HEALTH CARE SYSTEM
A COMPARATIVE STUDY OF PAKISTAN AND NORWAY
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Preface

This thesis represents an obligatory part of the Master of Science in Business (siviløkonom) program at Bodø Graduate School of Business. The thesis is written the specialization Management Control (økonomistyring) and has the weight of 30 study points. The purpose of the work is to undertake an independent study that is to be presented in the written form.

I am grateful to my supervisor Professor Inger Johanne Pettersen from Bodø Graduate School of Business for her guidance, insightful corrections and constructive suggestions. I would also like to thank Associate Professor Anatoli Bourmistrov from Bodø Graduate School of Business for his advices and valuable suggestions.

I would like to note that I am responsible for all the weaknesses and errors of the present work.

Zartash Arshad Waeen
13.06.07
Abstract:-

This study contributes the understanding and comparison of health care systems in developed and developing countries. For that purpose I decided to compare two politically and economically different countries like Norway and Pakistan. In addition, I attempt to contribute to the growing debate of health care system management and health institutions role in global world.

The organisation of financing in a health care system has implications for the funding levels, rationing mechanisms, health service provision and expenditure. These criteria are the basis of comparison in this thesis.

- **Funding** - In a public system, health care is funded from the general pool of all revenue collected through general taxation.

- **Rationing Mechanisms** – Public health systems ration their resources through setting the pattern of supply, gate keeping, waiting lists and queues.

- **Expenditure** – Public systems commonly suffer from under-investment perhaps due to the funding dependent on the budget set by the government based on their assessment of the health care sector requirements.

- **Health Service Provision** – In a public system, users cannot choose their GPs but are instead allocated one upon registration at a surgery. In addition users have to be referred by their GPs in order to see a specialist.

The data for analysis was obtained from secondary sources of information. The main focus of collecting data was internet search, reference books and health journals.
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Part 1:- Introduction

1.1 Motivation and background of the study:-

The introduction part includes the problem statement, the motives to study the problem and the structure of the thesis. I am very interested in health matters generally for two reasons. The first reason is that two of my closest friends are professional doctors in this field here in Bodø and we often discuss topics concerning health and thing related to this topic. Second and more important reason is because I am a newcomer in Norway and belongs to a country where health ad health related services are not according to public needs. Therefore I want to understand Norwegian health system in general, specially funding and expenditure system. Writing this thesis is an attempt to compare and explore cross national healthcare system functioning in Norway and Pakistan. Healthcare system in general is very broad but my attempt is to describe only health funding and expenditures in both countries. I am not going too deep to describe and because my knowledge about Norwegian healthcare system is very short this time.

I hope that I will achieve some knowledge about the health system over there when I have completed this assignment. I will try to describe how the system is functioning and its influences towards the social welfare system. I will also shortly describe the functioning of the Norwegian System and how it is build up. I will try to compare these two systems with each other and make a conclusion about which system I believe is the best for the society generally. Since there are many different aspects between Pakistani economy, politics and way of living compared with Norway, therefore it is naturally difficult to compare these two countries in this topic.

Health care:-

Health care or healthcare is the prevention, treatment, and management of illness and the preservation of mental and physical well-being through the services offered by the medical, nursing, and allied health professions (Costello & Haggart 2003, Public Health & Society). According to the World Health Organization, health care embraces all the
goods and services designed to promote health, including “preventive, curative and palliative interventions, whether directed to individuals or to populations”. The organized provision of such services may constitute a health care system.

**Is healthcare different?**

Health care differs from other goods and services in important ways. The output of a shoe factory is shoes. But the output of the health care industry is less well defined. It is unpredictable and imperfectly understood by producers, and still less by consumers. Also, third-party payment and government intervention are pervasive. None of these characteristics is unique to health care, but their extent and their interaction are. Nevertheless, health care markets obey the fundamental rules of economics, and economic analysis is essential in appraising public policy.

The ultimate output of medical care is its effect on health. This effect can only be assigned probabilities before the care is provided and is difficult to measure even after the fact. Medical care is not the only determinant of health; others include nutrition, exercise, and other life-style factors. Efficient allocation of private and public budgets to health requires equating marginal benefit and marginal cost for each of these inputs.

Health in the modern era is both a sensitive as well as a complex issue. Once only in the hands of physicians, healthcare now involves the crucial role of socio-economic agencies and political setups.

It should be understood that the health of a nation depends not simply on the provision of doctors, hospitals and sophisticated equipment. It depends on the existence of basic health concepts, not only in the minds of individuals but also in the mind of those who frame policies and enjoy the power of implementation.

Pakistan’s health system is surprisingly poor considering its level of national income, poor planning and policy making. On the other hand Norwegian health system is probably considered one out of best health systems in the world. Norway achieves an
extraordinarily good health status with a comparable national and becoming better day by day. Although both countries are located on different continents and have very different cultures, political views and economic situations. A number of similarities and differences exist everywhere and according to contingency theory there is no one best way to organize or lead. Norwegian health system have been reforming since 1995 but in this thesis reforms are not in my focus. Norwegian economy is a growing economy due to oil and fish export. Pakistan is an agricultural country and don’t have much resources. In this article the Norwegian and Pakistani health care financing arrangements are compared in order to see how much these nations are willing to spend for their people and how much interest these have to provide basic health facilities to everyone.

1.2 The Problem Formulation:-

The main purpose of my research is to identify, and describe the functioning of healthcare system in Norwegian and Pakistani context. Thus, the problem is to understand and compare the healthcare system functioning in these countries.

1. How does healthcare system functions in Developing and Developed countries?

(A cross national comparison of healthcare systems of Pakistan and Norway)

1.3 Limitations of the study:-

My study has a number of limitations resulting from the limited sources of information. My study is only descriptive and the data I have been collected through secondary sources. A lot of material on diseases and general health is available on internet and in library at school but material relating to specific healthcare functioning was not easy to accessible.

1.4 The structure of the presentation:-

The thesis has six parts: Introduction, theoretical framework, methodology, empirical part, analysis and conclusion.
In the introduction part I outline motivation and relevance of the study. I define the problem statement and come up with the research questions and some limitations of the study.

The 2nd part is devoted to research methodological aspects of the study and represents the method of the investigation.

In theoretical part I come across the theories and notions which can help me to cast light on health question.

The empirical part is divided into two sub-sections, which are devoted to Norway and Pakistan. In these sub-sections I describe economy, political context, healthcare system.

The analysis part reports my analysis of the empirical part in this section I compare the healthcare functioning system in Norway and Pakistan, reveal the differences and similarities and provide explanations of that.

The next part represents the research results, conclusions, and proposals for future research.
Part 2: Theoretical Framework

2.1 Introduction

In this part the theoretical framework for study is presented. A theoretical framework is a theoretical perspective. It can be simply a theory, but it can also be more general -- a basic approach to understanding something. Typically, a theoretical framework defines the kinds of variables that somebody wants to look at. Here in this part theoretical framework’s purpose is to provide conceptual background for the description of basic idea of public management and administration, public services and values, policy making and institutional and other related theories. A theoretical framework is a collection of interrelated concepts, like a theory but not necessarily so well worked-out. A theoretical framework guides our research, determining what things we will measure, and what statistical relationships we will look for.

Fiscal constraints, budget deficits and international competition have initiated a lively debate on the institutional arrangements and the performance of health care systems in many developed and developing nations. Due to technological innovation making new medical goods and services available, and due to the rising available income –at least in industrialized countries – we observe a trend towards more spending on health care. (www.oecd.com) However, this global trend is only partly induced by the voluntary demand of consumers and its persistence makes it incompatible with economic policy objectives. As the political debates in most developed countries show, expenditures for health care are contested, i.e. the willingness-to-pay for these goods and services is not unanimous everywhere. Contested expenditures may be result of the simple amount of money to be paid by the patient and/or of the perceived inefficiency of the health care system (HCS). Since institutions constituting health care systems (HCSs) vary across countries, systematic comparisons should reveal those factors inducing health care expenditures not demanded or even not accepted by relevant parts of the society. However, despite a large number of studies of HCSs, theory guided, systematic comparisons – the prerequisite for generalizations – are minority. As a rule, collections of cases studies prevail, often without a common theoretical framework. While offering
interesting and valuable data on the structure, development and operation of national
HCSs, generalizable insights of these studies as to expenditure dynamics and to
‘reformability’ of HCSs are limited. This applies even to most of the quantitative studies:
despite taking account of quite many cases and providing high degrees of ‘variance
explained’, these studies are often data/indicator driven and do not consider in detail the
specific consequences of institutional arrangements on the observed outcomes (see the
critique in Gerdtham/Jönsson 2000).
The most frequently used bases for comparing international health care resources are
health care expenditures, measured either as a fraction of gross domestic product (GDP)
or per capita (OECD). There are several possible reasons for this, including the
widespread availability of historic expenditure figures; the attractiveness of collapsing
resource data into a common unit of measurement; and the present focus among OECD
member countries and other governments on containing health care costs. Despite
important criticisms of this method, relatively few alternatives have been used in practice.
A simple framework for comparing data underlying health care systems is presented in
this thesis. It distinguishes measures of real resources, for example human resources,
medicines and medical equipment, from measures of financial resources such as
expenditures. Measures of real resources are further subdivided according to whether
their factor prices are determined primarily in national or global markets. The approach is
illustrated using a simple analysis of health care resource profiles for Pakistan and
Norway. Comparisons based on measures of both real resources and expenditures can be
more useful than conventional comparisons of expenditures alone and can lead to
important insights for the future management of health care systems.
2.2 Understanding of the Value of Health Services:-

Monica Elaine la. (1994) argues that Health care in all its manifestations is an extremely competence demanding service. Neither the product nor the production technology is well defined. The knowledge input is highly tacit and each service provided draws on multiple integrated technologies. Health care industry is conventionally defined as (hospital) care and medical services, the pharmaceutical and the medical instrument industries and the part of biotechnology industry that supports pharmaceutical industry.

Why do we care about our health? In the utilitarian framework, health is valued because it tends to reduce pain and discomfort and to increase pleasure, the capacity for pleasure, and other forms of utility (Ashmore. M, Mulkay. M and Pinch. T 1989 Health & Efficiency). In which case, it is rational to forgo an improvement to one’s health wherever resources can be devoted in some other way more effectively to increase aggregate utility.

Suppose we entertain a richer notion of the good life, wherein the pleasures of the intellect are rated above those of the body, or wherein action and achievement are rated above passive enjoyment. In this case, our valuation of health will similarly be extended: we will value health in more general terms for the capacity it affords us to pursue lives of value. Applying such a broad conception of the good life, Amartya Sen identifies good health as one of the “enabling conditions” that allow positive achievement. (Sen 1999, p.5). This is not to deny that good health confers straightforward utilitarian advantage – ill health is uncomfortable and can be painful. The point here is that it is also debilitating. Hence, we should view healthcare that restores health not merely as a consumer service generating utility but also as an investment in human productive capital. Health services should therefore be valued on two dimensions:

- the utility dimension: preventing, alleviating or removing pain and suffering
- the capability dimension: contributing to “individual capabilities to do things that a person has reason to value” (Sen 1992, p.56).
2.3 Healthcare System:-
What is health system? Unfortunately there is no simple answer to this question. “A health care system is the organization by which health care is provided.” According to the World Health Organization, health care embraces all the goods and services designed to promote health, including “preventive, curative and palliative interventions, whether directed to individuals or to populations”. The organized provision of such services may constitute a health care system. According to McPake (2002) a pragmatic view interprets a health system as being’ made up of users, payers, providers and regulators that can be defined by the relations between them.

With those relations referring to four keys functions of health systems: regulation, financing, research allocation and provision of services (Mills & Ranson 2001). National healthcare systems are motivated by highly diverse ideologies giving rise to consumer driven as well as social medicine models delivering widely varying quality of healthcare (Séror, 2001; 2002). International trade in healthcare services and the globalization of national economies raises questions with regard to institutional infrastructures appropriate to the emergence of sustainable international healthcare markets and management of the deepening divide between the wealthiest industrialized nations and the developing world. In practice, however, healthcare systems are often defined by national borders, exemplified by the remarks made frequently by journalists since the publication of the World Health Report (WHO 2000) that ‘ the French health care system is judged by the World Health Organization… to be the best in the world’ (BBC 2000).

Yet within each country there is almost always a complex mixture of different systems, in which some people use different ways to pay for health care and in turn receive different benefits ( McKee & Figueras 1997). For example, while many people would identify the British health system with its National Health Service (NHS), a system established in 1948 to provide universal coverage paid from general taxation, that interpretation would miss the growing differences in the way in which healthcare is organized in the four constituent parts of the UK, with Scotland, in particular, moving increasingly away from the model evolving in England. Similarly, it would miss the substantial volume of healthcare provided in the private healthcare sector, both to those that have private health insurance and, increasingly, for those who chose to pay directly. And the UK is, in
comparison with some countries, remarkably homogeneous. What, for example, is meant by the term ‘American healthcare system’ with its myriad of payment plans for those in employment, super imposed upon Medicare, for the elderly, and Medicaid (with its many variations from state to state) for the poor, to say nothing of a range of other federally funded programs such as those for the armed forces, for veterans and for native Americans? Even the soviet healthcare system, which might be thought to have been more homogeneous than most, contained a large number of parallel systems of those employed in the armed forces, the railways, Aeroflot (the soviet airlines), as well as the nomenklatura (the Communist Party elite).

Then there is the problem of defining the boundaries of a health system. There are many activities that contribute, directly or indirectly, to the provision of health care that in different countries, may or may not be within what is considered to be the health system.

Recent research in healthcare systems management and medical informatics demonstrates the critical importance of virtual institutional infrastructures and networks in healthcare market dynamics.

2.3.1 Management in healthcare:-

The term Management has different meaning in different perspective. The meaning varies with the person to whom it is referred to. Many definitions of management and leadership can be identified when surveying the literature (Brooten, Hayman, Naylor, 1988; Koontz & O Donnell, 1986). Hersey and Blanchard (1988) provided a comprehensive definition of management as “working with and through individuals and groups and other sources to accomplish organizational goals”. In general we can say that management is a process that involves planning, managing resources to accomplish the set objectives, and measuring the results got. When we say resources we mean to say not only the human resources but also the other resources (financial resources, materials required, machineries involved etc.) that are needed to accomplish a task or an objective.

There is a common perception that management involves only the managers and the people involved with the management of the company. It is definitely not so. Each an
every person in an organization has some tasks that involves managing some resource and reporting about that resource to the higher authority.

Now-a-days each and every process has its own management methods and personnel for managing that process. The basic principle remains the same as planning, organizing, staffing, directing, and controlling to achieve the goal by using the human, financial and material resources.

2.3.2 Financing in healthcare:-

There are generally five primary methods of funding health care systems:

- direct or out-of-pocket payments,
- general taxation,
- social health insurance,
- voluntary or private health insurance, and
- donations or community health insurance.

2.3.3 Complexity in healthcare system:-

Health care systems are complex systems with many independent agents each interacting with the others, occasionally inducing changes in some, and creating complex adaptive systems containing emergent property potential. Amongst the independent agents in health care systems there are language, structure, logic and social order. Each is fraught with fundamental problems, leading to famous paradoxes. Some of these parameters are initial conditions in complex adaptive systems, which can but do not have to be sensitive to changes in initial conditions – leading to future significant effects. It is still impossible to predict the appearance of emergent properties from independent agent behaviour, and evolving health care systems can thus become undesirable and fail. Much of all this applies to other social systems. However, there are systems with foreseeable behaviour – uniform, repetitive and nested ones. These are simple systems, with reducible computations for predicting their future development. In health care systems, one needs to reduce unpredictable developmental failure by emulating such simple systems through the implementation of their basic qualities.
A system is ‘a complex unity formed of many diverse parts subject to a common plan or serving a common purpose. A complex system ‘is defined to be a system which has many independent agents, each of which can interact with others’. Thus, the complexity of a system stems from quantities: of its parts, of their possible interactions, of eventual outcomes of in-built diversities and various feedback and feed forward loops. There is no clear cut-off point, but the more of each the more complex the system is. Various social (‘forming or having a tendency to form cooperative and interdependent relations with one’s fellows’) systems have been looked at as complex systems: democratic governments, labour unions, universities, economies and even biological research systems. Health care systems are among the most complex systems serving humans. These systems, each with many independent components, each of which can interact with the others, have repeatedly been declared failures, undergoing repeated reforms – perceived as unsatisfactory. Being highly complex, these systems are adaptive, without having been specifically designed to be, and contain emergent properties. It is an important feature of such properties that they are a none or total event, an occurrence when and where ‘more’ becomes ‘different’ . Possibly it is the emergent properties’ quality which leads to the failure issue: the systems begin behaving ‘differently’ than was planned and/or expected. We still cannot predict the appearance and behaviour of emergent properties from the properties and initial values of the independent components in such a system. It is this uncertainty as to how the complex, adaptive system will perform in the future, after its ‘emergence’, and the continuation of this ‘emergence’ over time that stymies the successful planning of such systems. These basic independent components include the use of words and definitions in formulating principles and modes of operation, the logical structure of the systems and the social regime within which they exist. All of the above apply to whatever order (hierarchical standing) of a system we are concerned with. In health care systems, we can concentrate on the highest level – which would usually be the national one, where national health care laws are formulated and implemented – including budgeting, income, expenditure and ‘savings’ (there are always attempts to bring about this). One rung lower
are the group providers including national districts, health maintenance organizations and their likes. Lower down come smaller districts including particular towns with corresponding health maintenance organizations.

The discussion in this manuscript is perhaps easier to visualize at the higher levels. The list of important constituent parts and components of health care systems is truly long. It would and does include health, morbidity, diseases (in general as well as a long list of specific ones), death and dying, doctors, patients and their relationships, hospitals, primary, secondary and tertiary health care, drugs, pharmaceuticals and their manufacturers, the economics of health care and the problem of paying for it all. Yet, underlying this level of parameters, there is a profounder, more basic level. One is the issue of ‘equality’ in health care, as opposed to ‘equitable’. Any experienced health care administrator knows how unbelievably persistent this misunderstanding is, and how widespread, with labour unions putting ‘equal health care’ on their battle banners again and again. Thus, language and the use of words turn out to be vastly important. On the same deeper, more profound level structure and logic can be found. One is led to these parameters at that level by the study of paradoxes, both self-referential ones, syntactical or pragmatic, and obviously by Gödel’s theorem. A fundamental, far-reaching, deep, underlying parameter is social order, to which one is led unwaveringly by Arrow’s impossibility theorem. These four constituents of human culture—language, logic, structure and social order—have ramifications for the basis and structure of health systems. The repeated failure of health systems throughout the world may have its origins in fundamental causes related to these components. Since different systems have been tried and failed, despite the investment of enormous resources, we might do better to look elsewhere for the reasons for these failures, rather than confining ourselves to regretting the simple fact that expenses seem to continue to rise without achieving a comparable improvement in outcomes. This hypothesis that there may be causes associated with the most basic elements of health systems, relating to language, logic, structure and social order, and to system complexity and that these are responsible for this systemic failure, may be strengthened if one examines certain aspects of the components noted above. It is probably self-evident that this hypothesis about
failure within healthcare systems because of problems with some deep-rooted components of the systems applies to other social systems as well. Most health systems currently in operation regulate their allocations according to waiting lists. This approach is problematic in moral terms, although it is legal; its legality has been examined several times by judicial authorities. Health policy makers repeatedly attempt to bring the free market economy into health systems (including waiting lists) by various means, but such attempts have proved unsuccessful in improving the systems’ results. The partial or complete failure of a market economy is not a rare occurrence, and this is also true in the case of health systems.

2.3.4 Comparing Health Care Systems:

In accordance with Freeman HCS means those institutions, actors and relationships that produce or maintain the health of the citizens (Freeman 2000: 1, Schulenburg/Greiner 2000: 175).

Generally, the baseline categories for classifying HCSs are so-called nationalized health care systems (NHS) systems, social insurance systems and market systems. Often, these basic categories are further differentiated along different institutional attributes, e.g. financing sources, public vs. private provision of health care. The typology as proposed by the OECD (1994: 11/2), categorizes HCSs according to the provision of medical services (public vs. private), the main source of financing (tax vs. public or private insurance) and the method of payment for the providers. Wessen (1999) classifies HCSs according to the degree of market orientation and the corporatist vs. pluralist mode of decision making. This catalogue is extended to eleven structural attributes, which are proposed for the classification of HCSs.

This heterogeneity of proposed typologies and categorizations mirrors the enormous variability of institutional settings, regulations and characteristics of existing HCSs (see Freeman 2000: 5).
2.3.5 The purposes and limitations of cross-national analysis:-

What is the purpose of comparing health systems and polices in different nations? Some scholars seek to understand the evolution and effects of different health systems and policies (Boychuk, 1999; Tuohy, 1999). Others seek to learn about policies, programs, or practices that might be transferred from one nation to another (Rodwin, 1987; White, 1995). Most efforts to evaluate health system performance are based on data assembled by organisations such as the OECD, WHO, the World Bank, and the United Nations (UNICEF and UNDP) (Anderson and Hussey, 2001; Reinhardt et al., 1999; World Bank, 1993; World Health Organization, 2000). Rodwin and Gusmano (2002) argue that there are at least two limitations associated with comparing health system performance among nations. First, there are enormous variations in population health and health system performance within nations (Ginsberg, 1996). Second, it is difficult to disentangle the relative importance of health systems from other determinants of health and the use of health care services, including the socio-cultural characteristics and neighborhood contexts of the populations whose health is measured.

Cross-national studies that attempt to evaluate the impact of health system characteristics on the use of revascularization procedures suffer from three additional limitations. First, cross-national studies often reflect a misunderstanding of how US data are coded and aggregated. Second, most studies do not adjust treatment rates for differences in the prevalence of IHD. Third, although deaths due to IHD disproportionately affect people 65 years and over (Lakatta, 2002; National Institute of Health and Medical Research, 2001; National Vital Statistics Report, 1999), most cross-national comparisons do not focus on older people (Houterman et al., 2002).

2.4 Governance and Public management:-

2.4.1 Public Governance:-

The concept of public governance (including the study of public management in a governance context) is less well developed than the subject of corporate governance, a staple of business school education and research. Public governance is also harder to
study because of the many considerations involved in normative and positive analyses of why and how to govern. Nonetheless, a growing number of scholars around the world, including the participants in this symposium, are giving definition to this field through their work.

2.4.2 Defining Public Governance
Governance—whether public or private—has been defined simply as “the general exercise of authority” (Michalski, Miller, and Stevens, 2001, p. 9), where authority refers to systems of accountability and control. It includes global and local arrangements, formal structures and informal norms and practices, and spontaneous and intentional systems of control (Williamson, 1996). The subject of corporate governance is, as noted, an active area of research and debate, and has been defined broadly as “the design of institutions that induce or force management to internalize the welfare of stakeholders” (Tirole, 2001, p. 4). An analogous characterization might also apply to public sector governance, namely, institutions to induce public managers to internalize stakeholder interests. Most scholars, however, recognize a need to include a broader range of concerns in a concept of public governance. For example, Frederickson’s (1997) formulation of the concept encompasses public administration, stakeholder pluralism, management within networks, and legitimacy. Recently, we have defined public sector governance as “regimes of laws, rules, judicial decisions, and administrative practices that constrain, prescribe, and enable the provision of publicly supported goods and services” through associations with agents in the public and private sectors (Lynn, Heinrich, and Hill, 2001, p. 7). This definition of governance includes public management: the behaviours and contributions to governmental performance of actors performing managerial roles.

2.4.3 Studying Public Governance:-
Research on public sector governance is emerging from bodies of literature that encompass comparative, national, and subnational research on public management reform (Pollitt, 2000), as well as on international governance and management (for example, Gerri,
Comparative work has been one of the most active areas of public governance research (Kettl, 2000; OECD, 1995, 2001; Peters and Savoie, 1995, 1998; Pollitt and Bouckaert, 2000). National and comparative studies of public governance, however, have “thus far largely been preoccupied with describing the new measures, comparing measures from various countries and assessing the impact on accountability” and have devoted relatively little effort to empirically verifying claimed results or to identifying causal relationships (Peters and Savoie, 1998, p. 7). Empirical research on comparative governance exemplifies one of three research strategies generally used in the empirical study of public governance and management. This first strategy tends to adopt a historical, descriptive, and institutional orientation. Insights and conclusions are based on systematic reviews and assessments of official documents, including surveys of reform activity, interviews and other forms of field observation, and secondary research by academics, consultants, and practitioners. The analysis of such materials often takes the form of classification schemes in which reforms or their characteristic features are associated with contextual and other factors (see, for example, Hood, 2002; Peters, 1996; Pollitt and Bouckaert, 2000; and the references in Lynn, 1997).

A second research strategy attempts to identify “best practices” through the collection of detailed case studies of actual management problems. The accumulation and perusal of detailed cases aims to reveal what works and what doesn’t, congealing conclusions into principles and recipes for effective practice that resonate with the real world as practitioners understand it. Examples of this type of strategy include books by Light (1998) on innovations in nonprofits and governments, by Bardach (1998) on organizational cooperation, and by Haass (1999) on public sector management and leadership.

A third strategy for studying public governance and management uses the formal theories, models, methods, and data of the social and behavioural sciences to study governmental processes and to develop a body of empirical knowledge concerning what works and why. This strategy, which depends on reductive abstraction, sacrifices verisimilitude and nuance but gains in transparency and replicability. Using formal
theories to develop hypotheses that are falsifiable is an important component of this endeavour: doing so helps clarify suppositions and findings about governance and managerial processes.

The contributors to this symposium are among a growing number of scholars who are producing (self-consciously and in collaboration with others) such theory based empirical work on questions of governance and public management. These particular scholars are hardly unique, however: The body of empirical scholarship that draws on formal theory to examine governance issues is large and growing (see, for example, Boyne, Powell, and Ashworth, 2001; Hill and Lynn, 2003). Studies of this kind are regularly published in scores of academic journals across numerous disciplines, fields, and subspecialties. Because individual research communities rarely communicate with one another, though, it is difficult to know whether the results of these dispersed efforts are cumulating to more general insights of practical value. For this reason, symposium authors refer to an overarching analytic framework that can assist in creating broader pictures than we can gain from any particular study or vein of literature.

2.5 Policy making and Approaches to Policy Making:-

Policy as a science in its usual definition studies conditions and ways of realization and implementation of the state goals. Policy as an art is about adaptation to these conditions and using these ways for realization of the state goals in practice. It would be more correct to define policy not as a science about social welfare or art to realize and implement into life this welfare but rather as a study about obligations of the state in regards to the society and individuality, but as art policy gives the system of carrying out these obligations and responsibilities. Thus we can see that one of the main concerns of policy is defining the state competence, which means those boundaries that limit the state interference.

Many authors of public policy and politics since the days of Socrates have attempted to analyze how policy is developed with the intention to suggest the best way to shape and deliver it. Since Policy making is concerned with many aspects of social life and impacts
on how operations occur, knowledge and policy have remained the subject of intriguing inquiry.

Here main purpose is to discuss whether policy making is either a product of scientific knowledge and reason or a product of art as in human skill, values, personality, ambitions, emotions, passions and common sense, or even a synthesis of all these elements. And if a synthesis of art and science is possible then the question of how much of each can contribute to effective policy making arising. This appears a complex investigation and involves many ideas.

First part presents the meaning of policy making and its nature. Then, the second part is focusing on the scientific approach of policy making. The contribution of various theories, frameworks and models will be discussed. Finally the third part is concerned with the contribution of the aesthetic element in policy making.

Policy making involves a vision to reach specific goals, getting the best decisions and reaching a consensus. There is no single solution as to how policy should be made. It depends on the space, time and conditions under which events occur. That is why the art of judgment in policy making is of a crucial importance.

This contention reflects on Einstein’s worlds. When Einstein was asked if everything could be expressed scientifically he replied ‘it would be possible, but it would make no sense. It would be description without meaning as if described a Beethoven symphony as a variation of wave pressure.’ To open this discussion a general understanding as to what policy is, is required to make a start. The Oxford English Dictionary defines policy as ‘a course of action adopted and pursued by a government party, ruler, statesman etc.; or any course of action adopted as advantageous or expedient…’

It can be argued that policy making comes as a response to social problems and needs. Social policy should be determined by social need and that need should be measured in terms of empirical ‘facts’. However, there are a number of questions arising in terms of definition and measurement of need. Bradshaw’s taxonomy of needs includes normative,
felt, expressed and comparative need. This contributed in defining and identifying social need to assist social services, and policy makers.

Policy making takes place in the context of the constraints of economic, social, geographical, historical political and cultural limits. This places policy making in a multidisciplinary area involving knowledge from sociology, economics, high and low politics and management skill. Policies are about making a difference, initiating social change and allocating values and therefore they must be dynamic. The whole process of policy making links the state, society and population. The following is a way of showing how an issue might appear or / and accepted as a problem or need for a policy response. Additionally the community or environment of which social policy is made is of a crucial importance and particularly in the area of globalization; those factors external to and beyond the control of domestic policy environment assume ever greater relevance. This means the need to understand what is ‘really good’ and how it ‘really’ can be obtained.

Socrates raised questions about the rational understanding of the nature of power, authority, justice, and fairness. His dream was the use of rational knowledge for the creation of a good polity. The world of modern policy – making has changed a lot since the days of Socrates but many fundamentals remain the same.

As Spicker put it social policy making in particular and the wider policy process in general are very much to do with power and the values of those engaged within the policy process. This will be analyzed further when presenting the artistic element.

Hill states that policy making is not a pure exercise in rational decision making. Nor is it simply the putting into practice of ideologies, or a quite incoherent process of bargaining and muddling through. Rather it is a mixture of all three, with perhaps the first being least apparent and the third most in evidence’. This position expresses the importance of linking ideology, learning and practicality in policy process. This will be explained further when examining scientific and artistic element in policy. Having had a brief insight into policy making, at this point the discussion turns to present the contribution of political science and its limitations.
The Oxford English Dictionary defines science as ‘the state or fact of knowing; knowledge or cognizance of something specified or implied; also with wider reference, knowledge as a personal attribute; in the sense of ‘knowledge’ as opposed to ‘belief’ or ‘opinion’. Also science is defined as contradistinguished from art. The distinction as commonly apprehended is that a science is concerned with the theoretic truth and an art with methods for affecting certain results. Sometimes, however, the term science is extended to denote a department of practical work which depends on the knowledge and conscious application of principles; an art, on the other hand, being understood to require merely knowledge of traditional rules and skill acquired by habit. Lasswell stated that policy science is about the production and application of knowledge of and in policy. A number of frameworks, theories and models of policy processes have been developed to explain public policy making processes. In particular, a framework sets the foundation from which more than one theory may be developed, and from a theory, multiple models may be developed.

Models of policy making include the rational model, the incremental model, the normative optimum model and the mixed scanning mode). Some frameworks are stages, the ‘black box’, institutional rational choice, multiple streams, advocacy coalition, policy diffusion and punctuated – equilibrium.

For example, Lasswell provided a model of policy process in a logic way. An issue moves through stages from start to end, from initiation, information, consideration decision implementation evaluation and termination. However this has received its criticisms on the grounds that policy making is an interactive process and such order may not be possible. Easton adapted an input – output model of the political system. This differentiates between policy demands, policy decisions, policy outputs and policy outcomes. Further a more extended perspective adding the policy environment and the political system itself is pursued. It appears difficult to capture the policy process in a model and thus a more detailed systems model emphasizing the main areas is needs to be explored.
2.6 **Institutional Theory:-**

Institutional theory attends to the deeper and more resilient aspects of social structure. It considers the processes by which structures, including schemas, rules, norms, and routines, become established as authoritative guidelines for social behaviour. It inquires into how these elements are created, diffused, adopted, and adapted over space and time; and how they fall into decline and disuse. Although the ostensible subject is stability and order in social life, students of institutions must perforce attend not just to consensus and conformity but to conflict and change in social structures (Scott 2004b).

The roots of institutional theory run richly through the formative years of the social sciences, enlisting and incorporating the creative insights of scholars ranging from Marx and Weber, Cooley and Mead, to Veblen and Commons. Much of this work, carried out at the end of the nineteenth and beginning of the twentieth centuries, was submerged under the onslaught of neoclassical theory in economics, behavioralism in political science, and positivism in sociology, but has experienced a remarkable renaissance in our own time.

Contemporary institutional theory has captured the attention of a wide range of scholars across the social sciences and is employed to examine systems ranging from micro interpersonal interactions to macro global frameworks. Although the presence of institutional scholars in many disciplines provides important opportunities for exchange and cross-fertilization, an astonishing variety of approaches and sometime conflicting assumptions limits scholarly discourse.

### 2.6.1 Principal-Agent Theory

The theory of agency relations is especially well appropriated for the analysis of the institutional design of HCSs and health care (politics). In the standard model of agency, the principal creates a scheme of incentives or penalties, such that the agent's behavior is forced, at least partially, in the direction that favors the principal's interest. The principal agent approach has only rarely been applied to the analysis of complete health care systems (De Alessi (1989), López-Casasnovas (1991), Milde 1992; Mooney/Ryan 1993, Scott/Vick 1999, Breyer / Zweifel 1997). The relevance of the principal agent for HCSs arises from the fact, that the complexity of medicine and medical services results in
enormous information asymmetries between the consumer and the providers of medical services. Both, health care goods and services as well as political goods are experience goods according to Nelson's (1970) definition. Experience goods reveal their quality only after purchase and consumption. Therefore, there is a high risk of buying bad quality. Combined with conflicting interests between the consumers and the multiple providers in HCSs, these information asymmetries give the actors multiple opportunities to mutually exploit the other side.

Asymmetric information occurs in two variations: In the case of hidden action, the agent may have available options for action, that remain unknown to the principal, even after the result of the agents' actions is observable. In the case of hidden information, the agent has information, e.g. on the state of the world, that is relevant for performing the delegated task, but unknown to the principal (Kräkel 1999: 22, Milgrom / Roberts 1992: 169). In our context, this information could be, whether a medical service or a medicine is necessary and helpful, etc. Optimally, all relationships in the HCS should be regulated by complete contracts among the actors specifying action in every contingency. Evidently, this is not feasible, due to the complexity of delegated tasks and actor/institutional constellations. Therefore, the contracts remain incomplete in so far, as the delegated task is only delineated in a general way, and the actors have considerable leeway to opportunistic behavior (Milgrom / Roberts 1992: 129). Opportunistic behavior shows up in two basic forms, moral hazard and adverse selection.

The concept of moral hazard has been developed in the context of insurance and describes "the tendency of people with insurance to change their behavior in a way that leads to larger claims against the insurance company" (Milgrom / Roberts 1992: 167). More generally, moral hazard covers all kinds of opportunistic behavior that occurs after the actors started their exchange relationship (see Dutta / Radner 1994; Homann / Suchanek 2000: 110ff). The concept of moral hazard covers the following incentive problems:

Exploitation of hidden information: The agent uses his information, or, the principals' lack of information, to oversupply the principal with services, that are neither necessary nor contributable to the objectives, the principal wants to achieve (Schulenburg / Greiner
2000: 157ff). With this kind of opportunistic behavior, the agent directly extracts - financial - rents from the principal.

**Shirking**: An agent, who is hired to perform a task, practices insufficient efforts. If the principal is not able to monitor the agents' activities and the effort does not fully determine the result, the agent is able to shirk, i.e. to reduce his work effort, and to blame circumstances for an insufficient result (Milgrom / Roberts 1992: 179).

**Hold Up**: The delegation of a task may necessitate the agent to make relation-specific investments. Due to the dependency (closure) of the principal, the costs occurred by the agent are susceptible to be expropriated by the principal by renegotiations.

**Collusion**: Principals may hire a supervisor, to control the agent(s), by collecting information on the agents activities and the state of the world. Based on this information, the principal can chose an appropriate remuneration for the agent. However, supervisors may get bribed by the other agents to report wrong informations (Tirole, 1986).

**Over-usage of common pool resources**: Once, actors have pooled their resources, e.g. within an organization promoting their goals, every actor has an incentive to act in a way that maximizes her benefits at the expense of all other contributors. Over-usage arises because contributions are broadly dispersed whereas the benefits of usage are concentrated to the individual. Costs are therefore not completely internalized. This kind of opportunistic behavior of the individual actors exploits the pool as a whole as well as the collectivity of the actors contributing to the pool. The pool exhibits features of a common property resource or a pure public good.

The concept of adverse selection covers phenomena and problems that are due to information asymmetries that persist before the actors start their relationship / enter a contract. The agent has private information with regard to his productivity and behavior. An optimal contract would differentiate between types of agents according to these characteristics. Under incomplete information, this differentiation is not possible, and the agent can use his private information to get a better contract than the one he would get, if all relevant information were known by the principal (Akerlof 1970; Richter / Furubotn 1996: 150 and 217). At worst, adverse selection leads to the situation, in which the principal offers a work contract, that is only attractive to people, that are not suitable to perform the task.
Contingency theory:-

Contingency theories are a class of behavioral theory that contend that there is no best way of organizing and leading and that an organizational leadership style that is effective in some situations may not be successful in others. In other words: The optimal organization / leadership style is contingent upon various internal and external constraints.

Contingency Approach to Management:-

The contingency approach to management is based on the idea that there is no one best way to manage and that to be effective, planning, organizing, leading, and controlling must be tailored to the particular circumstances faced by an organization. Managers have always asked questions such as "What is the right thing to do? Should we have a mechanistic or an organic structure? A functional or divisional structure? Wide or narrow spans of management? Tall or flat organizational structures? Simple or complex control and coordination mechanisms? Should we be centralized or decentralized? Should we use task or people oriented leadership styles? What motivational approaches and incentive programs should we use?" The contingency approach to management (also called the situational approach) assumes that there is no universal answer to such questions because organizations, people, and situations vary and change over time. Thus, the right thing to do depends on a complex variety of critical environmental and internal contingencies.

Contingency Perspective and Organization Theory:-

Environmental change and uncertainty, work technology, and the size of a company are all identified as environmental factors impacting the effectiveness of different organizational forms. According to the contingency perspective, stable environments suggest mechanistic structures that emphasize centralization, formalization, standardization, and specialization to achieve efficiency and consistency. Certainty and predictability permit the use of policies, rules, and procedures to guide decision making for routine tasks and problems. Unstable environments suggest organic structures which emphasize decentralization to achieve flexibility and adaptability. Uncertainty and
unpredictability require general problem solving methods for non routine tasks and problems. Paul Lawrence and Jay Lorsch (2003) suggest that organizational units operating in differing environments develop different internal unit characteristics, and that the greater the internal differences, the greater the need for coordination between units.

Joan Woodward (1998) found that financially successful manufacturing organizations with different types of work technologies (such as unit or small batch; large-batch or mass-production; or continuous-process) differed in the number of management levels, span of management, and the degree of worker specialization. She linked differences in organization to firm performance and suggested that certain organizational forms were appropriate for certain types of work technologies.

Organizational size is another contingency variable thought to impact the effectiveness of different organizational forms. Small organizations can behave informally while larger organizations tend to become more formalized. The owner of a small organization may directly control most things, but large organizations require more complex and indirect control mechanisms. Large organizations can have more specialized staff, units, and jobs. Hence, a divisional structure is not appropriate for a small organization but may be for a large organization.

**Contingency perspective and leadership:-**

Dissatisfaction with trait-based theories of leadership effectiveness led to the development of contingency leadership theories. Fred Fiedler, in the 1960s and 1970s, was an early pioneer in this area. Various aspects of the situation have been identified as impacting the effectiveness of different leadership styles. For example, Fiedler suggests that the degree to which subordinates like or trust the leader, the degree to which the task is structured, and the formal authority possessed by the leader are key determinants of the leadership situation. Task-oriented or relationship oriented leadership should would each work if they fit the characteristics of the situation.
Part 3 Research Methodology

3.1 Introduction:–

The purpose of this chapter is to define the type and method of research, data collection and analysis procedures in order to answer the research questions of the thesis properly. The research method I use is qualitative research and data is collected through secondary sources.

3.2 The research design:–

The choice of the research design is based on the research question and problem formulation. Research design provides the glue that holds the research project together. The research design explains what procedures are supposed to apply in connection with gathering information (Parasuraman, 1991). “A research design is the specification of method and procedures for acquiring the information needed to structure or to solve problem. It is the overall operational pattern of framework of the project that stipulate what information is to be collected, from which sources, and by what procedures” (Green et al, 1998:96&97). A design is used to structure the research, to show how all of the major parts of the research project -- the samples or groups, measures, treatments or programs, and methods of assignment -- work together to try to address the central research questions.

3.2.1 The purpose of the study:–

The purpose of this thesis is to describe and analyse healthcare functioning in Norway and Pakistan. The main focus is to investigate how Governments in these countries finance health care system. The comparison will be based on economical and political level. The predetermines the use of methods of research focusing first and foremost on understanding and stressing the importance of interpretative perspective and qualitative methods.
3.2.2 The type of investigation:-
Basing on the research question that I am going to study in this thesis, the study is only descriptive. Being descriptive, the study uses the pre-determined frame-the norms, practice and use. Descriptive research or survey research means to collects data in order to answer questions about the current status of the subject or topic of study or using formal instruments to study preferences, attitudes, practices, concerns, or interests of a sample.

3.2.3 The unit of analysis
“The unit of analysis is the major entity that is being analyzed in the study.” The unit of analysis is determined by an interest in exploring or explaining a specific phenomenon. It is the ‘what’ or ‘whom’ that is being studied. In social science research, the most typical units of analysis are individual people. Other units of analysis can be groups, social organizations and social artefacts. I am going to use data available on OECD and WHO web pages for analysis of hospital management studies.

3.2.4 The time horizon of the study:-
I chose from 1997 until now as time horizon of the study because of latest Norwegian hospital reforms in 2002 in which Norwegian central Government took financing and managing responsibility of Norwegian public hospitals. Actually I am not going to focus on reforms but I think it becomes necessary to mention little bit about reforms because improvement and changes in health infrastructure after 2002 reforms. The focus of research for both countries for comparing internationally is from 1997 and until now. The reason why did I started from 1997 is due to introduction of activity based funding and DRG system in Norwegian hospitals. It took lot of time to find secondary data relating to healthcare system in Pakistan due to less research in Pakistan.

3.3 Research Methodology:-
I used qualitative research method and collected data for research through secondary sources. In case of Pakistan and Norway the document analysis was based upon policy
documents and official reports of the health ministries, health-related departments and international agencies, published during the period 1997–2007. The reviewed policy documents included: reports of the medical reform commissions and health study groups, and national health policies. Official reports and documents. World health reports from 1997 until now of the World Health Organization, and the World Bank's development reports from 1997 to 2007 and reports from OECD. I also collected theoretical data through reference books borrowed from school’s library. The impact of the political and economical context on the health policy process was derived from these documents.

3.3.1 What is Qualitative Research?

“Qualitative Research is a situated activity that locates the observer in the world. It consist of a set of interpretive, material practices that makes the world visible. These practices makes the world visible. These practices turn the world into a series of representations including field notes, interviews, conservations, photographs, recordings and memos to the self. At this level, qualitative research involves an interpretive, naturalistic approach to world. This means that qualitative researchers study things in their natural settings, attempting to make sense of, or interpret, phenomena in terms of meanings people bring to them.” (Ritchie, J & Lewis, J 2003, Qualitative research practices, p. 2-3)

Strauss and Corbin (1998) says that “By term qualitative research we mean any type of research that produces findings not arrived at by statistical procedures or other means of quantification.”

Qualitative research uses a naturalistic approach that seeks to understand phenomena in context-specific settings, such as "real world setting where the researcher does not attempt to manipulate the phenomenon of interest" (Patton, 2001, p. 39). Qualitative research, broadly defined, means "any kind of research that produces findings not arrived at by means of statistical procedures or other means of quantification" (Strauss and Corbin, 1990, p. 17) and instead, the kind of research that produces findings arrived from
real-world settings where the "phenomenon of interest unfold naturally" (Patton, 2001, p. 39). Unlike quantitative researchers who seek causal determination, prediction, and generalization of findings, qualitative researchers seek instead illumination, understanding, and extrapolation to similar situations (Hoepfl, 1997).

Qualitative research has generally associated with the following beliefs presented by Ammanuel Kant (1781) that:

- Perceptions relates not only to the senses but to human interpretations of what our senses tell us
- Our knowledge of the world is based on understanding which arises from thinking about what happens to us, not just simply from having had particular experiences.
- Knowing and knowledge transcend basic empirical enquiry
- Distinction exist between scientific reason (based strictly on casual determinism) and practical reason (based on moral freedom and decision making which involves less certainty).

(Ritchie, J & Lewis, J 2003, p. 6-7 Qualitative Research Practice)

Qualitative analysis results in a different type of knowledge than does quantitative inquiry because one party argues from the underlying philosophical nature of each paradigm, enjoying detailed interviewing and the other focuses on the apparent compatibility of the research methods, “enjoying the rewards of both numbers and words” (Glesne & Peshkin, 1992, p. 8). This means such methods like interviews and observations are dominant in the naturalist (interpretive) paradigm and supplementary in the positive paradigm, where the use of survey serves in opposite order. Although it has been claimed (Winter, 2000) that quantitative researchers attempt to disassociate themselves as much as possible from the research process, qualitative researchers have come to embrace their involvement and role within the research. Patton (2001) supports the notion of researcher's involvement and immersion into the research by discussing that the real world are subject to change and therefore, a qualitative researcher should be present during the changes to record an event after and before the change occurs. However, both qualitative and quantitative researchers need to test and demonstrate that
their studies are credible. While the credibility in quantitative research depends on instrument construction, in qualitative research, “the researcher is the instrument” (Patton, 2001, p. 14). Thus, it seems when quantitative researchers speak of research validity and reliability, they are usually referring to a research that is credible while the credibility of a qualitative research depends on the ability and effort of the researcher. Although reliability and validity are treated separately in quantitative studies, these terms are not viewed separately in qualitative research. Instead, terminology that encompasses both, such as credibility, transferability, and trustworthiness is used.

3.3.2 Reliability and Validity in Qualitative Research

To understand the meaning of reliability and validity, it is necessary to present the various definitions of reliability and validity given by many qualitative researchers from different perspectives.

Reliability

Although the term ‘Reliability’ is a concept used for testing or evaluating quantitative research, the idea is most often used in all kinds of research. If we see the idea of testing as a way of information elicitation then the most important test of any qualitative study is its quality. A good qualitative study can help us “understand a situation that would otherwise be enigmatic or confusing” (Eisner, 1991, p. 58). This relates to the concept of a good quality research when reliability is a concept to evaluate quality in quantitative study with a “purpose of explaining” while quality concept in qualitative study has the purpose of “generating understanding” (Stenbacka, 2001, p. 551). The difference in purposes of evaluating the quality of studies in quantitative and qualitative research is one of the reasons that the concept of reliability is irrelevant in qualitative research. According to Stenbacka, (2001) “the concept of reliability is even misleading in qualitative research. If a qualitative study is discussed with reliability as a criterion, the consequence is rather that the study is no good” (p. 552).

On the other hand, Patton (2001) states that validity and reliability are two factors which any qualitative researcher should be concerned about while designing a study, analyzing results and judging the quality of the study. This corresponds to the question that “How
can an inquirer persuade his or her audiences that the research findings of an inquiry are worth paying attention to?" (Lincoln & Guba, 1985, p. 290). To answer to the question, Healy and Perry (2000) assert that the quality of a study in each paradigm should be judged by its own paradigm's terms. For example, while the terms Reliability and Validity are essential criterion for quality in quantitative paradigms, in qualitative paradigms the terms Credibility, Neutrality or Conformability, Consistency or Dependability and Applicability or Transferability are to be the essential criteria for quality (Lincoln & Guba, 1985). To be more specific with the term of reliability in qualitative research, Lincoln and Guba (1985, p. 300) use “dependability”, in qualitative research which closely corresponds to the notion of “reliability” in quantitative research. They further emphasize “inquiry audit” (p. 317) as one measure which might enhance the dependability of qualitative research. This can be used to examine both the process and the product of the research for consistency (Hoepfl, 1997). In the same vein, Clont (1992) and Seale (1999) endorse the concept of dependability with the concept of consistency or reliability in qualitative research. The consistency of data will be achieved when the steps of the research are verified through examination of such items as raw data, data reduction products, and process notes (Campbell, 1996).

To ensure reliability in qualitative research, examination of trustworthiness is crucial. Seale (1999), while establishing good quality studies through reliability and validity in qualitative research, states that the “trustworthiness of a research report lies at the heart of issues conventionally discussed as validity and reliability” (p. 266). When judging (testing) qualitative work, Strauss and Corbin (1990) suggest that the "usual canons of ‘good science’…require redefinition in order to fit the realities of qualitative research" (p. 250).

In contrast, Stenbacka (2001) argues that since reliability issue concerns measurements then it has no relevance in qualitative research. She adds the issue of reliability is an irrelevant matter in the judgement of quality of qualitative research. Therefore, if it is used then the “consequence is rather that the study is no good” (p. 552).

To widen the spectrum of conceptualization of reliability and revealing the congruence of reliability and validity in qualitative research, Lincoln and Guba (1985) states that: "Since
there can be no validity without reliability, a demonstration of the former [validity] is sufficient to establish the latter [reliability];" (p. 316). Patton (2001) with regards to the researcher's ability and skill in any qualitative research also states that reliability is a consequence of the validity in a study.

**Validity**

The concept of validity is described by a wide range of terms in qualitative studies. This concept is not a single, fixed or universal concept, but “rather a contingent construct, inescapably grounded in the processes and intentions of particular research methodologies and projects” (Winter, 2000, p.1). Although some qualitative researchers have argued that the term validity is not applicable to qualitative research, but at the same time, they have realised the need for some kind of qualifying check or measure for their research. For example, Creswell & Miller (2000) suggest that the validity is affected by the researcher’s perception of validity in the study and his/her choice of paradigm assumption. As a result, many researchers have developed their own concepts of validity and have often generated or adopted what they consider to be more appropriate terms, such as, quality, rigor and trustworthiness (Davies & Dodd, 2002; Lincoln & Guba, 1985; Mishler, 2000; Seale, 1999; Stenbacka, 2001).

The discussion of quality in qualitative research initiated from the concerns about validity and reliability in quantitative tradition which “involved substituting new term for words such as validity and reliability to reflect interpretivist [qualitative] conceptions” (Seale, 1999, p. 465).

The issue of validity in qualitative research has not been disregarded by Stenbacka (2001) as she has for the issue of reliability in qualitative research. Instead, she argues that the concept of validity should be redefined for qualitative researches. Stenbacka (2001) describes the notion of reliability as one of the quality concepts in qualitative research which "to be solved in order to claim a study as part of proper research" (p. 551).

In searching for the meaning of rigor in research, Davies and Dodd (2002) find that the term rigor in research appears in reference to the discussion about reliability and validity. Davies and Dodd (2002) argue that the application of the notion rigor in qualitative research should differ from those in quantitative research by “accepting that there is a
quantitative bias in the concept of rigor, we now move on to develop our reconception of rigor by exploring subjectivity, reflexivity, and the social interaction of interviewing” (p. 281).

Lincoln and Guba (1985) argue that sustaining the trustworthiness of a research report depends on the issues, quantitatively, discussed as validity and reliability. The idea of discovering truth through measures of reliability and validity is replaced by the idea of trustworthiness (Mishler, 2000), which is “defensible” (Johnson 1997, p. 282) and establishing confidence in the findings (Lincoln & Guba, 1985).

If the issues of reliability, validity, trustworthiness, quality and rigor are meant differentiating a 'good' from 'bad' research then testing and increasing the reliability, validity, trustworthiness, quality and rigor will be important to the research in any paradigm.

### 3.3.3 Testing Validity and Reliability

So far, the concepts of reliability and validity as they have been redefined for their usefulness in qualitative research have been presented. Now, the question which remains to be answered is ‘How to test or maximize the validity and as a result the reliability of a qualitative study?’

If the validity or trustworthiness can be maximized or tested then more “credible and defensible result” (Johnson, 1997, p. 283) may lead to generalizability which is one of the concepts suggested by Stenbacka (2001) as the structure for both doing and documenting high quality qualitative research. Therefore, the quality of a research is related to generalizability of the result and thereby to the testing and increasing the validity or trustworthiness of the research.

In contrast, Maxwell (1992) observes that the degree to which an account is believed to be generalizable is a factor that clearly distinguishes quantitative and qualitative research approaches. Although the ability to generalize findings to wider groups and circumstances is one of the most common tests of validity for quantitative research, but Patton (2001) states generalizability as one of the criteria for quality case studies depending on the case selected and studied. In this sense the validity in quantitative research is very specific to the test to which it is applied – where triangulation methods
are used in qualitative research. Triangulation is typically a strategy (test) for improving the validity and reliability of research or evaluation of findings. Mathison (1988) elaborates this by saying:

Triangulation has risen an important methodological issue in naturalistic and qualitative approaches to evaluation [in order to] control bias and establishing valid propositions because traditional scientific techniques are incompatible with this alternate epistemology. (p. 13)

Patton (2001) advocates the use of triangulation by stating “triangulation strengthens a study by combining methods. This can mean using several kinds of methods or data, including using both quantitative and qualitative approaches” (p. 247). However, the idea of combining methods has been challenged by Barbour (1998). She argues while mixing paradigms can be possible but mixing methods within one paradigm, such as qualitative research, is problematic since each method within the qualitative paradigm has its own assumption in “terms of theoretical frameworks we bring to bear on our research” (p. 353). Even though triangulation is used in quantitative paradigm for confirmation and generalization of a research, Barbour (1998) does not disregard the notion of triangulation in qualitative paradigm and she states the need to define triangulation from a qualitative research’s perspective in each paradigm. For example, in using triangulation of several data sources in quantitative research, any exception may lead to a disconfirmation of the hypothesis where exceptions in qualitative research are dealt to modify the theories and are fruitful.

In this view, Healy and Perry (2000) explicate on the judging validity and reliability within the realism paradigm which relies on multiple perceptions about a single reality. They argue the involvement of triangulation of several data sources and their interpretations with those multiple perceptions in the realism paradigm.

Another paradigm in qualitative research is constructivism which views knowledge as socially constructed and may change depending on the circumstances. Crotty (1998) defined constructivism from the social perspectives as "the view that all knowledge, and therefore all meaningful reality as such, is contingent upon human practices, being constructed in and out of interaction between human beings and their world, and developed and transmitted within an essentially social context" (p. 42). In any qualitative
research, the aim is to "engage in research that probes for deeper understanding rather than examining surface features" (Johnson, 1995, p. 4) and constructivism may facilitate toward that aim. The constructivist notion, that reality is changing whether the observer wishes it or not (Hipps, 1993), is an indication of multiple or possibly diverse constructions of reality. Constructivism values multiple realities that people have in their minds. Therefore, to acquire valid and reliable multiple and diverse realities, multiple methods of searching or gathering data are in order. If this calls for the use of triangulation in the constructivism paradigm, then the use of investigators, method and data triangulations to record the construction of reality is appropriate (Johnson, 1997). An open-ended perspective in constructivism adheres with the notion of data triangulation by allowing participants in a research to assist the researcher in the research question as well as with the data collection. Engaging multiple methods, such as, observation, interviews and recordings will lead to more valid, reliable and diverse construction of realities. To improve the analysis and understanding of construction of others, triangulation is a step taken by researchers to involve several investigators or peer researchers’ interpretation of the data at different time or location. In a related way, a qualitative researcher can “use investigator triangulation and consider the ideas and explanations generated by additional researchers studying the research participants” (Johnson, 1997, p. 284).

Triangulation may include multiple methods of data collection and data analysis, but does not suggest a fix method for all the researches. The methods chosen in triangulation to test the validity and reliability of a study depend on the criterion of the research.

### 3.4 Data Collection Methods

“Once the research problem is defined and clearly specified, the research effort logically turns to data collection” (Churchill and Iacobucci 2005:167). In order to answer the research questions the empirical data should be collected and used in the further analysis. There are two options available for the researchers concerning the type of data they can use in their investigations. These options are the use of primary and secondary data. In order to collect primary data about management practices and use researcher can either
observe the phenomenon through direct access to an organization or employ case study strategy. This strategy implies using in-depth interviews and questionnaires. According to the formulation of the research questions, following data is necessary for conducting the present study.

- Data on existing theory of public management and decision making in Norway and Pakistan
- Data on the practice of health system management in both countries

For this kind of research I am going to do, secondary sources for collecting research data are used. “Secondary data are statistics that already exist; they had been gathered for a previous purpose, not your particular study” (Churchill and Iacobucci 2005:167)

In the practical point of view, there are thousands of potential sources of secondary data. However, sources of secondary data can be grouped into two. They are internal sources ad external sources (Churchill & Iacobucci 2005; Parasuraman 1991; Craig & Douglas 2000). As the term simply reveals internal sources are sources within the organization, while external sources are sources outside the organization (Parasuraman, 1991). As well, Churchill & Iacobucci (2005) describe internal sources are the sources that can be found within one’s own organization, whereas external sources are the sources that can be seen outside the organization. Simply this classification can be portrayed in a figure as follows.
In the context of data libraries and archives, 'data' usually means computer-readable data, since data held in this form is more easily made available for additional research and more easily interrogated. Examples include censuses and large surveys carried out by governments, and administrative data. However, in the current context, ‘data’ is taken to include the whole range of information, since for evaluation purposes it is generally advisable to use as much existing information as possible. Information sources could also include reports and studies of the area under consideration, documents related to the life and management of the programme, information on similar programmes, and so on.

The three main sources of secondary information relating to social and economic development programmes are:

- Programme management documents;
- Statistical sources;
Past evaluations and research.

**Purposes of the technique:**

Secondary data is likely to provide a wealth of information for a range of purposes, depending on the circumstances for the evaluation. For example:

*Programme management documents:*
- provide the ‘raw ingredients’ for making evaluative judgements, since they will contain information on planned and actual spending, activities, and outputs;
- can be used to inform evaluation indicators;
- record the details of the beneficiaries. This will be crucial if the evaluators plan to involve the beneficiaries directly in the evaluation through fieldwork to collect information to inform the conclusions.

Usually the programme will have generated information in both synthetic form (i.e. summary reports and review documents), and elementary form (i.e. systematic data stored for each project).

If the terms of reference have been prepared correctly, this document will already contain a list of immediately available information.

The programme management documents are likely to contain information on outputs, that is, what has been obtained in exchange for public spending. This information can be used in a synthetic form, for example from progress reports. Often, project-by-project information on outputs is not readily accessible.

The evaluators will need assistance from the programme managers/officers and operators to gain access to management documents, and this could be time-consuming. Involvement of the relevant people early on in the planning of the evaluation will help to expedite the process. The commissioning authority is responsible for ensuring that the necessary doors are opened, for example by involving in the steering group those who
have most of the required information, or by promising to supply them with a synthesis of the first evaluation conclusions. To facilitate access to information, it is also important for the evaluation team to undertake to maintain the confidentiality of all personal data.

Statistical sources:
- provide information on the context for the programme;
- can be used to assess needs (e.g. the rate of new business creation is far lower than the European average);
- can be used to reveal apparent impacts (e.g. the number of new businesses created has doubled);
- show whether the objectives remain relevant (e.g. the rate of business creation has now caught up with the European average).

Unlike management and monitoring information (which concentrate on operators and direct beneficiaries), the statistical sources encompass all the people or businesses in an area whether or not they have had contact with the programme. As a result, the comparison of a before-after statistic cannot provide an estimated impact. At best, it gives information that can be used within the framework of an impact analysis, to impute observed changes to several causes: the programme and exogenous factors (or confounding factors). Thus, for example, statistics can show an increase in unemployment due to a sharp natural rise in the working population, even though the programme has created many new jobs.

In impact analysis, statistics provide useful indications on the evolution of exogenous factors, by measuring various characteristics of the territory or group concerned. They can be used to interpret or qualify observed gross effects or apparent impacts. They also supply extrapolation coefficients that are often used in evaluation. For example, if a statistical study can be used to establish that the average size of businesses created in the past two years is 4.5 jobs, this coefficient can be used in an estimation of impacts, for measuring support for business creation.
Most sources within the context of the Structural Funds will concern an entire region, a State, or even the European Union.

Statistical data are directly accessible from the organisations that produce and publish them (European, national and regional public statistics institutes, private institutes, etc.). Often these data have already been gathered by programme managers or by research organisations (e.g. regional statistical teams).

Past evaluations and research:

Can play a major role in all stages of evaluation:

- reference to specialised literature could help to suggest a relevant indicator;
- previous studies can identify strengths and weaknesses of different methodologies, or specific tools (e.g. a tested observation grid, an explanatory model of impacts, an extrapolation coefficient, a reference for comparison);
- can be used to make comparisons, for example the rate of return to work from a Job Training scheme in terms of occupational sectors, to see whether there are significant differences, or to better understand the factors of success.

Usually a number of sources are used in tandem, and often can be presented in a way as to suggest conclusions and comparisons that can be made. For example, the comparison of observations from administrative data and statistical sources could be used to assess the differences between participants and the population as a whole. It is may also be possible to estimate impacts on the basis of secondary data and/or the modelling of the implementation of the programme

Circumstances in which it is applied:-
Given the range and usefulness of secondary sources, some form of secondary data is used in practically all evaluation work.

It is important to note that the use of Secondary data must take into account the ethics or code of practice in place for the data. The ethical considerations usually relate to the rights of the providers of the information (ie. the original subjects from which the data were obtained). As a general rule, the use of the information must be acceptable to the provider, and not in breach of the original conditions of collection. Sources of information need to be fully acknowledged.

**Strengths and limitations of the approach:-**

Secondary data is relatively quickly available and can therefore help to provide the first answers to some of the questions asked in a relatively short timescale. Secondary data can be useful in comparing findings from different studies and examining trends.

The estimation of an impact is always difficult, and using as much existing information as possible will produce the most robust estimation.

Moreover, this data can also be relatively inexpensive, because the costs associated with collecting the data from its original source has already been borne. Secondary data cost are usually known, though there may be additional costs involved due to data conversion, or the need for re-coding of data. Some organisations make a charge for the use of secondary data in order to offset the cost of collecting it (eg. some Population Census bureaus).

The main drawback of secondary data is due to the fact that the data were not collected to analyse the question in hand. Every research study is conducted with a specific purpose in mind, and is designed to take account of the study purpose; responsibilities for data collection, completeness of the data and classification systems, timing, sampling criteria and delimitations; known biases; operational definitions; and methods of data collection.
These considerations will limit the extent to which the data provides an appropriate source of information to address alternative research questions and hypothesis.

In the case of statistical sources, the processes involved in the collection and handling of the data also need to be taken into account. Without rigorous document control systems, there is the potential for errors or mistakes in the data to be introduced. Some sources collected at State or regional level may contain errors, or have missing data, which limits its usefulness.

Secondary use of large scale datasets present particular challenges, because it may take some time to identify the most appropriate source, confirm the quality of the data, and to devise the process of obtaining the data and analysing it.

The key challenge with secondary data is to be assured that the data appropriately addresses the research question (otherwise there is the dilemma of altering the hypothesis to fit the data). A compromise may be needed between the results provided by the data and the requirements defined by the evaluation team or decision makers, and there needs to be a clear process by which any issues will be resolved and limitations on the use of the data will be dealt with. In some cases, the limitations that exist in terms of the nature and format of the data may be too extreme to permit a valid secondary analysis.

As I have explained earlier that I chose healthcare system reviews as the method of collecting empirical data. I used following main sources of such data: Internet search for healthcare system articles: healthcare magazines and reference books, official reports of both countries, health journals written in the field of management and specially health care management.
Part 4:- EMPIRICAL PART

4.1 Introduction

This section is devoted to the empirical part of the research. Here I am going to describe the result, which I found by reading different articles and reference books in the shape of secondary data analysis. In this part I will start from describing a historical background of Norwegian economy, healthcare and funding or financing system and then I will do the same thing for Pakistani healthcare system. Healthcare system comprises of nursing, ambulatory services and lot of other things but my target is to describe that how does it functions in limited boundaries. Due to a huge difference in economy and politics between both countries my plan is to compare both healthcare systems in political and economical contexts. Detailed summaries for both sections will be presented separately and this empirical part will be ended with a brief summary.

4.2 NORWAY

4.2.1 Economic context

The Norwegian economy is experiencing a favourable period of robust growth, low unemployment and moderate underlying inflation (www.oecd.no). This largely reflects the effects of globalisation, of which Norway has been a prime beneficiary, supplying energy and other commodities at high prices and increasingly importing products from low cost countries. Sizeable labour migration inflows, together with sustained productivity growth, have kept cost inflation at a moderate pace. A tradition of foreign trade openness, domestic competition, a good policy framework and sound macroeconomic management have meant that Norway was well prepared to take advantage of these international trends. With underlying inflation well below its target, Norges Bank has raised the interest rate in small, not too frequent steps. There are signs of tensions now emerging, notably in the labour market, which could lead to higher inflation expectations if interest rates remain below the neutral level for too long. The central bank has decided to edge up the pace of normalisation of interest rates; an even faster pace may become necessary if wage growth appears to accelerate more than
The fiscal rule has helped to limit the injection of oil revenue within the absorptive capacity of the economy. The budget deficit was allowed to exceed the amount permitted by the rule in the past five years, in part to support the economy. But with the recovery well under way, the budget for 2007 reaffirms the political commitment to the rule, thus bolstering its credibility. An undershooting of the rule should now be envisaged, so as to compensate for past deviations and help cool the economy. Even though the statutory retirement age is high by international norms, the pension system is not fully on a sustainable footing. Perhaps because oil revenues have allowed distortions in the work leisure choice, the effective age of retirement has trended down, suggesting that Norway may not in the end entirely escape the “resource curse”. The growing use of social benefit schemes for the most part sickness and disability benefits and early retirement has depressed older worker participation, lowered working time and brought labour utilisation towards the international average.

Future economic prosperity will also depend on the pace of technology-driven innovation, which at present remains low by cross country standard indicators. Although measurement is incomplete, R&D intensity appears weak, patenting is moderate and business surveys report a limited interest for innovative activity. Yet, the level of productivity is high in the mainland economy and its trend growth enviable, showing a capacity to absorb innovation spill over and undertake organisational and managerial changes. Improving the framework conditions that stimulate innovation, such as strong product market competition, would go a long way towards preparing Norway for its post oil future, when revenues from natural resources will make a reduced contribution to fast rising living standards.

### 4.2.2 Political Context

As we know that Norway has been a constitutional state since 1814 following approval of the first democratic constitution and the establishment of the Norwegian Parliament. Almost a century later, in 1905, the country dissolved the union with Sweden and became a sovereign state. Norway is governed by a three-tier parliamentary system, with each tier
governed by a popularly elected body: the national parliament (Stortinget), the county councils and the municipal councils. The parliament has 169 members, and is elected by proportional representation for a four-year period. The King is formally the highest executive authority, although in practice the cabinet – comprising the prime minister (chosen by the King) and his/her cabinet members (selected by the prime minister) – has the executive power.
<table>
<thead>
<tr>
<th>Indicators</th>
<th>1990</th>
<th>1995</th>
<th>1997</th>
<th>1999</th>
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<th>2001</th>
<th>2002</th>
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<td>GDP in billion NKr</td>
<td>727</td>
<td>937</td>
<td>1111</td>
<td>1233</td>
<td>1469</td>
<td>1527</td>
<td>1521</td>
<td>1562</td>
<td>1717*</td>
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<td>GDP growth rate (%)</td>
<td>2.1</td>
<td>4.4</td>
<td>5.2</td>
<td>2.1</td>
<td>2.8</td>
<td>1.9</td>
<td>1.3</td>
<td>2.9</td>
<td>3.1*</td>
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<td>GDP per capita</td>
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<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>in 1000 NKr</td>
<td>171.4</td>
<td>215.1</td>
<td>252.3</td>
<td>276.3</td>
<td>327.1</td>
<td>338.1</td>
<td>334.8</td>
<td>345.4</td>
<td>373.9*</td>
</tr>
<tr>
<td>GDP per capita US$ PPP</td>
<td>17 658</td>
<td>23 524</td>
<td>27 982</td>
<td>29 887</td>
<td>36 242</td>
<td>36 474</td>
<td>38 050</td>
<td>–</td>
<td>38 765*</td>
</tr>
<tr>
<td>GDP PPP Total billions US$</td>
<td>74.9</td>
<td>102.5</td>
<td>128.3</td>
<td>133.4</td>
<td>162.8</td>
<td>164.6</td>
<td>–</td>
<td>–</td>
<td>178.0*</td>
</tr>
<tr>
<td>GDP in billion Nkr</td>
<td>705</td>
<td>625</td>
<td>1 110</td>
<td>1 218</td>
<td>1 455</td>
<td>1 515</td>
<td>1 523</td>
<td>1 590</td>
<td>1 724*</td>
</tr>
<tr>
<td>Value added agriculture and fishery (% of GDP)</td>
<td>3.4</td>
<td>3.0</td>
<td>2.4</td>
<td>2.4</td>
<td>2.1</td>
<td>2.0</td>
<td>1.8</td>
<td>1.5</td>
<td>1.5*</td>
</tr>
<tr>
<td>Value added industry (% of GDP)</td>
<td>33.9</td>
<td>34.1</td>
<td>37.1</td>
<td>34.6</td>
<td>41.8</td>
<td>39.5</td>
<td>37.2</td>
<td>37.4*</td>
<td>39.2*</td>
</tr>
<tr>
<td>Value added services (% of GDP)</td>
<td>62.7</td>
<td>62.9</td>
<td>60.5</td>
<td>63.1</td>
<td>56.1</td>
<td>58.5</td>
<td>61.0</td>
<td>61.1*</td>
<td>59.2*</td>
</tr>
<tr>
<td>Annual average rate of inflation in %</td>
<td>4.1</td>
<td>2.4</td>
<td>2.6</td>
<td>2.3</td>
<td>3.1</td>
<td>3.0</td>
<td>1.3</td>
<td>2.5</td>
<td>0.4*</td>
</tr>
<tr>
<td>Labour force 1000</td>
<td>2 142</td>
<td>–</td>
<td>2 287</td>
<td>2 383</td>
<td>2 350</td>
<td>2 361</td>
<td>2 378</td>
<td>2 375</td>
<td>2 382*</td>
</tr>
<tr>
<td>Unemployment, % total population</td>
<td>5.3</td>
<td>5.0</td>
<td>4.1</td>
<td>3.2</td>
<td>3.4</td>
<td>3.5</td>
<td>3.9</td>
<td>4.5</td>
<td>4.5*</td>
</tr>
<tr>
<td>Employment rate, % of active population</td>
<td>65.6</td>
<td>–</td>
<td>69.6</td>
<td>71.0</td>
<td>70.9</td>
<td>70.9</td>
<td>70.7</td>
<td>69.6*</td>
<td>69.3*</td>
</tr>
<tr>
<td>Real interest rate</td>
<td>10.6</td>
<td>5.2</td>
<td>3.4</td>
<td>5.3</td>
<td>5.8</td>
<td>5.7</td>
<td>7.4</td>
<td>2.2</td>
<td>–</td>
</tr>
<tr>
<td>Official exchange rate NKr/US$</td>
<td>6 2544</td>
<td>6 3369</td>
<td>7 0718</td>
<td>7 8047</td>
<td>8 8058</td>
<td>8 9879</td>
<td>7 9702</td>
<td>7 0824</td>
<td>6.74*</td>
</tr>
<tr>
<td>Short-term debt outstanding current US$</td>
<td>4 894</td>
<td>6 376</td>
<td>4 828</td>
<td>4 244</td>
<td>3 419</td>
<td>4 020</td>
<td>7 185</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Overall budget balance, including grants (% GDP)</td>
<td>2.2</td>
<td>3.4</td>
<td>7.8</td>
<td>6.1</td>
<td>15.0</td>
<td>13.7</td>
<td>9.2</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Gini coefficient</td>
<td>0.228</td>
<td>n/a</td>
<td>n/a</td>
<td>0.254</td>
<td>0.275</td>
<td>0.243</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

There are 19 counties in Norway and 431 municipalities. Oslo is capital and largest city of Norway. Population density varies widely throughout Norway, ranging from 218 to 500,000 inhabitants per municipality. There are some 20 municipalities with fewer than 1,000 inhabitants, and one-third have between 2,000 and 5,000 inhabitants. Municipalities are responsible to provide basic necessities of life to its inhabitants e.g. health promotion, primary healthcare, care of elderly, care of people with disabilities including mental disabilities, kindergarten and primary school education, local culture, planning and infrastructure etc.

Politics of Norway takes place in a framework of a parliamentary representative democratic monarchy, whereby the prime minister is the head of government, and of a pluriform multi-party system. Executive power is exercised by the King and his Council. Legislative power is vested in both the government and the Storting. The Judiciary is independent of the executive and the legislature.

Norway has close cooperation and relationship with other Nordic countries like Denmark, Sweden, Finland and Iceland. There is a social security convention among all these Nordic countries. A referendum is also held in Norway whether or not country should join European Union. Norway is a member of the United Nations, WTO, NATO, Council of Europe and Council of British Isles. (www.odin.no)

4.2.3 Healthcare system
Norway is a monarchy with a parliamentary form of government. There are three independent government levels – the national government, the county councils and the municipalities. The Norwegian population reached 4.6 million in 2005. The life expectancy in Norway is among the highest in the world (WHO report 2006). Diseases of the circulatory system are the primary cause of mortality, with cancer being the second largest cause of death. The Norwegian health care system is organized on three levels, i.e. national, regional and local levels. Overall responsibility for the health care sector rests at the national level, with the Ministry of Health and Care Services as shown in following diagram. The regional level is represented by five regional health authorities, which have responsibility for specialist health care; and the local level represented by 434 municipalities has responsibility for primary health care (including nursing care). The
The parliament’s most important functions are: to pass new laws and amend or repeal the existing ones, to adopt the fiscal budget, i.e. to fix the annual revenues (taxes, charges, etc.) and the expenditures of the state, to authorize plans and guidelines for the activities of the state through the discussion of political issues of more general character, to take a stand on plans for reform, to approve major projects and so forth.
Norwegian Health System Table:-

Source :- Health in Transition Vol 8. 2006
Above table shows how health policies travel from Government to final user.
In 2003, by following OECD economic reports, Norwegian health care expenditure was 10.3% of GDP. Health care expenditure expressed in US$ PPP per capita was 3572 in 2003, which was much higher than the EU average of 2326 (i.e., among those countries that were members of the EU before May 2004). The Norwegian health care system is primarily funded through taxes. The municipalities have the right to levy proportional income taxes on their respective populations, while the regional health authorities must rely on transfers from the central government. Block grants provide the primary source of funding, but the financing of health care services is also supplemented by state grants, earmarked means, and some user charges. The social insurance system, managed by the National Insurance Scheme (NIS), provides financial security in the case of sickness and disability. There is no exact definition of the “coverage package” in the Norwegian health care system. The aim of primary care is to improve the general health of the population and to treat diseases and deal with health problems that do not require hospitalization. Each municipality has to decide how best to serve its population with primary care.
Primary care is mainly publicly provided. Much of the spending in the municipalities is directed towards nursing, somatic/health care and mental health care. Regular general practitioners (GPs) are in practice self-employed, but financed by the NIS, the municipalities, and by the patient’s out-of-pocket payments. The regional level provides the basis for specialist health care. The regional health authorities plan the development and organization of specialist health care according to the needs of the regional population and services are provided by the regional health authorities’ health enterprises. Their planning responsibility also includes health services supplied by other providers, such as private agencies. Tertiary-level specialized health care is delivered in accordance with regulations set out by central government. With regard to the training of physicians, the number of medical students is limited, and every year approximately 500 students join medical training programmes in Norway (www.vg.no). Further education and specialization of physicians is limited. Medical education is financed by the central government. The training of other health care personnel is normally regulated in the same way. Resource allocation does not vary among the regional health authorities and the municipalities. The regional health authorities are financed by basic grants, earmarked
means and activity-based funding (based on the DRG system and other fee-for-service for somatic care from the state). The municipalities’ health care services and nursing care are financed by basic grants, earmarked means, fee-for-service, and local taxes. The authorities have the freedom to set up their own financing arrangements (except for user charges, which are set by the central government), but in practice the same financing arrangements exist throughout the country. The majority of health care providers are publicly owned and, therefore, health care personnel are mainly salaried employees, with the exception of GPs.

The main purpose of the Municipalities Health Services Act (1982) was to improve the coordination of the health and social services at local level, to strengthen those services in relation to institutional care and preventive care, and to pave the way for better allocation of health care personnel. The act provides the municipalities with a tool to deliver comprehensive health services in a coordinated way (www.odin.no). In 1988 the Municipalities Health Services Act was further expanded and county nursing homes were transferred to the municipalities. The Regular General Practitioners scheme implemented in 2001 is based on a registration system whereby patients can sign onto the list of the GP of their choice. Basic principles of the scheme include patients’ freedom to choose whether or not to participate in the scheme, the right to choose another physician as their GP (twice a year) and the right to a second opinion from another general practitioner. The aim of the reform was to improve the quality of the local medical services, to improve continuity of care and ensure a more personal patient–physician relationship. This reform also provided a new model for employing GPs, based on contracted physicians in private practice where capitation, fee-for-service and out-of-pocket payments form the income of GPs.

4.2.4 Norwegian Health Legislations:

Following are some main points taken from Norwegian ministry of health pages showing Act of 30 March 1984 No. 15 relating to the public supervision of health services:-
Supervision authorities: - The Norwegian Board of Health has general supervision of health services in the country and led by a director general. The director general is appointed by the King for a fixed term.

The tasks of the Norwegian Board of Health at central and county level: - The Norwegian Board of Health in the county shall carry out all supervision of health services and all health care personnel in the county and in connection with supervision give advice, guidance and information that contribute to the needs of the population for health services being met.

Duty to establish and supervise an internal control system: - Everyone who provides a health service shall establish an internal control system for the activity and ensure that the activity and the services are planned, provided and maintained in accordance with the requirements laid down in or pursuant to laws and regulations.

Authority to issue instructions: - If an activity in the health services is run in a way that may have adverse effects for patients or other people or in any other way is unfavourable or unacceptable, the Norwegian Board of Health may issue instructions to rectify the conditions.

In 1997, Norway introduced activity-based funding (Innsatsstyrt finansiering, ISF) based on the DRG system for somatic inpatient activity (Pettersen & Bjørnenak 2003, Helse I hver krone). This measure was further expanded in 1999 to include day surgery. Introduction of activity-based funding has been followed by a substantial increase in the number of cases treated and a reduction in waiting times. The reimbursement of a DRG point is consistent throughout the country. But the regional health authorities are allowed to change these reimbursement rates to their health enterprises. The hospital reform of 2002 aimed to increase efficiency and consisted of three main strategies: the ownership of the hospitals was transferred from the counties to the central government sector; hospitals were organized as enterprises; and the day-to-day running of the enterprises became the responsibility of the general manager and the executive board. Preliminary results, following these reforms, point to some positive outcomes, such as decreased
waiting lists and improved management skills. In 2001 a new law was passed allowing
greater freedom in the establishment of pharmacies. This led to a vertical integration of
pharmacy chains owned by wholesale companies and allowed pharmacists to substitute
the physicians’ prescriptions with another (e.g. generic) brand. Patients’ rights have been
strengthened with the passing of the Patients’ Rights Act in 1999. Its main purpose was to
ensure equality of access to good quality health care.

The Norwegian health care sector has undergone several important reforms during recent
decades. Generally, national reforms that have had an impact on the health care system
have focused on three broad areas: the responsibility for providing health care services,
priorities and patients’ rights and cost containment. Future challenges include further cost
containment, integration of care and health inequalities.

The health status of the Norwegian population is one of the best in the world
(www.who.org). The key strengths of the Norwegian health care system include
provision of health care services for all based on need (regardless of personal income),
local and regional accountability, public commitment and political interest in improving
the health care system.

The Norwegian health care system is tax-based and is founded on the principles of
universal access to health care services, political decentralization to local governments
and free choice of provider. During the last few decades, there has been significant
progress regarding policy instruments to support such commitments, and many
achievements have been made. However, there are areas for improvement needing
attention, coupled with an aging population and increased demands on the health care
system.

Public health care delivery in Norway is almost a fully integrated system. Public hospital
care is the responsibility of the central government but governance and funding rests with
regional health authorities. Every year the national parliament sets a limit on public
expenditure for hospital care. Most hospitals are owned by public authorities and are
organized as public institutions. Responsibility for providing services is decentralized,
but there are large elements of centralized planning, as broad guidelines for priority
setting are found in official documents, and regional health plans have to be authorized by the Ministry.

The health care system guarantees universal access to a benefit package consisting of most preventive and curative services. Adult dental care and spectacles are generally excluded. Pharmaceuticals are divided into three categories. Non-prescription medicines are fully paid for by the individual, and prescriptions are either covered by the NIS (“blue prescription”) or paid for in full by the patient (“white prescriptions”). There is a co-payment on blue prescriptions which is limited to 36% of the prescription fee.

4.2.5 Norwegian Health Expenditures:-

Norway is ranked fourth among the OECD countries in terms of per capita total health expenditure with NOK 40 000 in 2006. 84 per cent of the health spending is financed by the government. The total health expenditure nearly doubled from 1997 to 2006.

The per capita total health expenditure is relatively high in Norway compared to other OECD countries. The spending is more than 50 per cent higher than the OECD average. Only the US, Luxemburg and Switzerland have higher per capita spending.
Total health expenditure per capita. 2004. Purchasing power parities (PPP). USD

Source: OECD.
Since 1997, Norwegian health expenditure has increased, and despite some annual fluctuations, the overall spending has almost doubled. The health expenditure to GDP ratio varied between 8.4 and 10 per cent, with the highest share in 2003. This decreased to 8.7 in 2006. The Norwegian share of GDP is higher than the OECD average over the period 1997-2006. In 2004, the OECD average was just below 9 per cent. In comparison, the GDP rate for the US, Switzerland and Germany was 15.3, 11.6 and 10.6 respectively.

Between 1997 and 2006, health spending in real terms increased by almost 4 per cent on average. Gross capital formation showed a higher growth rate than the current health expenditure, particularly in the first part of the period. This is due to a political action plan and programmes for long-term health care (1998-2001). The annual growth rate for
spending on the various health functions differs. Expenditure on day care increased by 10 per cent a year, whereas in-patient care had a far lower growth rate. Following table shows a good picture of Norwegian health expenditures.

**Health expenditure, key figures. 1997-2006:-**

<table>
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<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Total expenditure on health. (US in millions)</td>
<td>15482</td>
<td>17374</td>
<td>19056</td>
<td>20541</td>
<td>22276</td>
<td>24708</td>
<td>26279</td>
<td>27703</td>
<td>28986</td>
<td>30693</td>
</tr>
<tr>
<td>HC R.1 Capital formation of health care provider institutions. (USD in mill)</td>
<td>928</td>
<td>1232</td>
<td>1473</td>
<td>1399</td>
<td>1610</td>
<td>1568</td>
<td>1690</td>
<td>1803</td>
<td>1878</td>
<td>1940</td>
</tr>
<tr>
<td>Total current expenditure on health. (USD in mill)</td>
<td>14548</td>
<td>16138</td>
<td>17578</td>
<td>19137</td>
<td>20661</td>
<td>23133</td>
<td>24584</td>
<td>25900</td>
<td>27108</td>
<td>28753</td>
</tr>
<tr>
<td>Total expenditure on health in current prices in per cent of GDP</td>
<td>8.4</td>
<td>9.3</td>
<td>9.3</td>
<td>8.4</td>
<td>8.8</td>
<td>9.8</td>
<td>10.0</td>
<td>9.7</td>
<td>9.1</td>
<td>8.7</td>
</tr>
<tr>
<td>Total expenditure on health in current prices in per cent of GDP Mainland Norway</td>
<td>10.2</td>
<td>10.6</td>
<td>11.1</td>
<td>11.2</td>
<td>11.5</td>
<td>12.3</td>
<td>12.5</td>
<td>12.4</td>
<td>12.2</td>
<td>11.9</td>
</tr>
<tr>
<td>Total expenditure on health in current prices per capital</td>
<td>3512</td>
<td>3918</td>
<td>4268</td>
<td>4571</td>
<td>4932</td>
<td>5441</td>
<td>5753</td>
<td>6029</td>
<td>6266</td>
<td>6581</td>
</tr>
</tbody>
</table>
Trends in health expenditure as a share (%) of GDP in Norway and selected countries, 1998–2002

Source: European Health for All database, January 2006.

4.2.6 Public spending?

The public share of total health expenditure in Norway is high compared to other OECD countries (OECD report 2006). 84 per cent of expenditure on health is financed by the government. The public spending on health accounts for an increasing share of total public spending. This share has risen from below 16 per cent in 1997 to slightly above 19 per cent in 2006. In the OECD area, the proportion of public spending on health shows large variations. The US ranks highest in terms of per capita spending, but has the lowest share of public spending, about 45 per cent. On the other hand, Luxemburg ranks second in terms of per capita spending, but the public spending accounts for 90 per cent. Norway has about the same public share as Iceland and Sweden.
The final figures for 2004 show that general government accounts for 47 per cent of the public funding, local government accounts for 33 per cent and the social security fund accounts for 20 per cent.

In-patient and day cases of curative care make up the highest share of central government expenditure. Day cases made up an increasing share during the period 1997-2006, from 2.3 to 3.5, whereas in-patient curative care decreased from 26.8 to 23.4.

Source: - Statistics Norway

Health expenditures, by function in 1997, 2001 and 2004. Per cent:

<table>
<thead>
<tr>
<th>Service</th>
<th>1997</th>
<th>2001</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-patient curative care</td>
<td>26.8</td>
<td>25.2</td>
<td>23.4</td>
</tr>
<tr>
<td>Day cases of curative care</td>
<td>2.3</td>
<td>3.2</td>
<td>3.5</td>
</tr>
<tr>
<td>Out-patient curative care</td>
<td>20.1</td>
<td>18.0</td>
<td>18.5</td>
</tr>
<tr>
<td>Services of rehabilitative care</td>
<td>1.5</td>
<td>1.4</td>
<td>1.4</td>
</tr>
<tr>
<td>In-patient long-term nursing care</td>
<td>14.7</td>
<td>15.6</td>
<td>15.7</td>
</tr>
</tbody>
</table>
4.2.7 Activity Based Funding and DRG System in Norwegian Hospitals:

An activity-based financing system was introduced in somatic hospitals 1st July 1997. This scheme combines financing models to safeguard the positive aspects of the current general financing system, while, at the same time, expanding activity-based financing. The scheme is based on the DRG system (Diagnosis Related Groups). The financing involves the state paying, according to an activity-based ratio, for the treatment of a given number of patients, divided into different patient groups. Combination of activity-based funding and block grants with the proportion of activity-based funding defined annually at the national level. The activity-based reimbursement share in 1999 was 50 percent of the cost of treatment, i.e. half the total costs incurred by the counties for operating the hospitals.

Objectives underlying the introduction of activity-based funding in Norwegian hospital sector were to affect the design, implementation and adjustment of the system. Main purpose was to stimulate productivity with the aim of reducing waiting times and waiting lists.

Activity-based funding has typically been introduced over an extended period of time in some European countries. In several countries DRGs were used as monitoring or management tools prior to their use as a funding mechanism. Australia (Victoria), Italy, Norway and Sweden are
among those countries with the most extensive experience of activity-based funding. Germany, France and the Netherlands, the three countries that aspire to fund total hospital expenditure (mostly with the exception of capital costs) on the basis of activity, are relatively new to the field and have opted for an extended period of implementation, in combination with existing funding mechanisms, to allow close monitoring of any impact on hospital performance. This has given them the opportunity to identify and respond to shortcomings where necessary.

4.2.7.1 How are hospitals and specialist clinics reimbursed?
Hospitals are financed based on activity using a combination of diagnosis-related groups (DRGs) and block grants. Hospital outpatient services are largely reimbursed on a fee for-service basis.

4.2.7.2 When was DRGs activity-based funding introduced?
Activity-based funding was introduced in 1997 as a means of allocating funds from the central government first to counties and later to regional health authorities (then in charge of organising and financing hospital care). However, DRGs began to be used from the mid-1980s already to monitor hospital activity, followed by pilot projects involving four hospitals in 1994. As of 2000, all 19 counties in Norway have introduced activity-based funding of public and (contracted) private hospitals.

4.2.7.3 What was the objective(s) for introducing activity-based funding?
DRG funding was introduced primarily to increase the efficiency of hospital production and to reduce waiting lists. There was also an expectation by the central government that it would prevent county councils from shifting funds intended for hospital care to other areas of public service. Activity-based funding is used for two purposes: (1) to allocate funds for hospital care from the central government to regional health authorities (previously to county councils), and (2) by regional health authorities to reimburse hospitals.

4.2.7.4 How were hospitals and specialist clinics funded prior to the introduction of DRGs?
Prior to the introduction of DRGs county councils received a global budget from the central government (county councils acted as both providers and payers).

4.2.7.5 What are DRGs used for (other than reimbursement)?
In addition to funding, DRGs are used to monitor hospital activity. However, the system has been criticised by clinicians and hospital administrators for lack of transparency and there are concerns that the information regarding actual hospital costs are inadequate, reflecting both lack of political interest and lack of research activity in this area.

4.2.7.6 Is the DRG system mandatory throughout the health system or can different payers decide whether to use it?
DRGs have been introduced as a mandatory mechanism for allocating funds from the central government to regional health authorities. The share of activity-based funding in hospital reimbursement is determined by the parliament each year. Regional health authorities are essentially free to develop their own funding system, but in practice all fund hospitals on the basis of DRGs. Hospitals are required to document data necessary for the management and further development of the DRG system.

4.2.7.7 Is the same payment system used in the public and private sectors of provision?
Private hospitals that are approved by the Ministry of Health and contracted by regional health authorities receive public funding and consequently their services are reimbursed based on DRGs/block grants. Given the limited scope of private activity in the Norwegian hospital sector, private hospitals may de facto be considered part of the public (financing) system.

4.2.7.8 Are DRGs/activity-based funding systems applied equally across regions? If not how do regions differ?
Regional health authorities use activity-based funding to reimburse hospitals across Norway and are required to apply the same proportionate mix of DRG and block grant funding (determined on an annual basis by the parliament), although they can, in principle, devise their own system of funding hospitals as noted earlier.
4.2.7.9 What proportion of hospital activity is paid for through DRGs and how is the remainder paid for?

Hospitals are funded through a combination of activity-based funding and block grants. The actual mix of activity-based funding and budgets is determined by the parliament on an annual basis along with the overall budget for health care. The share of DRG funding has varied over the years, ranging between 35% in 1997 and 60% in 2005; in 2006, the DRG share was 40%.

4.2.8 Basic information on the DRG system:-

4.2.8.1 Which DRG system is used?

The Norwegian DRG system uses the Scandinavian grouper variant NordDRG in combination with the ICD-10 coding classification. When introducing DRGs, Norway used the HCFA 3 grouper developed by Yale University, combined with Norwegian weights. In 1999, this system was replaced by NordDRGs.

4.2.8.2 How many categories exist? How many sub-categories?

In 2006, the DRG system comprised 533 diagnosis-related groups, including 122 pairs of split-diagnoses. Splits are made for some DRGs to differentiate between severe and less severe cases (i.e. mainly related to co-morbidity). Splits do not differentiate between different lengths of stay.

4.2.8.3 To what services/sectors are DRGs applied?

DRGs apply to all inpatient acute hospital services; mental health care is however exempted from the system. DRGs are also applied to some outpatient services.

4.2.8.4 What services/sectors/patient groups/treatments/interventions are excluded?

Regional health authorities receive a block grant from the central government to fund mental health care in order to minimise a potential negative impact (i.e. the under provision of related services) and to support the implementation of a 10-year government
plan for mental health. Most outpatient services are funded on a fee-for-service basis. Some outpatient services (e.g. outpatient chemotherapy) have been incorporated into the DRG funding system in order to increase the incentive to shift services from inpatient to outpatient care. It is expected that by 2008/09 DRG funding will have been extended to include all outpatient services and mental health care.

4.2.8.5 Is there a national price/tariff?
DRG prices (set as a base rate) are nationally uniform.

4.2.8.6 Who sets the price/tariff? How often are prices/tariffs reviewed and on what basis?
Prices are set by the Directorate for Hospitals at the Ministry of Health and reviewed annually. Prices are also coordinated with Sweden and Finland. Information about actual costs are assessed based on data provided by 20 hospitals. The sample is considered to under-represent high-technology hospitals which are evaluated in a separate analysis. However cost evaluations are irregular and costing data have frequently been criticised as being of poor quality.

4.2.8.7 Is the basic average cost DRG system adjusted in any way e.g. using weights or other adjustments? If so, how and for what? Are there other methods of refining the system in use?
There are generally no adjustments within the DRG system. This is however compensated for by the high proportion of additional funding through global budgets. Global budgets comprise four components:
- a needs component which allocates funding based on the health and socioeconomic profile of a hospital’s catchments area;
- a cost component per DRG equivalent to compensate for research, training and high-cost outliers;
- a mobility component which adjusts the budgets based on the number of patients who seek care outside their own hospital catchments area (as there is free choice of hospital across the country). This means that the needs component is reduced/increased if fewer/more patients are treated by the hospital in their area of residence; and
• an activity-based component calculated on the basis of historical data (usually covering the preceding two years). This component is aimed at ensuring stability of funding from a long-term perspective.

4.2.8.8 How is the system monitored e.g. for its impact on provision and financial performance of individual hospital? And by whom?

The DRG funding mechanism is primarily monitored by SINTEF, the Foundation for Scientific and Industrial Research at the Norwegian Institute of Technology. The government has mandated the institute to set up a Patient Classification and Financing (PaFi) unit. PaFi is responsible for the development and monitoring of the DRG system, the cost calculation of patient groups used for pricing and analyses and calculation of the total amount of DRG funding allocated to each region. SINTEF also operates the Norwegian Patient Register which provides the patient data necessary for DRG calculations. This register will be transferred to the Directorate of Health and Social Affairs by the end of 2006.

The system for monitoring the use and effects of DRG funding has been criticised for being limited in its ability to reflect the dynamics of DRGs in Norway. It has been suggested that the system’s regulator (i.e. the government and its regional branches) has shown little interest in understanding hospitals’ financial behaviour which is necessary to control and contain costs. In contrast, the government’s main interest appears to have focused, mainly, on increasing activity and volume with a view to reducing waiting lists (the most politically sensitive issue). For this reason there may be competing objectives associated with the use of DRGs.

4.2.9 Evidence and experience:-

4.2.9.1 What effects have been observed following the introduction of DRGs? Has there been any research?

The main effect of activity-based funding has been an increase in hospital activity and a reduction in waiting times. A key challenge arising from the use of activity-based funding is the over-provision of services. There have been a number of incidents involving
hospitals that provided a high number of services that were however insufficiently justiﬁed on medical grounds (e.g. surgery for sleep apnoea, in this case provided by a contracted private hospital). In the absence of ﬁxed budget ceilings or volume agreements there remains an incentive for hospitals to over-supply those services that are ﬁnancially most rewarding.

4.2.9.2 How does the DRG system affect activity rates and/or efﬁciency? What is the evidence?
As noted above the introduction of activity-based funding was followed by a substantial increase in the number of cases treated and a reduction in waiting times. Increased activity has also been reﬂected by a rise in the number of DRG points produced in a year. An analysis of efﬁciency scores found that hospital activity was higher after the introduction of activity-based funding (at 3.2% between 1997 and 2000) when compared with the period before (at 2.0% between 1992 and 1996). However, the study also showed that despite the increase in activity, cost-efﬁciency has decreased. This decrease was assumed to be associated with the government’s ‘soft budget constraint’ approach, as hospital deﬁcits were eventually absorbed by the government.

4.2.9.3 How does the DRG system affect the quality of care? What is the evidence?
There is no documented evidence of any impact on quality.

4.2.9.4 What impact, if any, does the DRG system have on equity of access to services?
The impact on equity has not been studied.

4.2.9.5 How did the introduction of DRGs affect the ﬁnancial sustainability of providers?
What sorts of problems were encountered?
It has been reported that since 2002 hospitals have accumulated an overall deﬁcit of NOK 7.1 billion (approximately £575 million) (OECD report 2006). However, this deﬁcit is at
least partly concealed in hospitals’ balance sheets due to new accounting rules. Some hospitals have covered the deficit by taking out loans or reallocating funds from their capital budgets. In some cases the central government has awarded additional grants to regional health authorities or individual hospitals, an approach that has been criticised as being financially unsustainable. While currently low on the political agenda, the issue of hospital deficits is likely to become a key agenda item in due course.

4.2.10 Key challenges of the DRG system?

4.2.10.1 How is the system likely to develop in the medium/long-term? Are there plans to extend the system to other health care sectors? Is it likely to be abolished or altered in a major way?

As noted above, one of the key challenges is the lack of transparency of the dynamics and effects of DRG funding, its interplay with the global budget component of funding and the actual behaviour of hospital providers. A further critique relates to the classification used to group DRGs which, in the Norwegian context, is considered not sufficiently meaningful in a clinical sense. Consequently, activity-based funding is not supported by hospital clinicians. From their perspective it would be preferable to have a system in place to be used for additional purposes, including quality control and clinical research.

In financial terms the most important problem is the relative lack of effective mechanisms to control and monitor oversupply and over-stimulation of hospital production in certain ‘lucrative’ areas of care and the corresponding under-funding of other areas. Activity based funding is heavily criticised on these grounds and it has been suggested that the DRG funding component may be abolished as a result. It is possible to speculate that hospital funding will return to global budgets if regulators continue to fail to adequately monitor and adjust the DRG system.
4.3 Pakistan

4.3.1 Economy:-

The World Bank, International Monetary Fund, Asian Development Bank and other international financial institutions have repeatedly expressed their confidence in the resilience of Pakistan's economy (www.dawn.com). However, many Pakistanis still have negative perception about the economic fundamentals and credible performance of the economy, despite many odds. Agriculture is the mainstay of Pakistan's economy, employing almost 50% of the population. Wheat, rice, cotton, sugarcane, and tobacco are the chief crops, and cattle and sheep are raised. Most of Pakistan's agricultural output comes from the Indus basin. The country is now self-sufficient in food, as vast irrigation schemes have extended farming into arid areas, and fertilizers and new varieties of crops have increased yields (http://www.pakistan.gov.pk).

Pakistan's industrial base is able to supply many of the country's needs in consumer goods, although production has slowed in recent years. The country's natural resources provide materials for such industries as textile production (the biggest earner of foreign exchange), oil refining, metal processing, and cement and fertilizer production. Remittances from Pakistanis working abroad constitute the second largest source of foreign exchange. Since the mid-1950s electric power output has greatly increased, mainly because of the development of hydroelectric power potential and the use of thermal power plants. Pakistan's chief imports are petroleum, machinery, transport equipment, chemicals, and edible fats and oils. The chief trading partners are the European Union nations, the United States, Japan, and China. In the late 1990s, following years of lax fiscal policies, Pakistan appeared on the verge of bankruptcy, with a foreign debt of over $30 billion. (World bank report 2006)

Pakistan’s economy has traditionally been heavily dependent on external sources. The phase of high growth in the 1960s came to an end with the break up of Pakistan in the early 1970s. And the economy registered falling rates of growth. In the 1990s, the country’s GDP growth rate slid down from 6 percent to 3 percent. The shortfall was
mainly due to agriculture where production declined by 2.5 percent. The fall in investments did not help. The government’s debt started accelerating to reach a level above 100 percent of GDP. And the September 11 damage on account of the Afghan war is estimated to be upwards of $2 billion. Debt rescheduling and promises of grants and open markets from western countries have yet to register their presence. On a positive note, the rupee strengthened from Rs. 64 per US dollar in October 2001 to Rs. 60 per US dollar in January 2002. This has possible due to a regulation of the banking sector and remittances, and crackdown on hawala transactions.

According to the State Bank of Pakistan (SBP, the central bank), the merchandise trade deficit in the first eleven months of fiscal year 2001/02 (July-June) narrowed by 23.1% to US$1,195m. The fall was attributed to lower import volumes and oil prices.

From 2002/03, the surcharge on corporate incomes has been abolished and listed corporations pay 35% tax on profits. Banking corporations pay 50% tax in 2002/03. The number of personal income tax bands have been reduced from seven to five, with a minimum of 7.5% and maximum of 35%. Preferential rates apply in special industrial zones. Non-residents are exempt from tax on income earned from government securities and capital listed on the stock exchanges. Simplified rates of tax, from 0.5% to 1%, apply to income from the export of goods.

Pakistan’s economy has been hampered by the following factors:

1. Lack of an industrial Base: Over the decades, Pakistan developed a modest industrial base in steel, textiles, sugar, cement, leather goods, chemicals and plastics. Agriculture’s contribution to the overall output in the country has come down from 39 percent in 1969-70 to 25 percent in 2000-2001. At the same time, the share of the services sector increased from 38.4 percent to 50.3 percent during this period. The share of manufacturing has consistently remained around 16-17 percent during the past three decades. Large-scale manufacturing sector that grew at an average rate of 8.2 percent in the 1980s slowed down to an average rate of 4.4 percent in the first half of the 1990s and
2. **Low Investments and Savings:** In the second half of the 1990s, total and fixed investment rates went down to 17 percent and 15.2 percent of GDP respectively, from 19.5 percent and 18 percent in the first half of the decade. Also, foreign investment has been consistently coming down since 1995-96. From $1400 million in 1995-96, it declined to $403 million in 1998-99. In 1999-2000, however, investments rose ever so slightly to $543 million.

3. **Reliance on External Borrowings and Remittances:** In the 1990s, remittances declined and export growth slowed down. As a result, the current account balance of payments deficit increased, touching 7 percent of GDP in 1995-96. Also, external debt quadrupled from $10 billion in 1980 to $40 billion in 2001. Pakistan has received foreign aid in the wake of the Afghan War in 2001, but the country is yet vulnerable to a debt trap.

4. **Weak social sector development:** Growing poverty and low standards of health and education have been a nagging problem. Nearly 35 percent of the population lives below the poverty line. Infant mortality rate is high (10%). Similarly, the drop out rate of children at the primary school level is as high as 50 percent. Unemployment is also a big problem. At least one out of every ten men in the organized sector is jobless. And while the country’s defence expenditure accounted for 4.5 percent of GDP, its development expenditure hardly accounted for 3.2 percent of GDP.

### 4.3.2 Political structure in Pakistan

Analysis of the political context is important for the understanding of a health policy and its success, because contextual factors may significantly influence the health policy process and health.

According to 2004 statistics of Pakistan approximately 154, 7 millions people live in Pakistan and Islamabad is capital city and Karachi is largest city of Pakistan. There are four provinces in Pakistan and approximately over 500 districts.
Pakistan has experienced unbalanced power structures and frequent changes in government, which has disturbed health resources and has resulted in a centralized health system that hinders wider participation and disrupts health policy-making, planning and implementation.

After its independence from Britain in 1947, Pakistan experienced a delay in framing a constitution. The first constitution was promulgated in 1956, which was federal in form and parliamentary in composition. The second constitution was promulgated in 1962; this emphasized a presidential over a parliamentary form of government, referred the entire executive powers to the President, and made him solely responsible for the country's administration. In 1973, the first elected National Assembly approved the new constitution. Given the parliamentary democratic system, the Parliament is the most important institution in Pakistan.

The total population of Pakistan is 153.96 million with a population growth rate of 2% per annum. The population is denser in the industrialized and agriculturally fertile regions than in the uncultivated areas. The population is a complex mixture of indigenous people. Pakistan is in general linguistically heterogeneous, and no single language can be said to be common to the whole population. Each province has its own language. However, the national language ‘Urdu’ is used as a common language for communication in every part of the country. Almost the entire population in Pakistan is Muslim. Hindus, Sikhs, and Christians constitute only 3% of the population. The current literacy rate is 53%; males 66.25%, females 41.75%.

After its independence from Britain in 1947, Pakistan experienced a delay in framing a constitution. The first constitution was promulgated in 1956, which was federal in form and parliamentary in composition. The second constitution was promulgated in 1962; this emphasized a presidential over a parliamentary form of government, referred the entire executive powers to the President, and made him solely responsible for the country's administration. In 1973, the first elected National Assembly approved the new constitution. Given the parliamentary democratic system, the Parliament is the most important institution in Pakistan. The Constitution provides two lists for the legislation.
One list is called the Federal List and the other is known as the Concurrent Legislative List. These constitutional lists describe the distribution of legislative powers between the national and provincial assemblies. According to Article 90 of the Constitution, the Federal Government of Pakistan is composed of the Prime Minister and the members of his cabinet. The Prime Minister and his cabinet are collectively responsible to the National Assembly. In order to be elected as Prime Minister, the Constitution requires the candidate to poll the votes of the majority of the total number of members of the National Assembly. The Prime Minister forms his cabinet from amongst the Members of Parliament. The Prime Minister has the power to remove any minister from the cabinet. The President is elected in a joint sitting of the two Houses (the Senate and the National Assembly) of Parliament by a majority vote. The term of the President is five years from the day he assumes office. A person cannot hold the office of President for more than two consecutive terms. According to Article 48 of the Constitution as it originally stood, the President was bound by the advice of the Prime Minister in the performance of his duties. However, military regimes amended the Constitution and currently the President, who is also the chief of the army, is more powerful than the Prime Minister and the Parliament. The President appoints the Governors, Attorney General, Chief Election Commissioner, Chief Justice, and the Chief of Staff of the army, the navy, and the air force.

The Constitution of Pakistan specifies a bicameral legislature: the Senate as the upper house and the National Assembly as the lower house. However, the National Assembly enjoys more powers than the Senate. The National Assembly consists of 332 members who are directly elected by the people. The seats are allocated in the National Assembly for each province, the Federal Capital and Federally Administered Tribal Areas. These seats have been allocated on the basis of the population of each province. The term of the National Assembly is fixed for five years unless it is dissolved earlier. All the decisions in the National Assembly are taken by majority vote of the members. The National Assembly elects from amongst its members a Speaker and a Deputy Speaker.

The Senate comprises 100 members representing the four provinces, the Tribal Areas, and the Federal Capital. Provincial assemblies conduct the election for the Senate in accordance with the system of proportional representation by means of a single
transferable vote. The term of office of the members of the Senate is four years. The members of the Senate elect from among themselves a Chairman and a Deputy Chairman. The term of the office of Chairman and Deputy Chairman is two years.

Pakistan is divided into four provinces: North West Frontier Province (NWFP), Punjab, Sind and Baluchistan. Each province is headed by a Governor who is appointed by the President on the advice of the Prime Minister. Constitutionally, the Governor is the representative of the President and is responsible to him. The Governor's political and executive position in the province is similar to that of the President at the federal level. The Provincial Government is composed of the Chief Minister and his cabinet. It performs its functions and duties through the Chief Minister. Although executive actions and decisions are taken in the name of the Governor, the actual source of these decisions is the Provincial Government, that is, the Chief Minister. The provincial assemblies legislate for their provinces within the limits laid down in the Constitution. The tribal belt adjoining NWFP is managed by the Federal Government and is named the Federally Administered Tribal Areas (FATA). Azad Kashmir and northern areas have their own respective political and administrative machinery, although certain matters are managed by the Federal Government through the Ministry of Kashmir Affairs and Northern Areas. The Provinces are divided into divisions. Every division is administratively controlled by a Commissioner who is a civil servant and appointed by the provincial government. There are no elected bodies at the division level. Divisions are further divided into districts. Every district body consists of the Nazims (councillors) who are democratically elected by the people for four years. The district body elects from amongst its councillors a Nazim-e-Ala (head of the district) for four years. Districts are divided into Tehsils (municipalities). Every Tehsil level body also consists of councillors who are democratically elected by the people for four years. They democratically elect a Tehsil Nazim (head of the Tehsil) for four years. The district is the organizational basis for the healthcare system. There are 118 districts in the country and every district is engaged in the delivery of healthcare services.

There is a Supreme Court in Pakistan, a High Court in each province, and lower courts exercising civil and criminal jurisdictions in districts. The Supreme Court is the highest in
the judicial system of Pakistan. It consists of a Chief Justice and 13 other judges who are appointed by the President. To deal with specific types of cases there are special courts and tribunals.

4.3.3 Political context for the health policy

The Constitution (1973) of Pakistan protects fundamental rights, but several amendments enacted by military governments have administratively limited the judicial authority of the courts to protect basic human rights. Military regimes in 1977 and 1999 amended the Constitution. These amendments caused an unbalanced power structure and turned the Presidency into a dominant authority with the power to dismiss the Prime Minister, Government and the National Assembly. In practice, a ruling establishment referred to as the ‘troika’, consisting of the President, the Prime Minister, and the Chief of the Army Staff (COAS), rules the country. It means that ministries with a specific content like health and education are considered less influential and less powerful in formulating policies and setting priorities in their fields.

The Governor-Generals, Presidents and Chiefs of the army have dissolved elected governments and parliaments. No elected civilian government has ever transferred power to another civilian government; all have been replaced through non-electoral instruments and the imposition of military rule. The Governor-Generals abolished the governments in 1953 and 1955. The military dissolved governments and assemblies in 1958, 1969, 1977 and 1999. Furthermore, presidents dissolved governments and assemblies in 1988, 1990, 1993, and 1996. Consequently, the country has experienced frequent changes in regimes and every new government has changed the health policy formulated by the previous government, so that sufficient time has not been provided for the implementation of any health policy.

The army has no constitutional role in politics but it has established its dominance over the political system in Pakistan. The army has directly ruled the country longer than the elected regimes. On average, military regimes have tended to last for a decade, while civilian regimes have had tenure of three years or less. Military regimes tend to propagate
topics that concern national enemies or perceived threats to security in order to increase
defence expenditure at the cost of social welfare and the good health of the people. Social
welfare, human development and related issues, and environmental protection do not
attract the attention of the military regimes. Military rulers consider defence, the interior
and industry to be the high profile sectors and allocate maximum resources to these
sectors. They give low priority to health and allocate minimum resources to the health
sector.

The army in collaboration with civil bureaucracy has developed a partnership to
concentrate all power. This concentration of power at the top level has resulted in a
centralized health system that controls the health policy process in collaboration with the
top-level bodies at national level. It disturbs the delegation of power and functions to the
health systems at the provincial and district level that are required for playing an effective
role in the health policy process. Centralization also hinders wider participation from
professional groups, NGOs, communities and their representatives in the health policy
process, and decreases the chances of effective implementation.

Many governments, particularly military regimes, have maintained their supremacy over
the judiciary and tried with varying degrees of success to appoint judges of their own
choice in the superior courts by violating the rules and principles of merit. In popular
perception, there is also criticism of the judiciary and its role in certain situations. The
judiciary is viewed as a weak institution that mostly favours the government. For
example, the Supreme Court upheld the unconstitutional acts of the dissolution of the
General Yaya Khan and General Zia ‘usurpers’ and their military coups illegal only at a
time when they were already out of office. Consequently, the systems of accountability
have been handicapped and civil servants as well as health professionals working in the
governmental health sector do not feel themselves accountable for their performance,
eventually leading to corruption and misuse of resources in the health sector.

Free media are an important prerequisite for good governance. However, Pakistan has no
free, independent and pluralistic media as a source of information and knowledge. The
position of the media is weak and its influence on public opinion is limited. The electronic media, comprising radio and television, are entirely owned and controlled by the government. Therefore, electronic media only reflect the government view and officially certified health needs of the people. The official print media fall into the same category. However, independent journalists work hard to promote general awareness, the protection of human rights and democratic values in the society. Generally, health-related issues, availability and accessibility of health services and environmental protection and development of healthy lifestyles do not attract the attention of the media. Mostly the media feel comfortable in propagating topics that concern national enemies or perceived threats to security rather than better health conditions and quality of life. The impact of the media on the health policy process is therefore limited.

According to government documents, Pakistan is fully committed to the Millennium Development Goals (MDGs) and acknowledges access to essential healthcare as a basic human right. The Government takes responsibility for the provision of free medical treatment to all citizens in need of healthcare services. The public health sector in the country comprises 916 hospitals, 552 rural health centres (RHCs), 5301 basic health units (BHUs) and 4582 dispensaries. There are 99,908 hospital beds and the population per bed ratio is 1540. There are also hospitals, nursing homes, maternity homes and paediatric hospitals offering healthcare services in the private sector, but these are very expensive and the majority of people, particularly the poor, cannot afford private services. Government documents state that the health authorities intend to reduce child mortality, improve maternal health and combat diseases including HIV/AIDS, tuberculosis (TB) and malaria in accordance with the MDGs. In practice, infant mortality is still 74 per 1000 and the under-fives mortality rate is 98 per 1000. Eighty percent of all births take place at home and 16,500 maternal deaths occur annually in the country. There are about 80,000 HIV/AIDS infected persons in Pakistan and the level of infection is increasing. The percentage of TB cases detected and cured increased to 40% in 2005.
4.3.4 Health care system

Health care in Pakistan is Government sponsored, but over the years private health care providers have become more common. Pakistan has made great strides in reducing mortality rates. It is, however, a constant struggle to meet the health care needs of the rapidly expanding population. The government's strategy is aimed at primary health care, making essential drugs for common diseases available at affordable prices. Most Pakistanis find medical help at local clinics and hospitals. Some still turn to hakims, herbalists, for traditional medicines for common illnesses. Pakistani women prefer female doctors and men prefer male doctors.

Health facilities in Pakistan are inadequate, mainly due to a lack of resources and a high population growth rate. In 1993, 85% of the population had access to health care. Public health care expenditures in 1995 equalled 1% of GDP. As of 1999, total health care expenditure was estimated at 4% of GDP and 2% in 2003.

<table>
<thead>
<tr>
<th>HIGHLIGHTS</th>
<th>2005-06</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Health Facilities</strong></td>
<td></td>
</tr>
<tr>
<td>- Hospitals</td>
<td></td>
</tr>
<tr>
<td>- Dispensaries</td>
<td></td>
</tr>
<tr>
<td>- Basic Health Units and Sub Health Centres</td>
<td></td>
</tr>
<tr>
<td>- Maternity &amp; Child Health Centres</td>
<td></td>
</tr>
<tr>
<td>- Rural Health Centres</td>
<td></td>
</tr>
<tr>
<td>- TB Centres</td>
<td></td>
</tr>
<tr>
<td>- Beds in Hospitals and Dispensaries</td>
<td></td>
</tr>
<tr>
<td>- Registered Doctors</td>
<td></td>
</tr>
<tr>
<td>- Registered Dentists</td>
<td></td>
</tr>
<tr>
<td>- Registered Lady Health Visitors</td>
<td></td>
</tr>
<tr>
<td>- Registered Midwives</td>
<td></td>
</tr>
<tr>
<td>- Registered Nurses</td>
<td></td>
</tr>
<tr>
<td><strong>Population Per</strong></td>
<td></td>
</tr>
<tr>
<td>- Hospital Beds</td>
<td></td>
</tr>
<tr>
<td>- Doctors</td>
<td></td>
</tr>
<tr>
<td>- Dentists</td>
<td></td>
</tr>
</tbody>
</table>
Although Pakistan has made progress in improving health conditions, a large part of the population does not receive modern medical care. There are insufficient numbers of doctors and nurses, especially in rural areas. Federal Minister for Health, Nasir Khan, said in an interview with Daily Times dated Dec 06, 2002 that healthcare in Pakistan was infected with a dearth of medical practitioners, a poor standard of medical education, sky-high prices of life-saving and other drugs, pathetic conditions in hospitals, politicisation of official medical bodies and other innumerable problems that needed to be treated with uninterrupted, concrete policies and an honest approach. Sanitation facilities are also inadequate; only a small percentage of the population has access to safe drinking water and sanitary sewage disposal facilities. Malaria, tuberculosis and other respiratory diseases, and intestinal diseases are among the leading causes of death; drug addiction is an increasingly serious problem.

Following table gives a short overview of health system in 2004:-

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physicians (number)</td>
<td>116,298</td>
</tr>
<tr>
<td>Physicians (density per 1 000 population)</td>
<td>0.74</td>
</tr>
<tr>
<td>Nurses</td>
<td>71,764</td>
</tr>
<tr>
<td>Nurses (density per 1 000 population)</td>
<td>0.46</td>
</tr>
<tr>
<td>Dentists (number)</td>
<td>7,862</td>
</tr>
<tr>
<td>Dentists (density per 1 000 population)</td>
<td>0.05</td>
</tr>
<tr>
<td>Pharmacists (number)</td>
<td>8,102</td>
</tr>
<tr>
<td>Pharmacists (density per 1 000 population)</td>
<td>0.05</td>
</tr>
<tr>
<td>Public and environmental health workers (number)</td>
<td>106</td>
</tr>
<tr>
<td>Public and environmental health workers (density per 1 000 population)</td>
<td>0.00</td>
</tr>
<tr>
<td>Community health workers (number)</td>
<td>65,999</td>
</tr>
<tr>
<td>Community health workers (density per 1 000 population)</td>
<td>0.42</td>
</tr>
<tr>
<td>Lab technicians (number)</td>
<td>9,744</td>
</tr>
<tr>
<td>Lab technicians (density per 1 000 population)</td>
<td>0.06</td>
</tr>
<tr>
<td>Other health workers (number)</td>
<td>19,082</td>
</tr>
<tr>
<td>Other health workers (density per 1 000 population)</td>
<td>0.12</td>
</tr>
<tr>
<td>Health management and support workers (number)</td>
<td>203,337</td>
</tr>
<tr>
<td>Health management and support workers (density per 1 000 population)</td>
<td>1.29</td>
</tr>
</tbody>
</table>
Pakistan was among the first developing countries to establish a state-funded family planning program. (www.government.com.pk) This effort began in the early 1960s when the Family Planning Organization was organized. The *zakat* and *ushr* taxes are used to provide social welfare funds, which go to provincial, division, and district committees for distribution among organizations engaged in social welfare activities or directly to needy persons. *Zakat* funds are also used for scholarships.

The Federal Ministry of Health and provincial health departments are the principal organizations for ensuring a well governed health system. However, their capacity for policy analysis and formulation is limited and they are institutionally unequipped to make use of some of the new policy analysis tools developed by the WHO, such as burden of disease estimation, national health accounts and cost–effectiveness analysis. As a consequence, institutions (such as hospitals, and academic and research institutes) and priority programmes managed by the Federal Ministry of Health and provincial health departments are functioning below their potential capacity. The recognition of the role of the private health sector, and the ability of the Federal Ministry of Health and provincial health departments to regulate, support and build partnerships with the private sector is limited. At the level of programme implementation, the expected benefits of devolution in strengthening the district health system have yet to emerge.
Total Government Expenditure on Health  
(Federal plus Provincial)  
(USD .in Millions)

<table>
<thead>
<tr>
<th>Fiscal Year</th>
<th>Public health expenditure</th>
<th>As % of GNP</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Development Expenditures</td>
<td>Current Expenditures</td>
</tr>
<tr>
<td>2001</td>
<td>189</td>
<td>305</td>
</tr>
<tr>
<td>2002</td>
<td>203</td>
<td>284</td>
</tr>
<tr>
<td>2003</td>
<td>146</td>
<td>349</td>
</tr>
<tr>
<td>2004</td>
<td>168</td>
<td>397</td>
</tr>
<tr>
<td>2005</td>
<td>234</td>
<td>410</td>
</tr>
<tr>
<td>2006</td>
<td>276</td>
<td>333</td>
</tr>
</tbody>
</table>

Source: Planning and Development Division; Economic Survey 2006.

The estimated total health expenditure in Pakistan is US$ 18 per capita of which public expenditure on health is US$ 4 per capita. This compares unfavourably with the figure of US$ 34 per capita recommended by the Commission on Macroeconomics and Health. During 2003–2004, public health expenditure was estimated at Rs 32.80 billion (US$ 565 million) of which Rs 8.5 billion (US$ 146 million) was development and Rs 24.30 billion (US$ 418 million) recurring, which is 0.84% of GNP, registering an increase of 13.8% in absolute terms over the past year. While the government has been spending progressively more on health, it has yet to reach the target of 1% of NP. Out-of-pocket payment continues to be a significant source of financing of health care in Pakistan, accounting for over 75% of total health spending. There is limited experience with social health insurance, except for the employees’ social security insurance (ESSI) scheme under the Social Welfare Department, for the almost 1 million formal sector workers. A national health account study has yet to be undertaken in Pakistan.

4.3.5 Policy- and decision-making infrastructure

The policy-makers and decision-makers in the health sector of Pakistan are Ministers of Health, Secretaries of Health, Planning and Finance Division, Director-General (Health)
and Chief of Health. Senior managers include the directors of the different health programmes, such as expanded programme on immunization (EPI), malaria control programme (MCP), acquired immunodeficiency syndrome (AIDS), tuberculosis, leprosy and heads/executives of the medical institutes and tertiary hospitals, deans of faculties and principals of medical colleges.

Under the constitution of Pakistan, health is a provincial issue, and most of the implementation takes place in the provinces through the respective health departments. However, the Federal Government deals with the decisions about health policy, formulation of plans and the main primary health care issues such as EPI, MCP, AIDS, drug policy, user charges and health insurance. The provincial decision-making hierarchy is the same but the bottom level is narrower and includes: divisional directors, project directors, principals of medical colleges and training schools for medical technicians, nurses and lady health visitors. In addition, planning and finance departments play an important role in decision-making. The personnel within the three-tier system of decision- and policy-making have different backgrounds. For example, a minister is a political person, a secretary is a senior bureaucrat and the Director-General is a medical doctor or a technical person. There is no uniformity in the education, training and profession in the three tiers. It is, therefore, considered that valid information and analysis from health systems research will create uniformity in understanding of the issues under consideration, and provide the necessary background for decision-making and its effective implementation.

4.3.6 Health systems research in Pakistan:-

Decision-making in the health sector takes place at the macro level whereas implementation takes place in the regions, going down to the village level through different stages. Health policy is the responsibility of the Federal Ministry of Health with the assistance of the attached health departments. There is a risk of neglect of community interest or a lack of understanding of the problems at the grass-roots level in the existing system of policy-making. In order to achieve a balanced approach, access to the community is required so as to understand the basic problems and needs, and then to
design the necessary strategy to solve the problems to be reflected in the health policy of the country. The problems should therefore be studied at the micro level in order to understand the real requirements of the entire population.

The main objective of health systems research is to bring about improvement in the health of the people by increasing the effectiveness and efficiency of the health care system. This is related to the organizational structure of the health care system and the population and their mutual interaction. Therefore, continuous identification of problems and evaluation of the existing health systems are required. Hence, compilation and analysis of facts and figures which facilitate the development of a strategy for the future to meet shortcomings are the identifiable results of the research which will ultimately improve the efficiency as well as the effectiveness of the health systems.

In Pakistan, there is not sufficient research in health sector. The research can be initiated on the basis of the available data on the financial and physical position of the health sector. This requires identification of those factors which are hurdles to the improvement of the health system. Although the total health sector budget has increased many fold, and has consequently led to an increase in the number of health facilities and health personnel, the quality of the care has not improved, nor has health care been provided to the entire population. All these factors, once identified, will be helpful in meeting the shortcomings in the future, and will enhance the effectiveness and efficiency of the health systems through improved allocation of resources and equal distribution among preventive, promotive and curative health care.

Improvement of the health care system of the country through health systems research involves a variety of disciplines so that adequate information can be given to decision-makers in a systematic way before they make their decisions. Social, cultural, demographic, economic and political aspects of the issues to be resolved must be considered. The actual research will depend upon the precise nature of the problems, and will require the skills of biomedical scientists, sociologists, epidemiologists, demographers, economists, and political, organization and management scientists. However, ensuring the availability of all disciplines and their agreed working conditions
will not be an easy task. Furthermore, health systems research is dependent upon the existing infrastructure of research and management. These are important factors but unfortunately the infrastructure in Pakistan is weak and unable to cope with the problems faced by the health sector and its research needs. However, the need has been recognized and it is anticipated that improvements will be made with time. Management does exist but the activities are not research based and not regularly maintained. Decisions are mostly based on out-dated and incomplete information.

Development of the health sector in developing countries depends upon better use of existing resources, whereas health achievement is a combination of various factors of development, such as the extent of the problems, disease patterns, health needs of the population and availability of resources. For example, in Pakistan, the private sector, being a major provider of health services, needs reforms in the form of regulations to ensure the provision of quality care. On the other hand, increase in resources and mobilization in the country requires research to determine the starting point and match the resources with the requirements. The research and analysis should be conducted by assessing: what is; what ought to be; how is/was; how ought to be; and when to be. When this analysis is carried out, various sectors and professionals are involved such as economists, medical personnel, epidemiologists, biostatistians, planners, and sociologists. It is also important not to depend on one or two factors only but to make a realistic analysis of the variables involved which can provide better assistance to health systems research in determining the ultimate variables. In this regard, a Norwegian author commented:

Thus health systems research studies a vast array of possibilities for action. It tries to establish rational uses of medical knowledge and technology, evaluate methods of investigation and treatment, and develop methods for maintaining high quality. It aims to induce logical thought and action on these matters in the health sector and among the public at large.

In Pakistan, health systems research has the potential to play an important role in the achievement of health for all by the year 2000. Decline in the incidence and impact of
infectious diseases and awareness of chronic diseases have raised the public's expectations of the health system. However, only a small portion of the gross national product (0.74%) is spent on health in the public sector. Low economic and high population growth and demand for resources by other sectors have left little prospect of increasing the budget for the health sector. In this situation, the improvement can only be achieved through greater efficiency, which includes data collection on the inputs and outputs of the health sector, which will provide feedback for planning, implementation, monitoring, evaluation and strengthening of concerned management and administration. As the goals of health systems research are related to the effectiveness, efficiency and cost reduction in the health sector, the economic forces of today are, in fact, of great assistance for encouraging efficiency, cost reduction and effectiveness.
Analysis:-

5.1 Introduction:-

In this section I analyse the secondary data I collected and presented in empirical part of the paper in order to answer the research question. The questions raised in the beginning were

- How healthcare system functions in general in Pakistan and Norway?
- What is healthcare funding and expenditure system in both countries?
- What are differences and similarities in both systems?

I will try to make comparison of healthcare system functioning in both countries according to empirical data was constructed. I presented mostly norms and will compare norms system of both countries.

5.2 Comparative analysis :-

The effectiveness of health care to improve health on a population level is not directly measurable, as observed improvements in population health cannot be attributed to any single determinant. Furthermore, there is good evidence that other factors' contribution towards good health is more important than that made by health care, such as education, safe water, sanitation, and housing. Thus, a general description of the health status in Norway and Pakistan is given in a table under. I believe that the health care system problem in Pakistan compared to Norway is complex. It is hard to find the perfect program, which might not even exist, but Pakistani Government should look for better solutions and try to implement them.

In terms of the way the two systems are funded. The Norwegian Health System is funded through taxation collected by the Government. While Pakistani health care system consists of both Government expenditure and private contributions. Government finance university hospitals in Pakistan on 70/30 bases. Tax collecting system is not that efficient as it is in Norway. In Norway everybody has to pay approximately 25% tax. Tax is
deducted from employees salaries and when people buy something. It means that Government provide 70 % funds to hospitals and remaining they have to arrange themselves. The input/output comparison in the Norway shows a low input and a high output. This shows that the Norway is very efficient in utilising its resources to satisfy the users. The figures from the World Health Organisation shows that the Norway spent USD 6581 millions on health in the year 2006, whereas in Pakistan the government spent USD 609 of total GDP on health. Paksitani health care system does not display the same low input/high output as in the UK. The problem of using this method of comparison is the definition of output. This is because the World Health Organisation index does not take into consideration cultural, economical and structural differences (P sjokvist, D Cook, L Berggren, G Guyatt. (1998)).

When we compare the two systems we can see a difference in the pattern of supply. In the Norway basic health facilities are almost in the access of general public and there are small differences in the distribution of doctors in rural and urban areas. There are large numbers of available clinics that a patient can go. But in Pakistan this difference is very high. For 1000 population only 0.74 doctors are available. This shows a substantial difference in the allocation of resources in rural and urban areas.

The Norwegian health care system workforce consists of a number of highly skilled professionals, e.g. doctors and consultants. But there is still a massive shortage of nurses in the general and mental hospitals. The shortages have been alleviated by the migration of nursing staff from other developing countries. In Pakistan there is also a shortage of nurses and doctors in general hospitals because Government can not accommodate them and bear their expenses due to insufficient sources. Therefore lot of doctors and nursing staff like to work in private hospitals for better earnings. Some doctors open their own private hospitals and earn a lot of money, but as we know that population in Pakistan is mostly poor and can not pay heavy fees of doctors and medical expenses. Comparing general hospitals, private hospitals provide very good services to their users but only rich can afford fee and all expenses.
The gate keeping method is different between the two countries. In the Norway, there is a primary to secondary progress. This is where a patient goes to see a general practitioner (GP) before they are referred to a consultant. In Pakistan the choice of primary or secondary pathways is optional. In Pakistan patients go to the nearest available professional doctors and hospitals. The rationing method also differs in both countries. In Norway, non-price-rationing methods are used. For example: - waiting lists are ranked by importance. In the Pakistani private health care sector the price-rationing method is used. This is where people forgo small medical procedure in order to save their medical insurance contributions for bigger operations. This seems to be a form of self-rationing due to costs and it also indicates a reduction in moral hazard.

Another way of comparing the two systems is equity of their financing source. In Norway all pay the same regardless they are poor or rich. As I have mentioned earlier that poor people can not pay medical expenses from his own pocket in Pakistan due to low wages and high inflation. Policies are made by non professional people who don’t have enough experience in healthcare. Sometimes politics affect health policies very badly and possible good policies can not be implemented for improving health sector. There is politics involved from public to private shifting.

The advantages in the Norwegian Health System are the cost effectiveness of the system and how the system covers the whole population. Being cost effective is derived from the ability to produce high outputs from low investment. The system is very equitable, as people with similar conditions wait for the same length of time. It is showing that every patient in the Norwegian Health System is equal.

The disadvantages are plentiful. There is an insufficient distribution of funding in some parts of the system evidently seen in the lack of investment in cancer technology and severe shortage e.g. long queues for dentist (recently highlighted in the news). Yesterday dated 12.06.07 I watched in news on NRK TV that Norwegian Government is thinking to stop providing services to pregnant women in summer just to save funds. There are also shortages of doctors and nurses as mentioned above. There is also a ‘Lack of incentives’
to promote performance improvement within traditional reimbursement mechanisms. This because the employees of the Norwegian System are paid on a salary basis, therefore not needed to over-perform. In Pakistani health system doctors don’t receive sufficient salaries and are compelled to open private clinics and hospitals. Therefore they give less attention to patients go to public hospitals.
Conclusion:

When I started this thesis then I asked a question in my introduction, “Should Health Care be available equally to everyone?"

My opinion and answer for this question is YES, off course health care should be available equally to everyone. It is a responsibility of the whole community that all citizens get the necessary treatment when they get ill. Norwegian health system is equal to all but unfortunately people in Pakistan not treated equal when it come to health facilities. In Pakistan diseases like cancer is the second name of death to poor.

Health system is functioning not perfect but much better in Norwegian context. The system’s efficiency is much poor in Pakistan and there is a need to reform it by following other countries which have good public service systems and in my opinion Pakistan should try to adopt a health care system similar to health care systems in the other European countries and Norway. I know that it could be difficult for Pakistan to follow due to lack of resources, poor policy making and large population growth ration. In Norway we have a history of strong solidarity and economical equality.
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