

Challenges of Azerbaijan Pharmacy Market Development

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Abstract

The goal of this paper is to analyze the main issues of supply and demand of Azerbaijan pharmacy market due to develop the ground for recommendations for further reform.

All over the world pharmaceutical market is integrated into the economic system of a country but plays a specific role as one of the most important determinant of population well-being. Statistical researches show the close correlation between aggregate macroeconomic and demographic indicators and demand in pharmacy market. Market structure and management of health care system are determinates of supply and pricing mechanism.

Brief analytical and statistical review of pharmaceutical markets of Azerbaijan is done.

In the country health care system entirely and pharmaceutical markets mostly are under direct and indirect control of government. Despite pharmaceutical market demonstrates improved availability, and matured in terms of importation, wholesale, distribution, and retail, the governance and financing of the system is anachronistic. Old Soviet type of health care system (so called Semashko system) is in conflict to the new market methods.

Based on available data and dialogue interviews with key stakeholders in the healthcare sector and Azerbaijan pharmaceutical market, some recommendations are offered.

Keywords: Azerbaijan, factors of pharmacy market development, pharmaceutical market, reform

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1. Introduction

All over the world pharmaceutical markets are integrated into the market system of a country but play a specific role as one of the most important determinant of population well-being. Pharmacy market has its distinctive characteristics. It is a combination of stakeholders in the production (companies – manufacturers), sale (distributors, pharmacy staff, doctors, and management of clinics and hospitals) and consumption of drugs (patients themselves).

Production or supply side in this market typically depends on market structure (which, generally, maybe competitive, monopolistic, oligopolistic, or monopolistic competitive) that finally determines the specific of pricing and profit maximization.

Pharmaceutical companies sell not just pills; they sell “health” that is a service. Therefore, in pharmacy market important is not only properties of the proposed goods but personal qualities of a seller, his/her marketing skills, pharmacological support, promotional activity of pharmaceutical companies, and etc.

Statistical researches prove close correlation between aggregate macroeconomic and demographic indicators (such as GDP, GDP per capita, household income, structure of consumption, government and households expenditures on health-care and drugs, degree of public finance involvement, etc. as well as the size, age and sex composition of population) and demand (or consumption side) in pharmacy market. Additionally, level of per capita consumption of drugs largely depends on social factors, traditions, and population’s mentality.

The next important specificity of pharmaceutical market is that, in accordance with the international and national laws, manufacturer has no right to offer their drugs directly to their patients. Pharmaceutical companies have to act via intermedi-

aries, such as doctors and employees of pharmacies. As a result, although almost every doctor requests samples of drugs for “testing” and this practice, along with long process of creation and registration of original drugs, increases costs, strengthens stiffness and slowness of pharmaceutical market operation.

The goal of this paper is to analyze consumption side (demand) and production side (supply) of Azerbaijan pharmaceutical market in order to define basic challenges of its development and to formulate background for its further reform.

The assessment of the market is based upon a bottom-up approach combining multiple sources such as desk research, interviews, and statistical data analysis.

The paper is organized as follow. Part 1 introduces the statement of the problem. The next, Part 2 deals with brief description of global and regional pharmacy market trends focusing on import, retail sales and manufacturing of medicine. The third part addresses the issues of Azerbaijan pharmacy market in connection with demographic and macroeconomic environment, health care system management. Despite of unmet preventive and curative healthcare needs in Azerbaijan, policy-makers continue to rely on administrative data that generally indicate population’s good health and an adequately performing healthcare system that, in fact, failed to reform Soviet-style centralized financing and normative allocating human, physical, and financial resources. Unfortunately, the need for reform has not been widely known for the society.

The paper ends by focusing on unsolved issues about design and implementation of drug policy as the base for further market reform.

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2. Global and Regional Pharmaceutical Markets: Recent Trends

A country's market is a part of global and regional markets. Usually global and regional trends affect or even dominate in local markets.

Lower level of spending growth in the United States, the continuing impact of patent expirations in developed markets, strong growth in emerging markets, and policy-driven changes in certain countries relating to drug reimbursement are key factors that influence and will continue impact pharmaceutical industry growth during the following years. The global pharmaceutical market is expected to reach \$1 trillion by 2014 and nearly \$1.1 trillion by 2015 (World Health, 2012). The market will increase at a compound annual growth rate of 3–6% during the next five years, slowing from the 6.2% annual growth rate that occurred during the past five years. Absolute global-spending growth is expected to be \$210–240 billion between 2011 and 2015 compared with \$251 billion between 2006 and 2010. Removing the effect of exchange-rate fluctuations, absolute global-spending growth will be \$230–250 billion on a constant dollar basis compared with \$228 billion in the previous five years (World Health, 2012).

Policy moves will affect healthcare spending including drug spending during the next five years. In the US healthcare reform as made through the passage of the Affordable Care Act is expected to expand health insurance coverage to 25–30 million people. Price controls in China are designed to achieve universal health coverage. Japan will implement its first price cut under its new protected innovative products policy. In Europe, price reductions for generic drugs are expected in Spain and Italy, and mandatory cost-benefit evaluations for new products are slated for Germany. Additionally, rebates and discounts are being applied more extensively by both public and private payers, particularly in the US, France, and Germany (World Health, 2010).

Today Azerbaijan is a member of CIS (The Commonwealth of Independent States). Connection between CIS countries is their common Soviet past, similar stages of development since independence, and mentality of population. The basic similarity is low income drug expenditure per capita comparing to developed countries. So, in the CIS countries per capita consumption of drugs does not exceed \$100, while in the countries of Central and Eastern Europe, for example, in Czech Republic the figure is \$331, in Slovakia \$254, in Poland \$154. In 2010 among CIS countries, Russia was the leader by per capita expenditure on pharmaceuticals (\$94); at the second place was Belarus with \$66. In Kazakhstan, Azerbaijan and Moldova, the figure was \$40–\$50. The lowest level of spending on drugs per capita was recorded in Armenia and Uzbekistan (\$29 and \$12, respectively) (World Health Organization, 2012).

Among the CIS in terms of retail pharmaceutical market Russia is the leader, Ukraine occupies the second place but demonstrate the highest growth rate of the pharmaceutical market in terms of value; Belarus and Azerbaijan also noted positive dynamic of pharmaceutical markets; Moldova, Armenia and Uzbekistan were characterized by a minimum of quantitative indicators of pharmaceutical market (Balakrishnan, 2012, p.21). Currently, among the CIS countries, only two pharmaceutical markets run into billions of dollars and packages. Thus, in January-June of 2011 the volume of retail sales of medicines in Russia amounted to \$13.3 billion and 4.4 billion packages,

while in Ukraine the figure was \$2.6 billion and \$1.2 billion, respectively (Zasyapkina, 2011).

In 2008-2010 the maximum growth rate of the pharmaceutical market in terms of volume was noted in Azerbaijan - 59%. The rapid market growth during this period was largely due to lifting the ban advertising of Over-The-Counter (OTC) drugs in media, which was introduced in 2006 and thus negatively affected the development of the market in coming years. In 2010 moderate dynamic pharmaceutical markets in kind were demonstrated by Ukraine and Russia (13.8% and 10.7%, respectively). In other countries this figure is in the range \$1.6–\$3 (Nudin, 2012).

In Ukraine, Russia, Belarus and Uzbekistan, local producers cover more than half of the needs of retail markets of medicines in bulk, while in terms of money their share is lower. In particular, in Ukraine local manufacturers' share is 27% in cash and 66% in kind. In Russia, situation is similar - local producers accumulate a stake of 25% and 63%, respectively. In Uzbekistan and Belarus segment of the local manufacturers are also very developed - their share is about 20% in cash and more than 50% in kind. In Moldova, Kazakhstan, Armenia and Azerbaijan local producers cover less than 15% of retail pharmaceutical market in terms of money and up to 30% in packages (Zasyapkina, 2011).

3. Azerbaijan: Macroeconomic Factors of Pharmacy Market Development

As any other domestic market, pharmacy market is affected by both external (macro) and internal (micro) factors. We are starting with the first group of factors.

3.1. Social Demography

Demographic characteristics of population and, particular, age and sex composition of the population is highly significant for country's economy. Age composition of the population directly affects the demand for drugs, its volume and structure. For example, antibiotics are consumed mainly by kids while pensioners demand special medicine, such as insulin or drugs to decrease blood pressure. In 2012 children below 14 years old amount more than 22% of total population while working age people (in Azerbaijan from 14 to 60 for women and 65 for men) counted most part of population. The share of older people (pensioner) above 60 is not significant, less than 9% (Annual Statistical, 2012).

According to the official statistics, some demographic indicators had deteriorated over the period, in particular, death rates had risen but the birth rates had risen also. Child and maternal mortality were among the worst affected. Another important fact is sex composition of population. In Azerbaijan it is quit balanced: women share about the same as men. In 2011, the ratio of males to females was 49.6:50.4; or there were 1017 females per 1,000 males (Annual Statistical, 2012).

3.2. Macroeconomic Environment

Azerbaijan can be considered as one of emerging "economic tigers". Last decade due to massive oil exports the rate of economic growth measured as GDP growth has been constantly over 30%, with 37% in 2006 and 31% in 2007 (Annual Statistical, 2012), that is the highest growth rate in the world. Other industrial sectors have not enjoyed a development comparable to the extractive industry.

The country's drastic economic downturn during the post-Soviet period seriously affected health care expenditures. The situation has been changing since the beginning of 2000s, when the country started to receive the first oil revenues. As a result, in 2008, the per capita expenditure on health care was €35.47 (about \$50) (Ibrahimov et al., 2010). Yet the share of the GDP spent on health care has not changed drastically. In 2011, World Health Organization (WHO) reported that Azerbaijan had spent 4.1% of its GDP on health care. Other sources, for instance, UNICEF and the World Bank cited numbers as low as 1% in 2011, and the total government expenditures on health for Azerbaijan as being 0.9% of GDP in 2010 (World Health, 2010). The comparison of Azerbaijan's public health care expenditures with other countries reveals a substantial lag: with regard to its GDP, Azerbaijani health care expenditures take up the lowest share among all post-Soviet and post-communist countries (World Health; 2010). This was followed by Turkmenistan at 1.0%, Tajikistan (1.5%) and Armenia (1.7%). The respective figures for some other post-Soviet economies were the following: Georgia 1.8%, Kazakhstan 2.4%, Uzbekistan 2.5%, Kyrgyzstan 3.2% and the Russian Federation 3.4%, Ukraine 3.8% (Akhundov & Nolte, 2010).

According to the World Bank projects the dynamics of health care spending as a share of GDP for the upcoming four decades, until 2050, in Azerbaijan will be still among the lowest in the region. The share of health care spending for Azerbaijan constitutes: 0.97% (for 2020), 0.99% (for 2030), 1.00% (for 2040) and 0.96 (for 2050) (Akhundov & Nolte, 2010). Such statistics exemplify the relatively low priority of health care in the government's current policy agenda.

The problems also concern a pretty high inflation rate (16%) and level of administrative corruption.

Till today Azeri economy is owned by the state (about 20%). State controls oil industry, mainly through the company SOCAR (State Oil Company of Azerbaijan Republic).

Azerbaijan is a low-income country. Historically, from 1990 till 2011, Azerbaijan GDP per capita averaged \$1137.96, reaching the highest level of \$2344.81 in December of 2010 and the lowest level of \$487.73 in December of 1995 (The State Statistical, 2012). According to a report of World Bank, in 2011 GDP per capita in Azerbaijan was \$2338.90, or it is equivalent of 19 percent of the world's average (The State Statistical, 2012). During ten months of (2012) income of population compared to the same period of last year increased by 13.7%, its volume on per capita formed on average 295.9 manat (around \$379) a month. Disposal income increased by 14.0% compared to the previous year and 63.4 % of total income was directed to final consumption (The State Statistical, 2012).

Average monthly wage/salary of employees was 396.9 manat (around \$508.8) in September, 2012. It increased by 8.6 % compared to January-September corresponding period of last year (The State Statistical, 2012).

Government is the major employer in Azerbaijan. In particular, in September of 2012 average number of employees was 1395.3 thousand person of which 838.0 thousand person or 60.65% were employees from state sector and 557.3 thousand persons or 39.9% worked from private sector. Besides, 9.5 % of employees were engaged in health and social services (The State Statistic, 2012).

3.3. Health Care System Management

From another side, pharmacy market is a part of health care system because of the fact that in most CIS countries the main form of medicine provision and public participation in financing drug supply is hospital procurement.

The first look at Azerbaijan health care system shows that it is organized as the inherited Soviet Semashko system. The system is:

- organized around the guiding principle of free and universal access to health care.
- highly centralized and hierarchical; most decisions about health policy are made at the national level. The Ministry of Health formally has ultimate responsibility for the management of the health system, but it has limited resources to influence health care providers at local level as they are financially depended on local health authorities or village authorities.
- equitable, despite qualitative differences in provision between geographical regions and mainstream and parallel health services.
- focuses on hospital provision instead of primary care.
- generally inefficient and resource intensive.

Therefore, most medical services are still provided by state structures, but there is a growing private sector. The private sector is licensed by the Ministry of Health. On average, about 25% of public funding for health care is allocated by the Ministry of Health; the remaining 75% is managed at the district level through the funding of local branches of the executive power (World Health Organization, 2012).

In Azerbaijan the health care system is funded both publicly and privately. Individual (voluntary) medical insurance is provided for about 1% of the working population, mainly the employees of oil companies and inter-governmental organizations (World Health Organization, 2012). The insured person is a client of private companies. Depending on the insurance contract, the company covers only a range of selected health-related problems; dental services are, for instance, usually excluded from coverage.

Providing mandatory insurance for the whole population is urgent, but has not yet been fully realized in Azerbaijan. In January 2008, the Government of Azerbaijan has introduced mandatory health insurance and established the State Agency for Mandatory Medical Insurance. However, this agency is not yet operational.

3.4. Price Regulation

Pricing mechanism finally reflects the structure of market and government intervention modifying any pricing mechanism significantly.

In Azerbaijan today there are three different state agencies that oversee pharmaceuticals, instead of the single agency that was in charge in the period from 1996. The Department of Licensing and Medical Equipment of the Ministry of Health oversees the registration and licensing of pharmaceuticals. The procurement of pharmaceuticals is orchestrated by the Innovation and Supply Center, and ensuring their quality is the main function of the Analytical Expertise Centre for Medicines.

Surprisingly, despite of the strict control over health care system entirely, there is no control over retail prices of pharmaceutical products. Distribution and promotion of the drugs is also totally in the hands of private companies and distributors.

As it was mentioned above, there is virtually no local pro-

duction of pharmaceuticals. By the end of 2010, there were 876 retailers and 107 drug importers in Azerbaijan (Law on medicines, 2010; Law on patent, 2010).

4. Base for Reform

Taken into account the close relationships among the economic development of a country, health care system and pharmacy market development, a set of reform may be proposed to improve situation on Azerbaijan pharmaceutical market. Based on undertaken research, published in mass media interviews with key stakeholders of Azerbaijan healthcare sector and pharmaceutical market, as well as our interview with Director of HB Co LTD (Azerbaijan) Mr. Tashkilat Agaev, the foundation for further reform may be formulated.

Azerbaijan needs serious reform of entirely health care system aiming on reduction of state intervention and administrative corruption as a result of the intervention, developing market mechanism and increase of competition. The role of government should be limited and would involve mostly drug policy which includes (a) drug quality control and assurance; (b) improved affordability of drugs; (c) efficient monitoring system; (d) appropriate use of drugs.

This policy would improve the population's real but not formal access to high-quality, safe and effective drugs.

5. Conclusion

In post-Soviet countries like Azerbaijan, due to their status as low income countries government intervention is essential for two purposes - to balance equity and efficiency, and to meet inherited socialist mentality of population.

Nowadays the health status of Azerbaijan's population is poor, both in absolute term and relative to other neighboring countries. In Azerbaijan health care system entirely and pharmaceutical market mostly is under direct and indirect government control. Despite pharmaceutical market demonstrates improved availability, and matured in terms of importation, wholesale, distribution, and retail, the governance and financing of the system is anachronistic in view of significant progress made towards market economy and major reforms in public sector. Old Soviet type health care system (so called Semashko system) is in conflict to the new market methods. Unfortunately, the need for reform has not been widely knowledge in society.

In our opinion, the question is not whether efficiency can be improved or what additional volume of funding is needed; rather than the question is which reform would create sufficient room for private sector development. In such a model, government would provide traditional functions such as control of drug quality and assurance; targeting the population in terms of drugs distribution and affordability of drugs and assisting the poor; building efficient monitoring system and appropriate use of drugs.

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