

**PAYMENT FOR HEALTHCARE IN POST-SOVIET
KAZAKHSTAN**



ERAJ GHIYOSOV ANVAROVICH

**A THESIS SUBMITTED IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR
THE DEGREE OF MASTER OF ARTS
(POPULATION AND REPRODUCTIVE HEALTH RESEARCH)
FACULTY OF GRADUATE STUDIES
MAHIDOL UNIVERSITY**

2007

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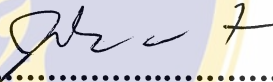
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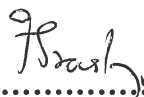
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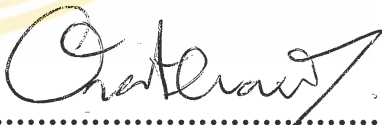
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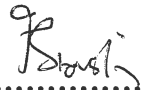

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ACKNOWLEDGMENT

This thesis is a result of my a year's course on M.A. International Program in Population and Reproductive Health (PRRH) Research, which was made possible by the Institute for Population and Social Research (IPSR), Mahidol University; The United Nations Population Fund, my family and friends.

I would like to gratitude all, who had helped me to make this academic accomplishment possible. In particular, my special thanks go to Director of IPSR Assoc. Prof. Chumrurthai Kanchanachitra, and Chair of the M.A Asst. Prof. Pimonpan Isarabhakdi, Ph.D. International Program in Population and RH Research, whose approval was crucial for accepting me to this program and fellowship from The United Nations Population Fund. Again to my thesis major advisor, Dr. John Robert Bryant, who had been supportive and accommodating from the start until I finished this work; to my thesis co-advisor, Professor Orathai Ard-am, who had shown her concern by being around during my work, and that her presence counted a lot, despite her busy schedule; to my external examiner, Dr. Symon Baker, who made substantial contribution in enhancing further the quality of this research study; to all my Ajarns, from whom I learned every lesson from the coursework; to Khun Luxana Nil-ubol, whose tolerance and concern, either officially or personally, had made my stay more comfortable; to all administrative staff (namely to Miss Ooy) whose kindness increasingly strengthen my esteem to Thai humanity; to the library staff, whose efficient service made my library work easier; to the finance staff, who had ensured the timely disbursement of our allowances; to the drivers, to the special group of IPSR staff and Thai MA students who at several occasions had made my stay even more exciting.

The United Nations Population Fund is functioning in Tajikistan and supporting population and government with formulation of policies and strategies to reduce poverty and support sustainable development. As well, there are few years students are getting advantage in kind of scholarship by the UNFPA, and improving their knowledge in demography and reproductive health surveys in Mahidol University. Thus, special thanks to the United Nations Population Fund that is supporting students in terms to develop their knowledge and deliver this knowledge further in their work, for development of Tajikistan.

My special thanks also go to my friend Chintana Ayeksuk, as a Thai friend who friendly and with pleasure support us during one year of our stay in Thailand; and other friends whose names cannot be mentioned due to space limitation. I thank all of them for making one year study life more exciting and special helps and encouragements. I will keep all of you in my mind forever.

Most of all, I am thank for the unending support of my loving family, specially my mother Kurbonbi Aminova who was always supporting my actions in my life and who is asking the Creator very recently for my success. I thank my wife Nargis Muhamadjonova for her tolerance, and my son Orzui Eraj whose existence gave me optimism in order to complete successfully my study for his future. Similarly, I thank my grandmother, grandfather, sister, aunts and all other relatives for their support and love.

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THESIS ADVISORS: JOHN ROBERT BRYANT, Ph.D., ORATHAI ARD-AM,
Ph.D. (Candidate)**ABSTRACT**

The collapse of the Soviet system in Kazakhstan brought in its wake healthcare shortage and a budget that was not able to cover all expenditure. A situation of shortcoming in public healthcare which associated low quality care, and increasingly obligatory payments emerged. . So it seemed an interesting question to find out why this was happening and who had to pay for healthcare?

The objective of this study was to explore the origination of payment in the healthcare sector in Kazakhstan after the reformation of the political system, and the factors influencing payment in the healthcare sector. Using secondary data from the Kazakhstan Demographic and Health Survey 1999, the study aimed to explore the demographic, socio-economic, and illness treatment factors influencing payments for healthcare. The reason for looking at the relationship between payment and the mentioned characteristics (mainly socio-economic) was to ascertain if payment occurs equitably according to demographic and socioeconomic factors, and type of healthcare, and to understand the determinants of payment in the transition period.

A model was formulated in order to conceptualize the relationship of independent variables such as place of residence, age, marital status, education, employment, household assets, and type of healthcare facilities to a dependent variable that is “payment for healthcare facilities”.

The result of this study identified that due to the economic crisis in the transition period even public ostensibly free of charge healthcare services in Kazakhstan require informal payments. Urban residents are much more likely to pay for healthcare than rural residents; however, payment occurs in both areas, and in most in public healthcare services. Payment occurs because it means higher care can be obtained. Those residents who are of higher socioeconomic status tend to pay more for services. These problems highlight the need for a more accessible and equitable healthcare system. One way to do this would be to formalize the existing informal payment system.

**KEY WORDS: TRANSITION / PAYMENT FOR HEALTHCARE /
LIMITATION OF BUDGET IN HEALTHCARE**

44 pp.

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LIST OF ABBREVIATIONS

UNFPA	The United Nations Population Fund
AKF	Aga Khan Foundation
FGP	Family Group Practice
PAP	Pharmaceutical Ambulatory Practice
WCC	Women Counseling Center
DK	Don't know



CHAPTER I

INTRODUCTION

1.1 Background

The collapse of the Soviet system and the move to a market-based economy dramatically affected the health sectors in all of the countries of the former Soviet Union. The reformation of the political system and the economic crisis led to a host of problems. The primary and secondary healthcare services, which were free of charge and properly organized during the Soviet period, lost their earlier structural function.

During the Soviet era there were only public healthcare services. The Soviet healthcare system was designed in such a way as to provide service to all citizens, and access to a basic level of care was available to all. The expenditures and resource distribution procedures were formulated according to the norms determined by the Ministry of Health in Moscow, and the All Union Research Institute in Moscow (G. Grabman 2003). All the Republic level individual health ministries were responsible for implementing Moscow's policies.

Previously, private healthcare was not allowed, and even after independence, private system in the republics developed very slowly. Three main services were under the primary public healthcare, and are still available namely. There are "Polyclinics", "Clinics" and "Women counseling centers". Each of these public services had their functions with the system, and payment was reimbursed by the government, so all healthcares provided by the government were free of charge. The hospital was and is a central institution for secondary public healthcare, and was also free of charge previously.

In Central Asia due to the negative effects of political reformation, the health sector is now facing challenges, which affect the quality of healthcare service. Medical equipments have become obsolete and are in need for replacement. But the limited government budget is not able to cover all expends. At the same time, however, the number of medical staff and medical buildings remain as numerous as before. The

salary of medical doctors and nurses is very low. In many cases, skilled doctors leave the country for a better life elsewhere. Healthcare staff works under difficult conditions that are not conducive to high-quality care while, at the same time, the public is very unhappy with the health services provided.

Thus, where the government healthcare system is not providing proper services and where physicians are forced to serve the public even though with a low salary, a new process has appeared in the healthcare system, that is “use of payment”, which in some cases is formal and in others informal. This transitional condition of post-Soviet republics involves such a phenomenon and will continue to do so in the near future. However, the socioeconomic condition of the population does not allow for equal support for all people, even though the post-Soviet republics have been following the strategy of “Health for All” which was written into the Alma-Ata declaration in 1978.

1.2 Problem statement

The economical crisis and lack of adequate healthcare service played key role in some changes in demographic characteristics of Kazakhstan population. Thus, the birth rate per 1,000 populations decreased from 20 to 14 percent, and death rate per 1,000 increased from 8 to 10 percent between 1990 and 1999 years. Taking into consideration the poverty, “need to pay for healthcare” avoid most poor people from seeking care. Thus, one of the government responsibilities in financing healthcare is to prevent risks of illness across the population, even for poor people, since they are unable to pay for healthcare. The estimated poverty rate in Kazakhstan by 1999 was 34% (Economic and Social Survey of Asia and the Pacific 2004). Thus, providing the population with free-of-charge service continued to be the government’s duty, even though it was difficult for the newly independent countries to support such a function with budget constraints. Thus, the shortage of funding compelled medical staff to charge patients for the services they received.

Nonetheless, medical staffs, being part of the population with unsatisfactory social and economic conditions, need to survive as well. The salary for medical staff was (is) not sufficient (\$30 per month), and in a majority of cases health services occurs with patients being charged. Due to the economical crisis, transition and changing in public spheres, the charging (payment) system starts to be functioning.

The newly independent republics were not able to obtain modernized and appropriate facilities for the healthcare sector. The medical staff faced with underpaying and financial disadvantages. Thus evidently functioning healthcare services were changed by using of payment. Even though payment was not formal, but due to shortcoming of income compelled medical staff to charge money from patients.

Another factor is “globalization” which brought a new private system to the post-Soviet countries. And such situation was flexible to some of the healthcare equipments establish payment system, but on the other hand it was not obtainable by all of the population. And according of the situated factors such as: live demands, transition effect, keep the health structure in active, and get quality of healthcare “using of payment” has come into view that was not formulated yet as a formal in public healthcare sector. Even though private services is available after independence, but managing skills are not sufficient in order to keep appropriate control over the remained sources and incomes. Moreover “payment” was functioning in public healthcare services, which was not accounted to balance of healthcare system, and was directly given by patients to medical staff for their service. Transforming from “government managing system over the recourses and distribution”, into medical establishment responsibility to control over the all resources and distribution, have required talented people to manage the changes in target area. And to develop system for payment which would provide stable financial control over all incomes. But management system was not sufficient in post-Soviet republics who independently functioning in different spheres of life. Taking into consideration all mentioned problem statement the study needs to be revised in order to explain “Why payment in healthcare services emerged and became frequent in Kazakhstan?” and “Who are paying for healthcare in Kazakhstan?”

1.3 Research question and Objectives

Overstaff and overcapacity in the healthcare system did not match the capability of newly independent countries that faced a shortage in financing. Declining income has resulted in underpaying and unpaid of staff, and obsolete medical equipment. The healthcare system, however was need to keep equipments appropriate for sustain service. And the same time medical staffs within being in need have use

“payment”, in order to get benefit from the proposed service. Transition process which brought globalization, has introduced a new private system to post-Soviet countries. The objective of this study is to explore the origination of payment in the healthcare sector in Kazakhstan after the reformation of the political system, and the factors influencing payment in the healthcare sector. The study has two objectives:

Objective 1

The working process for objective 1 is to review previous studies regarding payment, transition process and its impact, declining of income in healthcare service, underpaying and unpaid of staff, globalization impact in Kazakhstan, and determine indicators influencing to use of payment in healthcare sector by 1999. Also will try to determine, either government developed policies for generalize the payment system in Kazakhstan.

Objective 2

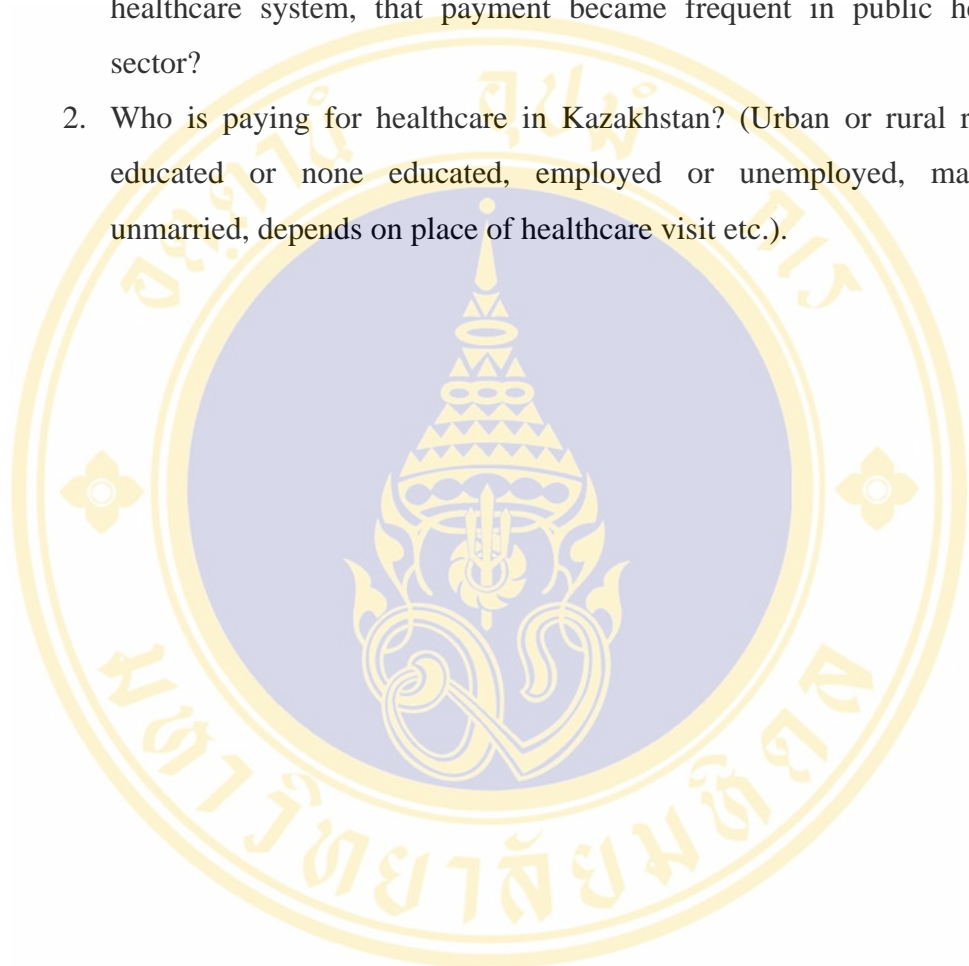
Using the secondary data - Kazakhstan Demographic and Health Survey 1999 the study aims to explore demographic, socio-economic, and illness treatment factors influencing to use of payment for healthcare. The importance of looking at the relationship between payment and the mentioned characteristics (mainly socio-economic) is to understand whether payment occurring equity according to demographic and socioeconomic factors, and type of healthcare, and to understand the determinants of payment in the transition period.

Such methods will be used to analyze the relationship: bivariate and logistic regression. A model of the study will be formulated in order to conceptualize the effect of independent variables such as demographic, socioeconomic, and type of health facilities to dependent that is “payment for healthcare service”.

Research questions

Take into consideration these issues would be appropriate for this research to raise question:

1. How the reformation of political system in Kazakhstan has impacted to healthcare system, that payment became frequent in public healthcare sector?
2. Who is paying for healthcare in Kazakhstan? (Urban or rural residents, educated or none educated, employed or unemployed, married or unmarried, depends on place of healthcare visit etc.).



CHAPTER II

LITERATURE REVIEW

The new payment system in healthcare services that has appeared after the collapse of the Soviet Union was instituted for several reasons. First of all the economies of each independent country have not been able to provide an adequate income for all people because of lack of finance. Environmental resources have been inadequate or poorly managed. Most important resources for financing healthcare remained very limited in these countries. Thus, the healthcare system has turned into a payment for health service system, which in most cases are not formal, as most of post-Soviet countries still are using the previous free of charge healthcare system.

2.1 The transition economy and payment for healthcare

Typically, public healthcare provided through large public systems is an initiative of government in order to deliver low price service to the poor who, make up significant proportion of the population. However, the budget deficit in healthcare is creating a rise in medical costs, which in turn is bringing up the issue of reorganization of financing for the healthcare system. (Herrin and Thomas, 1995) Payment in many developing countries with transitional economies has become a significant issue due to financing and delivery of public health services. The imbalance between demand and supply of healthcare services, limitation of budgets, and lack of government contribution in low income countries has required government facilities to start charging patients as a policy response.

According the R. Thompson (2004), “unofficial payment is closely related to the transition process”. As in any transition process, the initial output and employment decline. Those countries which were faced with transition have not fully recovered after their general restructuring and entry into the market economy. As a result tax income has declined, which in turn has led to a reduction of funding for the healthcare sector. Such shortage in funding resulted in patients being regularly asked to cover the unmet expenses of their healthcare by paying, through unofficial channels, for

medicines and other supplies required for their treatment. Thus, the Central Asian health system in transition characterized by a dual system, the first one like the old state structure with under-funding, and the second, an unregulated private system, following the dictates of the competitive market economy.

According to the Business Dictionary by P. Jack, “an underpay situation occurs when individuals are being paid less than a job or procedure is worth in market or perceived terms”. Thus, physicians, who are underpaid and unmotivated, have more power over treatment, and so exploit the difference in service quality according to what patients are able to pay for. In their study in Kazakhstan R. Thompson and A. Xavier (2004) found that after discovering the poor provision of healthcare, patients are willing to pay informally in an effort to improve the quality of care that they receive. This previous work of researchers in field of “payment in healthcare” expressing the information regarding payment which is associated with higher quality of care and disadvantages in terms of quality, if non-payment patients are applying.

In his work M. McKee (2004) states that transition has created winners and losers within societies and community levels. Transition had an immediate impact in the healthcare sector. Health outcomes are obviously related to economic performance. In reality life expectancy in the 1990s (especially in post-Soviet countries) can be characterized as a result of changing in economic situation. On the other hand, health itself impacts on economic performance because people who are wealthy can contribute to the economy, so having reasonable expectation of life they are more likely to invest.

G. Kadyrkulova (2003) in her work argues that improving of health condition is connected to family income growth and improvement of well-being. Thus, applying to healthcare services, patients face with factors such as - inconvenience of health services, high cost of service and weakening of healthcare quality. The main problem in setting up partner relations between the patients and a health system is the absence of their willingness to partnership which rose due to economical insufficient.

Maureen Lewis (2000) in her study mentions that “informal payments are a form of systemic corruption in health sector”. She mentions that the most costly elements in post-Soviet healthcare are the number of beds, physicians, and distance between residence place and hospitals. There too many healthcare staff, hospitals with

low occupancy rates, lack of modern management, insufficient base to keep the activity of oversized healthcare. Physician salaries were not sufficient as a result which faced them to take money for healthcare services.

Informal payment describes in different works of researchers as “under the table payment”, “envelope”, “direct payment by patients” which defines pay by patients for the services they are able to get for free. And which mostly occurs in public health system of countries that faced with transition. S. Allin, K. Davaki, and E Mossialos (2005) describing that informal payment exists for several reasons:

- Economic reason is the main one and occurs in form of general shortage of financial recourse in public system.
- The socio-cultural reason describes as lack of trust in government and culture of tipping. The healthcare system in post-Soviet countries was formed a government role as responsible to cover financing expends and delivery appropriate services. Informal payment in healthcare system started to happen, since the government could not deliver the promising services. In such situation is possible to say that healthcare system in transition period have accepted informal payment by reason of unaccountability and government oversight which create condition for lacking in transparency.

Within sufficient human resource and more facilities the healthcare provides with better quality, in urban areas, and this factor increases demand for charging of patients for service. As the same time, rural areas within lack of medical facilities and shortage of specialists decreasing the rate of payment for healthcare compare with urban regions. According to S. Allins, K. Davaki, and E Mossialos (2005) informal payment mainly relates with in-patient care settings and tend to be more common in large towns and cities. Allin explains informal payment occurrence as a cost for service contribution, or as an abuse of power by physician to patient who need immediate service. Healthcare payment dramatically affects to the poor patients who expend huge amounts in order to pay for healthcare services. According to S. Allins, K. Davaki, and E Mossialos (2005) in Kyrgyzstan one third of patients borrowing money for in-patient care, and rural patients (45%) of in-patients sold produce or livestock to cover hospital costs. Thus, might to say that even though, poor individuals pay less then rich, they pay more as a proportion of their income.

The American Medical Student Association (2006) states that demand for rural physicians in United States are high. Population in small towns in United States faces the lack of their medical services because there is not sufficient number of doctors to run clinics. Factors expressing loss of country doctors, increasingly specialized nature of medical performs and rapid rate of technological progression (American Medical Student Association, 2006). Relatively, possible to notice that in developed countries the issue of healthcare promotion visible as well in rural areas. But the difference between developed and developing countries which facing with transition is that modernization and technological progression pushing medical specialists in developed countries to achieve more progressive methods practicing in big cities and urbanized conditions. In that time, where developing countries in transition feeling lack of medical facilities, and less motivation in medical sphere. For example, in Tajikistan where more than 60% of population are poor, vulnerability in healthcare service meets in both - urban and rural areas. In rural areas where usually diseases occurs and relates with underdevelopment, the urban poor facing common health problems such as accidents, violence, and heart diseases. However, resource availability in urban areas in developing countries creating access to healthcare services better than in rural. And rural residents have less medical benefits than urban residents.

Tokezhanov (2003) in his study determines four main sources of health financing indicated by world practice: 1) General tax; 2) Social insurance; 3) Private voluntary insurance; and 4) out of pocket payments. The Mandatory Health Insurance Fund (MHIF) was introduced in Kazakhstan in 1996. The role of MHIF as a dynamic power for reforms was limited by its dependence on local administrations for financing and its lack of power to make large-scale changes. Even with existing limitations the MHIF system started changing roles and relations between government, providers, and patients within the healthcare system. Being non-budgetary fund, MHIF raised issues on accumulation of resources and non-line item financing. Based on the current situation in Kazakhstan there were approaches such as healthcare system model which should be based on general tax and social insurance. Tokezhanov recommending that continuously, monitoring and quality management process should be established for improvement of system, and satisfy international requirements, norms and standards.

X. Liu and W. Hsiao (1995) in their study found some factors which have an effect on healthcare cost increases in China:

1. Increase in number of beneficiaries. In this part researchers compare and found difference in healthcare beneficiaries among 1952 and 1989. The reason for this was increasing of population from 15 million into 153 million.

2. Inflation factors, including inflation in the input factor price and in the fees schedules. The economic reform brought new investment and created new demand, thus the market prices of many supplies increased. Contribution prices of health services increased, so this ultimately effect on the cost of social health insurance.

3. Aging of the covered population. Per capita expenditure of social health insurance by various age group in given years was estimated. The hypothesis for this method described that per capita expenditure of every age group can change over time.

4. Remaining factors such as increase in demand use of new technology and drugs, and improvement in the general quality of services.

Thus, the experiences describing that a cost of public health will usually increase, if the cost increase determine by relatively unmanageable factors such as inflation, increase staffing, and aging of the population.

2.2 Public and private healthcare sectors

Public healthcare sector is supported by government and free of charge. Private medicine includes mostly all kinds of health treatment supported by enterprise (or non government organization). In his study Philips (1990) find that in Thailand public sector is generally struggling to provide preventive healthcare as well as therapeutically services. He supposes those who can afford to pay can be exposed to many investigative procedures and expensive treatment. Dissimilarly, poor people who can not pay but need treatment, they have to rely on a minimal public healthcare services.

One of the reasons for different quality of service explains by Syied (2000) who study this issue in Bangladesh. He says that private hospitals rely on income from clients. Thus they provide more quality service to patient compare with public sector. Public hospitals in their turn have less motivation for taking extra initiative to improve the services. Most researches concentrate on the quality of healthcare between public

and private sectors attempting to explain people's interest and payment behavior. Bhatia and Cleland (2001) in their study found that majority of care in India are provided by private sector. In their work they found that 58% mothers with illness cases visiting doctors, of which 80% are private doctors. Those women who traveling long distance and pay for healthcare believe that can get more effective treatment.

But, in case of countries facing with transition period, the only quality of service can not explain people's behavior for expanding in healthcare services. Stacey (1988) confirms that dominant system of healthcare of any society can not be examined separately from other respects of the society; rather, it is an expression of the values and social structure of the society. Thus, in Kazakhstan case might to notice that expression of the payment values in healthcare are relating not only on quality of healthcare, but totally on socially structured culture within occurring condition and appearance which reformation of system brought.

2.3 Healthcare Reform

People are affected by government in reduce and rising health care expenditures, but not all of them have the same financial resources to manage with these changes. The reform in health sector was needed to address the underlying financing and delivery problems facing their health systems. The general policies followed to improve such drawbacks:

- Attain of supplementary financing through no budgetary sources as payroll taxes on employers; voluntary insurance; private financing; patient cost sharing.
- Decrease of pressure on the national budget through decentralizing the financing of healthcare.
- Improve system efficiency by introducing incentive-based provider payment mechanisms.
- Improve the service delivery system by reforming it to favor primary care, promoting general and family medical practice, and removing unneeded hospital capacity.

- Pharmaceutical regulation, management, procurement, distribution, and pricing.(Klugman, Schieber, Heleniak, Hon. 1996)

In developing countries with small economical growth some evidence arguing that people turn to self-treatment or traditional treatments bypassing the formal healthcare system which was insufficient and expensive for poor stage of population. From the providers' side, motivation of healthcare workers and their interest for their profession was low prior to starting of the health reform program in Kazakhstan. In contrast to such backdrop, the health authorities set an ambitious reform agenda in one of the Oblasts in Kazakhstan. Zhezkazgan was the chosen oblast, and reform aim in there was to resolve poor quality of the health system through the introduction of the market-oriented financing and service delivery. The principal goal was to change balance of resources and service provision to primary care through system of linking reforms:

- Rationalization of the hospital sector
- Introduction of a new incentive-based hospital payment system
- Reorganization of the primary care delivery system
- Introduction of new incentive- based payment for primary care
- Free choice of primary care providers through open enrollment (Abzalova et al. 1998)

The dominating system in primary healthcare such as “policlinic” was shifted into preventable stage in term of separating financial and administrative responsibilities. Family group practices (FGP) were established in rural and urban areas through the oblast. Out of 89 FGPs establishing between 1995 and 1997, there were 9 of them belonging to Zhezkazgan city. All of them were privatized and owning their family physicians. After the Zhezkazgan privatization reforming program, the health authorities felt that opportunity to build a business and collect the financial benefits of serving the population efficiently should allow creativity and increase the level of professionalism of primary health care workers. Economic interest in their work is primary source of increased motivation for primary care providers, at least for head physician and managers. One of the most important results of create self-regulating primary care is that finance directly will be balanced in the FGP, protecting

their flow of resources, but not through polyclinics or hospitals. All these factors are positively having effect to quality of healthcare delivery. The objective of health-sector reform can be stated as: to improve the health status of the population, ensure equity and access, improve clinical effectiveness, and ensure quality and consumer satisfaction. Reaching those objectives, however, is not an easy task, as not all of the population are able to apply for payment system, and not all are familiar with new reform in healthcare. The Kazakhstan Demographic and Health Survey in 1999 explains that out of all women respondents, 39 percent considering obtaining service from FGP, even though 55 percent of all respondents are aware of new reform system in healthcare sector.

2.4 Factors influencing to payment for healthcare

“Spending on healthcare is a result of a multitude of factors interacting with one another” (Seng Lee Huang, (2004)). Even in cases where fees are paid formally to a cashier, patients cannot always separate what is legally required and what is technically taken.

In Kyrgyz Republic a percentage of patients making informal payment for inpatient care reports at 11 percent in 1993 and rising to 75 percent by 1996. Some of the factors for such increasing are due to overall decline in income, which also reflects the rising weight of health care costs for households (World Bank 1997). Another aspect is quality of care. M. Lewis (2000) brings example of Bulgaria and Poland, where respondents noted that patients pay to seek higher quality care or to soften attitude of staff whom they toward. However, payment in healthcare may possibly relate to use of service. Weitz (2001) discussing the McKinlay's identification on effects of individual on approaches and problems in use of service. McKinlay listed following approaches: economic; socio-demographic; geographical; cultural, and delivery system. Nevertheless, payment outcome is the condition which in transition period can be described the occurrence by mostly economical imbalance, and periodically turns into legal or illegal action. In case of Kazakhstan, as a country with transition characteristic, might to relate payment in healthcare with demographic, social and structural, type of health facilities, household and residential resource dimensions.

The Age and sex variables may represent demographic dimension. Age is significantly related to the payment in healthcare through close association with ages of having income (25 to 50 years of age). There is obvious that men's position is higher than women's even in a modern society. And such inequality makes women's health lower level. Especially in Central Asian countries where women counts a keeper of house and men migrating for finding recourse for living and who in most cases can not attain their purpose. Cashin (2002) in his work indicates that in Central Asia based on a combination of utilization and cost of services, women at reproductive age consume approximately 1.5 times the average per capita primary healthcare resources. While men in the same age group consume about one half of the average.

The education level, income, and occupation may represent social structural dimension. For example, the education influence on the knowledge of where to pay, or not for healthcare service. Previous studies giving different information on education and its relationship to preference of healthcare with payment or free system. Bhatia and Cleland (2001) in their study found that healthcare spending among young mothers in India are not significant to educational differences. The study shows, although with education increases, mothers are more likely to apply to private care. Income relatively may effect to payment in healthcare. And it is possible to observe this association through place of residence in terms to compare urban and rural health expenditures. Hotchkiss et al (1998) indicates that in Nepal the percentage of total household expenditures used for healthcare service increases with the level of household income.

The household and residential resource dimensions highlights ability of individuals to pay for health service. Thus, wealthy household representatives are more likely to pay for healthcare than non wealthy one. According Falkingham (2000) in Tajikistan, 37 percent of pregnant women did not seek prenatal care due to its cost and one third of resent births occurred at home. However, some other previous studies verifying that expends are doing in both urban and rural areas, and in some cases the proportion of expends for healthcare larger in urban than in rural areas, due to more ability of household to pay and quality of healthcare service. The example is Indian mothers (stated upper) who are being rural residents are seeking for private healthcare in hope to get more quality of care.

Payment to type of health facilities in formal or informal way are difficult to prove. As many surveys shows that description of getting answer in this question is remains unclear. Even in some cases where fees are paying officially to cashiers, patients can not separate whether is required legally or technically optional. However, Lewis et al (2001) in study conducted arguing that unofficial payments can be occur as an attempt to improve quality of service receive in under-funded state facilities. Delchayeva et al (1997) found that in Bulgaria payment to health worker signified 14 percent of patient's average monthly income with the cost of surgical procedure with 83 percent of the average income.

Based on above literature review and further quantitative analysis the categories of payment in healthcare will be investigated by demographic (age, marital status, family size) characteristics, socio-economic (education, income, occupation, residence) characteristics, and type of health facilities utilize.

CHAPTER III

DATA AND METHODOLOGY

3.1 Data Source

This study makes use of the secondary baseline data from the 1999 Kazakhstan Demographic and Health Survey (KDHS). This project was undertaken by the Academy of Preventive Medicine of Kazakhstan, and MEASURE DHS+ Macro International Inc. The survey provides data on women's reproductive histories, knowledge and use of methods of contraception, breastfeeding practices and nutrition, vaccination coverage and episodes of diseases among the children under the age of five. Similarly, the data provides information on knowledge and attitudes regarding HIV/AIDS and sexual transmitted infection, men's reproductive behavior.

3.2 Sampling Method

There were six geographic regions defined for survey: Almaty City, South Region, West Region, North Region, Central Region, and East Region. The sample size was 4,800 women 15-49 years of age and 1,440 men 15-59 years of age. The surveys of regions were divided by urban and rural areas. The KDHS 1999 stratified by two stage sample – 1) primary sampling unit of selected 251 health blocks and villages. A complete listing of households was carried out; 2) Systematic selection of 6,336 households. Interview of women age 15-49 in selected households. Every third household was identified as for the male survey. In those households all men age 15-59 were interviewed.

There were three questionnaires used for Household Interview; Women's Interview; Men's Interview. The Household questionnaire was used in order to collect information relating to the socio economic situation of households. The women's questionnaire used in order to collect information (women age 15-49) on background characteristics; pregnancy history; antenatal and postnatal care; child health, nutrition and illnesses; knowledge of contraception; knowledge of HIV/AIDS and STI.

The men's questionnaire used to obtain information on background characteristics; reproduction; contraceptive knowledge and use; marriage; fertility preference; HIV/AIDS and STI knowledge.

The data provides relatively to study of interest the information which is coming from questions on: spending out-of-pocket money for medical care during last 12 months; type of health facility use when sick or need get advice about health; choice of changing place where go to for Health Care; Monetary costs of contraception whether is problem, etc.

3.3 Study Population

The population under the study on "payment in healthcare" will be women of reproductive age 15 – 49. The sample size of this study is 4,800 women. The study population is from urban and rural regions of six oblasts in Kazakhstan (Almaty City, South Region, West Region, North Region, Central Region, and East Region). The study relies only in women respondents, because of limitation in the information giving on payment for healthcare. The question on payment for healthcare is giving only for women. Thus, the study is looking on women's respond on this issue.

Operationalization of variables

3.4 Dependent variable

Spending out of pocket money for healthcare services is the key dependent variable. The payment in healthcare services happens due to economical crisis, transition and changing in public spheres - the charging (payment) system. The medical staff faced with underpays and financial disadvantages. Even though payment was not formal, but due to shortcoming of income required medical staff to charge money from patients.

This study will look over the options such as demographic (age, household size, marital status), socio-economic (education, occupation, employment, place of residence, source of information,), and type of health facility where respondents apply and pay for healthcare. There are four categories studied whether women pay for healthcare in the last 12 months:

1. Did not spend money
2. Spend less than 1,000 Tenge (1,000 Tenge equals to US \$ 8)
3. Spend between 1,000 and 10,000 Tenge
4. Spend more than 10,000 Tenge

3.5 Independent Variables

The demographic, socio-economic, place of residence and type of health facilities will be measured as independent variables.

Age

This variable shows the age of respondents. It will be categorized by groups, and provide information on payment in healthcare according the age of people.

Marital Status

This variable presents the respondent's marital status at the time of survey.

Household size

Demonstrate ability of people to pay for healthcare according the size of their household.

Education

Demonstrates education of respondent (years of schooling).

Occupation (employment)

It is explaining the respondent's work status and other jobs (husband's occupation). This variable will provide with information on payment in healthcare according the factors influencing by occupation of the respondents.

Household condition

Demonstrate possibility of the population to payment in healthcare according the household condition. The measured objects are "having or not having TV, refrigerator, car".

Place of residence

It demonstrates possibility of population to utilize health services according their place of resident and determines expends rate in both – rural and urban areas.

Type of health facility

This variable will indicate type of healthcare residents utilize, and whether payment in healthcare facilities different according of their type. Particularly, a place of visit for sign of tuberculosis is shown.

3.6 Methods of Analysis

The data for this study is analyze by using descriptive methods, mainly, percentage analysis. The cross tabulated analysis will describe payment in all 4 categories by using the main explanatory variables. There were some variables recoded (grouped) due to categorization by lower groups, such as “household members”, “ethnicity”, and “payment”. The “household members” were presented by 17 numbers separately, so it was not sufficient to analyze such big categories of this variable. Also the payment, which is giving in four categorize was recoded into two categories, because of using in binary logistic regression.

The “binary logistic regression model” used to examine effect of each individual independent variable on both categories of payment (did not pay, and pay for healthcare) in healthcare service. The SPSS Software will be used in the processing of these data.

3.7 Limitation of the research

As the study will give the impression of payment in healthcare sector after the reformation of political system in Kazakhstan (1991), the comparison of this sector would be attractive to see with USSR health services. In this case presumption of limitation might be absence of statistical data from period of Soviet Union. However, there are publications on healthcare system of Soviet period which can give with information about the health services during that period.

The study focuses on out of pocket money spending in healthcare services by socio-economic and demographic factors, so as some determinants which reliable with payment factors are not sufficient in KDHS 1999 dataset. There are missing on information regarding payment to healthcare according “sex” variable, because a question on “payment” gives only in women’s questionnaire. As well “income” is not determines in secondary data separated with such components as “salary” or

“earnings”. But still, the data gives information regarding healthy of household, proportion of spending money in healthcare out of general income.

Explanation of payment according to type of diseases for this or that healthcare facility is attractive, but shortage of information is not consent to realize such findings. The secondary dataset provides with information regarding disease such as sexual transmitted infections, pregnancy and delivery, and tuberculosis. But not all of them are suitable using in this study. For example only 0.3% of respondents had sexual transmitted diseases during the last 12 months. However, information on tuberculosis in dataset provides with such relation to the service utilization in different healthcare facilities. And which is states further in bivariate analysis.

3.8 Conceptual Framework

Based on quantitative analyses and using of the literature reviews, conceptual frameworks are given below to reflect the study on payment in healthcare after the collapse of Soviet Union in Kazakhstan. The framework reflects the situation on payment according the demographic, socio-economic, and type of healthcare facilities in Kazakhstan. It is proposed that the effect of reformation and lacking in government budget influenced demographic, socio-economic, and healthcare facilities, and face with charging system. Thus, in public service sectors, which is tend to be free of charge, the payment was evident. It is likely to predict that in transition period, due to economical unstable, the all population was charged for healthcare even within insufficient quality of healthcare. But those who's household size bigger, those who are not employed, and who's household assets are not well-off and who have no partner (husband) in families have less option to spend money for healthcare. Also, due to accessibility of healthcare facilities in big cities and ability to pay for services in urbanized areas, the payment expects to be occurring mostly in urban areas. As income sources tent to be reachable mostly in urbanized and mostly occupied areas, than in rural regions.

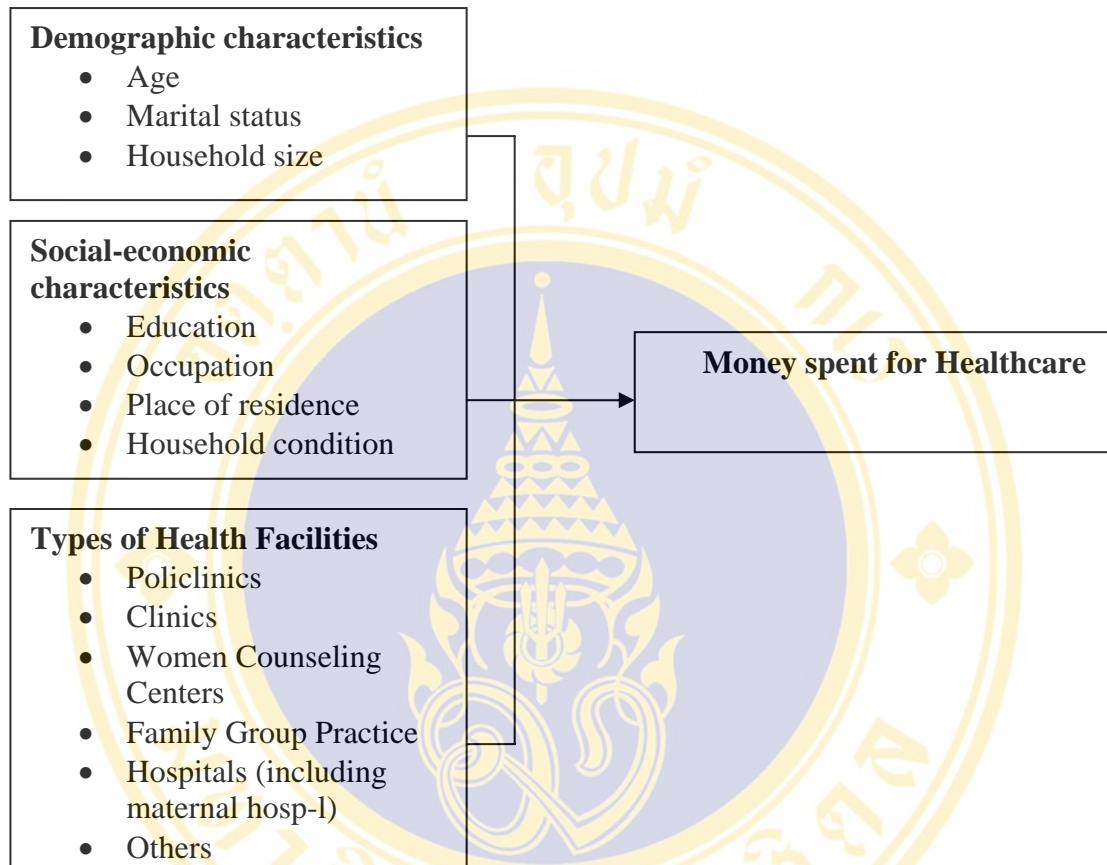


Figure 3.1 Spending money in Healthcare after the Political reformation in Kazakhstan

Table 3.1 Definition of Variables

Variable Name	Description	Measurement scale
Dependent variable		
Spending money for healthcare	The action occurred in transition period of post-Soviet countries in healthcare system, which previously was free of charge.	Ordinal 1 – Did not spend; 2 – Spend less than 1,000; 3– Spend between 1,000 & 10,000; 4 – Spend more than 10,000
Independent variables		
Demographic characteristics		
Age	The age of the respondents (women)	Ordinal 1 – 15 to 19; 2 – 20 to 44; 3 – 45 to 49;
Marital status	The respondent's current marital status	Nominal Never married; Married; Living together; Widowed; Divorced; Not living together;
Household size	The respondent's household size in time of questioning	Ordinal 1 – 1 to 4; 2 – 5 to 8; 3 – 9 to 12; 4 – 13 to 17;
Socio economic characteristics		
Education level	The education of the respondent by level	Nominal 0 – No education; 1 – Primary; 2 – Secondary; 3 – Higher;
Employment (occupation)	The respondent's employment situation in the last 12 months	Nominal 0 – No 1 – In the past year 2 – currently working
Place of residence	The respondent's residence	Nominal 1 – Urban; 2 – Rural;
Source of information	The respondent's availability to information	Nominal watches TV every week; Listening Radio every day; Read newspaper once a week;
Household property	The respondent's household asset	Nominal Has TV; Has refrigerator; Has car;

Table 3.1 Definition of Variables (cont.)

Variable Name	Description	Measurement scale
<i>Types of health facility</i>		
Visit the health facility	Kind of place respondent usually visit when sick	Nominal 1 – FGP; 2 – Polyclinic; 3 – WCC; 4 – FAP; 5 – Hospital; 6 - Other 7 - Out patient clinic; 8 - DK
Visit of health facility for tuberculosis treatment	Place respondents apply in case of tuberculosis sign.	Nominal 1 Hospital; 2 Polyclinic; 3 FGP; 4 TB dispensary; 5 other public; 6 Private hosp/clinic/doctor 7 other; 8 DK;



CHAPTER IV

RESEARCH FINDINGS

In this chapter relationship between payment for healthcare and characteristics of respondents will be described. The study population is women of reproductive age 15 to 49. The total sample size is 4,800 women living in six regions of Kazakhstan.

4.1 Characteristics of the study population

Table 4.1 describes the characteristics of the study population. The age characteristic gives the impression of equal distribution. Majority of women are married and covers up 60.0%. The study population distributed by six oblasts of Kazakhstan, and more happened in urban regions covering up 60.9%.

Majority of the study population has secondary education (77.2%). Less than 1 percent has only primary education or less. Most of the sample population is ethnic Kazakhs (50.6%). The minority ethnicities (such as Ukrainian, Uzbeks, Tatars, German, and Korean) are grouped, and cover up 14.4% of sample population.

Most of study population covers up households with number of 1 to 4 members (59.4%). Only 4.0% of sampled population has more then 9 household members.

The sampled population was asked whether worked last 12 months. This variable categorized into three, and most of the respondents were not working the last 12 months (52.6%). The respondents who answered into category of working currently are 41.8%.

Type of health facility is specifying the population's desire to particular healthcare facility. Accordingly, Family Group Practices and polyclinics are two main sources of health care for the sample. The hospitals and Pharmaceutical Ambulatory Practices each account for 10 percent of visits.

For those who have sign of tuberculosis and visit healthcare facility, mostly preferable hospital (46.8%). As well, the policlinic and TB dispensaries are visiting in case of tuberculosis signs.

Table 4.1 General characteristic of the study population (percentage)

Characteristics	Percentage	Number
Age group		
15 – 19	16.1	768
20 – 24	13.8	658
25 – 29	14.4	686
30 – 34	14.5	691
35 – 39	16.0	762
40 – 44	14.2	675
45 - 49	11.1	530
Current marital status		
Never married	25.8	1,231
Married	60.0	2,864
Living together	1.6	74
Widowed	3.1	149
Divorced	7.4	353
Not living together	2.1	99
Type of place of residence		
Urban	60.9	2906
Rural	39.1	1864
Highest education level		
No education	0.3	14
Primary	0.2	11
Secondary	77.2	3,681
Higher	22.3	1,064
Ethnicity		
Kazakh	50.6	2,527
Russian	35.0	1,586
Others	14.4	657
Household members		
1 to 4	59.4	2,834
5 to 8	36.0	1,717
9 to 12	4.0	190
13 to 17	0.6	29
Number of children under five		
0	68.8	3,284
1	22.8	1,087
2	6.9	331
3	1.3	64
4	0.1	4
Household property		
Has television		
<i>Yes</i>	93.8	4,381
<i>No</i>	6.2	290
Has refrigerator		
<i>Yes</i>	82.4	3,847
<i>No</i>	17.8	820

Table 4.1 General characteristic of the study population (percentage) (cont.)

Characteristics	Percentage	Number
Has car		
Yes	30.1	1,438
No	69.2	3,233
Worked last 12 months		
No	52.6	2,509
In the past year	5.6	269
Currently working	41.8	1,992
Type of healthcare facility		
Family Group Practice	38.8	1,676
Policlinic	28.0	1,335
Women Counseling Center	0.2	8
Pharmaceutical Ambulatory Practice	11.6	501
Hospital	10.8	465
Other type	3.9	169
Out patient clinic	3.2	154
DK	0.2	9
Type of healthcare facility where patients with sign of tuberculosis apply		
Hospital	46.8	2,231
Policlinic	17.7	842
FGP	11.6	554
TB dispensary	19.0	907
other public	1.6	77
Private hosp/clinic/ doctor	2.5	120
Other	0.2	10
DK	0.6	29
Total	100	4,770

4.2 Payment in healthcare

In this study payment is categorized as: “not paid”, “paid less than 1,000 Tenge”, “paid between 1,000 and 10,000 Tenge”, and “paid more than 10,000 Tenge” during visit for healthcare. The Tenge is Kazakh currency, and in 1999 was equal to US \$ 0.00757. The average monthly salary in Kazakhstan was 11,864 Tenge equivalent to US\$89 (www.unsiap.or.jp/participants_work).

In the second part of this chapter, the payment categories are combined into two groups (did not pay for healthcare, and paid for healthcare), and analyzed using binary logistic regression.

Table 4.2 shows that visit to the health care facilities in Kazakhstan require payments. Only 20% of respondents reported not paying. Thus, by 1999 in Kazakhstan majority of healthcare services included a payment, which was not the case during the Soviet era. Formerly, the responsibility for individual medical expenses completely was taken by government.

Table 4.2 Percentage distribution of out of pocket money spent in healthcare

Money spend for healthcare	Frequency	Percentage
No spending	1,862	20.1
Less then 1000 Tenge	1,336	28.9
Between 1,000 & 10, 000 Tenge	1,395	45.2
More then 10 000 Tenge	177	5.7
Total	4,770	100

1,000 Tenge is equal to US \$7.5

4.3 Characteristic of study population and payment for healthcare.

Table 4.3 shows the relationship between payment categories and demographic characteristics. The table indicates that within increasing of age, the respondents pay more for healthcare. Almost majority pay amount of between 1,000 and 10,000 Tenge. Especially the age group 25 to 29 pays more in mentioned category (53.4%).

Never married respondents pay less for healthcare (32% did not pay) then married respondents (21.7% did not pay). There is an aspect indicating no big difference in payment between married and living together women. And this aspect direct to assumption that women who have partners, are more able to pay for healthcare then single ones.

According to table 4.3 those respondents whose household size is smaller, pay more for healthcare compared with those whose household is more than 4 members. However, payment for healthcare occurs for all who apply for healthcare. If 48.1% of respondents who has 1 to 4 members pay between 1,000 and 10,000 Tenge, than the same amount pays by others who has 5 to 17 members (40% to 45%).

Table 4.3 Percentage distribution of payment by demographic characteristics

Demographic characteristics	Payment for healthcare for the last 12 months (%)				Total (%)
	No spending	Less than 1,000 Tenge	Between 1,000 & 10,000 Tenge	More than 10,000 Tenge	
Age group					
15 – 19	33.4	33.1	30.8	2.6	100
20 – 24	21.7	28.9	45.8	3.6	100
25 – 29	17.5	23.4	53.4	5.8	100
30 – 34	17.3	28.4	48.5	5.8	100
35 – 39	16.7	29.1	49.1	5.0	100
40 – 44	18.8	29.2	42.6	9.5	100
45 – 49	16.5	31.0	44.3	8.1	100
Marital status					
Never married	32.0	32.9	32.4	2.6	100
Married	16.7	27.8	49.0	6.5	100
Living together	11.8	28.6	52.2	7.5	100
Widowed	19.1	28.7	47.1	5.1	100
Divorced	16.3	28.0	47.0	8.7	100
Not living together	21.4	24.0	51.6	3.1	100
Household members					
1 to 4	15.8	29.3	48.1	6.8	100
5 to 8	27.0	28.7	40.3	4.0	100
9 to 12	30.4	24.9	40.1	4.6	100
13 to 17	41.3	13.0	45.7	0.0	100

N = 4770 for the all characteristics
 1,000 Tenge was equal to US \$7.5

Table 4.4 provides with information about socio-economic factors influencing on payment in healthcare services.

The respondents with higher level of education are pay for healthcare more then others (86.6%). But the difference among other levels is not high. And all categories of education, paying mostly amount of between 1,000 to 10,000 Tenge. An interesting finding is exposed in payment category of more then 10,000 Tenge, where mostly those who belonging to category of “having no education” paying this amount (10.7%). However the number of respondents in this category very low (0.3%). This

finding requires to assume that those who are non educated taking monetary source from labor working in outside of country, and business undertakings which is higher than salary provided by government. Generally, findings suggesting that the respondents with different level of education are pay for healthcare mostly amount between 1,000 to 10,000 Tenge.

Urban residents pay for healthcare service more than rural residents. However, the difference is not big. For example in category of payment with amount of more than 10,000 Tenge, 6.4% urban residents and 4.5% rural residents pay for healthcare. Such result substantiate again, that payment occurs in both places of residents in Kazakhstan by 1999.

According to table 4.4 there is a tendency for wealthier households to pay more for healthcare. Thus, respondents who have television, refrigerator, and care are paying more for healthcare than those who have not. For example 36.6% of respondents who did not pay for healthcare, have not television, but those who have television and did not spend for healthcare covers only 19.1%.

Table 4.4 Percentage distribution of payment by socio-economic characteristics

Socio-economic characteristics	Payment for healthcare for the last 12 months (%)				Total (%)
	No spending	Less than 1,000 Tenge	Between 1,000 & 10,000 Tenge	More than 10,000 Tenge	
Education Level					
No education	21.4	14.3	53.6	10.7	100
Primary	33.3	33.3	33.3	0.0	100
Secondary	22.3	29.9	42.3	5.4	100
Higher	13.4	25.8	54.1	6.7	100
Type of place of residence					
Urban	15.0	29.8	48.8	6.4	100
Rural	29.7	27.2	38.6	4.5	100
Ethnicity					
Kazakh	23.9	28.4	42.8	4.2	100
Russian	16.0	30.3	47.7	6.0	100
Others	17.0	27.1	48.1	7.9	100

Table 4.4 Percentage distribution of payment by socio-economic characteristics
(cont.)

Socio-economic characteristics	Payment for healthcare for the last 12 months (%)				Total (%)
	No spending	Less then 1,000 Tenge	Between 1,000 & 10,000 Tenge	More then 10,000 Tenge	
Employment/Occupation					
Not working	24.6	28.8	41.8	4.8	100
In the past year	16.2	20.1	47.5	7.1	100
currently working	15.6	29.0	48.8	6.7	100
Household property					
Has television					
Yes	19.1	29.1	45.8	5.9	100
No	36.6	28.0	32.3	3.2	100
Has refrigerator					
Yes	17.7	29.4	46.6	6.3	100
No	32.7	27.5	36.9	2.8	100
Has car					
Yes	17.3	28.3	47.5	7.0	100
No	21.3	29.4	44.1	5.2	100

N = 4770 for the all characteristics

4.4 Types of health facilities and payment for healthcare

This section includes types of healthcare facilities where people apply for treatment. Table 4.5 explains payment occurring by type of healthcare where people apply. According the table 4.5, payment happens in all types of health facilities, but is particularly common in Polyclinics (86.5%) and Family Group Practices (82%). Mostly in all types of facilities the payment happens with amount of 1,000 to 10,000 Tenge. The hospital as in-patient healthcare facility provides with service, where 76.9% of respondents are paying for it. All health facilities are likely to charge patients, and looking into each category we can predict that payment after the reformation of political system in Kazakhstan became common.

Table 4.5 Types of health facilities and payment for healthcare

Types of health facility	Payment for healthcare for the last 12 months (%)				Total (%)
	No spending	Less than 1,000 Tenge	Between 1,000 & 10,000 Tenge	More than 10,000 Tenge	
FGP	18.0	30.1	46.2	5.7	100
Policlinic	13.5	27.6	51.9	7.0	100
WCC	21.4	57.1	21.4	0.0	100
FAP	30.5	32.3	34.7	2.5	100
Hospital	23.1	24.8	46.4	5.8	100
Out-patient clinic	33.1	27.2	36.2	3.5	100
Other	18.5	28.7	44.8	8.0	100
Don't Know	20.0	80.0	0.0	0.0	100

FGP = Family Group Practice; WCC = Women Counseling Center; FAP = Pharmaceutical Ambulatory Practice

A table 4.6 shows the types of healthcare facility and respondents who have sign of tuberculosis and pay for service when apply for treatment. Policlinic is one of the most charging healthcare facilities, where only 14.9% of respondent did not pay. Most of respondents pay amount of 1,000 to 10,000 Tenge when apply to policlinic (50.3%). Family Group Practices and TB dispensaries also charging more comparing with another types of healthcare facilities. Thus, 85% of respondent are pay for service in mentioned healthcare services. Surprisingly, the result shows that in private healthcare sector 27.6% of respondents are not pay. However it can be explained by the reason of establishment regulations carrying out for old, and veterans of the world war.

Table 4.6 A type of disease and payment for healthcare

Visit of health facility with sign of tuberculosis	Payment for healthcare for the last 12 months (%)				Total (%)
	No spending	Less than 1,000 Tenge	Between 1,000 & 10,000 Tenge	More than 10,000 Tenge	
Hospital	24.3	28.7	40.4	6.6	100
Policlinic	14.9	26.7	50.3	8.0	100
FGP	15.2	31.8	54.7	7.3	100
TB dispensary	15.1	27.0	48.6	9.3	100

Table 4.6 A type of disease and payment for healthcare (cont.)

Visit of health facility with sign of tuberculosis	Payment for healthcare for the last 12 months (%)				Total (%)
	No spending	Less than 1,000 Tenge	Between 1,000 & 10, 000 Tenge	More than 10,000 Tenge	
Other public	26.9	37.3	35.8	0.0	100
Private hospital/clinic/doctor	27.6	24.9	40.1	7.4	100
Other	21.1	31.6	47.4	0.0	100
Don't Know	46.7	13.3	13.3	26.7	100

FGP = Family Group Practice;

4.5 Binary logistic regression

This section examines multivariate relationship between payments and background characteristics. To permit the use of binary logistic regression, the payment categories are reduced to 'paid' (coded as 1) and 'not paid' (coded as 0).

Table 4.6 presents direction of the effect of every independent variable on payment in healthcare in Kazakhstan by 1999. The reference (®) for all characteristics is the first group of each explanatory variable.

Accordinging of table 4.6 the age is grouping into seven groups. The results from 4.6 show that, as in bivariate case, older people pay more for healthcare service. For example the age group of 35 to 39, 1.86 times more likely to pay for healthcare than age group of 15 to 19.

The married women 1.51 times are more likely to pay for healthcare than unmarried women, with a significant level of less than 0.001. As well, women who are living together with partners are 2.13 times more likely to pay for healthcare than non married at significant level of 0.01. It can be assumed that having partners improves economic situation of population and gives more chance to use payment service.

The study specifies two types of residence places – urban and rural residence. The information of analysis verifies that rural residents are 0.49 times as likely to pay for healthcare as urban residents at significant level 0.001. It can be assumed that payment occurs in both residences (urban and rural) despite the fact that quality of care differs in both places and payment require caused by transition economy.

The study on household condition formed base on costly assets which is clarify household economical abilities. For this study some of them measured, and give explanation that those households where television is available are 1.35 times more likely to pay than others who has not television. The significant level is 0.05. Also those households who have refrigerator 1.40 times more likely to pay for healthcare at significant level of 0.001 as those ho have not.

The household size and number of children has effect to payment in healthcare. Therefore, number of children under five in household shows that those who has three children fewer than five are 2.72 times more likely to pay for healthcare than those who have not. However, the number of respondents with three and more children under 5 ages is very low (only 1.3%).

The results show that respondents who are applying to hospital are 0.77 times as likely to pay for healthcare as those who are applying to Family Group Practices (FGP). Those respondents, who applying to out-patient clinics are 0.66 times likely to pay for services as those who are applying to FGP. The significant level is 0.05.

Table 4.7 Binary logistic regression on payment

Variables	Odds ratio
Age group	
15 – 19 ®	
20 – 24	1.174
25 – 29	1.409*
30 – 34	1.776***
35 – 39	1.869***
40 – 44	1.767***
45 – 49	1.726***
Type of place of residence	
Urban ®	
Rural	0.491***
Education Level	
No education ®	
Primary	1.038
Secondary	0.095
Higher	1.256
Types of household asset	
Has no TV, refrigerator, car®	
Has TV	1.355*
Has refrigerator	1.409***
Has car	1.086

Table 4.7 Binary logistic regression on payment (cont.)

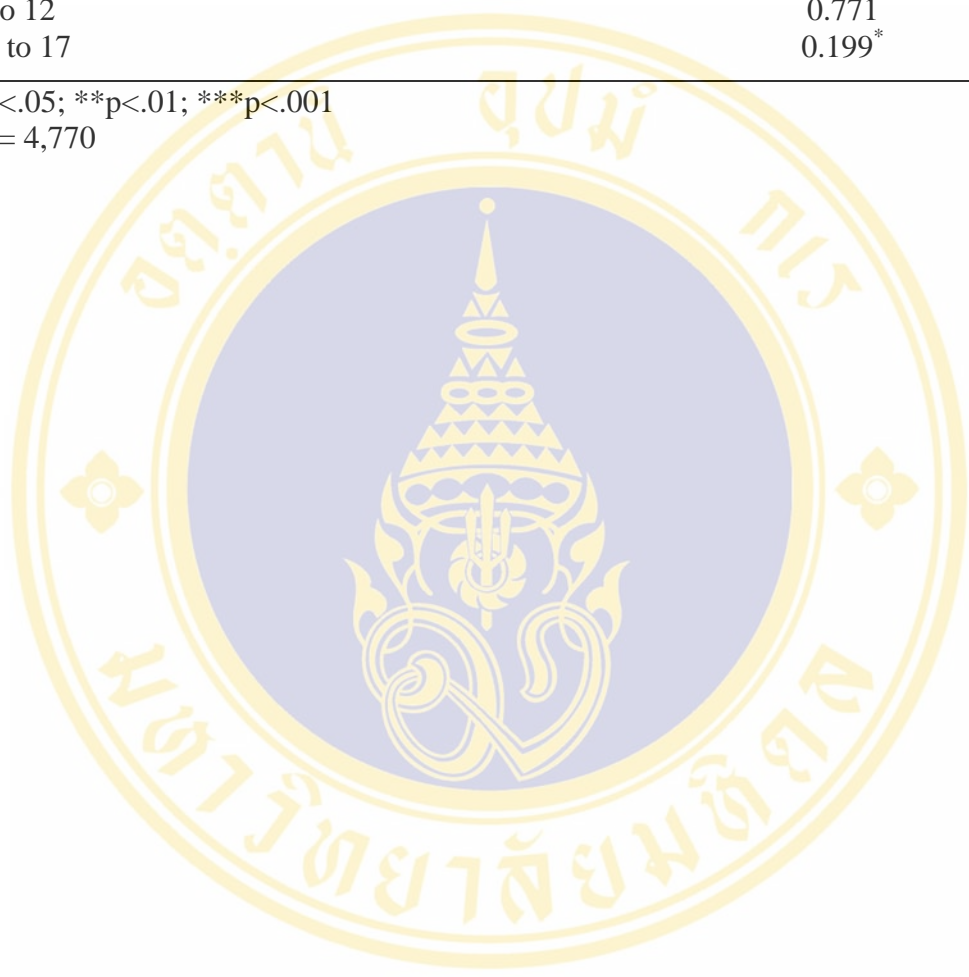
Variables	Odd ratio
Number of children under 5	
0 ®	
1	1.156
2	0.993
3	2.720**
4	0.088**
Marital status	
Never married ®	
Married	1.519***
Living together	2.137**
Widowed	1.210
Divorced	1.329
Not living together	1.019
Employment / last 12 month	
Not working ®	
In the past year currently working	0.965 1.014
Aware of New National Health Reform	
No ®	
Yes	1.125
Ethnicity	
Kazakh ®	
Russian	1.121
Others	1.201
Types of health facility	
Family Group Practice ®	
Policlinic	1.063
WCC	2.456
FAP	1.075
Hospital	0.776*
Other type	1.164
Out patient clinic	0.664*
DK	2.236
Visit of health facility with sign of tuberculosis	
Private hospital/clinic/doctor ®	
Hospital	1.294
Policlinic	1.224
Family Group Practice	1.721
TB dispensary	1.764
Other public	1.957
Other	1.081
DK	0.913

Table 4.7 Binary logistic regression on payment (cont.)

Variables	Odd ratio
Household members	
1 to 4 [®]	
5 to 8	0.714 ^{***}
9 to 12	0.771
13 to 17	0.199 [*]

*p<.05; **p<.01; ***p<.001

N = 4,770



CHAPTER V

CONCLUSION AND RECOMMENDATIONS

Summary

The population under study is reproductive aged women (15 to 49) in Kazakhstan in 1999. The sample size is 4,800 women, and is nationally representative. Literature concerning payment for healthcare of Kazakhstan, transition and its effect, and reforms in healthcare in post-Soviet Kazakhstan, has been reviewed. The quantitative analysis examines occurrence of payment for healthcare by demographic characteristics, socio-economic status, and types of health facilities. Main findings show that payment is related to socioeconomic status, and does not differ according to type of healthcare facility.

Most healthcare services involve charging, though payment is informal in governmental clinics. Thus, 79.9% of study participants had paid for healthcare services during the previous year. Most people (45.2%) pay between 1,000 and 10,000 Tenge. The results confirm that in the transition period, due to the economic crisis, more government doctors require informal payments for services that should be free. At the same time, patients have the option of going to a private clinic and paying formally for better quality of care.

Discussion

Primary and secondary public healthcare sectors were the main treatment source for people in the Soviet Union. Services were free of charge and available to all patients. After the collapse of communism, however, changes in organization in the healthcare sector and new economic motivations have pushed professionals in the primary healthcare sector to introduce small formal payments, as well as charge informally for some services. Increased awareness of potential monetary gains has caused some doctors in the primary healthcare sector to charge informally for improved services, however, they are sometimes impeded by low quality facilities.

Some formal payments have been introduced in these clinics in order to maintain facilities, but resources are still lacking for making improvements. From the consumer side, patients often have to pay for services because they have no other choice. According to the literature, some people also believe that these payments improve the quality of care when they visit the clinic (R. Thompson and A. Xavier, 2004).

Healthcare services in rural areas were not as good as those in urban areas, however, patients were charged for services in both areas. It is the government's responsibility to create conditions in which all Kazakh people have access to healthcare, so most government health services are officially free of charge. However, the existing resources are not enough for improving quality of care. Thus, the Central Asian health system in transition is characterized by a dual system, the first component of which is similar to the structure of the healthcare system during the Soviet period. The second is an unregulated private system, following the dictates of a competitive market economy.

Policlinics, which were the main source of free outpatient services under the Soviet system, are now charging patients due to lack of budget (86.5% of respondents in 1999 paid for health services in policlinic). A new primary healthcare facility, called Family Group Practice, was created after the fall of the Soviet Union, and is meant to improve outpatient healthcare. These clinics charge a formal fee for services in order to provide better quality of care. Although they started as a pilot project within the policlinic system, Family Group Practices now operate independently with their own budget.

In terms of patient characteristics that determine payment for healthcare, those who are of higher socioeconomic status tend to pay more for services. However, those who have more serious health conditions pay for services, regardless of their socioeconomic status. This means that people living in rural areas, which tend to be of lower socioeconomic status than those in urban areas, often pay more proportionally for healthcare, even though they may pay less on an absolute scale (S. Allins, K. Davaki, and E Mossialos, 2005). There is evidence, for example, that patients in rural areas sell livestock in order to cover treatment expenditures. Thus, it is difficult for the poor to get quality services, particularly in rural areas.

Based on the information above, the following recommendations can be made for the improvement of healthcare development in Kazakhstan:

Most often, patients pay for healthcare, regardless of whether they are formally required to pay or not. However, these payments usually go directly to doctors and do not necessarily guarantee better service due to lack of budget for improved facilities. The Kazakh government lacks the resources to provide further financial support for the healthcare sector, but this dataset shows that people are able and willing to pay for quality healthcare, so public clinics should therefore expand formal payments for services to go directly into facility budgets.

Also, it is essential that healthcare access and quality be improved in rural areas. Many rural residents are poor, and so they pay large sums for both transportation to and better treatment in urban areas. Thus, healthcare facilities should be opened in rural areas that provide quality services with a smaller fee than is charged in urban facilities. This would increase not only accessibility, but also affordability of healthcare for rural residents.

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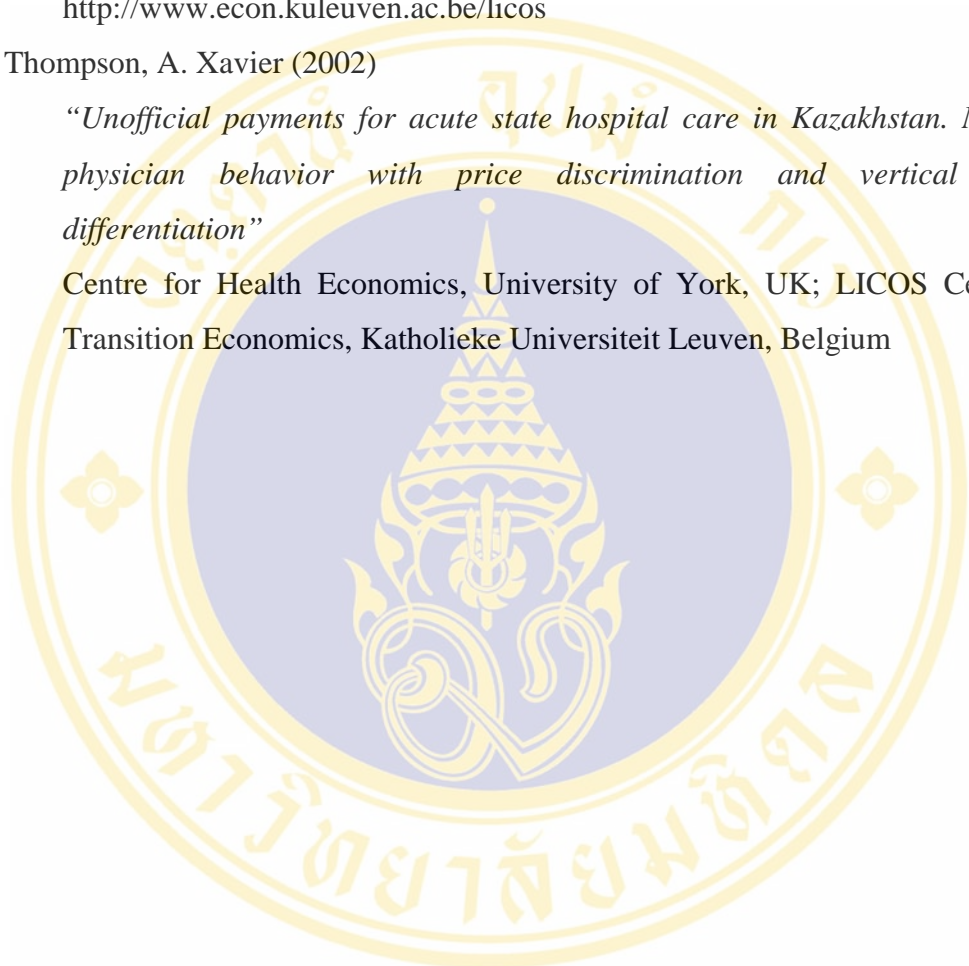
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