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Faculty of Business Administration and Economics
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# Master Thesis

## Corruption in the Health Care Sector
### A Cross-Country Comparison of India, China and Russia

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## List of Abbreviations

| | |
|---|---|
| BHIS | Basic Health Insurance System |
| CDCP | Center for Diseases Control and Prevention |
| CDSCO | Central Drug Standard Control Organization |
| CEE | Central and Eastern Europe |
| CIS | Commonwealth of Independent States |
| CPC | Communist Party of China |
| CT | Computertomographie |
| DCGI | Drug Controller of India |
| ECA | East Europe and Central Asia |
| GDP | Gross Domestic Product |
| GIS | Government Insurance System |
| HIV | Human Immunodeficiency Virus |
| LIS | Labor Insurance System |
| LSMS | Living Standard Measurement Survey |
| MCF | Ministry of Chemicals and Fertilizers |
| MCI | Medical Council of India |
| MFA | Medical (Finance) Assistance Scheme |
| MHI | Mandatory Health Insurance |
| MOHFW | Ministry of Health and Family Welfare |
| MRI | Magnetic Resonance Imagining |
| MSA | Medical Saving Accounts |
| NCMS | New Cooperative Medical Schema |
| NFHS | National Family Health Survey |
| NGO | Non-governmental Organization |
| OMS | Objazatel′noe Meditsinskoe Strachovanie |
| OPPI | Organization of Pharmaceutical Products of India |
| PC | Particularistic Corruption |
| PPP | Purchasing Power Parity |
| PRC | People's Republic of China |
| RCMS | Rural Cooperative Medical Schema |
| RF | Russian Federation |
| RSBY | Rashtriya Swasthya Bima Yojana |

| | |
|---|---|
| SC | Systemic Corruption |
| SIB | Social Insurance Bureau |
| SPF | Social Pooling Fund |
| TPI | Transparency International |
| TRIPS | Trade-Related Aspects of Intellectual Property Rights |
| UC | Universalistic Corruption |
| WE | Western Europe |

## Abstract

The health care system is a highly complex framework wherefore this field is very profound for corruption. Many people misuse the health system which has a negative effect not only on the status of health of the population but also on the public welfare.

Due to this, the interest in how corruption emerged, what effect it has and how the problem can be tackled is extremely high – not only in case of governments but especially from the point of view of the population.

The following paper is based on several studies and publications from the last decades and has the aim to give theoretical approaches a practical background. Therefore, the three BRICS states India, China and Russia are examined. This paper gives an overview about the theoretical background of corruption in the health care system and data concerning the three states with the aim to find the different reasons for corruption. The paper will be closed with possible solutions for the problem.

# 1. Introduction

In his book "Socialism vs. Capitalism" from 1937 A.C. Pigou stated that "The most important investments are investments in a person`s health, mind, and character".
Health is an essential part of everybody's life and can be defined in many different ways. It has an impact on people's physical and psychic constitution and is depended on culture, education, age, gender and nutrition as well as sports. People's health does although effect the economy and social life. A healthy population has a positive impact on economic key figures like the GDP because the amount of people who are working is high and health expenditures in case of treatments are lower.
Nevertheless, the health system is one of the most complex frameworks of a state, dependent on the development status of the country. Therefore, it is highly susceptible of corruption.
Corruption exists for thousands of years and holds a mirror up to nearly each sector of life. Already about 2000 years before Christ, it was common to use women as a bribe like they were objects. This attitude developed over the years and finds one's way also into sports, media as well as politics, economy and in the special case of this thesis in the health care sector (Sturminger 1982).

People in most developed countries take health insurances as well as a wide range of medical staff for granted and are using this system without compunction. In these relevant countries health care is seen as a right and is in many cases enshrined in the fundamental law. In Germany patient rights are registered in the so-called "Patienten Charta"[1] (bmg, 2016).
Governments should be interested in a going health care system because it is very important for the economy. On the one hand people need to be healthy to work properly and on the other hand many jobs are generated within this sector. Developed countries are promoting this sector and vast sums of money are invested in the framework. Due to this, developed countries have a huge interest to fight corruption in this area because in case of the high liability, much money is lost and people tend to take advantage of people needing help.
Germany has a very comprehensive statutory provision including personal rights of patients which is not a common practice. In the beginning of 2016 the government was able to close a gap in the administration of justice, now including a law that medical staff accepting payments from pharmaceutical companies which are given to force the doctor to give special prescription,

[1] On the 26th of February 2013 the „Patientenrechtegesetz" became effective, for the first time regulating all rights and obligation of patients in a treatment relationship. It is written down in the BGB (bmg, 2016).

is culpable. This includes not only monetary bonuses but also tangible donations and other advantages like memberships in supervisory boards (lto, 2015).

Now the question arises why in some states corruption exists and in some states this phenomenon is unincisive. It is inconceivable to offer a bribe to a traffic policeman in Germany because everybody knows about the consequences. In the opposite, it is absolutely natural to do so in India because law enforces are receiving such a small salary that they rely on these payments. It is a necessity of daily life. A weak executive establish a basis for corruption and it is becoming a habitus over the time. People internalize the fact that informal payments are a common procedure to live a bit more comfortable. The cultural and social norm is different from the one in North Europe and the North America. The most influencing fact is which weight is given to sanctions with reference to corruption (Fisman et al., 2008).

In respect of the problems even Germany as a highly industrialized country is facing in the case of corruption, the question remains how other countries deal with this way of crime. Especially developing and transition countries are of high interest due to the fact that in most political entities in these countries a particular principle of corruption is common. In which way are states are able to fight corruption if the surveillance structure firstly needs to be reformed to guarantee a serious prosecution?

Therefore India, China and Russia are countries of high interest because in their environment they are the major regional powers, having a different comprehension of the term democracy and as free decision-making power.

There are several approaches of how to tackle corruption because over the last years the topic became more and more important not only for politicians but also for multinational development agencies and private firms. Nevertheless, people do not know about the effectiveness of all these ideas because corruption is hard to measure due to short empirical evidence. Lambsdorff et al. mentioned in their introduction from their book of 2005 several questions of ideas how corruption can be limited. For example: “How should administrative procedures be reformed?”, “What pieces of information should be made publicly available?” or “Is transparency always helpful?”. They conclude that it is essential to get the link between “norms, trust and the precise mechanism by which corrupt relationships are established”.

This paper is based on research results which were ascertained over the last decades and has the aim to find the critical difference for the cause of corruption between India, China and Russia. Therefore, the theory of corruption in the health care system is described. Following this, it is adapted to the countries wherefore the political, social and cultural situation in each country is described to get the different requirements for the following description of the health care

systems and corruption in this area. After that, according to the main difference the theoretical foundation of the basis for this gap is depicted. Finally possible solutions terminate the analysis.

## 2. Theory of Corruption

Besides several official definitions, for example by Transparency International the terminus "corruption" can also be deduced from Latin: The term "corruption" is derivate from the Latin verb "corrumpere" meaning to ruin something (Bannenberger et al., 2007). This should indicate an abasement of morality.

Taking a critical look on different forms of corruption, it becomes clear that the valuation of human actions in different cultures and norms is the most complicated part. The term "corruption" is differently defined in individual cultural regions. The contrast is extremely high between the "modern" industrialized and the colonized countries which are mainly developing countries (Lückenbach et al., 2013).

Corrupt actions are always resting upon one principal: it is necessary that corruption is a voluntary decision. This action differs from universal expectations of society and result in a personal gain with a simultaneous loss for the public[2] (Schweitzer, 2005).

A corrupt action mostly comprises a service done by an official or a politician in exchange for illegal payments. If this action is voluntary, both sides benefit while welfare suffers especially if negative externalities are passed to the public being worse off. Hence, corrupt actions are harmful for other market participants and lower their benefits.

On the other side, corruption is also sometimes declared as positive for the market situation because it opens up new possibilities of contact making.

In reality, corruption is always a problem for the economy because countries with a high level of corruption mostly have feeble regulations concerning tax, import as well as export and control systems. Therefore it is easy for people to use the bureaucracy by paying illegally for services but they would come through it because their actions can be easily glossed over in the complexity of the framework.

More than US $ 3 trillion are spend each year on health services worldwide whereas taxpayers do most payments. The health system varies from country to country and is additionally extremely fragmented due to the high number of involved people and companies. Therefore this branch is highly susceptible for corrupt actions.

[2] Different kinds of corruption are described in the book of Lambsdorff et al. (2005) where the term is depicted verbally and graphically via three classifications: particularistic corruption (PC), universalistic corruption (UC) and systemic corruption (SC). Due to page constraints these points are not defined in detail.

Corruption causes that medical care becomes on the one hand inaccessible for many people and on the other hand people who can afford it may get the wrong treatment because doctors only want to make money. In most cases, there are two parts of corrupt actions. Firstly, medical staff is often influenced by the pharmaceutical industry wanting to sell their products, regardless of whether the medicine is tested properly or not. Secondly, there is the organizational part within the treatment where patients with the most money can jump the queue (TPI, 2006).
"The abuse of entrusted power for private gain" is the official definition of corruption by Transparency International (2016). In the case of health services this finds expression in corrupt actions of medical staff as well as regulators, tampering of drug tests, the high diversity in the system together with arrangements in contract award processes and fraud in invoice matters (TPI, 2006).

Corruption in the health care sector is unassigned to a system but occurs in every framework with different forms and characteristics. The intensity depends on the society using the system and coining it. Corruption and especially bribery is declining in societies with a stronger appreciation and therefore ensuring laws and transparency. Moreover the public sector needs to be regulated by a government sticking to a civil service code which is backed by accountability mechanisms. These are basic points wherefore aggravating the complexity of the system with its numerous dimensions and participants is added. Actually, there is no other system with this occurrence of uncertainties, asymmetric information and such a great number of actors. Therefore a policy controlling to observe corruption needs to tackle the sector as a whole. Only focusing parts would lead to decisive results.
Another problem is the scope of corruption because it is wider than in other sectors due to the fact that many parts in the public area are consigned to private institutions. It is often open to interpretation because in this case private institutions do not abuse "public office for private gain" (TPI, 2006) if they act fraudulent.
Additionally, the amount of money that is in the system is a major problem whereas the money of public sources is mostly endangered. The yearly number spent on health care aggregate to US $3.1 trillion whereas governments are the greatest financiers.

Nowadays, medical treatments are on such a high level that many illnesses which were fatal a few decades ago, are now curable because research activities are exponentially growing. Especially in affluent OECD countries people are well insured via public and private institutions whereas the state subsidize the system intensively. In contrary, in developing countries there is a

lack of sponsorship on behalf of the government and moreover people do not have enough money to pay care on their own or even invest in a private insurance. Often patients have to come back on traditional medicine, like in India the "barefoot doctors" or have to borrow money from friends or loan sharks who have horrendous interest rates. In corrupt countries people have to pay twice because besides the illegal payments to get a better or faster treatment they have to pay official charges to the doctor or the government whereas the poorest pay the most for medical care (TPI, 2006).

Communist governments especially in Central or Eastern Europe are a typical case because they promised their population free health care for everyone who needed help. In the following, corrupt activities rise enormously because especially political functionaries influenced allocations of medical and hospital treatments[3]. This was due to the fact that they had officially a privileged access to treatments and additionally also possibilities to use informal networks[4]. These practices were called "shadow" economy, people with money and power had admission to parallel universe were not only medical care was way better than the one people who were not in a party got (TPI, 2006).

[3] Nomenklatura: register of the most important executive positions as well as a term for the meritocracy (Duden).

[4] Called „blat"

## 2.1 Why is the health care sector liable to corruption?

In general there are three characteristics that make every health system to the same extent vulnerable for corrupt actions:

*Uncertainty* in the health market is a central feature and was first mentioned in 1963 by Kenneth Arrow. In this context, the focus is on policy makers who have to decide how scarce resources are allocated to the framework. It is hard to forecast "who will fall ill, when illness will occur, what kind of illness people get and how effective treatments are" (TPI, 2006). The most critical situation in his case is, if help is urgently needed, especially in humanitarian emergency circumstances because people in need would do anything for help. Therefore medical care and insurance markets run into danger to be inefficient.

Often people do not know that there could be a benefit for their personal health to visit a doctor or a therapist. In contrary, if people decide to make use of medical services, in most cases they are incapable to rate if the treatment was successful or not. A common example is a viral infection. Often patients get antibiotics despite the fact that they are futile.

Another point is that people do not have the chance to choose between different options and prices. Mostly there are long waiting lists and people have to take the doctor where they first get a treatment. Therefore the choice does not reflect the price as subject to quality and the other way around.

The uncertainty that is accompanied by health care conducts many people to invest in private and voluntary insurances. In this case insurances exploit these circumstances and provide too much health care so that they get an oversupply and pay too much.

Another critical point is the imbalance of information. Medical staff has more information about diseases, treatments and technical features as patients whereas pharmaceutical companies are better informed about their products than doctors (Chubarova, 2010). These problems are constituted within the principal-agent-relationship (Appendix 1). The principal-agent-theory is the basis for all approaches in relation to corruption. The agent is in the middle of the consideration because he or she has a connection to both, the principal and the client (Lückenbach et al., 2013). In this system the principal hires the agent to avail oneself of a service. Problems arise if the interest of the agent and the principal differs from each other and additionally if the principal is not able to get all information about the outcome. Finding a contract which is optimal for both sides is very complicated. A normal relationship between a doctor and a patient can be seen as a great example. A doctor normally wants to help a patient but the kind of treatment can influence the doctors' income or working conditions. Therefore, it

is common that patients are not in the position to rate the quality of a treatment because they do not know if the therapy was a critical factor or if they also would recover without the help of their physicians. In many cases, they are following advices without questioning them. Following, the easiest way for patients to evaluate medical care is via caretaking, equipment as well as locations (Lewis, 2006).

Doctors are not the only agents in this framework, managers of health facilities as well as pharmaceutical enterprises, equipment suppliers and insurances can also take advantage of this situation with the ancillary effect of inferior care for the patient. The worst situation occurs if these agents are additionally influenced by politics.

Up to now, often the only effect analyzed in this direction is the impact on the health care system itself but merely a few are examine the effects on corruption. Difficulties in monitoring actions prevent that illegal behavior is tracked.

In the following this complexity is in the focus of discussion. The system consists of a *multitude of parties* who are involved making the framework hard to oversee and to control. In particular, transparency and the collection of information get lost when there are no regulating rules. These parties can be categorized in five different units as visualized in Figure 1. Government regulators are in the first category consisting of health ministries, parliaments and specialized commissions. The second part comprises of the payers who are social security institutions, government offices and private insurers. The next unit includes all providers and is composed of hospitals, doctors and pharmacists. The fourth category consists of the consumers who are the patients and the last unit is comprised of all suppliers, namely medical equipment and pharmaceutical companies. This bunch of actors makes it hard to create a full transparency with accessible information and clear analysis whereas corruption is hard to detect.

The three main points – uncertainty, asymmetric information as well as the high number of participants – are preconditions for corrupt actions whereas the lack of proper prosecutions accessorily boosts the chance for illegal behavior.

## 2.2 Key actors in the health care system

Every part of this framework can be part of corruption as well as being the initiator of it.

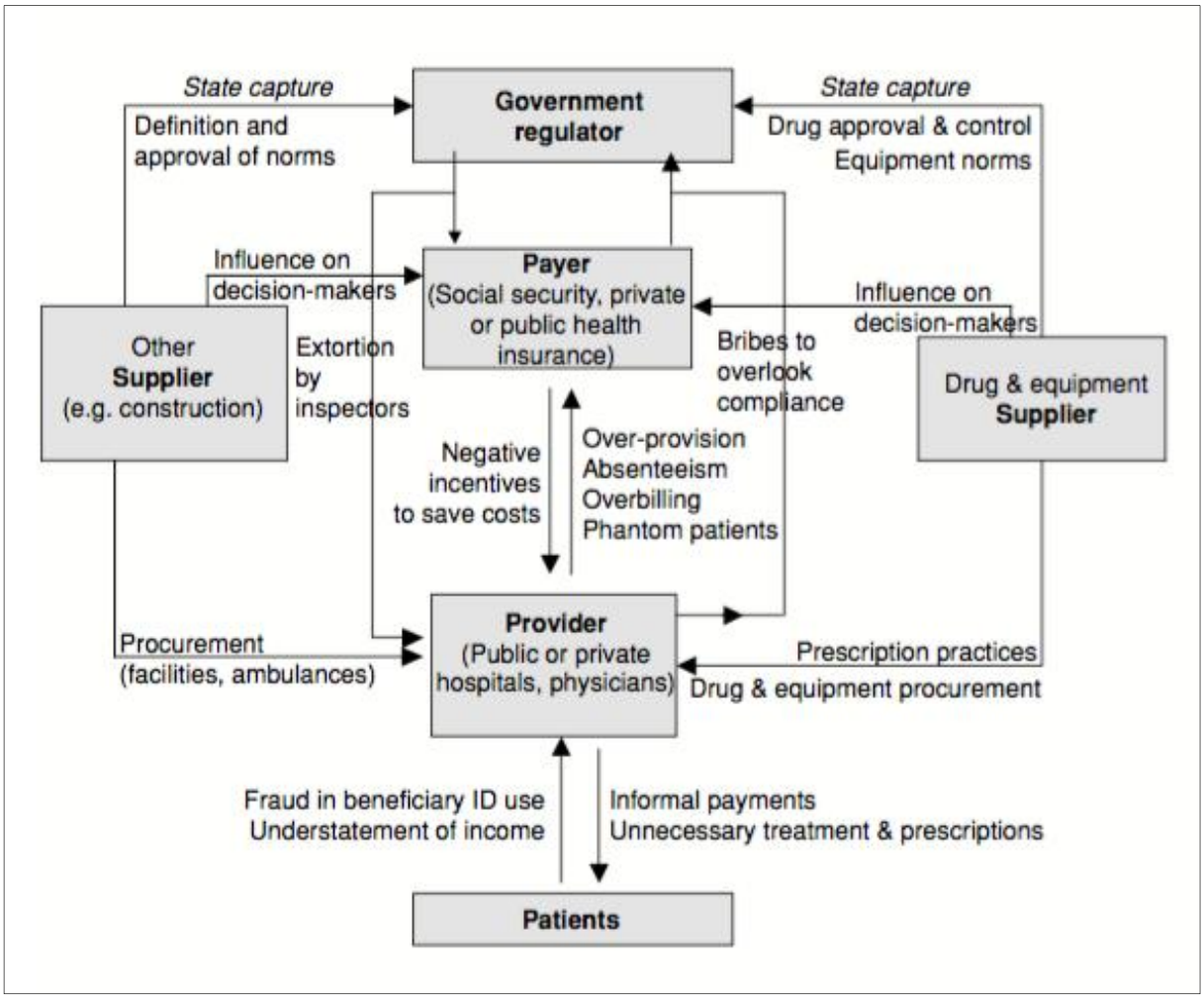


**Figure 1: Five key actors in the health care system (TPI, 2006)**

Uncertainty in the system should be the main working point for *regulators,* in most cases the government, to protect consumers. Their role consists of the generation of transparency as well as the observation and the provision of information. This can involve the verification of medications, trainings for practitioners and controlling if medical staff has all necessary certificates before starting their business as well as controlling for the existence of adequate equipment within the institutions. Nevertheless the presence of regulators also forces corrupt actions because they can undermine the system. Studies can be tampered and boards or single people can be bribed.

*Payers* are another influencing party because there are two ways in a public system to pay for health care. On the one hand, care is directly provided and on the other hand, it is provided by a public insurance organization. Moreover in the private sector commercial insurance firms are included. In case of a direct provision resources are assigned via guidelines of public budgetary mechanisms. Negative influences arising from political interests affect the decision process whereby regions governed by the leading party can profit whereas other areas remain due to the fact that relationships and not efficiency and equity is of main interest. Insurance funds – occurring in many countries with a mandatory insurance system – are endangered as well because officials are able to allocate money how they want whereas political perceptions are again of high interest. Private insurances can also collaborate with political parties wherefore their activity within public programs is the most critical point. There is the possibility of deceiving public programs through counterfeit invoices especially if they are subsidized.

*Health care providers* have sweeping possibilities to engage in corrupt actions because they have the greatest influence on medical decisions. It is the group who prescribes medications, doing analysis and test as well as deciding how long a patient have to stay in hospital or other medical institutions like rehab centers. These actions normally should be based on the best decisions for the patient but if providers are more motivated by monetary issues there could be the possibility decisions are made, based on financial benefits, prestige or power. The interesting thing in this case is that "health care providers are in the unique position of telling the "consumer" what service "to buy"" (TPI, 2006). There are three possibilities of how providers are paid. On the one hand they are in the situation that they get paid for each treatment they do – called "fee-for-service". Therefore they have the interest to conduct as many treatments as possible to earn more money. On the other hand it could be that they get paid on a "capitated" basis meaning that if the patient is in their care system he or she only have to pay once and get all treatments that are necessary. Consequently the care provider would reduce treatments to a minimum to maximize his earnings. The last case is the one which is at least susceptible for corrupt actions – a fixed salary. If providers always get the same amount of money independent of the number of treatments than there is no financial incentive to do more or less treatments. Moreover, there are some other ways of being corrupt in this division, for example providers are able to steal medicine to sell it elsewhere, they can refer patients to private institutions where they are holding some shares or there is the possibility of create files of patients who are not existing to get more money from the state.

Consumers or in this case *patients*, are also able to cheat on the system but it is way harder. Patients can try to get free services or use insurance cards of family members or friends to save

costs. Moreover there is the chance to directly bribe a doctor to for example to get a drivers license, to avert the military service or to get payments for handicaps.

*Suppliers* of medical equipment and pharmaceutical companies have a knowledge advantage concerning their products and offers whereas they can take advantage of this situation. They can influence the manufacturing process cycle and deliver inferior commodities to save production costs and increase their profit margin. Moreover there are two ways of influencing groups of people. On the one hand, they can influence providers to only use their products even if there are suppliers who deliver for less money. On the other hand, suppliers are in the position to suborn regulatory institutions to influence legislations for their own benefit. This is a common practice in the pharmaceutical industry where companies try to eliminate competitors via gaps in the law or where they try to push the rollout of a drug even if more tests concerning the impact would be necessary (TPI, 2006).

## 2.3 Informal payments

One major example for corruption is informal payments. Therefore this part is regarded separately, to give an inside in one of the most common practices.

Lewis defines informal payments as "payments to individuals or institutional providers, in kind or in cash, that are made outside official payment channels and purchases that are meant to be covered by the public health care system" (Lewis, 2000). This was one of the first definitions in the literature concerning bribery in the health care sector. Nevertheless, there is no general definition because every society has a different perspective on the topic making it hard to analyze and compare (Chereches, et al., 2013).
Informal or so-called under-the-table payments in the health care sector are nowadays a common phenomenon. More than that: it is even a very important financial source especially in developing and transition countries. Due to low funding levels and a lack of responsibility the health industry takes advantage of peoples' need for help. Meanwhile it exists an unofficial market for health care which is dominated by people having officially access to the public health care service network. The unaffordable costs create a barrier for poor people who have to sell personal assets to finance drugs and treatments. These payments are not reported and in most cases illegal. A problem in this field is the determination between informal and gratitude payments. Especially in Eastern Europe and Asia it is common to give presents as thanks to physicians after a successful treatment (Lewis, 2000). It is significant that especially the poorest countries have the highest rates of informal payments as a percentage of income (Lewis, 2007).
In the last decades Eastern Europe and Central Asia were characterized by fundamental reformations, but not only in the health care sector but a lot more in the public policy. Reforms arising from recessions cause the politics to cut costs. As revenues and subsidies declined in most regions, this resulted in underpaid stuff and inappropriate medical equipment, drugs etc.. From this it naturally followed that many people only can afford inadequate treatments (Lewis, 2000).

Informal payments are seen as a form of systematic corruption. In the health care sector it arises from governmental failures helping corrupt people working in civil service to maximize their benefits in form of payments or gifts. Due to this, health care efficiency is highly influenced but rather dependent on the mechanism of the framework. There are two scenarios in case of informal payments. On the one hand it is dependent on the patient. Are payments offered by

choice or do people feel compelled to do so? On the other hand, the system plays an important role. Is it common to show appreciation to the doctor or are the payments caused by the price system as "normal" additional payments (Chereches, 2013)? Most papers rank informal payments in a range between gratitude and coercion. In the case of voluntary payments, they are often done after the treatment as a present to express ones' gratitude to the physician. Coercion is mostly expected in advance and less often during the treatment but it is always paid monetary. Nevertheless, it is hard to distinguish how under-the-desk payments need to be classified because they can be given at various time slots and if for example somebody has a chronicle disease, a clear definition is hard to find (Lewis, 2000).

### 2.3.1 Why do informal payments exist?

*Market failure:* The health care market is highly influenced by asymmetric information (Principal Agent Theory) whereas physicians have an advantage over the patient, e.g. in case of diagnosis and treatments. This contains a certain risk in dealing with illnesses and its consequences. Further problems are communicable diseases like diabetes or HIV because the enlightenment within the population is tenuous. These facts show that a fundamental regulation by the government is needed to ensure a fair health care system: protecting consumers and regulating the whole health industry. In spite of that, governments often do not show enough involvement in the topic (Lewis, 2000).

*Governmental failure:* In most cases governmental failure and market failure are closely linked. Often the only thing done is to cover costs and moreover providing enormous subsidies to the system, like it was in the Soviet Union. The problem is that in this case providers and administrators do not have the compulsion to report their action to any authorities overseeing the ongoing processes. Additionally, the inability to reduce this overpayment is another point of failure. The health care system is oversized and artificially inflated. In developing countries health systems are poorly enlarged and salaries as well as treatments and equipment are on a very low level. In contrary, in emerging countries like the Russian Federation, the health sector was highly supported in the last decades but due to economic reforms and a falling GDP the standard cannot be met anymore. Nevertheless, an adequate downsizing of the health system cannot be recognized even if revenues are shrinking. This finds expression in underutilization of health care and a wrong allocation of specialists. It is conspicuous that numbers of hired physicians are constant, respectively are slightly growing, although salaries are declining. Due to

the lack of knowledge and no overall surveillance there is no modern management of hospitals. Additionally, resources are spread to sparse leading to an inability of an optimal care provision. As a consequence, many patients try to outwit the system and want to overcome the deficiencies by informal payments. This is supported via a badly developed private sector. Normally, patients with high incomes would prefer to be treated in the private sector. If this is not existent they try to use their money to receive the best care they can get in the public sector. Especially in the area of diagnostic and inpatient, bribery is a common procedure. In many CIS countries (Commonwealth of Independent States)[5], a huge amount of people working in the health care sector are underpaid. Beyond, it is also often the case that payments are not disbursed or that salaries are taxed on a high level. In this case, informal payments are compelling to get money and save taxes. It can be seen as a vicious cycle because under-the-table payments force the growth of corruption and subvert all governmental effort to establish a more transparent system (Lewis, 2000).

*Corruption:* Concerning Klitgaard (1998)

corruption = (monopoly + discretion) – accountability

Most countries in Eastern Europe and Central Asia (ECA) fit in this equation relating to the health area (Lewis, 2000).

*Monopoly:* The public sector has a monopoly on all processes in the health sector as an inheritance of the Soviet Union. A private sector is non-existent and there is no capital to entrench one because net costs of construction and importing equipment are to high to finance. Moreover in some regions legal regulations prevent this from the beginning.

The strong development of monopoly powers in the health sector is fostered by the lack of transparency. The World Bank sees this as a support for state capture and defines it as

> „*actions of individuals, groups, or firms both in the public and private sectors to influence the formation of laws, regulations, decrees, and other government policies to their own advantage as a result of the illicit and non-transparent provision of private benefits to public officials*“ (World Bank (a), 2000).

Often medical staff fit to this definition, as they are involved in each step of the administrative process and have no superior monitoring body. Alternatively, physicians outside this framework

[5] The CIS consists of Armenia, Azerbaijan, Belarus, Georgia, Moldova, Kazakhstan, the Kyrgyz Republic, Russian Federation, Tajikistan, Turkmenistan, Ukraine and Uzbekistan.

could provide a fair treatment but they have not got the resources to prevail against the overwhelming lobby (Lewis, 2000).

*Accountability:* The attractiveness of being involved in corrupt actions is caused by the midget chance to be called to account. Many governments are not able to monitor and sanction such occurrences because any management norms or quality assurance activities are not deployed (Lewis, 2000).

*Discretion:* Based on the above described missing supervision, it is difficult to evaluate the validity of medical decisions. A performance reporting is non-existent because in this system neither a reward nor a penalty scheme is implemented (Lewis, 2000).

### 2.3.2 Why do informal payments matter?

*Access and Equity:* Informal payments do not only promote corruption in the health care sector but also limit the access to health treatments to those who can pay for it, by making it unaffordable for poorer people. The involvement of governments could correct these actions by controlling the health sector as well as financing compliance efforts. Economically, it can be seen as bunching resources and allocate them equally to all people, independent of their asset. If this is not the case, fairness and financial responsibility are not standardized and cannot easily be audited (Lewis, 2000).

*Health Care Reform:* Informal payments reduce the importance and power of public policy and decisions are no longer made in public interest. Theoretically, the government no longer decides where the money goes wherefore the patient undertakes this task because due to their payments they allocate the cash flow within the system. Expenditures having a high priority from the governments' point of view are in danger of being neglected because a majority is not interested in it (e.g. maternity care).

Nevertheless, these actions won't change in the near future. Most money from under-the-desk payments got to single persons and not to institutions. Therefore the money cannot be invested in guaranteeing salaries or modern equipment to improve treatments. The contrary is the case because a reform needs people pushing changes ahead. In this case medical staff and administrative leaders have the ability to change the system sustainable but they won't do it because it would mean individual losses, like monetary incentives, for them. Such a change can only be done by agents from outside the system. Reforms are like races. There will be people winning the game but also some who are going to lose. In this framework, it is the case that

people who would lose most are at the top of the decision making process. Therefore, any changes will be very difficult (Lewis, 2000).

Nevertheless, there is little evidence that informal payments could have positive effects on the pubic system. Small amounts given to medical staff makes them stay within the framework and they are not switching to the private sector causing a lack of doctors in the public one (Gaal et al., 2005). If this positive effect could outweigh the negative ones depends on how much of payments are given voluntary or are expected by the system.

### 2.3.3 How can informal payments be measured?

The measurement of under-the-desk payments as well as the scale of corrupt actions in the health sector is nearly impossible. Obviously, there is no evidence of executions because every transaction is done in secret. Therefore, every data collection or analysis should be questioned and due to this each of the following statements is a generalization of found examples in the past. In nearly every country informal payments are illegal but informal payments are differently defined. For example, in CIS countries it is normal and declared as a gift to bring some money, food or other presents before or after a treatment to show ones gratitude. These different perceptions pose a problem in data collection as well because one cannot see a uniform definition of bribery. In spite of that, in the last years a growing flow of information can be recorded, especially due to the endeavors to collect data via detailed surveys. The foundation of analysis is mostly interviews of providers and households.

Besides some others, the two most common examples are on the one hand, the World Bank's Living Standard Measurement Surveys (LSMSs) which provides the most convincing studies in the field of household data collection due to the fact that they use standardized questionnaires and have representative samples. These are dedicated surveys and besides the health part these data collections are supplemented by numbers of consumption and income to give the outcomes a profound background[6] (Lewis, 2000).

On the other hand, surveys by order of the government are very popular but they often need to be considered with caution. In many cases the study is dependent on what politicians want to achieve. Do they really want to analyze the framework or do they want to show that their health system works and therefore no reformations are needed. These general surveys "often simply ask

[6] For a detailed summary of studies and surveys of informal health payments please refer to Table 1 in Lewis, 2000.

if illegal or side payments were required" (Lewis, 2000). Therefore it can be deceptive if the nature of bribery is not defined and gifts are a common procedure. The results are not comparable with states being not consistent with this practice (Lewis, 2000).

Nevertheless, both types of surveys are not complete because the second main part of the system. Providers are left out although these people really manage the system and they abundantly initiate payments.

Additionally, there are a few other methods which are not so popular yet and are partly expensive or elaborate. Two examples are data collection via canvassing people[7] or identifying patients through their insurance data (Lewis, 2000). The most important thing is to find qualitative data to give a meaning to differently gathered data sets.

Payments of patients in the health care system are in nearly every case not comprehensible, neither in the Western World nor in any developing or transition country. Due to the low transparency in the cost composition and the various regulations in cost absorption of insurances, a patient cannot clearly evaluate if a payment is legal or a technical discretion (Lewis, 2000).

### 2.3.4 Policy Implications and Proposed Actions

In countries where informal payments and bribery are accepted if not promoted, there the trust in the system is extremely low. Some governments envisage illegal payments whereby they shuffle out of responsibility to adjust salaries of medical staff to the current economic situation. This is due to the fact that the shortfall is paid via under-the-desk payments. These practices reduce the respect towards the politics and its power declines whereas simultaneously the role of modulators of health systems suffers. People who cannot afford to pay high amounts of informal payments will lose the access to the health system and the overall health situation of the country will decline (Lewis, 2000).

The fight against these illegal payments is not easy due to the large number of people involved as well as the big pharma lobby steering the process in the background. Most measures of restructuring are difficult to implement, especially when illegal payments are embedded in the system, like it was in the former Soviet Union. Therefore, an encompassing strategy is needed because selective actions will not have a great or sustainable effect (Lewis, 2000).

[7] A representative example is the survey about Population, Health and Nutrition of Vietnam by the Worldbank (b) (1992).

All things considered one can recognize five starting points:

Firstly, "public leaders must be clear that side payments and other "off-budget" exchanges […] are unacceptable" (Lewis, 2000). There need to be a clear policy of regulations and sanctions if someone contravened against the framework. Moreover, the laws and their compliance need to be transparent to show a clear position of the government in case of providing health care for everybody.

Second, governments have to understand that "the existing public health systems are bloated and inefficient" (Lewis, 2000). Frameworks need to be downsized to give them a clear structure. Until now, there are no reporting or controlling systems whereas the structure became confusing over the last decades. The actual costs are easily exceeding revenues caused by great numbers of employees, implicit trust in services and high numbers of hospitals. On the one hand, budget constraints need to be considered and on the other hand, new funding methods would help to expand these limitations. Especially a reduction in the number of physicians would help to enormously reduce costs because this would lead to a downsizing of capacities resulting in a reduction of costs and consequently in a rise of salaries of the outstanding medical staff (World Bank (b), 2000).

The third point is that "governments need to be aware that comprehensive, free services cannot persist in a budget-constrained environment" (Lewis, 2000). There are only two options. Firstly, patients have to understand that the actually provided service cannot endure any longer whereas if they want to maintain the standard, they have to legally invest in their medical care. Or secondly, the scope of financed services needs to be reduced.

In general, one can say that some hospitals or parts of them need to be closed to reduce costly services. A great problem in the Russian Federation is for example heating costs. Due to the cold weather and badly isolated buildings, costs are rising exponentially.

Additionally, the range of services itself can be reduced. Here, Western Europe could be a great example because public services were reduced but were offset by private providers. It is obvious that people are willing to pay money for health care, otherwise they would find other ways to get treatment without paying informally. Therefore governments need to steer the donations.

# 3. India

## 3.1 Dossier India

Having an area of approximately 3.3 Million square kilometers, India is the seventh-largest territorial state and with around 1.3 billion inhabitants the second densely populated state of the world (Statista, 2016). Nevertheless, the demographic growth slowed down since the 1980s. It decreased from more than 2% to approximately 1.4% in 2006. The Indian subcontinent is characterized by a rural structure and despite several megacities[8] the migration from land to towns is very small whereas 70% of the population is living in rural areas (bpb, 2007).

Indian is a federal republic and divided in 28 federal states which extremely vary in their size and number of inhabitants as well as in their economic and social development. Punjab is the richest federal state where the average income is four and a half times higher than in Bihar, the poorest state. Gujarat, Maharashtra, Tamil Nadu, Haryana and Karnataka are considered to be the most dynamic states with an economic growth which is two times higher than in other regions. Looking at social components one can see that these states can smoothly keep pace with states from Eastern Europe. In contrast states like Bihar or Orissa do not distinguish from the poorest regions in Africa (bpb, 2007).

### 3.1.1 Political development

After a long time of colonialism, India rashly became independent on the 15th of August 1947 following a partition plan from viceroy Lord Mountbatten of Great Britain. This included the separation concerning ethnic and religious criteria whereas the Muslim districts should belong to Pakistan and the Hindu districts to India. Each state got an own constitution but within this solution one third of the Muslim population territorially stayed in India and a few days after the official declaration, minorities became victims of violence[9].

Besides these negative effects, the colonial power Great Britain also passed some positive influences on. India started its independence with an efficient bureaucracy, a professional army, an independent judicial apparatus and not least a representative democratic governmental system (bpb, 2007).

[8] Among others Mumbai, Delhi, Kolkata, Chennai and Bengaluru.

[9] Approximately one million people died and twelve million people on both sides had to flee (bpb, 2007).

The first premier minister of India was Jawaharlal Nehru who was an advocate of democracy seeing it as the best form of government. Under his leadership, many laws concerning the emancipation of women get off the ground but their effectiveness was limited due to a lack of implementation. Up to know, women are a minority and they are constantly living under oppression.[10] On the contrary, the economical expansion worked very well. The mixed economy, consisting partly of planned and private elements is ranked among the most effective developing instrument. Due to the lack of financial reserve assets and insufficient export proceeds, India was stretched to the limit wherefore the USA and the former Soviet Union intervened and provide allowance. The Great Powers wanted to influences the politics as well as cultural structures but India always follows the domestic political maxim of nonalignment[11] (Der Bürger im Staat, 1998).

The following decades were coined by armed conflicts with China and Pakistan, ethnic and religious conflicts with violation of human rights as well as corrupt actions within the political leadership. One constant during these times were the leading family stemming from the first premier minister. In spite of that, there had never been any endeavors to change the democratic governmental system. An important factor for the political stability is the fact that the state is one of the rare cases worldwide of a working federation[12]. Indeed, the legal system and the administration are uniformly lead, the states have their own radius of operation concerning political decisions for their area.

It is noticeable, that since the independence in 1947 the Indian state was striving for becoming a regional Great Power. The government wanted to get more political importance within the world like the rival China. Only since the 1990s the relationship between these two countries is defused and the boundary dispute is trying to be solved (bpb, 2007).

### 3.1.2 Economy

India is regarded as a state with an enormous social pluralism. Therefore, the question arises how this variety can work as a whole. One important leverage point is the relatively constant growing of the economy as well as the democratic regime.

[10] Women are against all biological standards mathematically shorthanded (in 2001, there are 933 women for 1000 men) (bpb, 2007).

[11] India did not want any attachment to the major blocks and did not want to interfere in the conflicts of the world like the East-West conflict (Der Bürger im Staat, 1998).

[12] India consists of 28 union states and 7 union territories (Appendix 2).

Looking at the economic situation, it is noticeable that India is one of the fastest growing countries but with an income per capita of US$ 1,428[13] still one of the poorest nations (Auswärtiges Amt (a), 2016). This is due to the development of the distribution within the economic sectors. The service industry is steadily growing and was 2014 at a level of approximately 53%. In contrast, the industry sector was at a range of 30% and the agricultural sector of 17%. Nevertheless, most people are still working in the first sector which is caused by a rural-urban-imbalance.

Concerning the political situation in India, it is highly interesting that this country is one of the few third world countries consistently having a democratic constitution since the declaration of independence in 1947. Therefore, the democratic tradition is deeply embedded in society whereas up to now no other political stream endangers the system (bpb, 2007).

### 3.1.3 Social and cultural aspects

A set definition concerning India is the high mass poverty in contrast to a few very rich Indians ruling the economy and politics. This needs to be looked at more differentiated. In 2016, approximately 30 % of the Indian population lived below the poverty line meaning that they have less than a dollar per day (Auswärtiges Amt (b), 2016). These people make up one third of the worldwide poverty. In spite of that, the number of poor people is declining In 1972/73, the number was at approximately 51% due to the great economical situation in the last decades. 70% of the poor segment of people is still living in rural areas working in small enterprises or in farming jobs. The 30% living in urban areas are inconclusively unemployed conversely, an above average number of family members is employed but salaries are very low.

Since the liberalization in 1991, the gulf between rich and poor states is steadily growing. Nevertheless, in the latter case, the economic growth is only around half the average in comparison to the wealthy states. This is due to the fact, that at the beginning of the liberalization especially the rich states had a better starting point. Private investments from home as well as foreign investors went to these states because they had a suitable infrastructure, an acceptable educational standard and a stable government available. Therefore, the demand for a skilled workforce was much higher than in poorer states because every larger firm especially from foreign countries would open a branch where the circumstances are the best.

[13] In 2006, the per capita income was only US$ 770 (bpb, 2007).

In case of cultural aspects, it is noticeable that four linguistic families with several languages[14] and dialects coin India whereas Hindi and English are the nationwide official languages. Additionally, the religious variety makes it exceptional to other countries. Indeed, approximately 80% of the Indians are Hindu whereas the remaining 20% consists of Muslims, who are with 10% the second largest group as well as different religious counter flows of the Hinduism (e.g. Buddhism and Jainism) and some minorities (e.g. Christian). The whole society is divided into classes – the caste system which is defining the entire life.

The Indian social structure is coined via the caste system. The term for caste is in India "*Jati*", meaning group of birth. The most important characteristics in this traditional framework are affiliation of their members by birth, the occupational reference and the regulations for keeping the caste clean which means that the choice of partner is limited to the hierarchy. Nevertheless, there is the chance to change the caste but this is very difficult. By acquiring land or political posts one can climb the ladder of social and vocational level. This means to undertake the conventions of the upper caste. The overall changes leading to a higher educational level, urbanization and the monetary economy are forcing such efforts and making the changes easier. Additionally, these modifications cause a stronger relationship between the castes especially in urban areas where business relations are of a high importance.

In the last decades, India made huge progresses within their educational politics. The literacy rate significantly shrank to 35% and nearly all children are put to school. Nevertheless, India is still the country with the highest amount of illiterates. This is due to the comparatively low educational standard. Nearly all educational establishments lack of teaching material (e.g. books or blackboards). Classes are too big[15] and the education of teachers is way to primitive. Clear indications of the bad quality are high numbers of repeaters and dropouts. Although, gender specific differences almost disappear up to the fifth grade, there are great differences between the regions. However, the country is equipped with many universities with a high educational standard[16], the expenditures by the government are really small even if they are educating as many IT specialists and engineers as China.

[14] 22 regional languages are constitutionally acknowledged.

[15] The teacher student relation is approximately 1:49.

[16] The most popular ones are the Indian Institute of Technology and the Indian Institute of Management.

## 3.2 Health Care System

For historical reasons, the Indian health care system is very diversified. Besides a modern framework with the latest technologies and medical insights there are several traditional procedures. In this case the officially accredited ones are Allopathy, Ayurveda, Unani, Siddha and Homeopathy (Jourmard et al., 2015) which are partly known in the Western World as alternative medicine.

The Indian health care sector was most intensively influenced by Great Britain as the colonial power. The consequences can still be felt even after the independence movement. Up to the colonialization, like in most other developing countries, the Indian government was almost the sole provider of health supply. The British government than introduced a medical service for their military personnel and emigrants to guarantee the accustomed service known in the Western World. As a consequence the allopathic medicine was shifted from rural to urban areas and mostly became fee-for-service offers which were the beginning of private health care.

After World War II, in 1946 the "Bhore committee"[17] was originated to depict the system at that time and to develop reforms to improve it. Findings from this workstream together with the "Beveridge reforms"[18] in the UK led to the creation of the "Indian National Health Service". This contains a reorganization of the existing framework and the key components were the public managed health infrastructure and additionally a national disease program. Many recommendations were well received by the government but the implementation had never been fully conducted because of a missing financial basis. This resulted in different health plans for every single state in India because of a missing national guideline. Nevertheless the idea of a public health sector is still remaining (Berman, 1998).

After the introduction of the "Indian National Health Service" India achieved, up to know ground-breaking results with a growing life expectancy and decreasing child mortality. However this progress cannot be seen in every state of the country. It is clearly visible that there is a huge imbalance with a significant north-south disparity whereas the south is essentially doing better with literacy rates nearly 100% and a well-established health care system, completely in contrast

[17] A committee, officially known as the „Health Survey and Development Committee" which was introduced in 1943 with its chairman Sir Joseph Bhore. The aim was to find proper reforms for the Indian health care system. The results were presented in 1946 (NHP, 2016).

[18] A "Report on Social Insurance and Allied Services" by William Beveridge which had a great influence on the "Labor's Reform" in 1945. He recommended that all people who are in an employment relationship should pay a determined percentage of their income into a state insurance fund (BBC,2016).

to the northern part (Fischer et al., 2011). A great part of the population suffers from evitable infektions like tuberculosis and malaria. Additionally, modern and expensive illnesses like HIV, heart diseases or mental illnesses are increasing. Since a considerable time, the Indian government is trying to implement a primary health care but their efforts contrast the low investments made in the past. Only 0.9% of the GDP are invested in health care. The public sector which normally should guarantee the primary care merely gets 20% of the money whereas 70-90% of these payments are absorbed by salaries. In the end there are only little resources for drugs and equipment. Additionally, the investments are unequal concentrated wherefore cities with large health institutions get more money (bpb, 2007).

Nevertheless, since the constitution of 1947 every state is constrained to provide a social security for their inhabitants. The framework consists of two parts, on the one hand a state insurance by all employees and on the other hand a complimentary medical service for low-income citizens.
In outline, the framework is similar to the German state insurance system. It is organized in a solidary and contributory manner whereas the employee bears 2.25% and the employer 5% of gross salary. Moreover people can get a state subsidy of 12.5% for all medical costs incurred. Nevertheless this framework is nearly not adaptable to all citizens. These state regulations only affect a small group of people. For example, seasonal laborers, people working in agricultural jobs and families with an income above 6,500 Indian rupees are not allowed to benefit from the system. The rising salaries in the last years mean that many people drop out of the insurance but do not earn enough money that they can afford to pay a private insurer. This movement is negatively support by the governmental focus on the formal sector and the disregard of the informal one where most people are working (Fischer et al., 2011). As a consequence, the growing middle class who is generating an important amount of the GDP, is also affected by high health costs and run the risk of becoming impoverished.
In 2008 the government recognized the negative conditions and started to counteract with a new insurance program – "Rashtriya Swasthya Bima Yojana[19]" (RSBY) - for all people living under the poverty line to reduce out of pocket spending (RSBY, 2016). This national insurance program covers all costs arising from hospitalization up to the limit of 30,000 rupees[20] per year and family whereas the "coverage extends to maximum five members of the family which includes the head of household, spouse and up to three dependents" (RSBY, 2016).

[19] Emerged from the „Unorganized Workers Social Security Act" in 2008 (RSBY, 2016).

[20] This is approximately 430€.

Nevertheless, not all illness can be treated because they are to expensive to be covered by this insurance[21]. In April 2015, the conduct of the organization was given to the "Ministry of Health and Family Welfare" (MOHFW) who should consistently implement it in all states. They work together with 14 insurance companies to provide an adequate treatment for poor workers and their families (Schaap, 2013). The target is to cover 70 Million households by the end of 2017 They do it with the two main objectives:

1. *"To provide financial protection against catastrophic health costs by reducing out." (RSBY, 2016)*
2. *"To improve access to quality health care for below poverty line households of pocket expenditure for hospitalization and other vulnerable groups in the unorganized sector." (RSBY, 2016)*

Nevertheless, looking at the whole population, the overall result is that only 10% of the underclass is insured whereas in the top layer around 50% of the people have an insurance (Lückenbach et al., 2013).

As it can be seen in the figure below, the organizational structure of the Indian health care system consists of three hierarchical levels.

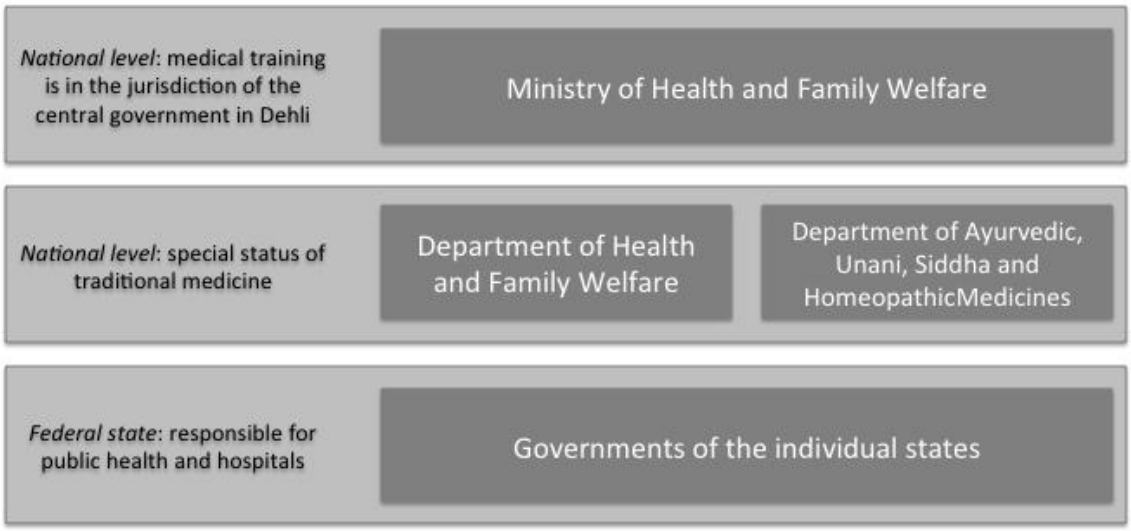


**Figure 2: Organizational structure of the Indian health care system (own figure, based on Fischer et al., 2011)**

[21] An actual package list with all illness being treated under the coverage can be found on the internet (RSBY, 2016).

It is divided in two national as well as a federal level. The highest authority is the "Ministry of Health and Family Welfare" (MOHFW). Likewise on the national level, the "Department of Health and Family Welfare" as well as the "Department of Ayurvedic, Unani, Siddha and Homeopathic" are equitable subordinated. From this, one can see that traditional medicine is of high importance in India and is strongly supported by the government. It goes that far, that this department is among other things responsible for the whole talisman market including advertisement and merchandising of mojos and other products which are revered as magical. The third party of the framework is composed of the individual health departments of every state. They are accountable for the implementation of national guidelines (as far as they exist), the septic and disposal system as well as for the management of local hospitals.

The educational and research system is controlled by the national government, located in Delhi (Fischer et al., 2011).

These three administrative areas are steadily working on the realization of the precepts arising from different health programs. The greatest concern is to provide and guarantee a primary care not only for people living in urban but also in rural areas. The medical centers on site are clustered via their treatment options and how many people they are able to treat at the same time. Figure 3 shows the different stages of health centers: Sub Centers, Primary Health Centers and Community Centers are providing the basic primary care where people get the first treatment but also a small range of special services belonging to the institution of visit. District hospitals are associated with the second and Dispensaries with the third sector of health care. For a fee, people can get high quality treatments but most people are not able to finance these costly services.

| Rural Medical Service - India | | |
|---|---|---|
| **medical facility** | **people to care for** | **staff** |
| Sub-Centers (SC) | 5000 | one male and one female community health worker |
| Primary Health Center (PHC) | 30000 | one doctor, two assistants and community health workers |
| Community Health Center (CHC) | 80000 - 120000 | four specialists as well as assistants and helath workers plus 30 beds |
| District Hospital | 1 - 1,5 Million | many doctors, specialists and beds |
| Dispensaries | - | - |

**Figure 3: Rural medical service in India (own table, based on Fischer et al., 2011)**

## 3.3 Corruption in the Health Care System

Concerning the "Global Corruption Barometer" provided by Transparency International (TPI), 56% of Indians responding in the questionnaire state that medical and health services were extremely corrupt or even corrupt (TPI, 2016).

After the RSBY program was introduced in the late 40s, the medical sector started to grow and is still expanding especially in rural areas. Nevertheless there are some problems the health care sector is actually facing.

A big problem is the medical staff. Most medical educated Indians stay after their studies in the big cities due to salary issues. Wages in urban areas are way higher than in the rural ones. An additional factor is that in rural areas medical institutions are predominantly public whereas the private providers are located in an urbanized environment. This is important because private suppliers are often paying up to 200% higher wages. Therefore most people working in rural areas are not as well educated as physicians in urban regions. Often people who want to work in the medical sector but are not able to pay the high fees for education find their profession in rural areas because people are happy if there is anybody who could help – not depending on the educational background. Following the shortage of doctors, respectively fully educated ones, is very high whereas the overall comparison shows that India had in 2009 0.6 doctors per 1,000 inhabitants (Appendix 3) (D Statis, 2011).

Another point is that next to the lack of doctors in rural areas the equipment is of low standard. Numbers from 2009 show that there are only 0.9 hospital beds per 1,000 inhabitants (Appendix 3) (D Statis, 2011). Another obstacle is the poorly developed infrastructure due to minor investments on behalf of the government. Health centers are spread sparsely and people have to cover large distances using an outdated local transportation system. As a result of these facts patients are normally accepting every treatment they could receive, independent of costs or quality of services making them predisposed to corrupt actions of their physicians. A contributing factor is the high illiteracy rate especially in the north which makes it easy for medical staff to demand higher amounts of money exploiting that patients are not in the position to check whether the invoice is correct (Fischer, 2011).

In general patients have the chance to choose between four different types of medical services dependent on the amount of money they are willing or able to spend on treatments. The sector with the most institutions is the public one. Apart from a small administration fee of five rupees which can occur in some states, mostly this service is for free. In some cases of costly treatments

people have to decide if they want to utilize them because they have to cover the costs on their own. Second, there is a rising number of private centers being to a great extent very luxury and expensive. This kind of medical institutions are popular for medical tourists who are mostly from the Western World and for the wealthiest Indians. The roughly 7,000 non-governmental organizations can be seen as a third part. These institutions are mainly charitable and clerical whereas their emergence is based on the colonial past and missionary efforts during this time. During the time, the clerical organizations progressively got an excellent reputation due to good equipment and well-educated employees. However, this positive effect was and is increasingly influencing the costs for treatments. The original aim was to provide medical care for the poorest. Nevertheless, today patients need to incur any expenses wherefore wealthier people are able to pay it and poor patients are automatically excluded because they are lacking of resources. To give these -nowadays- monetary oriented centers a touch of the original principal, it is dictated that a certain number of poor patients need to get free medical care. The fourth category consists of all unregistered practitioners who mostly have no official medical education but being often the only possibility for the poorest to get medical care because they are cheap and nearby. These physicians are affected of alternative medicine and are practicing various treatment philosophies like Ayurveda, Unani and Homeopathy which is strongly supported by the government (Fischer et al., 2011).
All in all, it is conspicuous that the various options include and exclude people based on their living conditions and their position in society. The caste system can be seen as a great example. This thinking makes it impossible for people from lower castes like Parias, Harijans or Shudras (Appendix 4) to get any help. These people have to accept all care they can get (WHO, 2008).

By all means, becoming ill is not nice but in many Western countries it is a simple thing to directly get medical care. On the other side, in India an illness can lead to a financial bankruptcy whereas as a last resort people cannot recover before they run out of money because many visits to the doctor need to be paid. This is due to the fact that primary care does not cover any ambulatory services or treatments of specialists. Until today, the number of specialized therapies is kind of low but is steadily becoming an important topic in health care due to the growing insurance scheme. This is especially contingent up on the growing middle class paying more and more for private insurers. Every person who is close to handle payments for private insurances uses them because the bad quality and the restricted attainability of the public health care system frighten most people and drive them into paying extreme high prices. The “National Family

Health Survey" (NFHS) from the year 2007[22] shows that the trust in the public health care system is very low. Two-thirds of Indian households prefer to harness private physicians whereas the most common reasons for this decision is the bad reputation of the public area (58%) and on the second position the lack of nearby governmental institutions (47%) (NFHS, 2005-06). If people are not able to finance private health care only via their income they try everything to get the money from other sources. It often happens that people have to sell their houses and properties. If they do not have enough possession, the only way to get money is to lend it whereas they are deep in debt. The pie chart below illustrates the distribution of payments for health care in India. It is obvious that the biggest amount is spend from households with 71.13% which is often caused by the inexperience of patients due to the fact that they are not aware of what are normal costs for a treatment because of the opaque price generation (Kumar et al., 2011).

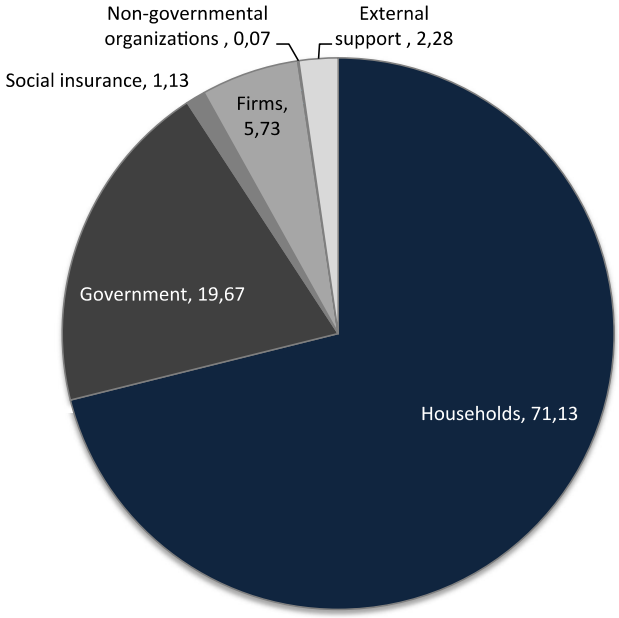


**Figure 4: Distribution of funds for health care during 2004 and 2005 in % (own figure, based on Kumar et al., 2011)**

Even if private spending on health care are extremely high the trend shows in nearly all Asian countries a declining of these expenditures (Appendix 5). This is a very slow but steady process.

[22] The results presented in the survey from 2007 are gathered in the years 2005 and 2006. The latest survey is from the years 2014 and 2015 whereas the results were partly presented in 2016. Nevertheless, up to know only the fact sheets about the states and districts are online and not the national sheet which will be presented in the end of 2016. However the outcomes presented up to know show that there is no variance of the trend and the tendency for using private health care is going upward.

From 1990 to 2013 the amount fell about two-percentage points caused by the initiation of health care reforms.

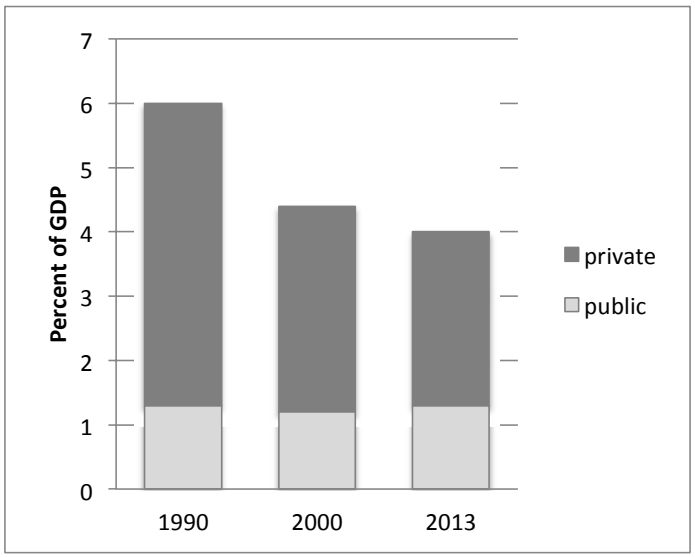


**Figure 5: Percentage of GDP - Health Expenditures 1990-2013 (own figure, based on data from the Worldbank (b and c), 2016)**

All in all, one can say that the bad reputation of the public system buoy up the private sector who is dominating the market. Its standard is often comparable to western clinics in case of equipment and treatment itself. The offer is specially tailored to rich Indians and medical tourists who often come from industrial states. Very popular in this direction are the luxury aryuvedic clinics or clinics being specialized on cosmetic operations.

A small part of these private institutions are run by companies to offer their employees an exclusive care but still demanding high fees while excluding family members of the employees from the system (Balarajan, 2011).

# 4. China

## 4.1 Dossier China

People's Republic of China is with approximately 1,381 billion people (Statista (a), 2016) the most highly populated country in the world followed by India (approximately 1,309 billion people) (Statista (b), 2016). Moreover, it is the oldest country having a continuously existing civilization with its own statehood. On the one hand, the country demonstrated a phenomenal economic growth over the past few decades and since 2005 it can be seen as the fourth largest economy (measured in terms of the GDP) arising from a new political style called "open door policy". On the other hand this welfare is not distributed equally whereof huge income disparities occur. Nevertheless, it is also the biggest country worldwide with a communistic single-party system.
From a health perspective, headlines were made about 13 years ago when the SARS epidemic (2003) and the avian influenza (2004) hit the country (Köster, 2009).

The central question respectively to this country is, how socialism in case of carrying for citizens can be consistent with the political leadership influenced by capitalism.

### 4.1.1 Political development

Since the foundation of People's Republic of China in 1949 the Communist Party of China (CPC) is chairing the country. They are asserting the claim of solely leadership which particularly includes economic, political, moral and ideological issues. However, the style of leadership changed notably since the transformation process in 1978. In the beginning of the republic especially war-experienced revolutionists held executive positions, whereas nowadays technocrats with an excellent education are preferred. Among them particularly the economic model changed and become a "market economy in accord with Chinese influence" (Köster, 2009). Looking at the overall picture one can see that there is still no separation of power, even since 1999 the Chinese government officially speaks in art. 5 par. 1 of a "socialist nation of law" (Heuser, 2009). Western countries would normally interpret this as a binding of state power to the law but the CPC associate it differently: Au fond, they see the binding of state and partisan power to the constitution and additionally the law under the leadership of the party. They adhere

to the sovereignty of the CPC and follow the principle of a "democratic dictatorship of the nation" (Köster, 2009). It is declared as the initial phase of socialism whereas the political system is often referred to as "fragmented authoritarianism"[23] (Köster, 2009). This is due to the fact that there are numerous actors competing within the system as well as a shift of important administrative and economic decisions to lower government levels (Appendix 6).

### 4.1.2 Economy

In contrast to other sector, the economic framework is already the part of the Chinese system being mostly influenced by the transformation process. This is especially confirmed by the fact that in the last three decades the economic growth, measured by the Gross Domestic Product (GDP), was between seven and eleven percent[24] (NBS, 2006). Also in this time the per capita income quadrupled and the country became the world's fourth-largest economy in 2005 (Köster, 2009). Despite these high numbers not all regions benefit from the economic upswing. Large parts of the country are still in the status of an emerging country wherefore China has the highest income disparities worldwide. Besides the East-West and rural-urban dichotomy being recognized for decades, additionally the North-South differences appeared in the 1990s. This is due to the massive support of all coast regions as well as Hong Kong and Taiwan and their linkage to the detriment of the interior provinces (Köster, 2009).

### 4.1.3 Social and cultural aspects

The following numbers concerning population composition and development need to be treated with caution due to the fact that there is no report system like it is standardized in the Western World. Moreover numbers are biased via the one-child-policy and the differences of rural and urban areas.

In 1983 China introduced the "one-child policy" to regulate the population growth because of fearing the forecasted boom (The Guardian, 2016). Even if the growth rate slowed down the

[23] Authoritarian: lack of constitutional state and democracy (no democratic elections, no separation of powers, political power is not controlled by independent courts or media)

Fragmented: each political decision is characterized by protracted procedures in their agreements of interest due to a high number of agents who are involved.

[24] Concerning the Statistical Yearbook of 2006 published by the NBS of China. However the Worldbank published numbers over 7% (The Worldbank (a), 2016).

population was still growing (Appendix 7). This was due to the fact that birth control in rural areas was not as effective as in urban ones wherefore one can see a great social gradient between these two. Nevertheless this policy leads to a shift in gender relation whereby far more boys than girls are born. Among other things this is caused by the position sons have in the Chinese culture (Köster, 2009).

Another point is that the mortality rate is steadily diminishing. Consequently in the long term China is -like the Western world- facing a demographic change. In 2006, 7.7% of the total population was older than 65. This number will rise until 2050 up to approximately 20%. In the final analysis this political model did not show the predicted successes whereas in the beginning of 2016 the one-child policy was changed to a two-child policy to stop the demographic crisis (The Guardian, 2016).

This demographic situation has a strong impact on the employment situation whereas more and more people are coming onto the labor market, entailing a drop in wage level causing an increase in productivity. Naturally many jobs are located in the agglomerations especially in the provinces at the east coast,[25] inducing a strong urbanization whereby the slope between rural and urban areas is growing further. The non-native countrymen often build a new and separated lower class in which they juristically do not have any claims on social contributions townspeople get (Köster, 2009).

China is a country with a diversity of cultures and religious orientations therefore it is not possible to talk about the "one" Chinese culture. Nevertheless, one can recognize three main streams which are Confucianism, Buddhism and Taoism. With the look at the health care system, there is one great similarity concerning these three mentalities: the family has an extremely high status. In particular the Confucianism emphasizes the importance of children – especially sons as well as strict hierarchical structure within the families. Therefore a family member is not seen as a separate and independent individual but as part of the whole. Looking at interpersonal relationships the family is in the first place. Until today, in some provinces there can be found clans ruling villages. This is due to the fact that in rural areas family structures play a central role in social security. Children have to look for their parents in their old age. On the one side, the Chinese constitution ensures this way of thinking but on the other side, was the one-child and is the actual two-child policy a contradiction to all traditional values. However the

[25] The most densely populated areas are Beijing, Tianjin, Shanghai as well as the provinces in east, southern central and southwest China.

state never considers the task of life and health insurance as their responsibility. Instead they attach more importance to create a suitable economic and legal framework which can be seen as a social policy with the background of a regulatory policy.

## 4.2 Health Care System

Due to the decentralized administrative structure in the Chinese health care policy the health care system in China cannot be seen as one big framework. It again reflects the fragmented authoritarianism already described in case of the government and administration structure. One the one side, all provinces, autonomous regions and non-governmental cities have in large parts an extremely different provision of health care associated with several financing schemes. On the other side, there is again a great difference between urban and rural areas. A social security system was extensively entrenched in the cities since the sovereignty of Zedong[26]. It includes a health insurance coverage financed by a levy system whereas in rural areas a cooperative organized financing ensures the medical service provision (Köster, 2009).
Due to this, the following framework is in part simplified.

Since the economic reforms and the opening in 1978 the rural health care system changed dramatically. The last reforms in 2003/04 targeted the provision and financing structure especially to steadily develop the "Xiaokang Society"[27] One key issue is to bring a program back into use which was introduced under the leadership of Mao Zedong: the "Rural Cooperative Medical Schema" (RCMS). It should be reactivated via the "New Cooperative Medical Schema" (NCMS). The service provision in both systems is based on the idea of cooperative society. The difference is that the old RCMS was a cooperative care system with a cooperative organized health care. All parts like offer and financing were integrated in the framework (Appendix 8). However in the new system only the financing service is integrated and the service providers are separated and mostly independent. Most small hospitals are up to now privatized whereas the big ones are in state ownership being managed on the principle of production responsibility system which is the new legal as well as business form (Köster, 2009).
As seen in the last abstract China is a country with different systems, reflected as well in the NCMS. In 2003 the central government presented the guidelines[28] whereas it is the task of every

[26] Down to the present day, Mao Zedong is revered as a saint, despite his sovereignty from 1949-1973 was characterized by terror and violence. He was the man who exclaimed the Cultural Revolution and therefore plunged the country into economic and social chaos (bpb, 2016).

[27] It is the name for a society with modest prosperity having its origin in the Confucianism. It means to have a functional and great middle class where wealth is equally distributed.

[28] It was published in a paper of the central government: „Decisions on Further Strengthening Rural Health"

downstream governmental level to implement it in the regarding area. The individual local governments do particularly the financing.

Main goals of the NCMS are:

- Hedge of cost coverage in case of serious illnesses
- Reduction of poverty due to cost of illnesses
- Improvement of health status in rural areas
- Improvement of satisfaction with respect to health service especially in rural areas (Köster, 2009)

The participation in this program is voluntary for local communes as well as for each individual family. The World Bank justified it with the cost management at that time. Some tax regulations were changed and they did not want to introduce another compulsory charge.
Official model projects were launched in the end of 2003 and especially the financing system was under observation. The a typical way to finance the program consists of two parts, namely personal contributions and subsidy payments of local governments as well as from national side. There is only one exception. Currently, subsidy payments for the rich East coast are barred (Appendix 9). Additionally the support system "Medical (Finance) Assistance Scheme" (MFA) was tested in poor economic regions to help impoverished peasants to finance their payment of contribution. Up to now there are no clear rules how the money should be distributed fairly but mostly 5-10% of the poorest households are supported by this scheme.
But the most common financing strategy is a combination of funds and private ledgers which are meanwhile representative for the system. In 2001 the private insurance program "Medical Saving Accounts" (MSA) was introduced in cities whereas today this idea is part of the mentioned combination: funds + MSA. This mix is used by 85-90% in the western and central provinces.
Nevertheless, the insurance system is staggered so that the service matched to the deposit. Each local area can create the program and its service on their own so that there is no equality over the provinces. The relation between payment and reimbursement varies (Köster, 2009).
All in all, it is conspicuous that the proportion of health expenditure changes (Appendix 10). The out of pocket spending rose in the last decades whereas subsidies by the government as well as payments of social partners shrank.

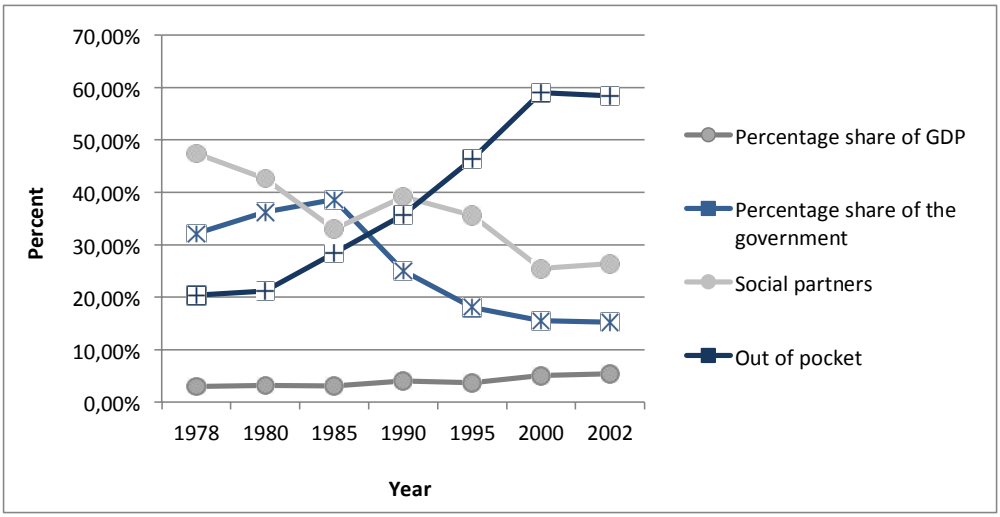


**Figure 6: Health Expenditure (own figure, based on Köster, 2009)**

The extent of insurance cover is correlated to the payment of contribution. It has been noticed that regions with a higher payment of contribution, offers a greater insurance coverage with a more generous catalogue of services. In general, costs of major illnesses are covered as well as partly ambulatory services. Concerning the last point some differences between the provinces occur due to their legal autonomy. For example, in some areas it is suggested to offer a yearly check up for poor farmers who had no need to use the health service in past years.

At the moment, especially services of district hospitals are supported whereas health stations and community health centers are often not taken into account. This contradicts to the original test scenarios[29] as well as the agreed targets. Commonly private suppliers are as well excluded from the NCMS system.

All in all, you can see a great diversity within the service offers and their payments. Obviously this type of health insurance is not a comprehensive insurance with a full insurance cover. Quite the contrary, often high additional payments are needed to get an adequate care. The reimbursements are relatively low, for example, for a major illness the payments are limited to 20-60% of the arising expenses. By contrast ambulatory care is only supported by 10-20%. Besides the partial payments also a maximal amount of refund is defined. This sum varies significantly in the different districts (Köster, 2009).

[29] For example the Sichuan-RAND-Health-Insurance-Study.

| Role | Organisation |
|---|---|
| | |
| Formulation of health policy | National Congress |
| | Privy Council |
| | Department of Health |
| | National Development and Reform Commission |
| | National Population and Family Commission |
| | Department of Employment and Social Security |
| | Local governments |
| | |
| Administrative Jurisdiction | Department of Health |
| | Public Food and Drug Administration |
| | Public Administration for Traditional Chinese Medicine |
| | General Administration for Quality Assurance |
| | Local health authorities |
| | |
| Public Supply | Department of Health |
| | Local health authorities |
| | University clinics |
| | Other ministries |
| | State controlled businesses |
| | |
| Private Supply | Private clinics |
| | Private hospitals |
| | Drugstores |
| | |
| Financing | Treasury Department |
| | Local finance departments |
| | BHIS |
| | NCMS |
| | MFA |
| | Private health insurances |
| | Uninsured patients |

**Figure 7: Organizational from of the Chinese health care system (own figure, based on Köster, 2009)**

The NCMS is provided by the Chinese government, whereby the local governments represent it. The guiding principles are to form a committee for the administrative tasks consisting of government officials, representatives of the department of health and representatives of peasants. The committee has to open an account together with a bank and therefore has a control function concerning particular actions. Moreover, it issues directives for the affected region. Beneath this committee, the funds management is responsible for further development of strategies as well as the implementation of given rules. The local department of health mostly does this management whereas their director also has the leadership function within the NCMS bureau. Additionally, the person doing the management of the NCMS, is also responsible for the reimbursement of costs to the service provider. This constellation causes conflicts of interest as well as negative incentives to deceive on the poor. This situation is facilitated by the close link of service provision, remuneration and funds management (Appendix 11). This is aggravated by the fact

that the role of government is not clearly defined meaning that the guidelines are worded in a very open way (Köster, 2009).

Similar to the NCMS, the BHIS insurance program should only cover basic medical treatments. The standard benefits are determined by the central government in the so-called "Essential-Drug-List" and "Essential-Service-List". Only treatments from these lists are covered by the BHIS.
The BHIS is provided by the state and the operative responsibility lies with the "Social Insurance Bureaus" (SIBs) having a wide scope of action. Beside management activities, they have the decision-making power especially in the case of detailed product designs and contract making with all service providers.

Indeed medical systems of rural and urban areas are in general separated but the strict division initiated under Mao Zedong declined over the last years (Appendix 12). Even if especially big and well-equipped hospitals are mostly located within the cities, the access is now also given to people from rural areas when they are able to pay the fees. A limitation of mobility is de facto non-existent anymore as it was under the sovereignty of Mao. Everybody needed to have a place in society and he or she was not able to leave this predetermined path. This was expressed in allocation of places of domicile, workplaces in common with medical services which were dependent on the job.
Therefore it follows that medical institutions in the cities are facing a higher number of patients. On the one hand, the increasing numbers are caused by a great migration movement from rural to urban areas. On the other hand, the opening of the medical market associated with free decision making induce townspeople to choose the best medical service they are able to afford. Especially the new formed middle class and foreigners seize private institutions of health care. Up to now patients prefer the highest supply stage even if costs are three times higher (Köster, 2009).

Due to the size of the People's Republic of China and the political strength of single regions, the decentralized health related policy has an enormous significance. Generally the management and control system is equal for rural and urban areas. Nevertheless single allocations of competences and tasks vary. Therefore it follows that the framework is highly fragmented and the administrative structure is very complex. This can be said about the vertical (political decentralization) as well as the horizontal (ministries variety) direction. In the vertical line are the central government, province, prefecture, district as well as the community administrations.

In accordance, in the horizontal line are several ministries and respectively assigned subdivisions. The Department of Health is the highest administrative authority and has the political decisional power because it is directly subordinated to the Privy Council. Moreover it is especially responsible for the health policy in rural areas. Relating to this its main tasks are the regulation of health insurance contracts and the control of health related laws as well as programs of actions to protect general health.

## 4.3 Corruption in the Health Care System

In China, the "guanxi" networks are a very important point while analyzing corruption. Guanxi denote a network of personal relationships (between individual people and not between groups of persons) influencing nearly every decision made in life. Contracts and agreements are always done under the principal of these connections. It is always a network of contacts which is coined by a mutual way of acting.

These networks clearly differ between corrupt and legal transactions and they embedded stable mechanisms for order processes. This has the effect that "the average costs of all transactions conducted under the umbrella of the guanxi network can be reduced" because of special contracts within the framework (Schramm et al., 2005).

Therefore, the main question arises how such relationships can be destabilized if corruption is a main point of their income. The answer is that the focus should not be on individual people but on the framework itself. There is no standard of norms describing corrupt behavior because actions being seen as corrupt from a universal system might not be illegal from the side of a guanxi network. The solution is to publish these universal norms to convey the population a feeling for illegal actions but this would tackle one of the oldest and most widespread traditional institutions of the Chinese society (Schramm et al., 2005).

The high intense of economic reforms also influences the health care system in urban areas. However, old insurance systems which tanked during economic reorganization should not be reinvigorated like in rural areas but a realignment and unification of two already existing systems should happen: the Government Insurance System (GIS) and the Labor Insurance System (LIS). Therefore, the Basic Health Insurance System (BHIS) was created. Equally to the rural system a consistent funding is not existent. Especially the weighting of individual financial sources for different contribution groups is unclear. Commonly, the BHIS consist of five financing components. The first point is the Social Pooling Fund (SPF) which is financed via wage-dependent contributions of employees and administered by each city on its own. A second source is the Individual Pooling Fund each employee has at command. This is financed partly by employees as well as by employers. Actually, it is dependent on the age of the employee. Charges privately paid by employees are another great point. The fourth point goes in the same direction with private additional assurances which are mandatory for some employees, especially in civil services. Governmental subsidies are the last point. These are mainly paid indirect, via the financing of administration costs through fiscal revenues (Köster, 2009).

In contrary to the old system, now employees, retirees of the public sector and enterprises as well as civil servants, the party officials, members of university and some veterans are within the same system. However relatives of civil servants are no longer included in the framework. Moreover unemployed, self-employed, employees working in the private sector and migrant workers are not part of the insurance system. Nevertheless a voluntary participation can be granted if the concerning employer is willing to pay the fees. Higher authorities have an exceptional position because they still get full coverage paid by the government.

Most service providers face new challenges due to the opening up of the market, resulting from the transformation process. Contrary to the economic reforms, reform measures in the health sector were neglected over the years although the market is changing rapidly. The biggest problems in this case are the state investments and managing the competition regulations.
Most hospitals in China are under state control especially the greater ones. At the hands of financial straits at the beginning of the transformation process, the central government as well as many local governments reduced the financial support of health services[30]. State subsidies cover at least 14%-30% but only for special institutions which are mostly located at the east coast. Further problems are that the government missed to create a framework for a private range of services and that a basic financial strength of demanders is non-existent. As a result, one can recognize an oversupply in economically stronger and an undersupply in economically weaker regions.
Actually the offering structure is characterized by a mixed system. One the one hand, it exists a decentralized paramedical care which consists of simple medical ancillary staff and small health stations. On the other hand, the vertical clinic system is also represented by simple municipal health centers and by some large well-appointed district hospitals. Besides there are also institutions of public health services, called “Center for Diseases Control and Prevention” (CDCP), primary responsible for prevention and control of epidemics. Additionally, coordination units support these stations, called the “Public Health Emergency Respond System”. Their task is nowadays only to monitor and control the offers concerning diseases prevention. This covers in particular awareness campaigns and vaccinations (Köster, 2009). Under Mao Zedong this mixed system was a quadrinomial pyramid whereas today the system only consists of three levels. Until the transformation process one can recognize a strict hierarchy with a clear referral system and quality controls. Today, all providers compete against

[30] Refrained investment policy.

each other due to the uncontrolled range of services. Each provider has to control the quality on his own and all education events arranged by higher care levels for local hospitals, health stations and barefoot doctors are cancelled (Figure 8).

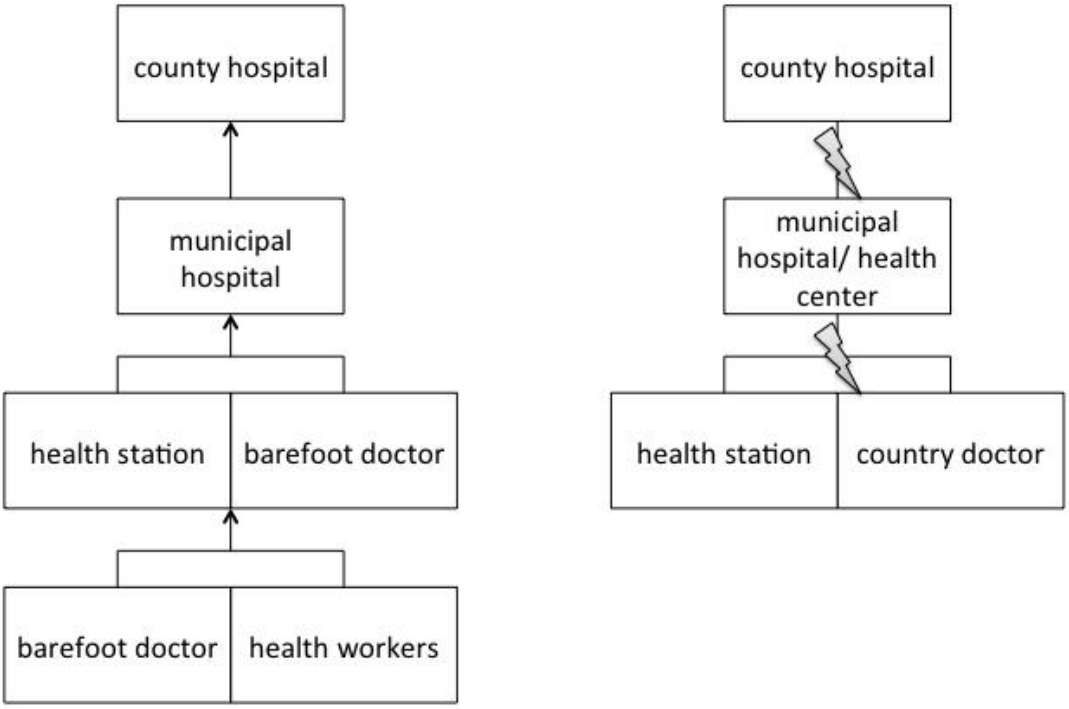


**Figure 8: Structure of health care providers (own figure, based on Hu, 1980 and Feng et al., 1995)**

The term "barefoot doctor" became famous under the Mao regiment. Today, these people are called country doctors and they are responsible for primary care and hygiene trainings. They have an independent status because local governments cut all payments and therefore they are dependent on revenues from rendered services and the profit of sold drugs. Nevertheless, this is applicable to large district hospitals. Small clinics were privatized whereas since the 1980s larger hospitals in rural areas work on the principle of a production responsibility system[31]. However, the public not-for-profit hospitals are exempt from taxation and get state subsidies but they have to adhere to the governmental pricing. All in all one can say that country doctors as well as local hospitals are subjected to market-based incentives. Especially hospitals are under a great price pressure due to high personnel costs resulting from socialistic times. To privately invoice the performance of making profits it was allowed to separate not-for-profit and for-profit

[31] The hospital management has the financial responsibility but not the authority to make decisions concerning investments, employees or pricing.

departments in clinics[32]. Moreover, it is admitted that employees get bonus payments for the acquisition of new sources of income. This results in a remarkable difference in the supply situation in rural areas. Hospitals are able to expand and use the newest technology in rich areas whereas health stations in poor parts are not able to acquire enough patients because these people cannot pay the treatment and therefore have enormous financial problems. The consequence is that these important institutions have to further reduce their service, equipment and staff. It is conspicuous that in the last years additionally to the rural-urban dichotomy an east-west gradient in rural areas can be recognized.

Down to the present day, the Chinese government has the control over all prices in the health care area. Before the transformation process, most prices were rated under the effective costs of a treatment. This was not a problem for the service supplier because as the sole owner the Chinese state was responsible for all generated losses. Currently the problem occurs that the state dropped its role as bankroller whereas due to the massive curtailment of subsidies all institutions are increasingly dependent on their revenues. In real terms, this means that a service extension especially in the area of drugs and western medicine tries to compensate costs. In particular, prices of drugs raised about 15-20%. These lucrative drug prices lead to a strong growth of pharmacies in rural as well as in urban areas. Results from estimations show that actually 16,000 drug wholesalers and approximately 110,000 independent drugstores exist. They are in competition with the hospitals in cases of selling profitable drugs. Nevertheless, hospitals have an advantage because there is no division of sale and medical prescription to create a supply induced demand. Until now the government did not introduce concrete reforms to change this.

In the opposite, private suppliers have a free pricing which is mostly distributed in rural areas. Besides the official fee for the individual performance one can recognize growing “under-the-table-payments”. On the one hand, in most cases this is forced by producers of pharmaceuticals to higher their revenues and on the other hand by patients to get a faster or better treatment. Often these payments are done by putting the money in a red envelope to use it as an entrance card. Every patient sitting in the waiting room with such an envelope is treated first (Köster, 2009).

[32] Similar to the Australian health system.

# 5. Russia

## 5.1 Dossier Russia

The Russia Federation is one of the biggest countries in the world where more than 140 billion people are living on 17 billion square kilometers. The state spans over nine time zones and is located on the two continents Europe and Asia whereas during the modern era it brings the culture more into line with the European conditions[33].

Based on several characteristics of the Russian economy and society as well as a depiction of specific elements since the beginning of the 1990s, one can see a profound change in the organizational structure of the country.

The Russian economy experienced a far-reaching transformation to a full market economy whereas the country faces problems like difficulties of combining the ongoing globalization with traditional values. The state plays an important role in every area of the country. It has never been only an administrative body but rather a booster of social, economic and intellectual values. This finds expression in striving for a powerful state which was always compatible with democratic thoughts and autonomy. Part of this imagination is self-management of municipals, political and economic diversity on the regional area as well as democratic characteristics in daily life. One of the most important features is the well-marked social tradition. It is expressed in the aspiration of the population for social equity, collective property and economic forms, social paternalism as well as the alignment for a pronounced corporate good.

Russia promoted itself as one of the most influential centers in the modern world and call for the position as a great power. But not only size of territories and population are important, rather economic, political and military strength are of greater significance (Klein, 2011).

### 5.1.1 Political development

The Russian history decisively influenced the historical development of two continents and the global progress (Schröder (a), 2010).

Until World War I, Russia was under tsarist rule and came into the conflict in the middle of the 19th century because of the alienation of the European coined upper class and the autocratic

[33] During the modern period, the multiethnic state increasingly approached in terms of socio-political to the European culture (Schröder (a), 2010).

regime. In the course of the industrialization the strife peaked in the takeover of the Soviets[34] (Schröder (b), 2010). Following, the Bolsheviks established a rigid dictatorship of supply – the Communism. During World War II, the social basis collapsed, the economy stagnated and the society was in conflict with the leading party. Wissarionowitsch Stalin exploited the situation and took over the leadership of the Russian Communist Party and therefore of the whole country. Central planning and collectivization were the central aspects of his government program (Schröder (d), 2010). After the end of World War II and his death in 1953, Nikita Chruschtschow pushed reformations especially in the commercial policy to detach the repressive structures of the Stalinist system. The overall aim was not to endanger the one-party rule, the centrally planned economy as well as the stigma of the Marxism-Leninism being a stark contrast to the Capitalism (Schröder (c), 2010). A mixture of relaxation and the expansion of the imperium coined the 1960s and 1970s. Due to the "Perestroika" of Michail Gorbatschow the last attempt at reform failed and the system of the Soviet Union ended in 1991 (Schröder (g), 2010).
After the end of the Soviet Union, President Boris Jelzin focused on the aspects of liberalization, development of institutions and stabilization resulting in the abolition of a planned economy and a one-party rule. The political transformation towards a market economy took place in two phases. From 1991 to 1999, Jelzin enforced the new political direction and with the assumption of power in 2000, Wladimir Putin initiated the consolidation of the regime (Schröder (e), 2010). Until now, he assumes important positions in the Russian government[35] and the protection of his own power is the central point of his striving (Schröder (f), 2010). His style of government is declared as managed democracy and is a combination of an autocracy and oligarchy (Mommsen, 2012). This general attitude also influences the social life especially in the case of freedom of expression. There is no pluralism in the media and the freedom of assembly is limited. Interestingly, Chap. 2 Art. 29 makes arrangements for freedom of opinion and in this case freedom of the press but in reality, in the last 20 years more than 300 journalists were killed[36]. There is no state independent television channel reporting government-critical (Hartsich (b), 2011).

[34] The Soviets were organized in a labor and soldier party. The part of the Bolsheviks which were the radical faction of the social democrats became under Wladimir Iljitsch Lenin the strongest political power.

[35] He was President of the Russian Federation from 2000 to 2008 and Premier of the Russian Federation from 2008-2012 while his friend Dmitri Medwedew was President. Due to changes in the constitution he was able to run for the post as President again with simultaneous extension of the term of office to six years.

[36] Journalists criticizing the Russian system are living in danger: Anna Politkowskaja, Michail Beketow and Oleg Kaschin were killed, gagged and brutally battered.

The compliance of the law would result in a more balance political variety because there could be a free competition.

### 5.1.2 Economy

Politics and economy are closely connected especially due to financial magnates called oligarchs who acquired much political influence in the 1990s. They became the determining factor in the Russian politics and for example significantly influenced the election of President Jelzin to his advantage. Following that, he considered these people when making decisions concerning economic and social concerns. Therefore, this small group was protected by the government and became billionaires. Via their indirect contact to the politics, they were in the position to ensure their own interest, like for example receive state orders, getting subsidies or tax concessions. Therefore they used direct consulting, their influence on the media, gifts and donors as well as corruption. Putin started after his election to fight against these machinations but only against enterprises that obviously were against his style of politics. Oligarchs supporting Putin were endorsed to get political positions. Therefore, the power relations shifted away from this small group of industrial magnates towards the Kremlin (Kusznir, 2011).

Looking at the economic development separated from the influence of the oligarchs, one can recognize that the country has undergone significant changes in the last 25 years after the collapse of the Soviet Union. The centrally planned system was partly adjusted to the market based economy of the Western World. Nevertheless, most wealth is under official control by the government. Russia is number one in the world concerning oil and natural gas production. With an eye to the future, this industry will lose in the next decades, already being influenced today by diminishing growth rates. The combination of falling commodity prices, sanctions due to political decisions and structural limitations lead to a recession in 2015, following that the GDP fell by nearly 4%. In absolute terms this was a fall from US$ 3.862 trillion in 2014 to US$ 3.718 trillion in 2015 (CIA, 2016).

### 5.1.3 Social and cultural aspects

More than 170 ethnic groups[37] and different nationalities with several mother tongues are coining the Russian Federation. Russia is the successor state of the Soviet Union with approximately 142 million inhabitants (CIA, 2016), including 21 republics, nine districts called "*Krajas"*, 49 areas called *"Oblasti"*, two federal states (Moscow and St. Petersburg) as well as four autonomous districts and the separated autonomous Jewish area Birobidschan. From these 83 subjects, 26 are ethically defined. According to the constitution, all subjects of the federation are equal before the law. Nevertheless, there is no possibility to leave the League of Nations.
In Russia a consistent system of government takes effect, in which all regions are involved. The responsibility for the central power is up to the state government wherefore all other issues are part of the regions. This has the effect that local governments suffer from the insufficient separation of federal and regional responsibilities.
The official language is Russia whereas every region at the minimum has got one additional state language. Due to this every official document need to be translated in every language as well as the use of the additional language is promoted in media, education and cultural politics to prevent the extinction of the ethnic group (Heinemann-Grüder, 2016).

The Russian Federation is a state with several differences concerning the distribution of population: Densely populated areas stand opposite nearly deserted regions in East Siberia. This is due to the fact that the massive urbanization efforts of the Soviet Union forces 73% of the entire population to live in urban areas. The problem is that numerous cities have administrative functions and therefore the distance between the centers is pretty high to avoid unequal distributions. Following, the costs for adequate infrastructure are very high and mostly not invested (Stadelbauer, 2010).

Religion is a national tradition in Russia but without influencing daily live. 75% of the inhabitants are Russian Orthodox but the Islam is also a part of the tradition. This movement exists for more than 1,300 years in the North Caucasus, representing approximately 15% of the population (Hartwich (a), 2011).

[37] The largest group is the one of ethnic Russians (77.7%), followed by the Tartars (3.7%), Ukrainian (1.4%), the Bashkir (1.1%), the Chuvash people (1%), and the Chechens (1%) (CIA, 2016).

## 5.2 Health Care System

The slightly positive economic situation over the years only has little influence on the development of human welfare indicators like life expectancy and child mortality.
Infectious diseases are traditionally related to the standard of living and this number is pretty high for a country with such a development status. Additionally, illnesses declared as sicknesses of poor people like tuberculosis are prevailing.
The demographic change is one of the major problems for the health care system. The population is shrinking since approximately 1995 due to high mortality and low fertility rates as well as the emigration of well-educated people (Chamie et al., 2014). Therefore the population in total gets older following that costs for health care are rising and productivity is going down whereas the social status is declining. This impact will be very important in the future but until now Russia is spending less for health care than other OECD countries (OECD, 2006).

The Russian Federation is widely coined by the former Soviet Union and therefore concerning the health care system by the *Semashko*[38] scheme of universal coverage for everyone. The government exclusively financed this. However, the state was not able to finance care for the entire population and people had to find ways to guarantee health care and so informal payments became popular. Some scientists argue that informal payments accrue from discontented patients as well as providers. Quality and availability suffer in the communistic era whereas supply bottlenecks prevent free choices of patients. There was no diversity in case of public providers as well as a private sector was non-existent. Due to the state organization there was no way of breaking out of the system because everything was streamlined (TPI, 2006).
The system was focused on the fight against epidemics and infectious diseases. The result was that there had been an effective public health strategy[39] with emphasize on separating ill people from the healthy ones wherefore today Russia an over-provision of hospital beds. Additionally, the Soviet Union did not put much effort in primary care but focused on special treatments and hospital care.

Since 1991, the gist of the health care reformation was the "transition from an integrated, hierarchical model of health care provision to a more decentralized, contested and insurance-based system" (OECD, 2006). Besides several reform approaches since the collapse of the

[38]For further information, please refer to http://www.who.int/bulletin/volumes/91/5/13-030513/en/.

[39] Called "san-epid".

Soviet Union, the basic framework of the medical system largely survived including many negative aspects like long waiting times, outdated techniques, unrewarding provision of drugs and a lack of qualified staff. Nevertheless, the system still exist on the principles of yesteryear's, including in particular

1. the right to get free medical care
2. financed by the national budget or fees of public enterprises
3. medical care by public health centers
4. ambulant treatment in polyclinics where different specialist work together
5. centralized administrative system

The right for every citizen to get free medical care was firstly exclaimed in 1918 in Soviet Russia. To guarantee this promise a huge network of health centers was build whereas most of the institutions were state properties. Only a small number of health facilities were in the possession of unions and social institutions (Antropov et al., 2005).
Nevertheless, each health center was responsible for a particular district or certain people like civil servants whereas the leeway for a free decision was restricted and health care was only a tangible service (Siebel, 2003). Due to this the physician – patient relationship only played a tangential role. Superficially, every citizen had the chance to see a doctor but nevertheless the quality varies within social classes. People working for the government got better and faster treatments as people working in the industry (Antropov et al., 2005).
The free medical care was on the one hand a great chance for the population because even if people were not able to pay for a doctor they got help. On the other hand, to financing this project was very difficult and ultimately the government was not able to do so over years. Due to the strict centralized control within the health centers, employees focused on quantitative numbers and not on quality. Moreover, on the basis of supply shortfalls and a slow development within the health area as well as the low priority concerning the distribution of resources (financial and tangible) the system lacks behind other states (Antropov et al., 2005).
In the 1980s, the leading opinion was to proceed to an insurance-based system. On the one hand this was based on the thought of acquire more monetary resources for the health system. On the other hand a more efficient use of resources was expected. Finally, the law was passed in 1991 and planned to let the employers pay the health insurance contributions for their employees. The most important phase of reformation was between 1991 and 1993 but in the years after the process slowed down and therefore many problems arose from this lack of consistency (OECD,

2006). In 1993 the medical compulsory insurance Objazatel´noe Meditsinskoe Strachovanie (OMS) was introduced in some metropolis and administrative districts (Oblasti)[40]. This insurance system was planned to be fully integrated in the social framework until 2003 and is very complex (Siebel, 2003). Since 2001 these contributions are part of the social flat tax whereas the company decides which insurance company will be responsible for the workforce and concludes the contracts for all employees. Every taxpayer has to discharge 13% of his or hers income whereas the employer pays a fixed rate of 30% for health insurance, unemployment insurance and pension insurance. Every insurant gets an electronic health-insurance card. Therefore this system is in some points similar to the German insurance system (Siebel, 2003). The state on the other side concludes all agreements for people without a job. The money being collected is deposit in two special funds which are regional and federal owned. Indeed, the public authorities still stayed in the system but their responsibilities changed drastically. It was expected that the original administrators of the whole health care system should be the insurance companies but this plan failed because they were not able to be the informed and active part in this framework. Instead of guiding and directly financing the medical centers, they had to look for the compliance of demands to the organization and the quality of treatments and medical staff (Antropov et al., 2005).

The impact of health care reforms varies over the country due to the fact that local administrative bodies have a huge influence on the process because most institutions are owned by municipals. Subordinated to the Ministry of Health and some other ministries are on the federal level specialized centers while the regions oversee only a little amount of medical institutions but these are the most important ones. The case that they have the control over the budget of the municipals makes sure that the regions have the control over all municipal clinics. Furthermore, almost every expenditures coming from the OMS is regulated by the regional OMS fund. Therefore, local authorities can be seen as the key players of the system wherefore many inter-regional differences arise which makes it hard to implement one general solution concerning a coherent framework. A consequence is that not every region is able to act like dictated in art. 41 of the constitution because they have not got enough money or are badly managing their resources (Antropov et al., 2005).

[40] Moscow, St. Petersburg, Orenburg, Karelien, Kemerov, Perm, Tver and others.

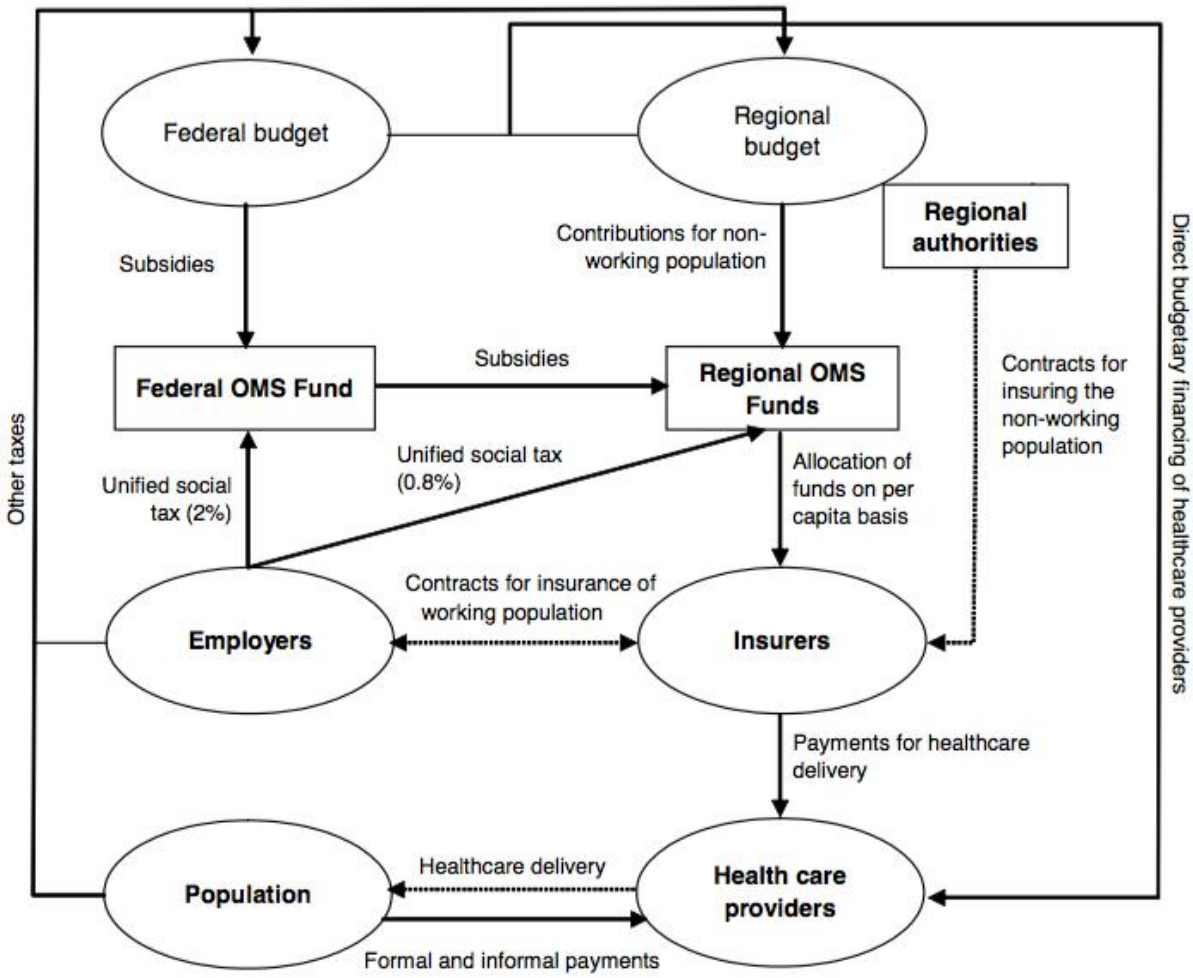


**Figure 9: Financing public health care in the Russian Federation, 2005 (Tompson, 2006)**

All things considered, the measurements were not as effective as anticipated. Especially during the change of systems in the 90s, the ways of governmental funding shrank. Therefore, the majority of population was not able to get medical treatments anymore because they had not got the money due to the fact they were not aware of saving money for health care. Within the last decade the resources go down about one third.

Nevertheless, this did not affect the obligation of the state to guarantee free medical care where payments are to be made via a compulsory insurance because the constitution did not change[41] (Deutsches Ärztblatt, 2010). This is nearly non-existent anymore because investments in health care shrank during the last years to 3% of GDP per year whereas the growing demand cannot be satisfied anymore (Deutsches Ärztblatt, 2010). By comparison, developing countries with a similar level of governmental expenditures only guarantee a minimal medical provision with basic supply. On the other side, developed countries with investments of 6 to 7% of GDP are

[41] Medical treatment in public health centers is costless and granted for every citizen (Russian constitution, art. 41)

also not able to provide complimentary medical care for all citizens. Nevertheless, Russia is a state with a significant low level o health expenditures in comparison to the European countries. People are hoping for a public care because they are not able to save money for an additional private insurance wherefore the overall level of health care spending is nearly half the percentage of GDP like in the European Union.

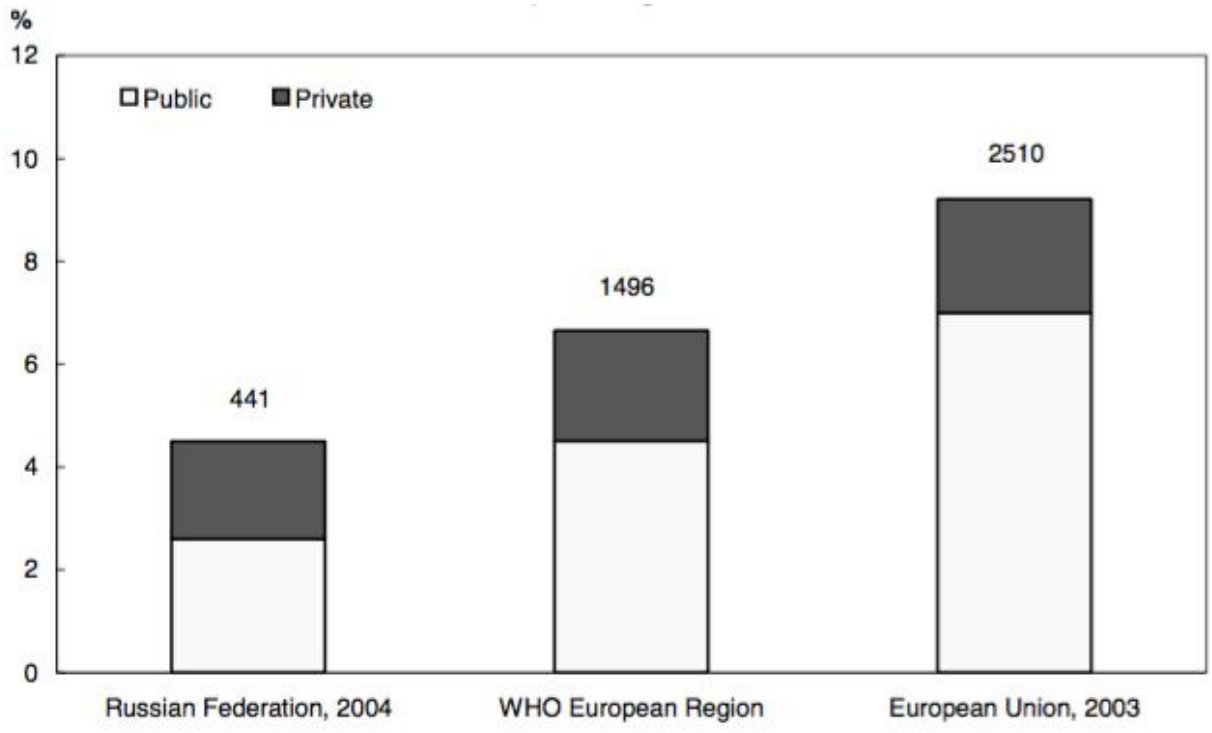


**Figure 10: Health care spending as a percentage of GDP (Tompson, 2006 based on data from the WHO)[42]**

In the situation that free medical care needs to be paid, especially poor people and families living in rural areas have to invest most of their budget for getting care. During the socialism a wide range of publications occurred concerning alternative complementary medicine which are still very popular as an alternative to the official and expensive institutions (Siebel, 2003).

The complimentary medical attendance is increasingly replaced by care in return for payments. The problem is being aggravated by the fact that politics are ignoring the situation and therefore forcing social inequalities.

Since the introduction of the market economy, the number of private insurers is steadily growing, being as well a parallel to the German system in case of people having a basic care which they can upgrade with voluntary payments to private institutions. Nevertheless, the gap between persons on average wage and pensioners on the one hand and the well-heeled (Novorič) on the other hand is far big. Therefore, private clinics and special services are reserved for the

[42] The figures represent the per capita health care spending in US$ PPP.

gentry whereas the services of compulsory insurances only cover the rudimental standard. Expensive special procedures like CT scanning or MRI examination are only doable in a few very expensive clinics (Siebel, 2003). The Deutsches Ärzteblatt (2010) is citing a study of WZIOM[43] from April 2009 which found out that only 51% of all people being questioned use a public health center for free if they are ill. 5% are directly visiting a private institution whereas 33% try to heal themselves on their own. This has the consequences that illnesses which seemed to be vanished are on the rise, for example tuberculosis or syphilis. Besides this, internationally numbers of for example life expectancy are extremely bad in comparison to other states with a similar developing standard. Additionally, Russia has the problem that not only life expectancy is very low but also the "healthy" life expectancy. In his work from 2006, Tompson mentioned that Russians who are older than 40 are less likely to be healthy in comparison to people from Western Europe (Appendix 13).

The behavior of the insurance companies is criticized enormously because approximately the half of them is only a passive member, meaning that they only work as an intermediary. They transfer the money and withhold the agency fee but do not control the usage of these resources or check the quality of medical care.

[43] The WZIOM is a polling institute that is publishing surveys concerning social and political relevant topics on a regular basis. In 2003 it changed from a research institution to an incorporate company being state owned for 100%. Therefore, the results should be skeptically reviewed due to the financial dependence on governmental mandates (decode, 2016).

## 5.3 Corruption in the Health Care System

After the demise of the Soviet Union the government tried to tackle the problems arising from that system via the introduction of a more insurance-based framework while guaranteeing a free provision of care for everyone, called "Guaranteed Package Programme". For that reason, in 1991 the mandatory medical insurance system OMS was introduced to combine effectiveness and the possibility for the patient to chose between competing medical institutions, like it is in an informed economy. This should encourage for example public as well as private insurance companies to provide better offers to attract people in case of increased quality and a reduction of costs. Nevertheless, this model did not work like forecasted because the system is to complex and therefore to sluggish leading to inefficiency. The model was not created like reformers wanted it to be due to less financing and micro-level incentives. Often money that should be transferred to the funds, especially on the regional level was directed for other cases. Therefore the total spending on health care fall, resulting in a downward spiral. Additionally, the right for patients to chose the insurer on their own was cut back because in the end the employer decides to whom he would like to pay his proportion of health insurance. In most cases these managers are likely to decide for their company and not for the patient because of costs. "Employers frequently opt for "pocket" insurance companies, which they control." In many selection processes, corrupt actions are involved to convince people "taking the form of "competing" kickbacks to managers." (OECD, 2006).

The Russian health care sector is mainly coined by some imbalances. One great difference can be seen between promises and resources to fulfill these. Inherently, everybody has the right to get free medical care. Therefore, a minimum package of actions[44] was defined for every region and contained a restructuring plan for this typical area. It was also created to shift the focus of inpatient care to a greater amount of outpatient care to reduce costs. Based on these principals every region had to create an own program perfectly fitting to the respective region. Their framework has to include the minimum standard but can have some additional free services depending on the ability of local governments to pay them. This way of organizing health care is popular in many OECD countries but in comparison, the extent of the Russian care package is quite high regarding the low share of GDP that has been spent on this topic.

This gap between expectations and reality lead to financial problems, following that informal payments are rising to compensate the problem. Estimations show that households spend RUB 53 bn on medical care and RUB 120 bn on medicine in 2002. Additionally, RUB 22 bn were

[44] These are listed in the OECD paper from 2006 as annex 5.A1.

given as informal payments to health providers. These numbers show that private payments are becoming more important than free medical care due to the unequal distribution (OECD, 2006). Derived from these figures one can say that most spending of households is done for pharmaceutical products. This is based on the principal of a combination of cost-sharing and regulations in this area[45]. Normally, on the one hand, patients in hospitals get drugs for free because costs are covered via the insurance. On the other hand, outpatients have to pay at least a typical percentage of their pharmaceuticals on their own. This situation can cause incentives for unnecessary hospitalization. In reality, patients do not become medicine for free. It is estimated that around 80% of inpatients have to pay additional fees for their drugs that are in most cases informal. This is due to the fact that hospitals have to buy pharmaceuticals by using their budget which is limited. Exceptions are only a few centrally supplied drugs being necessary for public health, e.g. insulin and vaccines. This lack of adequate drug supply in combination with a weak manifestation of the control system leads to a rising amount of informal payments to get drugs especially on the black market (OECD, 2006).

In the Russian Federation 56% of total national health care expenditures are accredited to informal payments (Chereches et al., 2013). In their study about the Russian health sector in 1999, Feeley et al. ascertain that informal payments going to hospitals amount to 74%. Looking at all health expenditures only 16% of expenses were made illegal and the rest was going to co-payments, drugs, private health care etc.. At first appearance, this does not look so corrupt but having a look at the spending pattern it is interesting that 55% of all expenses are made for formal pharmaceutical drug purchases. Normally it is supposed that drugs are at least partly provided by the health system whereas accordingly the amount of informal payments would rise. Going the same direction, over the last decades the Russian Federation inaugurated formal fees on public health services. As a consequence, privatized pharmacies are the main supplier for drugs because the government is not able to finance all health requirements. Even if in normal cases informal payments exceed formal ones, Feeley et al. noticed in 1998 that in the Russian Federation this number differs in the field of where payments were made. It is conspicuous that general charges as well as payments to hospitals are predominately formal whereas payments to medical staff are largely unofficial. The stated reasons by Russian patients are very complex but it can be noticed that 25% chose private care because they do not trust the professional qualifications of public health physicians. Further, 20% criticize the “lack of sensitivity” of medical staff in the pubic sector (Lewis, 2000). It seems like patients recognize the

[45] A common practice in nearly every OECD country.

underpayment of medical staff and are willing to pay more. This would raise the question if everybody would be able to pay higher fees if they would be introduced.

Levels and Patterns of Informal Health Expenditure: In some countries under-the-desk payments surpass all formal payments. In 1998 in the Russian Federation, 3.5% of household spending belongs to informal health payments. This represents 56% of total national health expenses.

Moreover, the hygienic standards within the hospitals are extremely bad. Disinfectants as well as disposable gloves are missing in many institutions and a normal sickbed distribution is approximately ten beds per room. Several information show that every second vacancy in the health sector is not filled. One crucial reason is that physicians and caregivers are worst paid in comparison to other occupation groups. Therefore, it is normal that patients have to pay a small donation before a doctor starts the treatment (Deutsches Ärzteblatt, 2010).

Governments offer health care systems to guarantee medical treatments for all people independent of their income or social standing. Informal payments and bribery limit the access to a selected group of people who can pay enough money. In the survey from 1998 by Feeley et al., it becomes clear that the poorest 20% percent of the Russian population need to spend 27% of their household income on medical services whereas the richest 20% only need to use 9% of their income. A year before 41% mentioned that they are not able to pay for drugs and 13% could not even pay for medical treatments. Approximately 10% of the richest people are not able to finance medical care whereas under the poorest 20% altogether 50% can pay for a medical treatment. These differences can only occur due to the differentiation of informal and formal payments (Lewis, 2000).

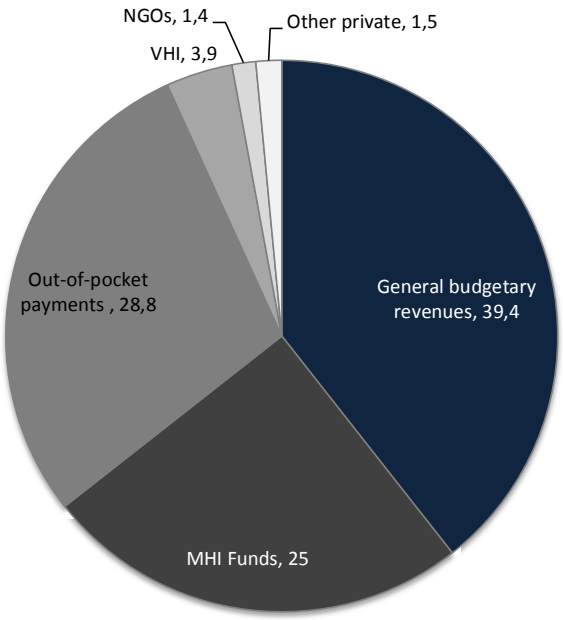


**Figure 11: Percentage of total expenditure on health according to source of revenue, 2009 (WHO, 2016)**

Structure of provision and health needs is the second area where a high imbalance exists. Due to a slowed down reform movement, the health care system is still coined by the *Semashko* model focusing on specialized treatments in hospitals. Therefore, it follows that people are very soon admitted to hospitals whereas most stays are too long and too expensive. As a consequence, primary care is mostly under-developed and neglected by the government. Only 30% of medical staff is working in the outpatient sector whereas 60% of the physicians are working in the more profitable inpatient sector[46]. This allocation is not only caused by higher salaries but also by reputations. Historically, primary care played less of a role and "has been the least prestigious and least remunerated field of medicine" and is seen as ordinary in the eyes of patients and other physicians.

As a result of an unfinished change to an insurance-based health care system providers are facing several problems especially in case of financial issues. In 2004, only 40% of spending in the public health area was conducted by the OMS system, additionally varying in the different regions.

When starting the program the intention was not to finance health care via a direct budget but through the OMS. Therefore, insurers are facing not only problems concerning the source of money but also in case of the method of money allocation. Most money is still spent by

[46] The remaining 10% are physicians working in both areas.

inpatients in form of informal payments. The money is allocated on the basis of size and staffing and marginally on volume of care. This creates incentives to focus on outcomes and not on patients needs. A great example is the restructuring of a hospital to more patient focused circumstances. This can lead to a loss of budgetary cash flow because it is based on for example numbers of beds and staffing ratios which would be reduced. This entails that restructuring is avoided (OECD, 2006).

This mix of incentives and financing models creates a wide range of formulae used to calculate payments which makes it confusing and easy to subvert. The problem is not only the variety of methods but also the different chances to influence the amount of money that is spent via the single formulae. The usage of methods vary in the different regions but it is obvious that the most common practice in the inpatient care is to rate it via number of cases an in the outpatient area via the number of visits. Both methods can evoke bribery because they incentivize overtreatments. Looking at outpatient care, on can see other extreme of health staff that gets a fixed salary and therefore has no incentive to even treat patients (Appendix 14 and Appendix 15) (OECD, 2006).

Most expenditure made in the health care sector are very low and poorly allocated as well as administered. There is the need to change the framework to optimize processes and higher the efficiency but the government is only willing to higher the spending without reforming the system. This would only lead to quasi-rents[47] for health providers and not to a higher quality or a better access to care for the population. This would create the specific danger of an opportunistic misappropriation by the transaction partner (OECD, 2006).

[47] Quasi-rent is the difference between the actual usage of an investment and the next best (Gabler Wirtschaftslexikon, 2016).

## 6. An example of corruption

A typical example for corrupt activities is the pharmaceutical market. The unspecific defined legislation opens the possibility for numerous illegal actions effecting different areas of this sector. The example above is from India wherefore the described practices are easily adaptable to Russia and China even is there are marginal differences in the legislation topic. Nevertheless, it gives a good inside in corrupt actions in the health care system.
The following example is taken out of Fischer et al. (2011):
In total, four institutions are responsible for the regulation of the pharmaceutical market in India. The legislative part is done by the Ministry of Chemicals and Fertilizers (MCF) and the Ministry of Health and Family Welfare (MOHFW). They are especially responsible for the coordination of production and development of medicine as well as controlling already existing preparations. The regulatory part is supervised by the Central Drug Standard Control Organization (CDSCO) in New Delhi. This institution is directly subordinated to the ministry of health and by order of them the "Drug Controller of India" (DCGI) – as the fourth part – monitors the quality of all medical products which are produced and distributed.

With the introduction of the patent law, India became independent of medical imports from western countries in 1970[48].

> *"The implications of TRIPS[49] for the pharmaceutical sector are that: patents will be granted both for products and processes for all the inventions in all fields of technology; the patent term will be twenty years from the date of the application (compared to seven years under the 1970 Act), which is applicable to all the member to all member countries and thus rules out all the differences in the protection terms prevailed in different countries." (Puranik et al., 2010)*

This means that especially pharmaceutical manufacturers are competent to manufacture all types of medicine and this applies irrespective of whether those are patented in another foreign country. The only constraint is that the method of production needs to doffer from the one used

[48] The patent act became law on 20/04/1970 and was only little modified over the years but never underlies profound changes.

[49] Trade-Related Aspects of Intellectual Property Rights (WTO,2016). More information on the web page oft he WTO.

from the firm who is originally producing the drug. However this new method can be patented afterwards in India. This new law had an enormous influence on the pharmaceutical industry and experienced a rapid growth. This was additionally fostered by the fiscal stimulus as well as governmental subsidies. Nowadays the world market share stands at approximately 20% and the area of generic drug[50] production is the most lucrative one. This field particular includes the production of HIV, Tuberculosis and Malaria medication. The law has the aim to give Indian manufacturers the chance to use well-tested and established drug recipes to produce at a lower cost level to offer medicine for a lower price in India. This has the consequence that especially charity organizations are using these preparations for their work in developing countries due to the cheap price. There is also the fact that new patents are only given to firms who can prove and give the guarantee that their preparations are helpful for the therapeutic progress. Due to this many drugs are legally produced without the existence of a patent because it is not necessary for an official sale and therefore a great price war beat down the price.

The government and other instances controlling the market are lacking behind the development. It is foreseeable that in the future firms will be able to use fastened processes and work with accelerated clearance mechanisms of ethic committees. In fact the Western World does not accept these mechanisms and are not satisfied with the forecast of how this area will develop. The committees which are actually working on this topic are often not registered and their staff is only poorly educated. Nevertheless, there are ambitions of the government to improve this framework and is trying to enhance the punishment system so that breaches of ethics can be better pursued. A common example is the area of clinical studies which are to a great extent done in India especially by global players from western countries. Participating in these studies is often the only chance for poor people to get a treatment and a chance of recovery. If they do not have the possibility to take part in such a program in most cases there are only two ways to pay for medical care. This is on the one hand to sell their property and on the other hand to rise credits with extremely high interest rates. It is the rule that patients are not informed about the existence of any studies. They are ascertained via patient charts which can easily be found by companies due to the low standards of data protection. Another source for drug companies are doctors who get paid for every patient they are able to convince to take part in the program. In respect of peoples situation this is pretty easy work because for them it is often the only chance to convalesce. Additionally due to the low educational attainment people are often not in the position to scrutinize treatments. A survey from an Indian research institute shows that 76% of

[50] The legal imitation of brand products.

the interviewed patients were approached by their family doctors whereas 94% at the end participate in an experimental program. This is aggravated by the fact that in some cases these family doctors were simultaneously the investigator in charge. All other test persons were enlisted by contract research organizations that are specialized on recruiting subjects. They have huge databases soring information about patients which they get from public as well as private documents or through announcements in the media (infochange, 2016).

As a consequence the number of fatalities exponentially increased in the last years. According data from the ministry of health, in the first half of 2010, 462 subjects of clinical studies died. The alarming fact behind these deaths is that not only companies from India were conducting these studies but also companies from western countries who officially dissociate from these practices.

Indeed, all these drugs are produced and tested in India, the population is not informed about the extent and the possibilities these practices could present themselves. This is due to the fact that the medical promotion is strictly regulated via the Drugs and Cosmetics Act from 1940. These regulations divide medical treatments as well as medical preparations into categories whereas only drugs of "Schedule K" are allowed to advertise in public. This area contains preparations for the medicine cabinet like acetaminophen as well as traditional treatments. The government significantly enhances Ayurveda and Unani. Additionally, campaigns from health organizations concerning health education, hygiene and family planning are only allowed if no medicament is mentioned by name. By contrast, it is forbidden that illnesses like fever, high blood pressure or HIV are officially promoted.

Following, the prohibition of drug promotion is fostering corrupt activities of pharmaceutical companies trying to sell as much as possible. Due to the fact that they are thereby to a great part contingent on doctors prescribing their preparations, they try to convince as many medical staff as possible to work for them. Therefore, the most common and effective method is to invest huge amounts of money in representatives to see doctors, trying to convince them by the products. This persuasion to cooperate is often accompanied by presents as well as invitations and holiday grants for the doctors. The position as a representative of a pharmaceutical firm is most sought-after in India because all people hold them in esteem. For people of lower social classes, people wearing suits and carrying brief cases are extended far beyond everything they know and clothes are seen as a status symbol.

If doctors are working for pharmaceutical companies they are always under pressure to succeed which leads to the three Cs: convince, confuse, corrupt (Gulhati, 2004). This is benefited by the fact that in India lacks of any regulations concerning the promotion of drugs at surgeries.

A first try of limiting corruption in the health sector was a code of ethics published by the Medical Council of India (MCI). Nevertheless, this is mostly inefficient and the government is not able to foster these endeavors. Quite the opposite, leading members were imprisoned at governments behest because of corruption allegations in March 2010. Two month later the governance decided to dissipate the organization due to the inefficiency and converse actions.

Another way to operate against corruption was published by the "Organization of Pharmaceutical Producers of India" (OPPI) with some voluntary guidelines. These recommendations for action include the promise to not accept presents like paid travels. In general, in the document the credo is to handle gifts in a moderate way. Nevertheless, the word moderate is not further defined which is leaving enough scope for interpretation and therefore corrupt actions.

Indian companies are trying to slacken regulations concerning the promotion of drugs[51] whereas New Zealand and the USA are used as role models. The argumentation for this movement is based on consumer information. Bringing the information directly to the consumer would result in a higher level of information whereas this would lead in a healthier India. Nevertheless, it is questionable if firms really want to achieve this standard of knowledge because this would also result in patients who are increasingly questioning decisions and recommendations of medical staff or if they are only working for their profit.

[51] This movement is similar to the one of European companies who are trying to get more influence via the media.

# 7. Comparison

While looking at the three states several differences occur in every area looked at. It is a normal finding that every country has its own requirements because of an individual history, culture and social as well as economic life. Due to the specification of pages, in the following especially the parts social and political differences are closely looked at because combining these parts one can figure out the main difference between the three states. Russia and China are partly similar in their conditions concerning especially their political environment. Both have a communistic background whereas India is a democracy for many years. In the case of India, poverty is the most important factor for the occurrence of corruption. Looking at the description of the three states the two main problems poverty and communistic attitude stand out.
Therefore, the following analysis theoretically focus on the two relationships: Poverty and corruption as well as Communism and corruption to give a detailed overview where corruption comes from in the three countries.

Placing China and Russia on the same level concerning the political endowment one can see that two very important facts in case of the occurrence of corruption are the size and social values. One can see that countries with lower corruption indices a far smaller[52] than Russia and China, in comparison having the biggest landscape. Social norms are influenced via politics, economy and values being crucial for the development of a society (Holmes, 2006).

After the October Revolution in 1917 Russia became the first communistic state. It was renamed to the USSR and had its peak under Josef Stalin. The Bolsheviks allocated the guiding role to the laboring class and keep the population under control via terror and ethnic cleaning. After the collapse of the Soviet Union, things changed and the state adjoined reformations whereas the political system became semi-presidential. Nevertheless, reforms slowed down and communistic characteristic can still be found in many frameworks today.
China changed to a communistic state in 1949 after the civil war and Mao Zedong became the most popular politician in this direction. In his version of communism peasants were ruling class. He initiated the Cultural Revolution to eradicate grievances and enrage the population against each other. Since the 1980's China pursues a politics of reforms and turn back from communism. The socialist market economy and operates on the principal of capitalism. Notwithstanding, the

[52] The least corrupt countires are New Zealand and the Nordic states.

communistic ideology is fostered to obtain the dictatorship and the communistic party (RP, 2016).

On the other side, India is the most populous democracy in the world, influenced by its colonial power Great Britain. Nevertheless, it is coined by great poverty and oppression of women.

## 7.1 Corruption and Communism

### 7.1.1 Cultural and Psychological factors

Corruption in Russia is explained from S.Glinkina in 1998 via the three "aspects of the national mentality". These include the influence of Asian culture in case of the importance of family and friends, the historical situation as well as no awareness of a functioning political system.
The simplest explanation why in general corruption exists is material interest. This is due to the fact that material success is for most people the main factor of one's status accompanied with the respect of other humans and therefore greater influence in society. This is in most cases on a voluntary basis wherefore people also can get under pressure to act corrupt. This negative influence can occur "because of peer (horizontal) or superior (vertical) pressure" (Holmes, 2006). People can be influenced via colleagues or their employees. Especially in countries with a high unemployment rate, people are forced to collude within bribery actions because they fear to lose their jobs and descend further into poverty (Holmes, 2006).

### 7.1.2 System-related factors

In many analyses systemic factors are more importantly than the cultural aspect. There is a variety of components which cannot be fully explained in this thesis due page constraints. In the following the four main categories are closer looked at while it needs to be considered that due to the complexity of the topic some overlapping can occur (Holmes, 2006).

#### 7.1.2.1 Historical background and loyalty to the party line

Communistic heritage is the main influencing point. China has still a communistic government structure whereas reforms in Russia were only put across superficially. Breaking this down, in the next step five examples will be listed to give an overview.
One, communistic regimes were coined via a strict hierarchical organization where the individual did not care. Responsibility was only given to people who were loyal to the party or who were born within a regime focused family. Additionally, only these people were supported in their personal development and everybody else was left to himself or herself. In this direction, the centralized management of enterprises was supporting this clear role assignment. In accordance with the centralized governmental structure, each company was ruled by only one

person, wherefore there was nearly no chance to climb the ladder of success. Furthermore, these managers had to follow constraints prescribed from the government that halt every propensity to creativity and innovations. Due to the abrupt change of the system in the beginning of the 1990's managers and officials were confronted with a new economic system whereas they got more responsibility and a greater decision-making power but also they had to manage more risks. This causes an increasing number of corrupt actions because the fear to lose the job and thus the prestige is higher than moral objections. Additionally, bonuses which were more or less automatically paid in the old system became performance-based and the possibility that managers lost bonuses was higher. Therefore, this had to be compensated through bribes and other forms of rent seeking (Holmes, 2006).

Second, the division of institutions was not clearly defined. The most common example is the separation of the party and the state apparatus. The distinction between these two was only a façade because in reality it was one unit. It was also considered that most people were working for the state whereas the line between the population and the government was slightly defined. This narrowly defined distinction between private and public often caused confusion in many parts of life. This had the effect that many politicians were not able to see the line between these areas and therefore did not understand the "concept of private abuse of public office and conflict interest". This mixture highly promoted corrupt actions especially on the management level.

Third, the transition from a collective to private organized state involved the danger that corruption increased. This part is directly linked to point two, whereas the line between the officially separated institutions became indistinct. Additional state agencies had to be implemented to overlook the process of privatization, e.g. in the area of foreign trade, foreign affairs and defense. This included that many officials ha to give up their original power and simultaneously had to find a new place in a greater team being dependent on each other. This forced corruption due to the fact that people wanted to save their position in the new constellation because they did not want to give up their powerful position. Some investigations show, that in this case a higher amount of official lead to an increasing danger of corrupt actions because the effort to defend one's position becomes higher (Holmes, 2006).

Fourth, communist states were not aware of freedom of expression. People had to follow the line of the party not being allowed to scrutinize the leadership whereas any infringement was severely punished. This had the consequence that any culture of finding compromises was not established. Therefore, in the post-communism era it was very though to reorganize the state because any solution process was addressing the needs of an individual. This caused a high

potential of corruption because officials wanted to bring through their own thoughts and did tried to collaborate with others via discussions.

Fifth, decision-making processes were also influenced from secret mongering within the councils. This slowed down many procedures because information transfers were only done if officials were allowed to get the information. Due to the fact that only a few people had an overall look at the situation, corruption was one chance for officials in lower ranks to get more information. On the other side, people in higher positions tried to influence decisions so that issues were approached in terms of their imaginations (Holmes, 2006).

#### 7.1.2.2 Impact of the Transition

The radical change and therefore the unique position of post-communist states are often named as the rising of the new democracies of CEE and CIS. This change is far more extreme than any other change of a communist country like in Southern Europe or Latin America. Besides the fundamental change in their political systems, states additionally had to reform their economic systems.

The legal transition is a change from a centrally planned to a market-based economy, where price settings are done by market developments and not by an overall organization, was very radical. Besides the economic liberalization, trade barriers disappear and state owned enterprises were changed to self-managed businesses. In the course of this, a financial market had to be created to further private money movement and to secure the macroeconomic stabilization. Moreover, the law had to be changed and new positions within the enterprises emerged, like for example the job as a regulatory affairs manager. One great point were property laws which were very vague at that time (Holmes, 2006).

Following, the overall effect was that also the role of the states changed because while institutions disappeared, some new had to be created.

Due to the glorification of their one-party system, many people in communist states were not able to identify themselves with a democratic system. This was especially caused by the fact that most of them did not know how other systems worked. There was no model of democratization which could be used leading to an overall legal and political confusion after the breakdown. In several cases old regulations were declared as political ineffectual[53] while new one's not yet exist. Certain officials used this confusion to take advantage from the change through corrupt

[53] Often caused by pressure from outside regimes wanting them to accelerate reformations.

actions. They were indirect support by the population because the ignorance of what was right or wrong was the order of the day. Everybody was only looking for his or hers own life. There was no authority controlling the transformation process due to the fact that officials themselves were confused. The possibility of arbitrary decision-making was higher because of disinformation through all levels of state control (Holmes, 2006).

#### 7.1.2.3 The lack of Bourgeoisie[54]

The restructuring of the communist states brought a huge problem to light which is one of the most important factors of many aspects. In a communist state property, including production resources, were state-owned and centralized controlled. "There was no large-scale capital-owning class" (Holmes 2006). This fact made it hard to privatize the economy. To do so, there are several ways, for example to sell enterprises to foreign investors. At the time when the Soviet Union dissolved, the West only had limited resources to invest in the Eastern countries because they had their own problems especially in case of the recession in the late 1980s. Additionally, the amount of states breaking with communism was to high to recue them at the same time. The few investors that were willing to spend money for an enterprise in for example Russia were discouraged because of the confusing legislations on property ownership. They were not be certain that they formally became legal owners. This had the consequences that investments needed to be generated within the countries but due to the non-existence of a capital-owning class it was hard to implement structures to do so. Based on the urgency of this topic, states wanted to make the transition very fast wherefore often practices were used which are mostly illegal in Western states (Holmes, 2006).

#### 7.1.2.4 International and Ideological Context

Looking at the overall international situation, the timing of the transition was really bad because the Western World was fighting against a recession and was not able to support any movements from the Eastern countries. Therefore, states like Russia had great problems to secure foreign investments and to create a stable financial climate. This uncertainty especially forced officials to supplement their salary losses. They had to determine that the possibility to lose a job even if

[54] This decleration comes from the French Revolution where it described the high society, standing across the proletariat. Karl Marx used this expression in his theory for capitalists and equalized them with exploiters. Due to this, nowadays the wording is negatively loaded.

they performed very well in the last years was very high. A great problem in this direction was the loyalty to the state and the ideology. With the collapse of the communist era this loyalty was redundant because there was nothing to be loyal to anymore (Holmes, 2006).

## 7.2 Corruption and poverty

The corruption perception index of transparency international shows a strong relation between corruption and poverty (TPI, 2006). This index reflects the perception of a countries population but the fact is also underpinned via several studies. Corruption is a consequence of poverty but it can also cause that rich countries impoverish and poor countries stay in the situation. Corruption hampers the development of an economy and discourages investors because it leads to legal uncertainty, distorted competition and increased costs. Corruption inhibit processes to achieve important reforms and development goals as well as the development of a democratic structure. Political institutions are instable and public administrations are working less efficient (BMZ, 2016).

> *"Corruption, by itself, does not produce poverty. Rather, corruption has direct consequences on economic and governance factors, intermediaries that in turn produce poverty. Thus, the relationship examined by researchers is an indirect one." (Chetwynd et al., 2003).*

In general two models are used within common literature: the economic and the governance model.
The economic model states that corruption directly affects the economy wherefore the welfare level of a state and therefore poverty is influenced. In this case corruption has a direct impact on investments, increases costs of doing business and create income inequalities (Chetwynd et al., 2003).

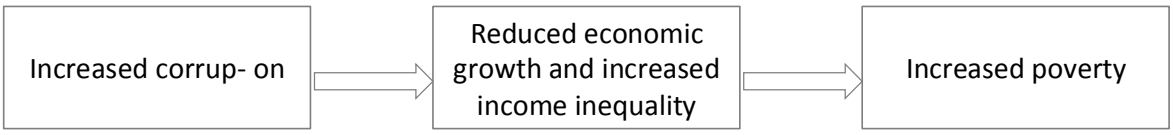


**Figure 12: Economic model (own figure, based on Chetwynd et al., 2003)**

Corruption has a variety of impacts on economies wherefore analysis are widely spread. Nevertheless, one can identify five main areas of influence. Corruption scares foreign investors of wherefore "rent taking increases costs and creates uncertainty" (Chetwynd et al., 2003). This has the effect of a vicious cycle because incentives are further reduced whereas the country becomes even less attractive for foreign as well as domestic investors skimming off large amount

of money from the economy to invest it in countries with better conditions. Additionally, corruption influences entrepreneurs who need contracts and licenses when they start their business. To do so, often bribes are paid enormously lowering their profit, especially in the beginning. Furthermore, the infrastructure is influenced because public money is shifted to private investments because the chance to cheat in this area of investment is higher than in the public sector where controls are tougher. Due to this redirecting of money operations are postponed to more rent seeking activities. The problem of tax embezzlements goes in the same direction. Corruption causes tax alienations facilitating the wealthiest proportion of the population (Gupta et al., 2001). Tax officials are bribed beforehand, following that firms have to payer lower tax rates as officially listed. This money lacks is the country's budget. Corruption acts like a regressive tax. Concerning this, another point is that public expenditure is reallocated. Rent seekers will support the projects where bribes are the easiest to place which in most case is the private sector. This means that money is extracted from areas like education and health (Chetwynd et al., 2003).

Many studies also show a direct link between corruption and income inequalities[55]. Corruption going on over a long period causes distortions of competition with the result that some people are excluded from the advantages. A growing number of corrupt actions creates a higher number of people who does not benefit. Ancillary, the government could be able to influence the impact of corruption in income rates because via financing strategies and the allocation of scare resources they can influence the possibilities to bribe – they can lower but of course higher them. Furthermore, corruption has an effect on growth rates. Poverty is directly linked to economic growth because in the absence of growth or still more serious in the light of negative growth, the poverty rate is increasing (Chetwynd et al., 2003). Any the less, in this case, income distribution is of high importance. Income inequalities are detrimental for the growth rate of the economy. If corruption fosters this inequality it lowers the growth and limit poverty reduction. Therefore, a more equal income distribution would help a country to reduce poverty (Gupta et al., 2001).

The governance model suggests that via a direct effect on governmental issues, the poverty level is influenced. Examples are the shift from public investments to more capital based projects where corruption is easier to implement as well as the rising pressure on the government in case of budget distributions.

[55] The theoretical ideas can be found in the book of S. Rose-Ackermann from 1978.


**Figure 13: Governance model (own figure, based on Chetwynd et al., 2003)**

Corruption has a direct impact on government activity. Chetwynd et al. listed in 2003 that it "disrupts governance practices, destabilize governance institutions, reduces the provision of services by government, reduce respect for the rule of law, and reduces public trust in government and its institutions". This has the effect that social capital is reduced wherefore money for economic and social growth programs is absent and the government is not able to help the poor (Chetwynd et al., 2003). Often money from government-funded programs are redirected enlarging the wealth of the rich (Gupta et al., 2001)

If asset ownership is overrated this is also an influential factor in public policy and therefore it can cause an increase in income inequalities. The concentration on a little part of society engenders lobbying. The wealthiest are able to lobby the government to act in their benefit, e.g. in case of trade policy or tax treatments and spending programs. "These policies will result in higher returns to the assets owned by the wealthy and lower returns to the assets owned by the less well-to-do, thereby increasing income inequality" (Gupta et al., 2001). Furthermore, these collaborations have an impact on the borrowing and investment culture. Inequality in the direction of ownership leads to a lower chance for poor people to borrow money because they have no security. Therefore the majority of the population is facing a higher risk concerning their investments (Gupta et al., 2001).

# 8. Possible Solutions

Using economic methods to analyze health care issues is becoming more and more popular because in this area of research economic efficiency and social justice come into conflict. This can also be seen in the politics of public health care where it has a direct influence on the development of the countries' economic situation. Nevertheless, this point leads to several goal conflicts especially between the Ministry of Finance and the Ministry of Health due to the fact that often health care is not prioritized and is not seen as an important resource to invest in (Chubarova, 2010).

In applied science, economics of health care "involves determining the amount of resources to be allocated to health care (macroefficiency) and various options of using them (microefficiency)" (Chubarova, 2010). Anyway, the growing amount of expenditures in this field indicates that the focus is increasingly getting on health care. To analyze health care economically it is needed to check how it is organized and financed. In particular the method of financing and the way of paying for treatments need to be analyzed.

In the framework it is important in which way the medical service is influenced by the state or the market. Seeing health care as a system with the areas market oriented, public oriented or a mixture of the two one is able to create a matrix relating to whether it is economically classified as a market or state system. Combining these characteristics one can create four basic organizational types:

| Health Care System | Economy | Example |
|---|---|---|
| Private | Market | United States |
| Mixed | Market | Most developed countries |
| Public | Market | Great Britain |
| Public | State | Soviet Union |

**Figure 14: Organizational types health care (own figure, based on Chubarova, 2010)**

The coincidence of corruption and poverty[56] is nowadays ubiquitous whereas it is nearly impossible to look separately on one of the topics. It is like the story of the chicken and the egg. The fundamental questions are if, with an economic expansion corrupt actions decline or if

[56] Violence is also a factor mentioned related to poverty and corruption but an adequate description of the conjunctions would go beyond this master thesis.

development assistance firstly should help states to tackle poverty, hoping that corruption will decline afterwards (Fisman et al., 2008).

There is no chance to lower the appearance of corruption by changing laws if corruption is a predominate factor in the culture for thousands of years. As a matter of fact, reformers are often coming up against a wall of resistance by law enforcement agencies. The attempt to change something using economic incentives is often not enough to change an ingrained daily use of corruption. Nevertheless, culture can be changed but it takes a long time and is only doable via creativity, originality and perseverance (Fisman et al., 2008).

Fundamental principles function can be seen as a starting point of considerations. Knowing that incentives play an important role, one can think of the motivation for corruption. If salaries would be higher, there could be the chance that the overcoming of accepting an informal payment is higher because the person does not need the payment to survive. Another point could be that the anxiety is higher to lose a well-paid job if a bribe is accepted. If the conscience doesn't play a role, only a credible threat of punishment would be effective (Fisman et al., 2008).

The characteristic and form of corruption varies from country to country and is dependent on the society, due to different understandings of corrupt actions and consequently different laws. It is important how the civil sector deals with terms like transparency and trust towards the public as well as an independent media sector and codes on behavior. Nevertheless the points are hard to enforce because they are not part of most laws. The following points go in this direction and should show a direction of what can be done to fight corruption in the health sector:

There are four points belonging to the point of *transparency*, whereas the most important thing is the accessibility for the public, for example via the Internet. To get these information "government departments, hospitals, health insurance entities, and other agencies handling health service funds must be subject to independent audits" (TPI, 2006). Another point is that tender processes are transparent including conditions and evaluations. The third point is a complex list of drugs and their effects (obviously positive and negative) to afford an opportunity for physicians to use this list and steadily work on it. In liaison with this, a list of all drug trials need to be created and be mandatory for all pharmaceutical companies to boost medical research. The last part deals with a prudent use of donors. There need to be the clarity of a justified tribute. For a donation, not the speed or the cost should be crucial but the outcome and the positive impact.

There are two facts dealing with *codes of conduct* whereas the first point is about how these can be implemented and observed. They need to be structured and very detailed in their description

of how corruption is defined and which sanctions are applied in case of violations. Moreover these regulations need to be given to all parties for example medical staff and pharmacists as well as regulators and administrators. The continuative point is an anti-bribery program especially for pharmaceutical companies which needs to be implemented worldwide.

Governments need to respect the *civil society participation* and their wish to have an *oversight***.** This means implementing free ways to oversee the health system to improve accountability. This can include budget plans, reporting or drug selection mechanisms.

There need to be a protection for people who are *whistleblowers* and want to unfold corrupt actions, not only by the government but also from pharmaceutical companies.

The point of sounds very obvious but is hard to implement because every person has its own comprehension of how much power and money he or she needs. If regular payments and recognition are not high enough these people are easier to influence through corrupt actions. Nevertheless, governments need to implement fair payment mechanisms to reduce the temptation.

Additionally, governments have to eliminate *conflicts of interest rules*. This targets the pharmaceutical industry because the whole product cycle needs to be monitored. Individual persons or groups need to be precluded from the manufacturing process to avoid harmful interferences. Furthermore, medical prescriptions have to be controlled in case of overprescribing and relationships between medical staff and drug firms.

With *integrity pacts and debarment*, there is the possibility to exclude pharmaceutical companies from tender processes if firms are organized in such covenants being binding agreements. This can be applied to significant acquisition in the health sector.

The only way to implement all these methods and rules is to connect them to punishments so that there is a *rigorous prosecution*. This strengthened the message and the position of governments and health authorities which revises the border of deciding to do corrupt actions upwards (TPI, 2006).

Additionally since 1995, the Worldbank is actively working against corruption. They introduced the principle of “Good Governance” as a development concept for all economies. This means, that the government apparatus of a state is able to use economic and social resources in an appropriate manner to guarantee a positive development of a state. Often this is related to industrialized countries from the Western World but it should be the aim for developing countries to achieve these goals (The Worldbank (a), 1992).

# 9. Conclusion

India, China and Russia are belonging to the BRICS states. Those associations of national economies who are emerging nations with growth rates about five to ten percent. The five countries are of high importance in the world economy and producing approximately about 25% of the GDP worldwide. Looking at India, China and Russia, these three states play a very important role in this framework. India is often named as a future global player at the beginning of the industrialization process. The significance lies in the era of computer science and software development whereas many enterprises from the Western World are shifting their production and creation process to India. China in a potential place to outsource cost intensive productions because salaries are very low and the workforce is very high. Foreign countries are able to save a lot of money and additionally sell a huge amount of products via domestic trade within the country. Furthermore, Russia is the biggest commodity supplier of oil and gas and therefore extremely important especially for the European states. Nevertheless, the countries industrial facilities are of poor quality because often they are from the time of the Soviet Union.

All these countries vary from each other but they have the common problem that it is still a long way to go in the context of health care.

Every state has the monopoly on the health sector and is controlling the framework wherefore changes can only be adopted when the government proofs it. Additionally there is the problem that the accountability is very low. Due to many actors within the system, the overall structure is hard to oversee which especially encumbers patients. In many cases citizen voices are ignored particularly if they come from the lower or middle class. Nevertheless, the two most critical points are the lack of transparency and education. Enforcements are not promoted and government decisions are done without explanations. Additionally, a great part of the populations have a low standard of education that is misused by many people working for the medical sector because they are not aware of the difference between corruption and legal actions. Often governments only allocate typical information fitting to their style of leadership. These do not need to be the truth.

These disparities are found in the requirements of any country. China and Russia are influenced by their communism because of their past and remaining structures within many parts of their political and social frameworks. Decisions are coined by old principles and supported in case of Russia via old institutions from the Soviet era. Concerning China one can see that there is still a communistic one-party system, following that besides several reforms the mindset is kept alive.

In the comparison, the main problem in India is the poverty. It is like a spiral because corruption is causing poverty and poverty exacerbates corruption because people are desperate.

To change the situation in these countries a profound change in the political and social framework need to be done. Nevertheless, this is hard to implement because people are living in these systems for thousands of years and they do not know any other frameworks. Development needs to be done very slowly and carefully because of the enormous changes. External people are needed to give an unbiased view while convincing governments to rethink the current situation. Small changes can be that citizens receive better education so that they are able to scrutinize medical actions. Nonetheless, a huge amount of money is needed to transform the systems. One can notice that in the case of India it could be easier to find solutions because the governmental structure is far more flexible than in the other two states. The possibilities to fight poverty are higher than the chance to change a whole political philosophy.

All in all one can say that each state has a long way to go to be able to provide health care which is less corrupt than at this juncture.

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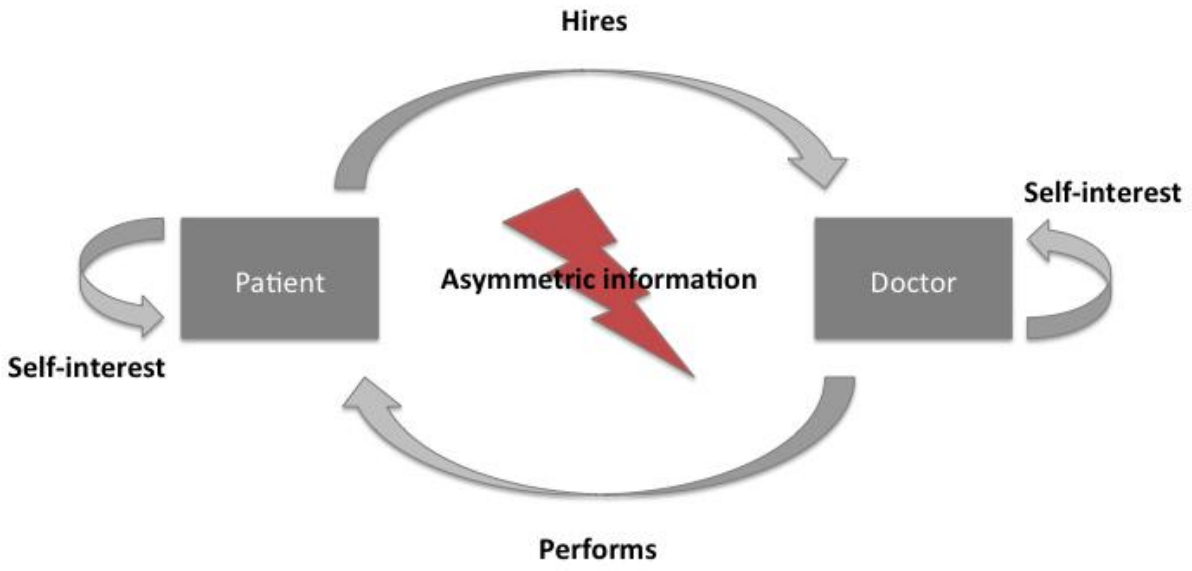
# Appendix

**Appendix 1: Principal Agent Theory: Health Sector (own figure)**




**Appendix 2: India - States and Territories – map and table (own figure, based on maps of India, 2014)**

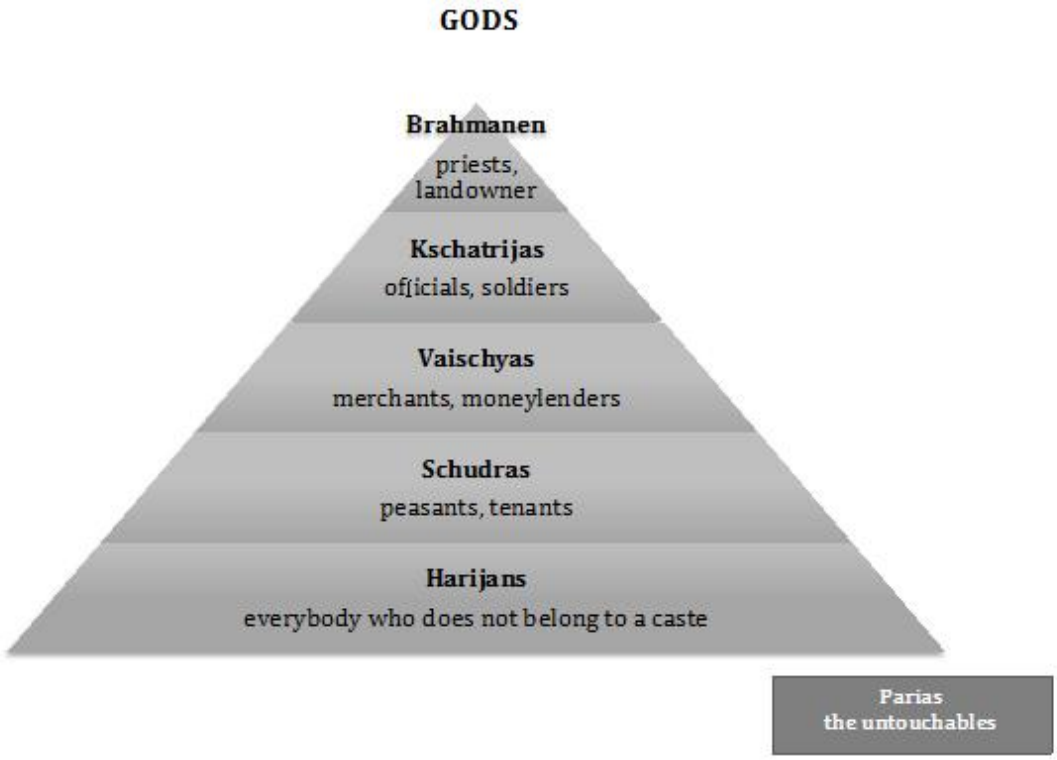
| Union States | |
|---|---|
| State | Capital |
| Andhra Pradesh | Amaravati |
| Arunachal Pradesh | Itanagar |
| Assam | Dispur |
| Bihar | Patna |
| Chhattisgarh | Raipur |
| Goa | Panaji |
| Gujarat | Gandhinagar |
| Haryana | Chandigarth |
| Himachal Pradesh | Shimla |
| Jammu and Kashmir | Srinagar (summer)<br>Jammu (winter) |
| Jharkhand | Ranchi |
| Karnataka | Bengaluru |
| Kerala | Trivandrum |
| Madhya Pradesh | Bhopal |
| Maharashtra | Mumbai |
| Manipur | Imphal |
| Meghalaya | Shillong |
| Mizoram | Aizawl |
| Nagaland | Kohima |
| Odisha | Bhubaneswar |
| Punjab | Chandigarth |
| Rajasthan | Jaipur |
| Sikkim | Gangtok |
| Tamil Nadu | Chennai |
| Telangana | Hyderabad |
| Tripura | Agartala |
| Uttar Pradesh | Lucknow |
| Uttarakhand | Dehradun |
| West Bengal | Kolata |

| Union Territories | |
|---|---|
| State | Capital |
| Andaman and Nicoba | Port Blair |
| Chandigarh | Chandigarh |
| Dadar andNagar Have | Silvassa |
| Daman and Diu | Daman |
| Delhi | Delhi |
| Lakshadweep | Kavaratti |
| Puducherry | Pondicherry |

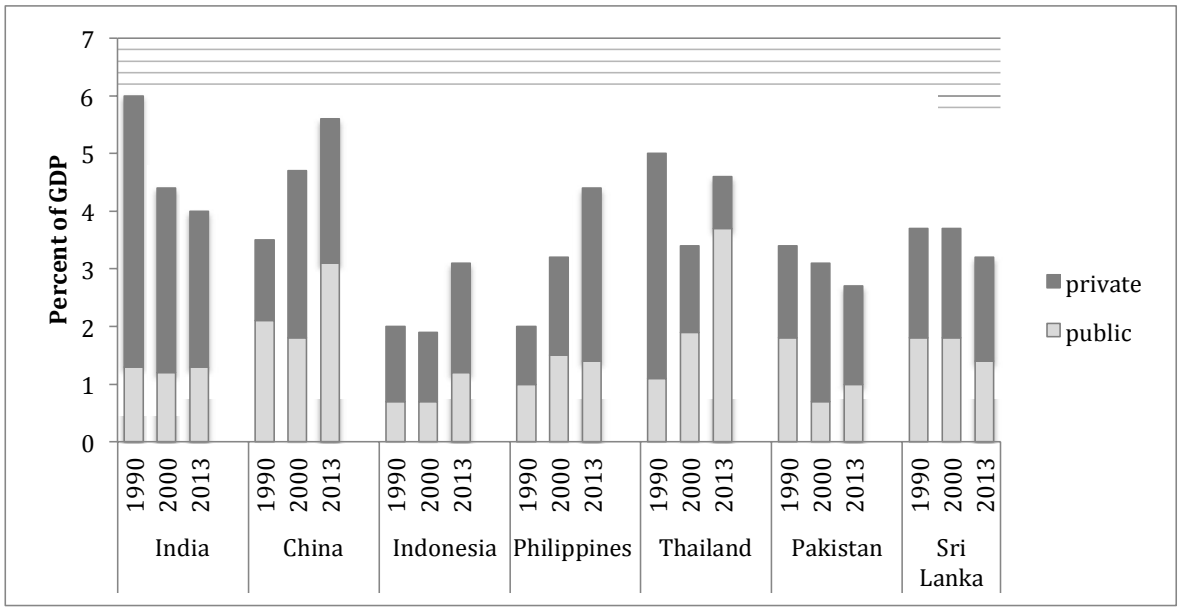
## Appendix 3: Data concerning medical treatment in India, China, Russia (own figure, based on D Statis, 2016)

| | Measurment | **Russland** | Year | **Indien** | Year | **China** | Year |
|---|---|---|---|---|---|---|---|
| | | | | | | | |
| Area | sq km | 16,376,870 | 2013 | 2,973,190 | 2013 | 9,424,701 | 2013 |
| Population | 1,000 | 143,819.6 | 2014 | 1,295,291.5 | 2014 | 1,364,270.0 | 2014 |
| Population density | inhabitants per sq km | 9 | 2014 | 436 | 2014 | 145 | 2014 |
| GDP | Bn. US$ | 1,860.6 | 2014 | 2,051.2 | 2014 | 10,356.5 | 2014 |
| GDP per head in € | US$ | 12,718 | 2014 | 1,608 | 2014 | 7,572 | 2014 |
| GDP growth | % compared to the previous year | 0.6 | 2014 | 7.3 | 2014 | 7.3 | 2014 |
| Life expactancy: Men | years | 66.0 | 2013 | 64.7 | 2013 | 74.1 | 2013 |
| Life expactancy: Women | years | 76.4 | 2013 | 68.3 | 2013 | 76.7 | 2013 |
| Doctor density | per 10,000 inhabitants | - | - | 7 | 2012 | 15 | 2011 |
| Hospital beds | per 10,000 inhabitants | 97 | 2006 | 9 | 2005 | 42 | 2009 |
| Infant mortality | per 1,000 live births | 9 | 2013 | 41 | 2013 | 11 | 2013 |
| Public total expenditure: education | % of GDP | 4.1 | 2008 | 3.9 | 2012 | 1.9 | 1999 |
| Activity rate | % | 63.8 | 2014 | 54.2 | 2014 | 71.4 | 2014 |
| Unemployment rate | % | 5.1 | 2014 | 3.6 | 2014 | 4,.7 | 2014 |

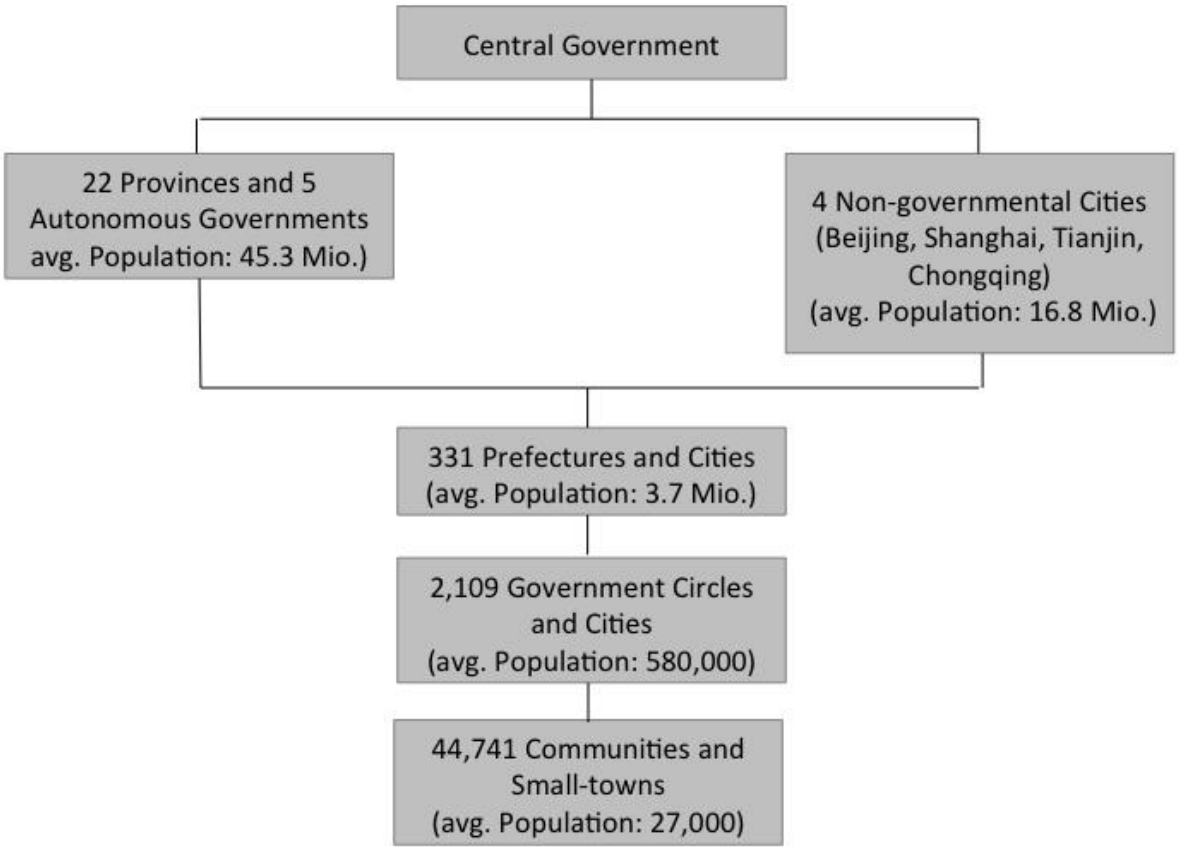
**Appendix 4: Indian caste system (own figure, based on Klett.de, 2016)**




**Appendix 5: Percentage of GDP – Health Expenditure 1990-2013 (own figure, based on data from the Worldbank (b and c), 2015)**



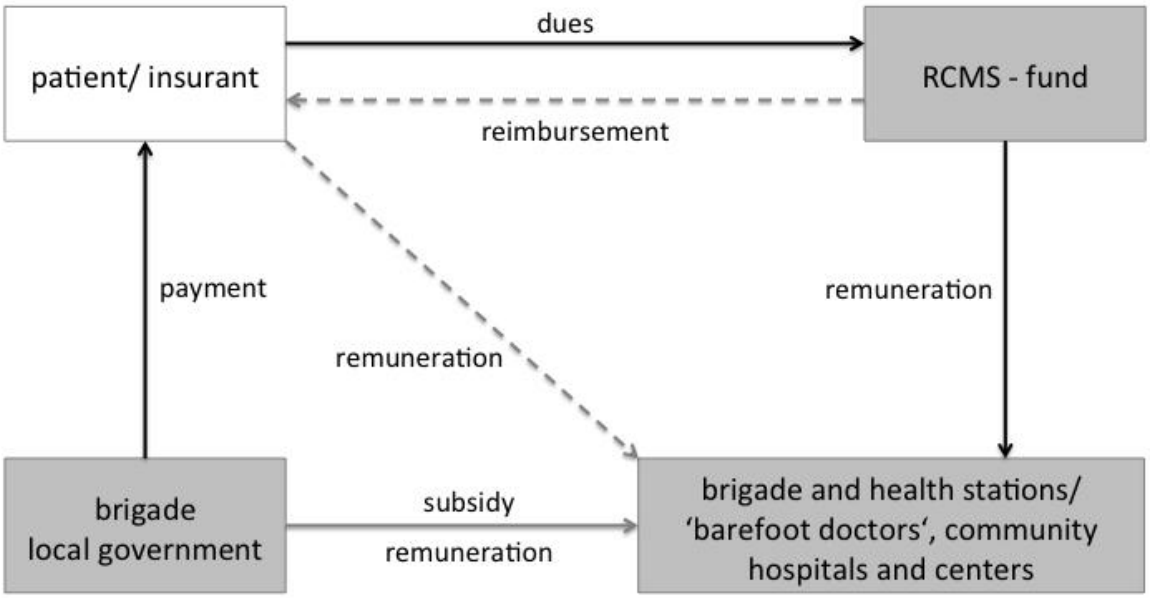
**Appendix 6: Administrative Structure of the PRC (own figure, based on Koplan, 2005)**




**Appendix 7: Vigor of the entire population (own figure, based on Scharping, 2007)**

| | entire population | birthrate (%o) | added birthrate (children per woman) |
|---|---|---|---|
| 1953 | 584.19 | 40.3 | 6.1 |
| 1960 | 650.66 | 24.6 | 4.0 |
| 1970 | 820.40 | 37.0 | 5.8 |
| 1980 | 983.38 | 17.6 | 2.3 |
| 1992 | 1.164.95 | 18.2 | 1.8 |
| 2000 | 1.262.65 | 14.0 | 1.7 |

**Appendix 8: The Rural Cooperative Medical Scheme - basic treatment under Mao Zedong (own figure, based on Köster, 2009)**




**Appendix 9: NCMS Fund 2003[57] [58] (own table, based on Köster, 2009)**

| | China | Zhejang | Shaanxi |
|---|---|---|---|
| NCMS fund | 3,084 Mio. Yuan | 293 Mio Yuan | 20 Mio. Yuan |
| central government | 9.64% | 0% | 31.71% |
| local government | 32.66% | 23.41% | 31.71% |
| collective economy | 14.36% | 25.94% | 0% |
| rural households | 41.30% | 47.44% | 36.58% |
| others | 1.77% | 3.21% | 0% |

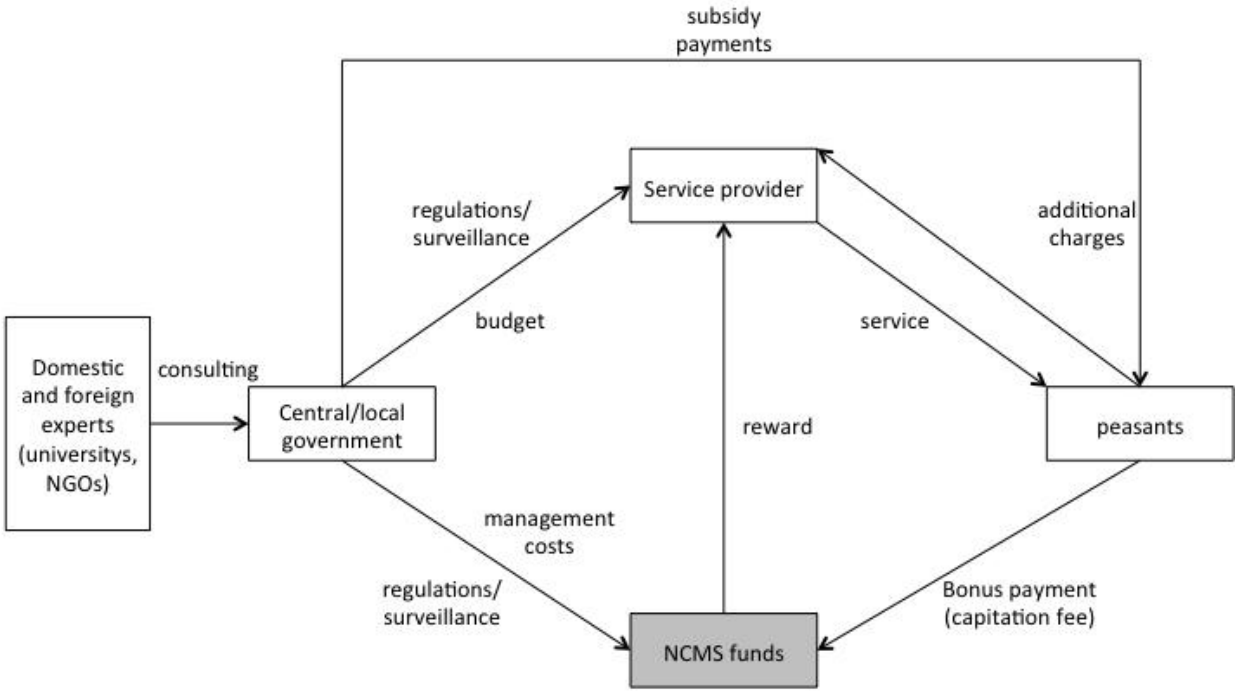
[57] Payments from the local government are already including subsidies from the MFA

[58] Zhejang is a typical example for a well-developed and rich region at the east coast whereas Shaanxi from the central western region is lower developed.

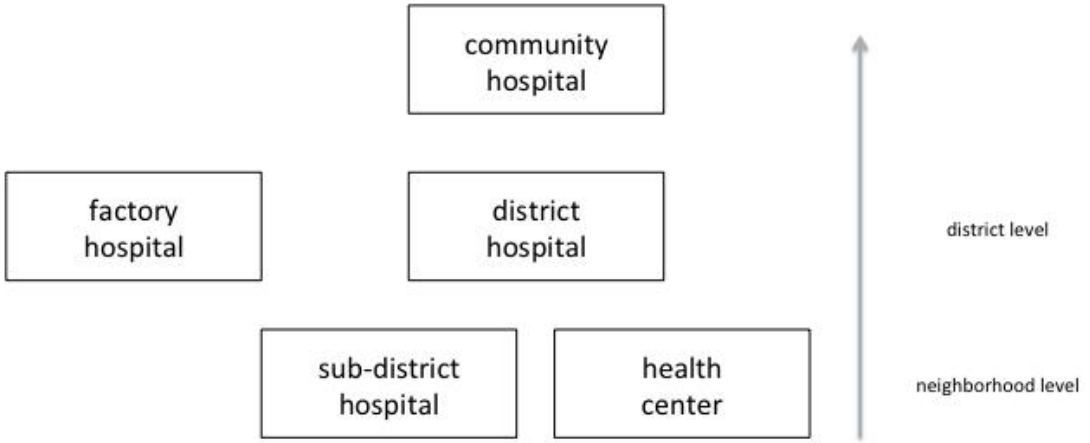
**Appendix 10: Health Expenditure (total, per capita and percentage share of GDP) (own figure, based on Köster, 2009)**

| Year | Total (Yuan 100 Million) | Per capita | Percentage share of GDP | Percentage share of the government | Social partners | Out of pocket |
|---|---|---|---|---|---|---|
| 1978 | 110,21 | 11,45 | 3.0% | 32.2% | 47.4% | 20.4% |
| 1980 | 143,23 | 14,51 | 3.2% | 36.2% | 42.6% | 21.2% |
| 1985 | 279 | 26,36 | 3.1% | 38.6% | 33.0% | 28.4% |
| 1990 | 747,39 | 65,37 | 4.0% | 25.1% | 39.2% | 35.7% |
| 1995 | 215,13 | 117,93 | 3.7% | 18.0% | 35.6% | 46.4% |
| 2000 | 458,63 | 361,88 | 5.1% | 15.5% | 25.5% | 59.0% |
| 2002 | 5684,63 | 442,55 | 5.4% | 15.2% | 26.4% | 58.4% |

**Appendix 11: Interest groups of the NCMS (own figure, based on Mao, 2005)**

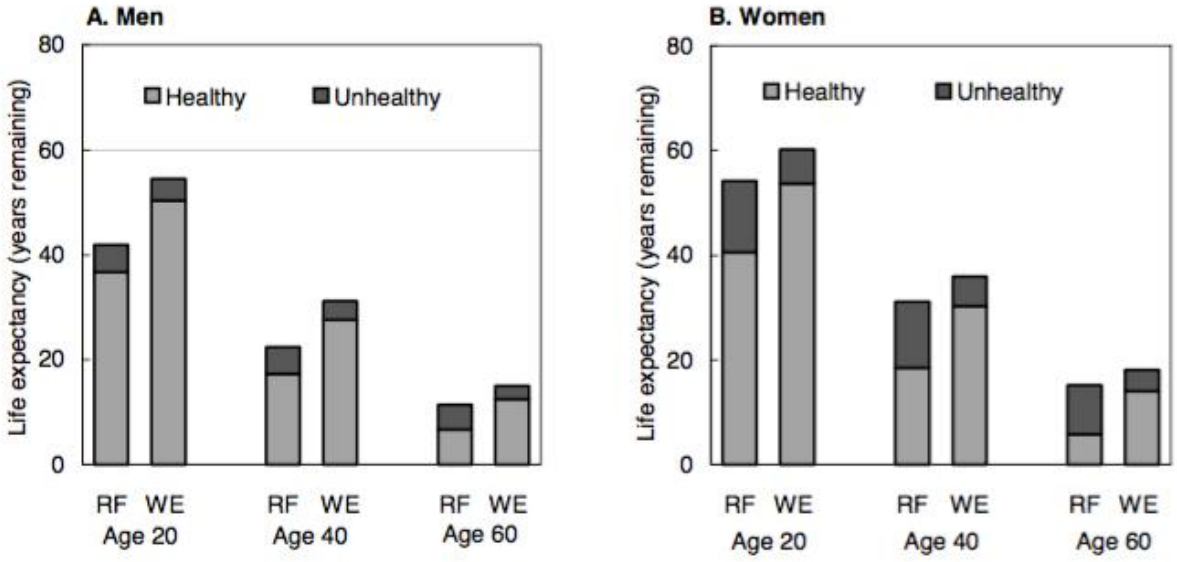


**Appendix 12: Rural health care situation under Mao (own figure, based on Köster, 2009)**

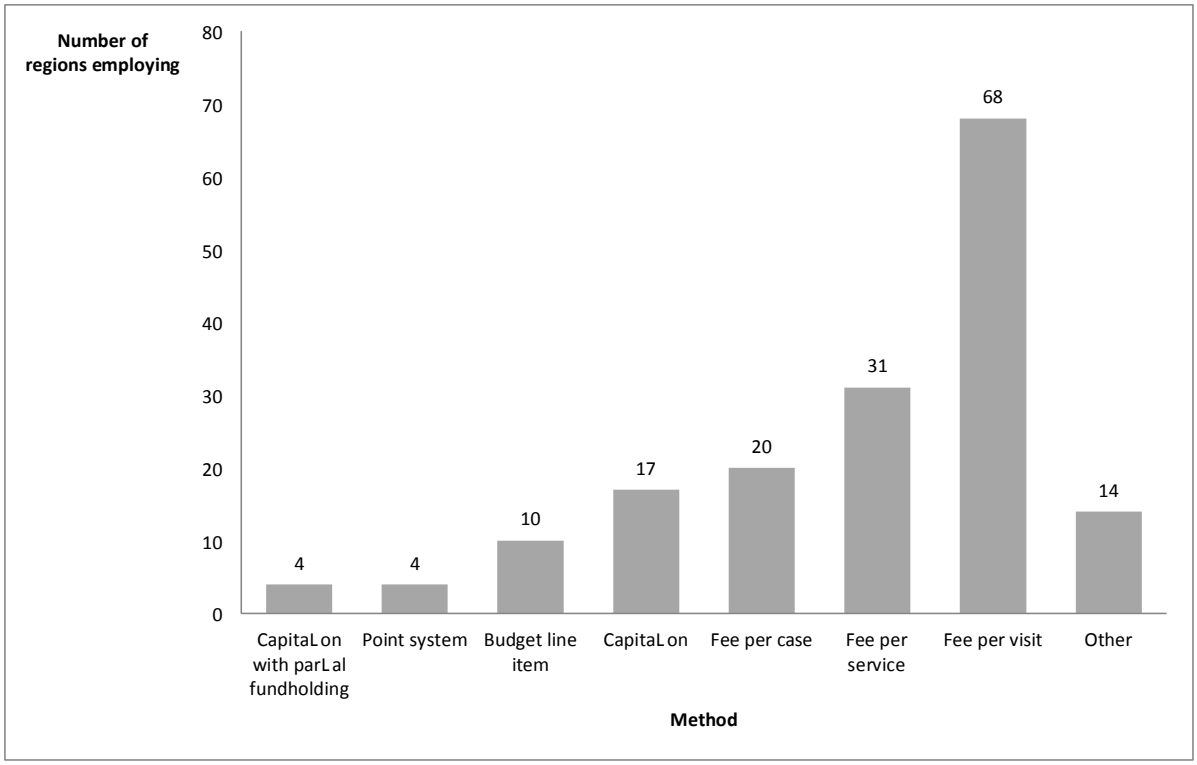



**Appendix 13: Life expectancy and healthy life expectancy at different ages (Tompson, 2006 based on Andreev et al., 2003)**

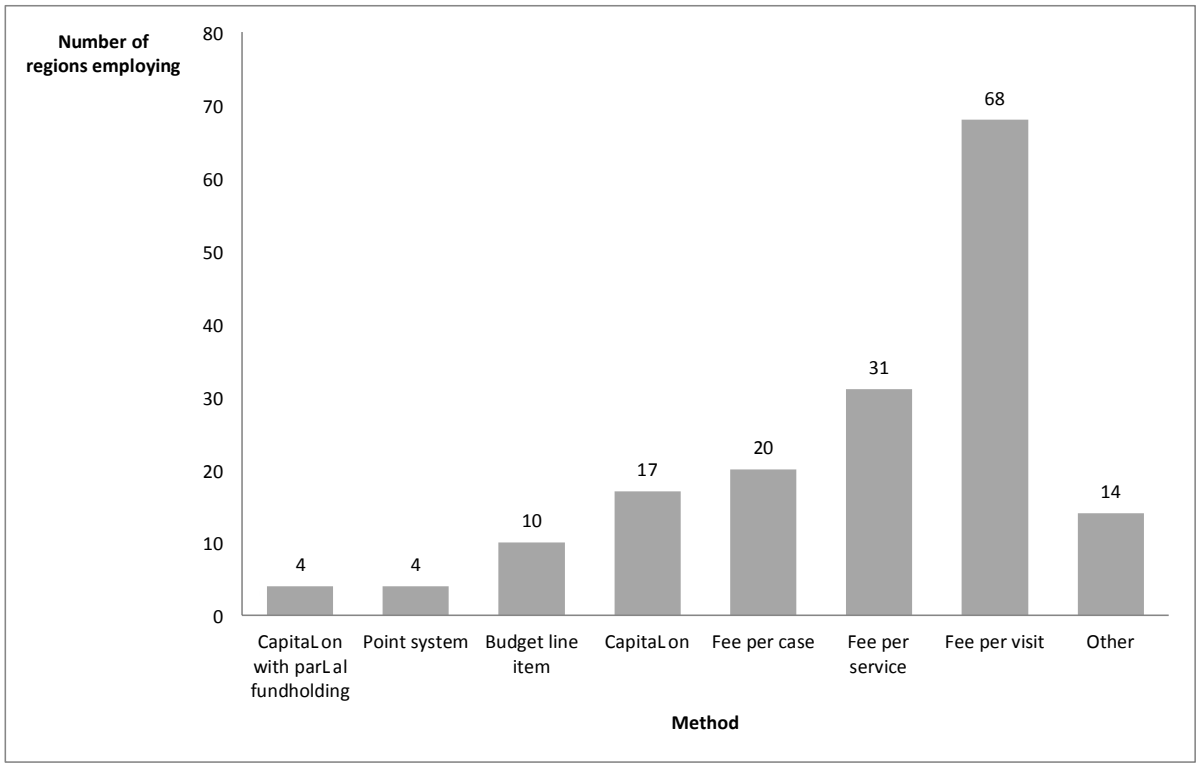
The Russian Federation (RF) and Western Europe (WE), 2002



**Appendix 14: Methods of paying for outpatient care through regional OMS funds, 2004 (own figure, based on OECD, 2006)**




**Appendix 15: Methods of paying for inpatient care through regional OMS funds, 2004 (own figure, based on OECD, 2006)**



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