expert panel. A sample was of advisable nature and it covered 33 experts, including academic teachers and managers of spa & wellness facilities. Moreover, the authors of the paper provide results of their surveys conducted among the clients of Gołębiewski Hotel in Karpacz.

Spa & Wellness Services Market and Information Asymmetry Issue

The spa & wellness services market in Poland is still an emerging one. A philosophical base shaping the preferences related to feeling of needs in the field of biological renewal is a connection of healing procedures and a will to maintain optimal health. The traditions of the spa & wellness services are mostly connected with travels to 'healing waters' and their origins date back to the ancient times. The following stage of this form of spending free time is dated to the seventeenth and eighteenth centuries, and is related to medical tourism (Crebbin-Bailey, Harcup, Harrington 2005, pp. 2-7). Contemporary spa & wellness services are a response to needs of a post-industrial human being and they have been developing most quickly in the USA (International Spa Association 2012). In Poland, the market of biological renewal to some extent replaces the health tourism, whose infrastructural base has been substantially damaged for the two recent decades (Szymańczyk 2009, pp.70,73). Popularity of the spa & wellness services is a chance to restore health resorts into profit-generating touristic objects.

Transactions related to the provision of the spa & wellness services are encumbered by a certain level of uncertainty, which results from the difference between the expected quality of a service and its reliability & safety. Because of this reason, purchasers may rate a product improperly, that is to overprice or underprice it. Hence, there appears the spa & wellness market unreliability which could be counteracted by providing entities taking part in exchange with real and reliable information (Samuelson, Marks 1998, pp. 618-619).

The issues in question may be examined from two points of view, from the clients' point of view, and the point of view of suppliers. Generally (optimistic scenario), information handed over by spa & wellness facilities is intended to enable clients to rate products of varied quality. Nevertheless, imperfect information is the source of improper knowledge of consumers, which does not enable them to identify the real quality of a service and consequently, market mechanism does not result in elimination of poor quality services (Nowak 2008, p. 126).

The situation is frequently used by suppliers in the tourism sector, in particular, in the spa & wellness industry. There is a series of facilities/resorts which use the spa & wellness expression, but they offer only an access to a swimming pool, sauna and jacuzzi and rely on improper image of the spa & wellness philosophy (cf. Stajszczak-Skopowicz 2012). This kind of opportunistic behaviors result in the formation of two kinds of clients - those, who think that every hotel with a swimming pool is a biologic

renewal center, and those who find the offered products & services unreliable and lose their confidence in the entire market.

The relation presented above may be supported by two examples. The first one presents the use of imperfect information in order to increase in attractiveness of an object and the second one – consequences of wrong knowledge. The basis to assess the phenomenon under examination was the authors' survey, which rated the significance of 26 factors pointed out by 33 experts. They (experts) were academic researchers hired by faculties of tourism, and spa & wellness facilities managers. The selection of factors was made on the basis of the following biological renewal fields: "water world", treatments, saunas, education, sports, recreation, catering, as well as prizes and certificates. Acc. to the conducted analysis, in the experts' opinion the most significant one is: "water world", which is swimming pool, jacuzzi and classic massages. The same level of significance was assigned to the sports zone, including a gym and active forms of recreation, while in the field of treatment – beauty salons. Talking about the recreation, relaxing rooms are the most important, and in the field of saunas – a Finnish sauna. The less important factor acc. to experts is education element, spa cuisine, as well as certificates and prizes.

Therefore. Jan Hotel Wojcieszyce in is advertised Spa&Pleasure&Business hotel. This hotel, in the first half of 2011, offered a swimming pool, a Turkish bath, and one beauty salon opened just 6 hours a day. Acc. to results of the expert panel, one could conclude that using the spa expression in this particular case is an abuse. Imperfect information has been generated by hotel managers in order to gain profits. For the clients who are aware of spa & wellness philosophy, this marketing manipulation is, using colloquial language, wide of the truth. In economics, one would rather say about disinformation and opportunistic approach of a supplier in relation to a client, in order to use a supplier's advantage. In case of clients not being aware of spa & wellness philosophy, or having just a little idea about the concept, such an approach produces incorrect image of spa & wellness services' quality and nature.

Another example is *Golębiewski* night accommodation facility in Karpacz – at the very beginning it did not offer spa & wellness services and the sole attraction was an *aquapark* (which is a part of spa zone, but it is not enough to be called a spa). Nevertheless, a survey made among clients of the hotel revealed that 3/4 of them thought it was spa & wellness facility even if the hotel did not offer such services. The situation was an effect of wrong information supplied by hotel managers, which was a consequence of improper knowledge of clients caused by information asymmetry.

Unreliability of the Spa & Wellness Market and Regulations of the Tourism Market

If one divided the factors which cause unreliability of a market into exogenous and endogenous ones, then the lack of transparency of the market would be an endogenous feature of the market mechanism. It is an effect of the fact that not all of the entities on the market take care of transparency of the market (cf. Brol 2010, pp. 65-69; Surdej 2011, pp. 27-28). The largest benefits of poor transparency of the market are gained by suppliers, whose facilities are not *sui generis* spa & wellness facilities. They benefit from market advantage which is use of the spa & wellness brand. It should be mentioned that this situation is possible due to relatively short time this market has been functioning in Poland, and no comparison available to the Polish tourists concerning the standards in other countries (e.g. the USA, where spa & wellness services are said to be the best quality).

This situation is *status quo* form, since there is a very small number of facilities which provide high standard spa & wellness services. Being a minority in relation to *quasi* spa & wellness facilities they have insufficient market power to shape a standard for all suppliers. The situation could be called market spoiling, which is a reduction on the quality of subject of exchange and simultaneously, an increase in real prices. To some extent, this is a kind of price conspiracy, but this is not necessarily a formal or intentional conspiracy, but it is a result of universal attribute of individual entities' opportunism.

Opportunistic behavior results from an essence of a human being itself and may be limited by cultural standards (social capital) or legal regulations. Since the mechanics of forming of cultural norms is a natural process for a society, it is not a subject of decision of a single-decision maker. However, there is a possibility of intervention of a state into the market mechanism in order to liquidate unreliability.

On a generally recognized tourism market, regulations are usually of 'paternalistic' nature. It means that a regulating body, in this case – particular official public authority, which has more complex information, enforces making better decisions than those ones which would be made on a free market (Samuelson, Marks 1998, pp. 619-620). Spa & wellness sector, despite being a part of the tourism market, is not characterized by any specific regulations in Poland. Spa & wellness resorts' clients do not know what they can legally demand from hotel owners and what minimal requirements should a resort/facility satisfy to be classified as a facility offering the biological renewal.

Polish legislator has not developed a uniform act which would adjust functioning of the spa & wellness market services. However, in the Polish legislation there exists a full range of acts which could assure required standard of biological renewal facilities. The most important legal provisions regarding hotels are contained in the Act on touristic services and Ordinance of the Minister of Economy and Labor on hotel facilities and other facilities which render hotel services (Journal of Acts 2004, no. 188. item. 1945). The Act defines the basic terms in the field of tourism, including hotel management, while the ordinance imposes detailed terms and conditions which must be satisfied by hotel facilities. Acc. to the documents, the hotel facilities, 4-5 stars, must have a biological renewal system, that is a swimming pool, a sauna, a gym, a solarium, massages and render other recreation services. 2 types at least. In case of boarding houses, the ordinance specifies biological renewal services in 3-5 star objects, located within entertainment & recreation areas and regions characterized by great natural advantages. A biological renewal system is deemed to comprise a swimming pool, a sauna, a gym and massages (two types at least).

Moreover, in the case of spa & wellness nature services, till 1st January 2012 a significant document was an *Ordinance of the Minister of Health on sanitary requirements which must be satisfied by hairdresser, beauty, tattoo and biological renewal facilities* (Journal of Acts 2004, no. 31 item 273). The aforementioned document contained general guidelines regarding rendering of services which could be classified as spa & wellness services. It also described the requirements which regarded, among others, work stands, standard of sanitary facilities and sports rooms. It also included the requirements connected with storing of cosmetics, the procedures regarding devices and the ways wastes were to be stored, and other which had to be satisfied during provision of spa & wellness services. Presently, the ordinance has been canceled and works are in progress on the new *Ordinance of the Minister of Health on detailed sanitary & hygienic requirements which must be satisfied by facilities, where hairdressing, cosmetic tattooing and biological renewal services are rendered.*

In the case where spa & wellness services are of medical character, apart from the aforementioned ordinance, it is necessary to adjust the hotel facilities to the provisions of the *Act on medical business* (Journal of Acts 2011 no. 112, item 654). It means a necessity to adjust to the provisions imposing detailed requirements, which must be satisfied by rooms and devices of an entity, which provides medical services (cf. Journal of Acts 2012, no. 0, item 739).

Concluding, creating or adjusting a facility to render spa & wellness services, apart from provisions regarding the hotel facilities themselves, it is necessary to meet a series of additional requirements. The aforementioned acts and ordinances, depending on a situation, may be extended by acts in the form of the following documents:

- Act dated 25 August 2006 on safety of foodstuffs and catering services (Journal of Acts 2006, no. 171, item 1225);
- Ordinance of the Minister of Spatial Economy and Building Industry dated 27 January 1994 on safety and hygiene of work with use of water treating and wastes processing chemical agents (Journal of Acts 1994, no. 21, item 73);
- Act dated 27 April 2001 on wastes (Journal of Acts 2001, no. 62, item 628);
- Act dated 30 March 2001 on cosmetics (Journal of Acts 2001, no. 42, item 473);
- Act dated 7 July 1994 Building Law (Journal of Acts 1994, no. 89, item 414);
- Ordinance of the Minister of Infrastructure dated on 12 April 2002 on technical conditions which buildings and their locations must satisfy (Journal of Acts 2002, no. 75, item 690);
- Ordinance of the Minister of Labor and Social Policy dated 26.09.1997 on general terms and conditions of the industrial safety and hygiene (Journal of Acts 1997, no. 129, item 844);

and auxiliary documents, non-binding - Polish Standards:

- Therapeutic swimming pools. Basic technical requirements, sanitary and operational ones (BN-80/9568-02);
- Therapeutic and rehabilitation swimming pools. Basic requirements (BN-90/9568-02).

The Polish law imposes the necessity of use of series of standards and guidelines which regard general spa & wellness services. Meeting such requirements warrants high quality of biological renewal services. However, the *Act on touristic services* alone does not define what services belong to the spa & wellness. And so, on one hand the legislator takes care of the quality of particular services which meet the spa & wellness concept, and on the other hand it does not specify what services must be rendered by a facility in order to use the spa or wellness names. This situation creates a hazard of opportunistic behaviors, since no accuracy of the definitions enables arbitrariness. Meeting all the requirements enumerated above generates costs which could be minimized by providing *quasi* spa & wellness services. Finally, the regulations on the tourism services market, even if

detailed and multi-aspect ones, are useless in the process of improvement of transparency of the spa & wellness market.

Efficiency of Self-regulation of the Polish Spa & Wellness Market

Activities of endogenous nature are not limited to negative affection on market transparency. There is a series of initiatives which may be classified as market self-regulations, the source of which are market entities (direct or indirect ones) heading for limitation of uncertainty of quality of rendered services. In the Polish market, one may distinguish many entities/organizations, such as Polish Association SPA&Wellness, Comfortum, Hotelarz, Hotel Profil, Spa Business or Eden. Apart from the first one of the enumerated organizations, the other ones are of intermediate nature in relation to spa & wellness market, since these are media dealing with spa & wellness services

Polish Association SPA&Wellness is a perfect example of an activity of spa&wellness services vendors aimed at reducing the uncertainty regarding the quality of services rendered by members of the association. At the end of 2012, the total number of 26 touristic facilities joined the association which was quite small number in relation to all facilities using the spa & wellness name. Acc. to the statute of the association (Polskie Stowarzyszenie SPA&Wellness 2012), its goals are (among others):

- Development of uniform system of products and spa & wellness services.
- Care for growth in the professional qualification of personnel.
- Constant acquisition of knowledge regarding issues related to spa & wellness.

The regulation of these goals takes place during organized congresses, participation in touristic services fairs or arrangement of post-graduation studies. Such activities are to the large extent oriented for suppliers, and they are supposed to form up their quality. These are initiatives stimulating growth in the quality and awareness of both suppliers and clients. However, their affection is seriously limited, since the industry organization has no impact on a statistical tourist.

Comfortum publishing house, in the framework of its activity, rates touristic facilities and awards so called SPA Certificates. In this way, it reduces the uncertainty regarding the quality of services rendered by them due to its rating system. The publishing house awards prizes annually, among others, for the best spa & wellness hotel in Poland (Comfortum Travel & Projects 2012).

Other magazines also play information provider role, however it is tough to determine if this is more about the form of objective minimization of information asymmetry, or it is more about marketing activity. Nevertheless, their activity affects transparency of the market, since it provides minimal information on the existing spa & wellness facilities and products & services they offer.

The aforementioned tools increase the transparency in the spa & wellness market, but generally they are insufficient. Most of all, it results from small affection on the consumers, whose awareness on the possibility to search for information on the quality of spa & wellness services is insufficient. The organizations presented above are not recognized by a general audience, and therefore their reputation and reliability have no enough impact. Consequently, self-cleaning of the spa & wellness market does not take place.

Conclusions

Intervention into the market mechanism is always connected with a hazard of other unreliability. The hazard may be compared to unexpected effects of intended actions. Liquidation of a single unreliability stimulates another one, even if this is not an intent of an authority. Also in the case of the spa & wellness market there exists such a hazard. Perhaps leaving the market 'alone' would result one day in the desired effects, due to the 'invisible hand' of the market. Nevertheless, presently the situation looks the other way round.

Firstly, the accommodation facilities use low awareness of tourists and use the spa & wellness name, but they do not render the expected services. Consequently, they enhance misinformation and more and more destroy market transparency. Secondly, lack of uniform classification does not protect any of the parties to transaction. Tourists cannot be sure of the quality of rendered services, while suppliers characterized by high quality standard cannot protect their interests and need to cooperate with entities which promote a false image of the market. Thirdly, the entities participating directly in the spa & wellness market are not able to clean the market because of low affection on awareness of consumers.

Finally, one could state that a Polish tourist is accustomed to classification imposed by an authority (regulating body). It is a guideline for him/her, and enables a quick rating of expected level of hotel services. The fact that only classified facilities may use such names as hotel or motel makes that a tourist loses his/her watchfulness. In a sense, this habit covers

also the entire touristic services market and consequently - the spa & wellness services. However, leaving this particular sector without regulations makes incoherence which consequence is a disharmony between expectations and the reality.

The necessity of classification of spa & wellness objects in order to assure market transparency by minimizing of information asymmetry and leveling of quality uncertainty is a form of regulation spiral. The regulation is partially a result of other regulations so, it also may cause necessity of other regulations. However, in this particular case no regulations may appear to be worse, since discrediting of this branch of tourism may not only seriously affect the domestic tourism, but also reduce its competitiveness compared to foreign markets.

References

- Akerlof G. A. (1970), *The Market for "Lemons": Quality Uncertainty and the Market Mechanism*, "The Quarterly Journal of Economics", Vol. 84, No. 3, http://dx.doi.org/10.2307/1879431.
- Baseny lecznicze. Podstawowe wymagania techniczne, sanitarne i eksploatacyjne, BN-80/9568-02.
- Brol M. (ed.) (2010), *Zarys ekonomii sektora publicznego*, Wydawnictwo Uniwersytetu Ekonomicznego we Wrocławiu, Wrocław.
- Comfortum Travel & Projects (2012), http://www.comfortum.pl/ (11.112012).
- Crebbin-Beiley J., Harcup J., Harrington J. (2005), *The Spa Book*, Wydawnictwo Thomson Cengage Learning EMEA, Londyn.
- Forlicz S. (2002), *Nowe technologii teleinformatyczne a przejrzystość rynków*, "Zeszyty Naukowe Wyższej Szkoły Bankowej we Wrocławiu", No 2(2).
- International Spa Association 2012, *The U.S. Spa Industry Fast Facts*, http://www.experienceispa.com/media/facts-stats/ (11.11.2012).
- Nowak P. (2008), Instrumenty ograniczania niepewności konsumenta [in:] A. Chodyński (ed.), Zeszyty Naukowe Wyższej Szkoły Humanitas, Oficyna Wydawnicza Humanitas, Sosnowiec.
- Polskie stowarzyszenie SPA&Wellness (2012), *O nas*, http://www.spawellness.org .pl/?page_id=2 (11.11.2012).
- Rozporządzenie Ministra Gospodarki i Pracy z dnia 19 sierpnia 2004 w sprawie obiektów hotelarskich i innych obiektów, Dz.U. 2004 nr 188, poz. 1945.
- Rozporządzenie Ministra Gospodarki Przestrzennej i budownictwa z dnia 27 stycznia 1994 w sprawie bezpieczeństwa i higieny pracy przy stosowaniu środków chemicznych do uzdatniania wody i oczyszczania ścieków, Dz.U. 1994 nr 21, poz. 73.
- Rozporządzenie Ministra Infrastruktury z dnia 12 kwietnia 2002 w sprawie warunków technicznych jakim powinny odpowiadać budynki i ich usytuowanie, Dz.U. 2002 nr 75 poz. 690.

- Rozporządzenie Ministra Pracy i Polityki Socjalnej z dnia 26 września 1997 w sprawie ogólnych przepisów bezpieczeństwa i higieny pracy, Dz.U. 1997 nr 129 poz. 844.
- Rozporządzenie Ministra Zdrowia z dnia 17 lutego 2004 w sprawie wymagań sanitarnych jakim powinny odpowiadać zakłady fryzjerskie, kosmetyczne, tatuażu i odnowy biologicznej, Dz.U. 2004 nr 31 poz. 273 (uchylony).
- Rozporządzenie Ministra Zdrowia z dnia 26 czerwca 2012 r. w sprawie szczegółowych wymagań, jakim powinny odpowiadać pomieszczenia i urządzenia podmiotu wykonującego działalność leczniczą, Dz.U. 2012 nr 0 poz. 739.
- Samuelson W.F., Marks S.G. (1998), *Ekonomia menedżerska*, Wydawnictwo PWE, Warszawa.
- Stajszczak-Szkopowicz J. (2012), *Słowa, słowa i tylko słowa...*, http://www.spa-inspirations.pl/index.php?mact=News,cntnt01,detail,0&cntnt01articleid=7 3&cntnt01returnid=56 (28.11.2012).
- Surdej A. (2011), Nowoczesne państwo a gospodarka rynkowa, Instytut Obywatelski, Warszawa.
- Szymańczyk J. (2009), *Bariery rozwoju lecznictwa uzdrowiskowego* [in:] *Innowacyjne kierunki rozwoju turystyki uzdrowiskowej i lecznictwa uzdrowiskowego*, Golba J., Rymarczyk-Wajda K. (ed), XVIII Kongres Uzdrowisk Polskich, Muszyna, http://www.sgurp.pl/Dokumenty/Kongres%20Muszyna/publi kacja.pdf (stan na dzień 28 grudnia).
- Ustawa z dnia 15 kwietnia 2011o działalności leczniczej, Dz.U. 2011 nr 112 poz. 654.
- Ustawa z dnia 25 sierpnia 2006 o bezpieczeństwie żywności i żywienia, Dz.U. 2006 nr 171, poz. 1225.
- Ustawa z dnia 27 kwietnia 2001 o odpadach, Dz.U. 2001 nr 62, poz. 628.
- Ustawa z dnia 30 marca 2001 o kosmetykach, Dz.U. 2001 nr 42, poz. 473.
- *Ustawa z dnia 7 lipca 1994 Prawo budowlane*, Dz.U. 1994 nr 89 poz. 414.
- Uzdrowiskowe baseny lecznicze i rehabilitacyjne. Wymagania podstawowe, BN-90/9568-02.