

Revista de cercetare și intervenție socială

Review of research and social intervention ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic) Selected by coverage in Social Sciences Citation Index, ISI databases

THE RURAL PHARMACY AND RURAL HEALTH SERVICES IN THE PERSPECTIVE OF THE INDIVIDUAL'S COMMUNITY PROTECTION

Alina Monica MIFTODE, Alina STEFANACHE

Revista de cercetare și intervenție socială, 2011, vol. 35, pp. 80-92

The online version of this article can be found at:

www.rcis.ro

and www.scopus.com

Published by: Lumen Publishing House On behalf of: "Alexandru Ioan Cuza" University, Department of Sociology and Social Work and Holt Romania Foundation

REVISTA DE CERCETARE SI INTERVENTIE SOCIALA is indexed by ISI Thomson Reuters - Social Sciences Citation Index (Sociology and Social Work Domains)



THE RURAL PHARMACY AND RURAL HEALTH SERVICES IN THE PERSPECTIVE OF THE INDIVIDUAL'S COMMUNITY PROTECTION

Alina Monica MIFTODE¹, Alina STEFANACHE²

Abstract

Pharmaceutical services are one of the vital components of the health system, both in the urban environment, but more so in the rural environment. It is wellknown that the inhabitants of rural areas have limited access to medical services due to several factors: health workers (physicians, dentists, pharmacists, nurses, midwives etc.) in insufficient numbers or unevenly distributed in the territory, meagre equipment in medical practices, faulty infrastructure, and, last but not least, the standard of living and the level of education of the inhabitants of these areas. This phenomenon has become more pronounced of late, due to the closing of several medical facilities, as well as to the exodus of medical professionals towards other countries. In these circumstances, maintaining pharmacies in the rural environment is a necessity; however, the numerous current dysfunctionalities in organisation and law jeopardise the existence and the normal operation of rural pharmacies. In such a pharmacy, community members are counselled with respect to medication, to how it must be used, to side-effects, so that its main goal, patient-centred health care services, is reached. At the same time, the rural pharmacy may become involved in the social life of the community, taking part, together with the other professionals in the primary care team, in actions for detecting and preventing chronic disease, infectious disease and STD, and for referring patients to specialists. The pharmacist may also contribute to the health and hygiene education of the rural dwellers, may promote contraceptive means, may give advice and indications to young mothers, may warn about the dangers of alcohol and tobacco etc. For this reason it is necessary that the authorities

¹ Associate professor, PhD, Faculty of Pharmacy, "Gr.T.Popa" University of Medicine and Pharmacy, Iaşi, e-mail: monica_mif@yahoo.com

² Senior lecturer, PhD, Faculty of Pharmacy, "Gr.T.Popa" University of Medicine and Pharmacy, Iaşi, e-mail: stef.alina@yahoo.com

analyse with a maximum of responsibility the dysfunctionalities currently present in the system of pharmaceutical services, to develop long-term strategies on welldocumented grounds, through which to provide pharmacies with a solid base for exercising its role in the global community protection.

Keywords: community protection; pharmaceutical care; rural pharmacy; dys-functionalities.

Introduction

Global community protection requires an ensemble of actions concerning the economic and legal protection, the individual security, the educational and cultural development and – a priority in the current context – the health protection of the family and of the individual. Several institutions fulfil these community goals, however the institution of the rural pharmacy has one of the most significant dynamics and one of the most up-to date set of issues. Rural residents have limited access to health services due to several factors: a shortage of health workers, meagre equipment in rural medical practices, lack of involvement of the local community in the operation of health care, and, last but not least, the inhabitant's reduced possibilities of travel to better-equipped urban centres. In these circumstances the rural pharmacy, there where such things exists, supplies not only pharmaceuticals and parapharmaceutical products, but also advice to both patients and the members of the community at large. Being easily accessible and having the required professional expertise, the pharmacist is an important player in the rural community. Together with the other professionals in the primary care team serving a certain area, the pharmacist takes part in the community activities such as: health education, prevention campaigns for certain diseases, promotion of hygiene norms, education campaigns for lifestyle changes or improvements etc. Direct involvement, through immediate contact with the citizens, of the pharmacist and his/her team in the life of the community can only be beneficial. By being the link between doctor and patient, the pharmacist is familiar with the patients' current problems and can oftentimes solve personal emergencies, as well as bring to the knowledge of those managing the community certain aspects concerning medical care and even social welfare. In the current context, the numerous dysfunctionalities occurring in the offer of pharmaceutical services in Romania must be analysed with a maximum of responsibility, so that they can be solved and an optimal legal and organisational framework can be provided for the pharmacy, in order for this important component of primary health care to be able to strengthen its role in the community.

Access to health care in rural and remote areas. Inequalities and imbalances

In order to define the multidimensional concept of *rural area*, one needs to take into consideration several criteria. Currently there is no consensus over a definition of the *rural* or of the *urban areas*. There are several criteria used in order to describe the difference between the two: population density, geographical remoteness, social and economic features etc. The United Nations acknowledge the difficulty of defining urban and rural areas at global level, believing that "because of national differences in the characteristic that distinguish urban from rural areas, the distinction between urban and rural population is not amenable to a single definition that would be applicable to all countries" (United Nations, 1988). Each country has its own definition for these terms, but as a rule there are two factors that are primarily taken into consideration: the profile of the settlement (population density, availability of economic structures) and accessibility from urban areas (as a rule, distance in kilometres). The Organization for Economic Co-operation and Development (OECD) recently proposed a definition of the urban and of the rural areas, that could be shared by all countries, so that it could be used consistently in comparative analyses concerning rural development policies. These definitions were given on two levels of territorial units: local and regional. At local community level, OECD identifies rural areas as the communities having less than 150 inhabitants per square kilometre. At regional level, OECD identifies several functional or administrative units, according to their degree of rurality, which depends on the extent to which the population of that particular region lives in rural communities.

Based on the analyses carried out, the regions were then grouped under three categories: (1) *predominantly rural regions*: over 50% of the population living in rural communities; (2) *significantly rural regions*: 15 to 50% of the population living in rural communities; (3) *predominantly urban regions*: less than 15% of the population living in rural communities. A study carried out by the World Health Organization (WHO, 2009), analysing the dynamics of health workers, suggests the following definitions for rural and under-served areas: (1) *rural areas* – those areas which are not urban in nature; (2) *under-served areas* – the most general interpretation of the term concerns the geographical areas inhabited by less affluent populations, with limited access to professional medical care and appropriate medical services. This category would thus include remote rural areas, poor neighbourhoods of urban areas, conflict and post-conflict areas, areas inhabited by minorities etc.

Inequalities and imbalances

The factors that cause inequalities between the rural and the urban areas in terms of health care are quite numerous; however, the main cause of this imbalance is the inadequate distribution of health workers: doctors, dentists, pharmacists, nurses, midwives, managers and support workers. The shortage of health workers in the rural environment or their imbalanced distribution in the territory is due to several causes. Research on the domestic and international migration of health workers shows categorises the factors that influence the choice of a job under the generic names of "push" and "pull" factors (Zurn P. et al, 2004:13). "Pull" factors are the factors that attract workers towards that particular area: better remuneration, allowances, improved standards of living, improved working conditions, opportunities for education of children, better supervision, access to continuing medical and pharmaceutical education and professional development. The "push" factors may include: poor remuneration, poor working and living conditions, lack of clear career profiles, lack of schooling for children and jobs for spouses, work overload, lack of management support, decline of health service etc. Taking these findings into account, the WHO proposes a number of intervention policies that would encourage health workers to practice in rural and remote areas, policies that should be implemented by the governments of all countries, and that should have the following goals: education and regulatory interventions, monetary compensation (direct and indirect financial incentives), management, environment and social support. In Romania, the gap between urban and rural areas in terms of health services is very wide, due to numerous "push factors" and to the lack of a coherent intervention policy, as well as the massive exodus of health workers (doctors, pharmacists, nurses) towards Western European countries or towards other areas.

The pharmacist's social and community standing

The World Health Organization (WHO) defines health as being "the state of complete physical, mental and social well-being and not merely the absence of disease or infirmity". In this context, the traditional role of the pharmacist – that of medication manufacturer and dispenser – has changed. The profession of pharmacist is currently recognised for its importance in the provision of health services, so much so that it was necessary to change the phrase *pharmacy practice* to *pharmaceutical care* (Hepler and Strand, 1990: 533), a term adopted by international pharmaceutical organisations and by academic training programmes. *Pharmaceutical care* is "a philosophy and standard of provision of care for patients" (Rovers JP et al, 2003). Nowadays, the pharmacist must not stop at merely dispensing medication accurately or at promoting sophisticated pharmaceutical

services. "Pharmacists and their institutions must stop looking inward and start redirecting their energy to the *greater social good*. Pharmacy re-professionalization will be completed only when all pharmacists accept their *social mandate* to ensure the safe and effective drug therapy of the individual patient" (Hepler and Strand, 1990: 533). Oftentimes, insufficient knowledge of medication side-effects or adverse effects has resulted in patient hospitalisation and even death. Through their intervention, through the advice given to the pharmaceuticals consumers, the pharmacists can reduce the risk of accidents caused by overmedication or by side-effects; thus, the number of hospitalisations and their duration will decrease, resulting in a decrease of healthcare costs.

As expected, this new approach of the pharmacist profession has required major organisational and functional changes. It was necessary to develop new standards for the pharmacy practice, to establish closer cooperation ties with other health-care professions and to create new strategies for pharmaceutical marketing. *Pharmaceutical care* combines thus the pharmacists' expertise with the professionalism of the doctor writing the prescription, the results of this cooperation being beneficial for the patient. The International Pharmaceutical Federation (FIP) and WHO have formulated the concept of *"the seven- star pharmacist"*. In order to qualify for this standard, a pharmacist must simultaneously be: (1) a compassionate caregiver; (2) a decision-maker; (3) an active communicator; (4) a good manager; (5) a life-longer-learner; (6) able to be a teacher and researcher; (7) a good leader. Besides, pharmacists must hold thorough specialised knowledge and to have the attitude, skills and conduct that befit their role within the health care team (Cisholm-Burns et al., 2010: 923; WHO and FIP, 2006)

Social protection in the perspective of the functions of a rural pharmacy

For practising pharmacists, being familiar with medication and the way it should be administered is not enough in order to exercise their profession in the community. Communication with the patient/customer is very important, as individuals reacts differently to the way they are treated. A number of social and psychological factors influence the patient's attitude: age, education, material situation, religion, related beliefs, the social group they belong to, temperament and, last but not least, the patient's health status. In the rural environment, the pharmacists have the opportunity of becoming familiar with the population served by their pharmacies and can cooperate much more closely with the GPs, so that the treatment given takes into account both the nature of the patients' ailments, as well as their social circumstances. The rural community pharmacy, especially those in remote areas, may become a centre for the promotion of health, by carrying out screenings concerning the incidence of chronic diseases (cardiovascular diseases, diabetes, osteoporosis etc.), using accessible equipment and engaging the whole community in that particular action. In many countries in the world, the active role the rural pharmacy has in the health care team is visible through its involvement in actions for the identification of high-risk patients, counselling them and directing them to the GP or to the specialist. Thus, screenings were carried out in order to identify patients with cardiovascular risk (Liu et al, 2009: 549; Hourihan, 2003: 28), in order to manage high cholesterol (Machado, 2008: 1195), in order to detect and prevent osteoporosis (Elias, 2011: 2587; Johnson, 2008:379). Tuberculosis, skin conditions, STD may also be monitored through the rural pharmacy.

Rural pharmacists and their collaborators can have an important role in promoting contraceptive means, in counselling and advising young people in the area of STD. Warning patients on medication side-effects or adverse effects is part of the permanent health education campaign the pharmacists and the other members of the health care team must wage among the population, especially in the rural environment, where many of the inhabitants are old, suffer from multiple diseases and have little access to other information media. A special problem that is widespread in the rural environment is alcoholism, a condition with extremely serious consequences, both medically and socially. Educating and advising the population on the effects of alcohol consumption, and of associating it with certain pharmaceuticals are of vital importance for certain categories of the society. Also, promoting personal hygiene and care norms can result in changes and improvements in the lifestyle of rural community inhabitants. This aspect of health education can be approached relatively easily by pharmacists, due to their permanent and direct contact with the most of the population, not only with ill individuals. A multidisciplinary approach of healthcare, the inclusion of pharmacies as competent members of the healthcare team, must be taken into consideration when developing health policies and programmes, both at local and national level.

Social marginalisation of the rural pharmacy

Hypothetically, the main problem facing the Romanian society is the ruralfarming one, and the community – the *health status* problem. The severity of morbidity levels, especially in rural areas, is rooted both in the shortage of doctors and pharmacists, as well as in the precariousness of medical and pharmaceutical facilities – the few that remain – in the current crisis. Despite these circumstances, the rural pharmacy fulfils essential functions, chiefly those of *health education* and *creation* – in this disadvantaged environment – of a genuine *culture of health*. In such a culture, the pharmacy does not merely sell medication, transmitting

instead a set of values and behaviours for a genuine *social and medical protection*, advice concerning the role of medication, the risks of overmedication, sensitive aspects in pharmacy etc. One could say that the warning formulated over a century ago by Romanian scientist Spiru Haret concerning the dangerous gap between the village and the city is still valid today. Whereas in the times of Haret, as well as later on, in the times of the great historians, sociologists and politicians lorga and Gusti (that is in the early 20th century, before World War II) the authorities developed health education programmes and established rural pharmacies, nowadays rural medial and pharmaceutical facilities are closed down or brought in bankruptcy by discriminatory social policies. The peasant and rural issue, debated in the Romanian parliament as early as the 19th century, is resurrected, paradoxically, in the context of the implementation of European values, one of them being the value of non-discrimination. Global provision of decent living standards for the inhabitants of the countryside caused Dimitrie Gusti to include in sociological teams physicians, who had the role of assisting the village population in becoming "health civilised", an essential part of social reform. The complex programme of rural education included four spheres, foremost being *health*, that is "the hygiene of the village" and of the people, based on culture and education. The status of the rural pharmacy and the issues of the health status as part of the social condition of the Romanian village were reactivated and submitted to an unprecedented public debate when the law concerning the Mandatory social service in villages was adopted (1938). According to the new law, the statutes of the village culture centres stipulated three objectives: strengthening bodily health, guiding labour and engaging in labour all social categories and lifting the soul in the village community, as well as more means for ensuring a better state of health, chief among them being the social pharmacy, specific to villages, followed by the public bath, practical advice, sports, the village library etc. (Gusti, 1939:30). In the same social reform programme, Gusti stipulated the organisation of Rural Superior Schools, the aim of which being "to equip with knowledge and skills concerning individual health and the health of the village, concerning local labour and production, social life and moral organisation" (Gusti, 1934: 1477).

Under the influence of similar schools in Sweden, Denmark or Norway, Romanian rural schools has as a goal the "social learning" of individual and family hygiene norms, of husbandry, of community cooperation etc. It is significant that these rural schools (special schools, with limited duration) were focussing on fundamental, *day-to-day* and practical aspects of people's lives, pertaining to a genuine social protection: the presence of a pharmacy and of the "rural bath" (according to the terminology of the time), as well as of micro-farms, of tools and of workshops for local traditional crafts. The School's curriculum for *Health* included, among others, *folk medicine*, human anatomy and physiology, the organisation of a "mini-pharmacy" and its operation etc. (Stoian, 1936: 153). The pharmacy as an institution and as a factor of human protection and civilisation was an integral part of a *coherent programme* of the rural school, as designed and temporarily applied by Dimitrie Gusti, Stanciu Stoian and Nicolae Iorga. Nowadays, unfortunately, the presence and the operation of rural pharmacies, so much needed in disadvantaged areas, are negatively impacted by the lack of a coherent programme for supporting and encouraging pharmaceutical services. Small rural pharmacies operate under the increasing pressure of financial problems, of bureaucracy and of the lack of interest from the part of local authorities and sometimes even of the community. The case studies carried out in several villages found a number of dysfunctionalities that negatively affect both the pharmacies and the population, causing a local drop in the quality of medical and pharmaceutical services. These dysfunctionalities are present both at organisational and at legislative level.

In the rural environment, pharmacies are very much dependent on suppliers and on the number of prescriptions, that is on the local presence of a physician. Without these prescriptions, rural pharmacies cannot survive, because the sale of over-the-counter medication alone cannot ensure their financial security. The rural population is much poorer and much more cautious in its health expenses than the urban population. The high prices of pharmaceuticals determine many rural inhabitants, especially the seniors, to give up their treatments. Bearing in mind that the relationship between pharmacies and the Romanian National Health Insurer (CNAS) is completely inequitable (the money for the partially and totally subsidised prescriptions is paid to pharmacies after very long time intervals), rural pharmacies often find themselves unable to pay their dues to the state and the debt to their suppliers. The delay in these payments generates penalty fees, and the rest of the costs (salaries, utilities, various taxes) are covered with great difficulty. One may say that pharmacies subsidise the state's social policies, without receiving, however, any kind of support from the latter.

The concept of *professional independence*, that is the freedom to make decisions based on the pharmacist's own expertise, becomes, in these circumstances, inapplicable. There can be no professional independence without financial and economic independence. Currently, a large number of pharmacies have declared bankruptcy or insolvency. The local authorities should be aware of the fact that closing down a pharmacy in a village will affect that place in more ways than one. Thus, if patients realise that they cannot find in the place where they live the medication prescribed for their treatment, and that they have to travel for this service to another place, they will prefer to chose a GP from a place that can provide both services; this means that the number of patients of the village GP will drop. Thus, the activity of rural medical practices may be affected, and the village as a whole will feel a negative economic impact. The decrease in the number of village GPs (given the exodus of health workers towards other areas of the world), followed by the disappearance of rural pharmacies will result in an important part of the population being deprived of primary medical care, with

very serious negative consequences on the health of future generations. Rural pharmacies have also been ignored in terms of legislation. The law that allowed GPs to buy, at affordable prices, the spaces that the local town councils had allowed them to use as offices for their practice, did not include pharmacies among medical services providers; they were always considered businesses (more or less profitable) and treated as such. One explanation for this attitude could be the fact that any individual, even one without medical training could open a pharmacy, the only condition for running it being the employment of a trained head pharmacist.

As it turned out, however, most rural pharmacies were opened by trained pharmacists, many of them with reduced financial potential, but with the potential of providing superior quality services. "I would like very much for ethical pharmacy to be promoted ahead of the mercantile one." stated in an interview the vice-president of the Romanian College of Pharmacists. This type of pharmacy can, indeed, be promoted in the rural environment, but in order to do that it is necessary that all the actors the existence of a rural pharmacy depends on cooperate in the interest of the community. Given that in the interval between the two World Wars it was possible to run coherent programmes for supporting and developing all the institutions that could contribute to raising the degree of civilisation in rural areas, it is hard to understand why, in a modern and ultratechnological world such as ours it is impossible to implement long-term strategies that would indeed provide a *community protection of the individual*. The increased awareness in society of the importance of pharmacies, especially in disadvantaged areas, resulted in various attempts at introducing measures that would contribute to maintaining pharmacies in villages and to increasing their effectiveness. Thus, in March 2010, the Romanian College of Pharmacists publicly launched a Reform platform in 10 points, aiming to reform the health insurance system under the formula of the "assumption of social responsibility". The principle of this Platform, Accountability instead of Responsibility, relies on the fact that accountability means assuming responsibility and answering (accounting) for failure in case of lack thereof. The purpose of this Platform is "to reform the health system, which is underperforming, ineffective and unjust, without including the individuals who currently represent and manage this system". It is known that the patient's accessibility to treatment depends chiefly on the insurer. Currently, the most serious problem is the reimbursement of medical and pharmaceutical services by the CNAS to the suppliers of such services. For this reason, the first point of the Platform proposed by the College of Pharmacists concerns the need to recover and extinguish the debt the CNAS has by the end of 2011, as per the Memorandum signed with the IMF. It was also proposed that the payment deadlines are shortened, in order to avoid the accumulation of debt. The application of these measures would result in a revitalization of pharmacies, especially of independent ones, and to the development of normal economic relations inside the system.

It was also believed necessary to introduce *contractual norms*, as the provisions of European directives concerning the strengthening of contract discipline among public authorities have so far been deliberately ignored by the authorities. This would mean introducing penalty and interest fees in the CNAS contracts, resulting in increased efforts to avoid the accumulation of debt. Currently, payments to pharmacies are made at delays that greatly exceed contract deadlines, but the CNAS does not pay any penalty fees; however, the pharmacies do pay such fees to the pharmaceutical dealers when the merchandise is sold by the pharmacy, but the money is not paid by the county offices of the national insurer (CJAS). It was also proposed that the CNAS be subordinated to the Prime-Minister, similar to other institutions, as the subordination to the Ministry of Health and the control exercised by it are "an obvious conflict of interest", and has always been a brake to the process of increasing the efficiency and quality of health services. Dismantling state insurers that exist in parallel with each other and supporting the development of a system of private insurance would eliminate the artificial discrimination between the various insured categories, would create unity and efficiency in managing public funds, and the private health systems would take over part of the *financial pressure* placed nowadays on the public health insurance funds. Transferring the decision-making power within the CNAS from the Chairman of the Board to the Board of Directors, electing a Chairman from among the members of the Board (consisting of members of the public authority as well as of beneficiaries of the insurance system - business owners associations, trade unions, pensioners, freelancers) instead of appointing him/her according to political criteria would result in an increase of accountability and of responsibility of the chairman, in a better representation of social partners, , including patients, in the decisions concerning the way public money is managed. Changing the law regarding the Ombudsman, that is granting explicit and unequivocal attributions concerning the defence of the population's right to health is another challenge proposed by the Platform. It seems that some of these proposals found their way to the ears of the decision makers and we are currently expecting improvements of the legislation.

Conclusions

The individual's and the family's health protection, as a component of the global community protection, is provided in every country by a well-structured health system, consisting of specialised institutions and personnel. Within the health system, the pharmacy occupies an important place, through its functions as provider of pharmaceutical services, as well as through its social role in the community. In the rural environment or in remote areas, the presence of pharmacies is indispensable, its role in the community being much more complex than in

urban areas. There exists a great imbalance between urban and rural areas in terms of access to medical services, especially in developing countries. There are multiple causes for this imbalance: health workers (physicians, dentists, pharmacists, nurses, midwives etc.) in insufficient numbers or unevenly distributed in the territory, meagre equipment in medical practices and pharmacies, organisational shortcomings etc. This gap between the rural and urban areas in terms of health care is much wider in Romania, due to the lack of coherent intervention policies, as well as to the massive exodus of health workers towards other areas of the world.

In the current circumstances, with many hospital families closed down, pharmacies in general and rural pharmacies in particular must assume their social mandate, to act on multiple levels in such a way that, together with the other professionals in the primary care team, they contribute effectively to improving the population's state of health. The importance of the community pharmacy and its role in providing primary healthcare is recognised internationally, and the phrase *pharmacy practice* has been transformed into *pharmaceutical care*, a terms that defines care for the patient as the foremost objective of pharmaceutical services.

The rural pharmacy, due to the functions it performs, contributes to the health protection of the community it works in: informs and advises patients of medication, on secondary and adverse effects and warns on the risks of overmedication or inappropriate medication. Screenings can be performed in rural pharmacies in remote areas in order to detect chronic diseases and to refer the sufferers to specialists. Rural pharmacies can run activities in order to advice on transmissible diseases, on contraceptive means, on the dramatic effects of alcohol abuse, and can promote hygiene norms that would improve the inhabitants' standard of living.

Romanian rural pharmacies, due to the expertise of their pharmacists, can perform all these functions. Unfortunately, a number of dysfunctionalities negatively affect the quality of pharmaceutical services. Of these we list here: (1) Lack of physicians in certain remote places and hence the impossibility for the population to receive subsidised medication; (2) In the absence of medical prescriptions, rural pharmacies cannot survive, as the rural population is poorer and more cautious in its health spending; (3) Faulty collaboration with the insurer, at national and county level, delays in reimbursing the prescriptions delivered by the pharmacies, which the pharmacy needs to reimburse to the suppliers; (4) Lack of support for the local authorities, who oftentimes treat pharmacies as purely profitmaking businesses rather than as an essential component of community healthcare services; (5) A lack of health culture in the population, which is not always aware of the importance of preventing and treating certain diseases, preferring other remedies instead (see the worrying increase of alcohol abuse in villages). To conclude, it is necessary to develop a coherent programme for reforming the health system, a programme that would underline the social responsibility authorities have and that would take into account the numerous problems posed by the current organisation of the health system. The development of this program must involve competent individuals with a thorough knowledge of the dysfunctionalities in the system, capable of adapting various models to Romanian realities rather than applying them mechanically; also, the prevailing interest should be to ensure an appropriate state of health for the entire population rather than to obtain economic gain or other benefits.

References

- Chisholm-Burns, M.A., Kim Lee, J., Spivey, C.A. et al. (2010). US pharmacists' effect as team members on patient care: systematic review and meta-analysis. *Medical Care*, 48(10), 923-933.
- Colegiul Farmaciștilor din România (2010). Platforma de reformare în 10 puncte. http:II www.colegfarm.ro/noutăți/151-platforma-de-reformare-in-10-puncte.html
- Elias, M.N., Burden, A.M., Cadarette, S.M. (2011). The impact of pharmacist interventions on osteoporosis management: a systematic review. *Osteoporos Int*; 22(10), 2587-2596.
- Gusti, D. (1934). Un an de activitate la Ministerul Instrucțiunii și Artelor, București.
- Gusti, D. (1941). Principiile și scopurile Serviciului Social, București.
- Hepler, C.D., Strand, L.M. (1990). Opportunities and responsabilities in pharmaceutical care. *American Journal of Hospital Pharmacy*, 47(3), 533-543.
- Hourihan, F., Krass, I., Chen, T. (2003). Rural community pharmacy: a feasible site for a health promotion and screening service for cardiovascular risk factors. *Aust J Rural Health*, 11(1), 28-35.
- Johnson, J.F., Koenigsfeld, C., Hughell, L., Parsa, R.A., Bravard, S. (2008). Bone health screening, education, and refferal project in northwest Yowa: creating model for community pharmacies. J Am Pharm Assoc, 48(3), 379-387.
- Liu, Y., Mc Donough, R.P., Carruthers, K.M., Doucette, W.R. (2009). Identifying patients at risk of cardiovascular disease a pharmacist-managed screening event for union workers and their dependents. J Am Pharm Assoc, 49(5), 549-53.
- Machado, M., Nassor, N., Bajkar, J.M., Guzzo, G.C., Einarson, T.R. (2008). Sensitivity of patient outcomes to pharmacist intervention. Part III: systematic review and metaanalysis in hyperlipidemia management, Ann Pharmacother, 42(9), 1195-1207.
- Rovers, J.P., Currie, J.D., Hagel, H.P., McDonough, R.P., Sobotka, J.L. (2003). A practical guide to pharmaceutical care, *Washington,DC: American Pharmaceutical Association*.
- Stoian, S. (1936). Scoala superioară țărănească, Cultura Românească, București.
- World Health Organization (WHO), 2009, Increasing access to health workers in remote and rural areas through improved retention, Background paper for the first expert meeting to develop evidence-based recommendations to increase access to health

workers in remote and rural areas through improved retention. http:II ww.who.int/ hrh/migration/background paper.pdf.

- World Health Organization (WHO), International Pharmaceutical Federation (FIP), 2006, New tool to enhance role of pharmacists in health care, http:II www.who.int/media centre/news/new/2006/nw05/en/index.html
- Zurn, P., Dal Poz, M.R., Stilwell, B., Adams, O. (2004). Imbalance in the health workforce, *Human Resources for Health*, 2(13), 1-13.