The Theoretical Principals of Equity in Health

Study of Equity in Health sector of Islamic Republic of Iran

Introduction

The evidence manifest that in most of the countries, the non-beneficiary groups have the least of the survival chance and are extinct in lower ages. There exist great gaps among the urban and rural populations of a country in different regions. The poor groups, not only bear a higher burden of disease, but also the initiation of chronic diseases among them is in lower ages and the youth. This issue not only happens in the poor countries, but is true for poor groups of the affluent countries. According to the following reasons, equity in health sector is of great importance:

1) According to the accomplished studies, poverty, as the greatest cause of death, disease, and inabilities, is preventable. A child born to a poor family, in comparison with a child born to the affluent social groups, is averagely two times more in the risk of death confronta on before reaching 5 years old. Besides, the researches on distribu on of the resources and public consumptions proves that in most of the developing countries, establishment of subsides benefits the rich. E.g. in India the rich take benefit from subsides, 3 mes more than the poor.

2) The poor 10.1%, the second group 13.4%, the average group 17.8%, the 4th group 25.6%, and the rich 33.1% take benefit from the public subsides, henceforth, the poor bear a high burden of diseases, while they have a low share of the healthcares, which is referred to as "Inverse care law". This matter exists both in poor countries and in the social groups of the affluent countries.

3) In most of the equity debates, confusion happens, when a group becomes responsible for studying the inequity, and the status and quality of health in diverse population groups, while another group discusses it at the level of provision and the service distribution.

4) Although naturally, all determining factors of individual health are summarized as the following, but is inequity in health justifiable, according to these issues?

- Natural differences like biologic differences.
- Selective risky health behaviors such as some sports and recreations.
- The privilege of a group's health over the other, when that group selects the health progressive behavior sooner than the other group.
- The risky health behaviors, when the degree of life style has become severely limited.
- Having contact with the life and job in unhealthy and stressful situations.
- Insufficient access to the basic health and other public services
- Natural selections or social motivations relevant to health issue which causes the sick people move towards lower socio economic groups in communal criteria.

Theoretical Views of Equity in Health:

To comprehend the subject matter, the necessity of delivering a functional definition for equity in health becomes essential. This definition is so that "each individual should have suitable opportunity to attain a potential health, and not being deprived practically." Accordingly, the aim of equity in health is not the elimination of all differences in health, and bringing them to the same status and quality, but those reasons should be eliminated or lessened that are avoidable, or inappropriate. Maintaining this viewpoint, equity in health is consisted of:

- Equal access to accessible cares for the equal needs.
- Equal benefits for the equal needs
- Equal care quality for all

Therefore, equity in health does not mean that all individuals should have similar level of health, similar level of service and resources consumption, regardless of the degree of need. Most of societies believe that the sources and advantages of health care in the society ought to be distributed in a way that they create congruency and equity. Because of this matter, judging the activities in health sector necessitates a philosophical analysis. Three important ethical perspectives which often influence health systems discourse are: Utilitarianism, Liberalism, and Communitarianism.

1-**Utilitarianism** argues that policies should be judged by their consequences and promotes the benefits of achieving the greatest good for the greatest number.

2-**Liberalism** focuses on the importance of rights and opportunities of individuals more than the consequences to society as a whole.

3-**Communitarianism** focuses on the qualities of the society in which people live (the community) and views the character of a society as dependent on the character of the individuals who compose it. Communitarians would justify actions to improve health systems arguing that public policy helps society and the individuals who live in it; the state therefore should ensure that individuals develop good character and help produce a good society. Ideas about the importance of solidarity in creating well-performing health systems often have their roots in communitarianism.

A) Utilitarianism:

Utilitarianism is a popular ethical theory, which is based upon consequences. As a whole, the theory says "the end justifies the means". According to this theory, judging a policy, one should ask what its effects are on the members of the society, and then select a choice that elevates the whole health status of the people to the utmost point, in comparison with the other choices. To do this, it is necessary to answer some questions.

- Whose health status is counted and to what degree?
- How health status could be evaluated practically?

The way we answer these questions have created “subjective and objective utilitarianism” as two traditional thoughts. Both of these thoughts are after efficient utilization of resources to create the best form of health, but there are great differences in these methods and their functions.

-Subjective utilitarianism:

Based upon this approach, each individual knows better that how he becomes happy, and judges his own happiness. According to their specific priorities and tastes, they experience different rates of optimality. The best deed is that “brings happiness to a greater number of individuals”. Based upon this viewpoint, all individuals are important and their importance is the same as each other. Judging the policies necessitates the accumulation of the optimality level of each policy holding choice for all individuals and compares the mentioned policy with its replacing choice. Then, a policy should be chosen which brings the most optimality.

The economics taken this analytic framework further and are the followers of “cost- profit” analysis for determining the activities causing the most of optimality. I.e. to determine the willingness to pay of the potential beneficiaries of a policy or a program for its benefit. Then this eagerness is compared with the expenditures of the program. If the obtained profits are higher than the expenditures, then this policy has the most of the profit for the most of the individuals. In this kind of analysis, all expenditures and profits are evaluated through a financial viewpoint. In the objective utilitarian’s view, health is not a special commodity, but it’s just one of the commodities which the citizens regarding their needs, can buy or not. When just the individuals know about what makes them happy, their choice should be respected. However, the optimism of the objective utilitarianism based upon the individuals’ choices, is not an acceptable issue, in many of the critics’ views. These critics reject a social policy holding which is merely based upon the individuals’ requests and decisions.

- Objective utilitarianism:

Those policy holders who are after improving the health status of the individuals, but are doubtful about the permenance and correctness of individualistic choices, believe that the selections should be based upon individuals well being and it is defined by a team of experts in objective terms. The approach behind the analysis of the burden of diseases through indexes like DALY (Disability Adjusted Life Years) and QALY (Quality Adjusted Life Years) which are done through World Bank and WHO, are the instances of objective utilitarianism. This approach, unlike the cost- benefit analysis, does not express health gains financially.

B) Liberalism:

Philosophically speaking, the utilitarians are willing to consider a number of individuals as the goal, another number as the means, and sacrifice a group for the sake of the other. The principal conception in the liberals’ viewpoint is the issue of legal rights based upon mutual respect which is paraphrased through tow diverse methods. Liberals believe that the mere

negative rights deserve protection. These rights guarantee the individualistic freedom so that they can do whatever they like, regardless of any governmental intrusion towards individualistic choices. Contrary to that, the Egalitarian liberals believe that having the right to chose without sufficient resources is meaningless. They believe that a true respect towards others is in need of the provision of the necessary preconditions for making the right to chose possible. Hence, each individual has a positive right regarding the least rate of the services and benefits necessary to guarantee the relative equality of opportunities. A person, who is hungry, with no house to live in, deprived of education, and sick, does not have a meaningful choice opportunity.

Equity in health means that the basic and principal status of health services is provided for all social strata. This definition is not sufficient, as two terms of "equality and equality" are mostly misrepresented. Equality means to establish appropriateness and balance, while there might not exist equality. In healthcares, sometimes equality means unequal accessibility to the services as the more sick are in need of more accessibility in comparison with the others, and oppositely, two similarly sick individuals should have the same accessibility and should be treated equally.

Communitarianism:

The third major approach expresses that in judging the public policies, what is of importance is the kind of society and the kind of individual which the policies, in case they are executed, are after establishment. This approach emphasizes upon the essence of community, and is called "communitarianism", and believes that the specifications of a community rest upon the specifications of its constituent individuals. Therefore, the government should be ascertained that the individuals have good characteristics, and help in establishment of a good community. The communitarians are divided into two groups:

Universal Communitarians:

The Universal Communitarians believe there is a single universal model for the good individual and the good society. There are numerous examples, religious and non- religious: the God believing religions which have religious preaches are the samples of the universal communitarians.

Relativist Communitarians:

The second kind of communitarians recognizes the wide variety of cultural practices in the world and emphasizes that each community does and should decide its own norms and mode of social organization.

Concludingly, it should be said that each one of these behavioral theories, contains its specific questions which reflect the unresolved issues, and each one provides an important intuition which is guidance for decision making in health system policies. These questions are as the following.

- How should health be measured for the utilitarians?

- What are the rights of the liberals?
- For the case of communitarians, what are the limitations and values of a good community?

Responding to these questions, it should be stated that:

- The utilitarians emphasize on the results and where(s) and what(s) the people should attain.
- The liberals emphasize on the point of initiation for the people.
- The communitarians emphasize on the kind of individuals and the kind of communities which should be created.

Equity in Health from a Practical Viewpoint:

Regardless of the philosophical views, it should be verified that how equity could be attained in health system. In social literature, the principal of equity is divided into two horizontal and vertical sections. It was stated by Aristotle in ancient Greek, for the first time. His definition of horizontal equity is that "equals should be treated equally", and vertical equity is that the "unequal should be treated unequally". From health and medical view, these two concepts imply having access and taking benefit from the services which are organized based on the needs, regardless of the socio economic status of the individuals. According to that, the people who have the most of need have priority to the others. The issue of need is defined based on the following principals:

- The need based upon the severity of disease.
- The need based upon the capability of accessing
- The need based upon the least of resources for evacuating the capacity of utilization.

Based on the definition, the vista is to give the priority to the ones who take benefit from the healthcares more than the others, but some believe that this matter itself, causes inequity, for the ones marginally taking of the benefit are chiefly richer, healthier, or both. Regardless of diverse views towards equity in health issue, what has been gained from the studies, manifest the unjust situation of health in the developing countries.

Horizontal Equity:

Practically horizontal equity consists of equal treatment for equal situations, and in fact, equal treatment is for equal needs. It is essential to differentiate between accessibility and desirability, as equal desirability for equal needs necessitates standardization of the medical procedures for disease situations. For example, two patients with broken hip bones who are living in different regions of the country ought to receive similar treatments and physical therapy. Equal accessibility equal needs means that the individuals have similar opportunities of taking benefit from healthcares. Concludingly, equity in usage and desirability is that healthcare is standardizes for any kind of need. Equity in accessibility becomes problematic when paying for trading off between equity and functionality becomes essential. E.g. establishing CCU units which are of great importance and sensitive to the resources in different parts the country

(with low or high population), which is definitely a wrong strategy. Therefore, it is necessary to evaluate the price of equity in relation with the lost life and life quality, so that the resources are used in the most productive way possible.

Vertical Equality:

Vertical equity deals with this important issue that unequal individuals in the society should be treated differently, which is an acceptable method in medical treatments, as treating myopia differs from treating gynecological diseases. The aim of financial equity, is establishing an equal payment system, based on affordability which is a correct hypothesis, because the illness situation is indefinite and unpredictable, on one hand, and on the other, the effects of health expenditures could be greatly non-optimal, especially for the poor, so supporting activities in this ground are logical and acceptable. Secondly, consumptions in health issues are considered as important and essential by the society. Therefore, elimination of the relevant financial barriers is also of importance. The financial equity hypothesis should be studied in two levels. Firstly, accepting the vertical equality connects paying based on affordability, and secondly among the groups having similar financial condition, there exists actual payment for suitable acts. Vertical equality in health leads to two major questions.

A) How affordability could be defined?
B) How the relation between affordability and payment should be?

Equity Definitions

Horizontal Equity:

-Equal consumption for equal needs, like equal nursing expenditures for each bed in all emergency hospitals.

-Similar optimal condition such as equal hospitalization for equal health needs.

-Equal accessibility for equal needs, like waiting times for similar disease conditions.

-Equal health and medical acts for unequal health conditions, such as standards death rate which is organized based upon the gender and age issues in all regions under covered by health

Specifications of Vertical Equity:

-Unequal treatments for unequal needs, such as non-equality in treating simple diseases and severe diseases.

-Studies show that 4 spontaneous ends have been defined for healthcare

1) Inducing an efficient social level of healthcare optimality
2) Risk distribution in all population
3) Risk distribution during the individuals' lives

4) Resources distribution according to the needs.

Even though, it is necessary to evaluate the aims. For instance, a society is eager to obtain first and third aims, so the strategy of the possible resources provision would be to utilize the prices of the market at the consumption point, but the payback period is lengthened. On the other hand, in case the last 3 ends are followed, (at the cost of expending the first aim), the public revenue resources should be used for health resources provision, and concludingly, the redistribution ought to be determined through the form of income tax system progression.

A healthcare system based upon resources provision through taxes or a social insurance system could lead towards obtaining some levels of vertical equity. The health systems, which are mostly dependent to the out of pocket payment, are in need of establishing additional rules and regulations, in a way that they could shelter the low income individuals and those in current need of healthcare services. The result is that in organizing the economic objectives of health systems, both efficiency and equity should be considered. Efficiency is followed in two levels, ”Allocative efficiency”, which evaluates the value of the programs, and “operational efficiency” that defines the best method of producing valuable programs. Equity is considered from two perspectives “financial equity” and “opportunity equity” in health resources utilization. Financial equity evaluates the financial redistribution obtained from different socio economic groups, therefore; paying the expenditures depends on affordability. Noticing the relative essence of accessibility, equal opportunity in resources utilization, is a complicated issue. However in an ideal condition, equal opportunity means equal accessibility for equal needs which manifest it in horizontal equality objectives.

Equity in Health from an Individual Perspective:

Regarding distribu onal equity in health from an individual viewpoint, there are 7 perspec ves:

1- **Egalitarian:** All social strata should benefit from equal health statuses.
2- **Allocation according to need:** it is dependent on a sufficient definition of “need”.
3- **Rule of Rescue:** points to the ethical responsibility which announces that any help possible ought to be delivered to the people in urgent conditions and death threats.
4- **Equality of access:** which is a form of operational equality, but is in need of defining “accessibility and need”.
5- **Decent minimum:** which needs explanation of the basic package of healthcare services.
6- **Maximum principle:** expresses social policies in order to maximize the low social strata status.
7- **Libertarian:** which follows the resources distribution based upon entitlement.

Even though the above points are all individual perspectives, this is the politicians, responsibility to announce their equity oriented view to the society. On the other hand, many of these perspectives are just theoretical rather than practical. Therefore, we could summarize all above perspectives under two titles which has the capability of an economic view from a priorship view, besides scrutinizing the advantages and expenditures alongside each other.

A) Concept of need: which comprises entitlement and deservingness issues.
B) Equity Relevant to Access to Services:

Regarding the first hypothesis, i.e. equity as competence, entitlement, and deservingness, and in relation to allocation of resources, the following matters are posed:

- The capacity of utilizing from healthcares (which is the consequence of maximizing health from equity view).
- The awaited future health (which follows guiding resources towards the low potential healthy individuals)
- Previous health experiences (which follows guiding the resources towards the individuals who historically have lower health situations.
- Rule of rescue (guiding resources towards the individuals in urgent need.
- Other need hypotheses.

In all above points except the 1st one, some social facets are discussed and the "need" issue is evaluated for the obtained health.

Measurement of Unequity in Health:

To scrutinize equity in health financial provision, this question should be answered that who is paying the health services expenditures? And this point should be considered that the financial provision system is just, when the payment is according to "ability to pay". Hence, in order to measure, accessibility to both of the information forms spontaneously, is necessary, which includes, the socio-economic status of all strata, and the amount of payment for healthcares (including revenue, premium, out of pocket). There are two analytic perspectives towards measurement:

A) Threshold analysis: which uses two methods of catastrophic cost and impoverishing expenditures.
B) Progressivity analysis: which benefits from two methods of simple tabulations of progressivity, and complex methods of measurements through using issues such as concentration curve and concentration index, etc …

Considering the above perspectives, different methods of unequity measurement in health are summarized as the following:

1- Catastrophic Cost:

In order to have an exact analysis of equity condition in financial contribution, a complementary discussion referred to as "catastrophic cost" of medical and health services has been posed in the literature of the subject. A little consideration of the conception of catastrophic costs, would lead us to comprehend that increase of this index means that a family should pay an unreasonable amount of its income (the capacity of payment), in order to maintain the health and medical status of the members of the family. Inevitably, realization of such a situation is not optimal, at all. Measurement has three kinds:

- **Catastrophic threshold:**

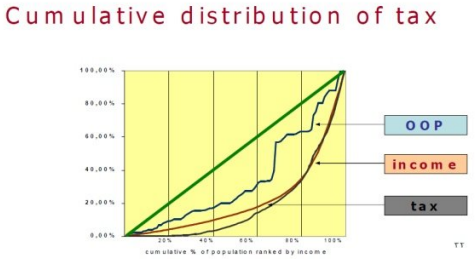
In this method, the expenditures are called catastrophic, in case they exceed from a specific percentage, as the amount of out of pocket payments reaches 80 percent, the economic pillars of such a family is practically shattered, and it is incapable of providing other essential necessities of life, such as food, clothing, a place to live, and other things, and such a family is in great hardship and danger. To avoid such circumstances, a "threshold" has been defined for the amount of out of pocket payments of each family. Exceeding this threshold is called a catastrophic situation of incapability and hardship of affording financial health and medical services provisions. (In some legal texts and statutes, it has been translated to "unbearable"). The medical-economic specialists have determined this catastrophe border as 40% according to their studies and experiences.

- **Catastrophic Payment Headcount:** In this method, the numbers of families which have exceeded in payments for health, from a determined percentage, and are considered catastrophic, are counted.
- **Catastrophic Payment Gap:** In this method, identification is done through responding to the question of "how much of the payments are above the catastrophic threshold?"

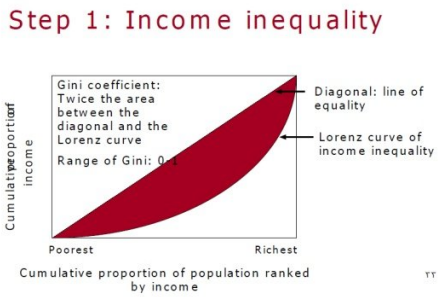
2- Impoverishing Expenditures (Medical Impoverishment): In this method, the families that are placed below the poverty level, after paying for the medical treatments expenditures and experience impoverishing medical expenditures.

3- Simple Tabulations of Progressivity: In this method, the socio economic status of each family is determined (including income, expenditures, belongings, etc …) and are classified and graded. Then, payments for health for the revenue, social insurance, private insurance, and out of pocket of each family are specific and percentiled.

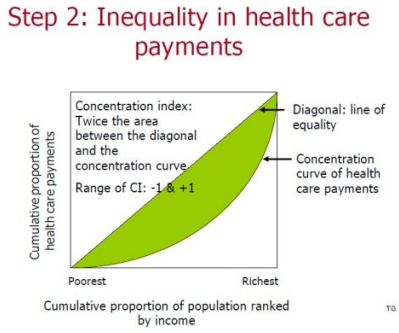
4- Complex Methods of Measurements: In this method, the income distribution chart, out of pocket distribution chart and paid revenue distribution chart are drawn. (The figure below).



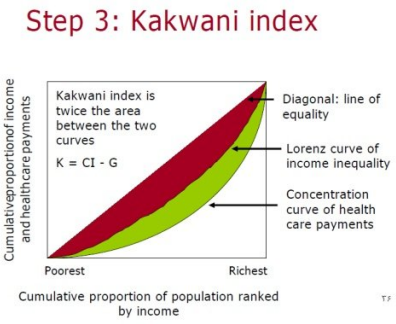
In the first step, inequality of income is specified (Lorenz curve), and Gini coefficient is calculated which is consisted of twice the area between the diagonal (equality line) and Lorenz curve. It should be noticed that in case the income distribution is identical to the diagonal, it is the most balanced situation, and the more Lorenz curve is near to the diagonal, the income non-equality is smaller, and consequently, Gini coefficient is smaller, and the more Lorenz curve is far from the diagonal, Gini coefficient is bigger and the non-equality is more.



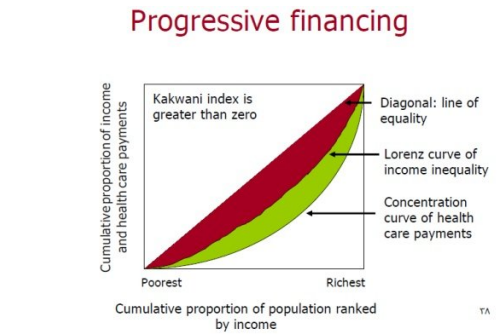
The second step:"inequality in healthcare payments" is calculable which is consisted of concentration curve and index. Concentration index is consisted of: twice the area between the diagonal and the concentra on curve, and its range is between +1 and-1.

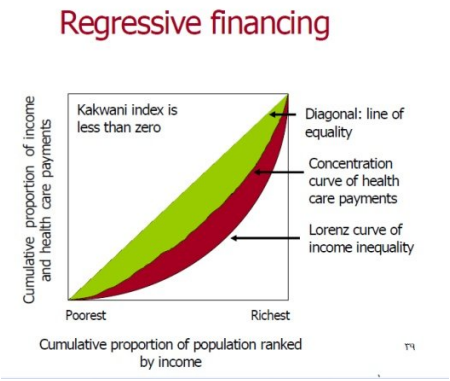


In the third step, "kakwani index measurement" which is twice the area between Lorenz income inequality curve and concentration curve.

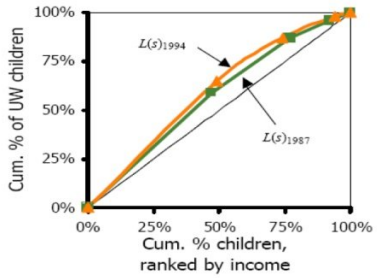


Kakwani index manifests the vertical unequity. When this index is higher than zero, the financial provision is progressive and when it is below zero, we are encountered with regressive financial provision.





It is of importance to notice for concentration curve and concentration index, that Brazil government executed a complex mother-child health program for the first me in 1987 which lead to good results. The interesting point was the decrease in the difference between the rich and poor. Through drawing a chart of children having mal-nutrition on one side, and on the other, the income groups, and a curve was obtained which was named “concentration curve”. The diagonal of this chart is the line of balance. The numbers above the inequity line are beneficial for the rich, and below this line, are beneficial for the poor, which for Brazil case, the unequity in health was for the benefit of the rich, therefore equity was for the poor. In this curve, the percentage of the low weight children in 1987 and 1994 are compared.



When the curve is simple and direct, the concentration curve is responsive, but in some cases with broader comparisons, like international levels, the concentration index is used which is

signed by “C”, and is twice the area inscribed between the diagonal and 2 curve. In case it is above the diagonal, it’s positive, otherwise, it is negative.

Proximate Determinants of Non-equality:

Beside the previous mentioned points, which measure unequity in health directly, we could measure it indirectly, as well. Therefore, if we assume that all income inequalities are omitted, (although it is impossible in reality, as the groups are different from each other in the average of age), and consider the death rate of the adults, definitely the health status of an 80 year old individual is incomparable with that of a 20 year old young, and if the number of the old is higher in a group, the concentration curve is located above the diagonal, which because of the relation between income and age issues, and also age and health status. In this regard, three factors have been identified, which are consisted of: determining factors in families, society, and health system and dependent sectors. At the family level, the income (financial fortune) and knowledge level are the key factor even though inside families, gender discrimination is the major factor. Children’s nutrition style, maintaining hygienics, like washing the hands and correct excretion, improve by the increase in income.

Education and literacy result in improvement of health status. Literate mothers utilize from a higher level of services, kind of providers, utility, nutrition styles, and observing hygienics.

In the socio economic status, i.e. society, geography and environment like road provisions and rainy seasons are important. Observing hygienics in insufficiency of water and a bad environment is problematic. The society has an indirect influence through social institution like the youth clubs, female groups, and other institutions.

The term “social capital” is sometimes used to define the norms and networks through which social activities are facilitated such as organizing nutrition programs. There are three major social capital layers:

-Inner society ties-bonding.
-Relation between different society members-bridging.
-Relation between societies and official institutions-linking.

During the debates of health system determinants, there are sufficient evidence on the results of health and benefit from services in the form of provision, accessibility, price, and quality. Provision means presence of the workers in health centers, accessibility means facility of getting to the health centers, and one is the time it takes to get there. Existence of transportation vehicles, roads and road foundings. The price is influential on benefits, and its increase results in decrease in benefits: For the tendency to pay, the quality of service is influential on the amount of use.

Distribution of Determining Health Factors:

In family stage, the important cause of inequity in health consequences is the family income. In countries with low average income, Gini coefficient is variable between 0.2 and 0.3(Eastern

Europe) to 0.6 (Brazil, Sieraleon, South Africa). The other key factor is the non-equality of education, especially in mothers. There exists an inner family inequality among poor families, especially gender discrimination.

From a socio capital perspective, a great deal of social capital are of “Bonding” kind, an average amount of “bridging”, and a small amount of “linking” kind. Regarding the population perspective, the poor have more problems, although there are very small troubles in availability but in accessibility, there are more troubles considering transportation. And the last point is that we cannot come to any conclusion, merely from the socio-economic distribution, that which approximate factor is the pivotal point of unequity in health, we also cannot conclude which socio-economic factors are the most relevant reasons in income percentile distributions. Even though studies show That there are great factors at work in the children’s survival, including mothers’ education status, family income, insurance coverage, availability of hygienic water, the distance to the medical services centers, etc … Among the above factors, the most important has been the “income”.

In public policies, the governments have great impacts on the gap between the rich and poor in health issue, either from inside or outside the health sector. As the above figure manifests, the politic territory consists the following points:

1-Allocation of health expenditures

2-Financial provision and observing resources

3-Provision and service delivery

4-Health system stewardship, which is consisted of policy making, establishment of the policies, writing regulations and quality assurance in public and private sectors.

5-Monitoring and evaluation

6-Policies out of health ministry including education, energy, social support, environment, transportation and basic structures.

Even though in fact policies are influential on different socio economic factors and health system, in all territories, but practically, they have more influences on some of them. Through “decision making in the way of consumption”, governments influence availability, accessibility, and the quality of services in poor regions, and through “decision making in financial provision and producing resources, “they are influential on the price of health services and expenditure exemption of the poor and in the long run, through” stewardship activities” they are influential on public and private sectors.

Study of Equity in Health in Iran:

In the year 2000, WHO delivered three major aims for an ideal health system in its new prospect, including: provision and assurance of a good health with acceptable standards, ideal

response, and establishing fairness in financial contribution among families. Accordingly, fairness in family contribution in health is comparable with equity hypothesis in economics and social sciences, and like income distribution and the relevant subject matters in different population groups, (like income percentile) which are evaluated and calculated with indexes such as Gini coefficient, and Tile index, fairness of financial contribution is also calculable in health in the form of an index, and manifests how the families regarding their affordability and their income status contribute in health expenditures. It is worth mentioning that, regardless of income capability of the families, they should have similar health standards. We should know that variation amplitude of IFFC index is variable between zero (the least) and 1 (the most).

The more this index gets near to 1, the more appropriate and just status is imagined.

From the conception point of view, equity in financial contribution focuses on this point that whether each family contributes in provision of medical and health expenditures, proper to its financial affordability and income, or this contribution has no logical congruency with their welfare and income status. Besides, it should be mentioned that taking benefit from the amount and standard of services is henceforth, nearly similar and independent of affordability of a family. Now, with the recent hypothesis, i.e. similarity of the status and standard of services, is the financial contribution appropriate with affordability? An example vivifies the issue. Regarding the recent prospect, in case all strata of a society consisting the healthy or the sick, the rich or the poor, the urban or the rural are capable of obtaining nearly similar standards of physical and mental health through paying 10 percent of their annual income and maintain it through on time utilization of medical services, we could claim that the mentioned ideal society in an ideal situation of equity in financial contribution. Reversely, if the structure of financial contribution is inappropriate in a way that a group of families are incapable of accessing and providing the essential and vital medical services expenditures, or through family collapsing methods and abnormal debts they afford the expenditure, and in the same society, another group are capable of accessing luxury medical services through paying less than 2 percent of their income, it could be that this society has an unjust situation. In this ground, it should be mentioned that the ratio of contribution income capacity of the families is the touchstone of equity calculation, not the paid money by the families.

It might be questioned that why subject of equity is so much noticed in financial provision, and it is evaluated with medical services from the importance viewpoint. The designer of the novel frame of health system evaluation, name four risks and their major consequences as the results of an just situation and have counted the following:

1-Families, especially the vulnerable, encounter hardship through provision of financial resources for obtaining medical services, as they decrease their expenditures to provide for medical expenditures, and this matter decreases the welfare status of the family.

2-The financial burden of health expenditures because of lessening the deposits and allocation of the family income to other consumptions especially items such as appropriate food, or education which like human resources culmination especially for the children of the families have an undeniable influence, decreases the capability of production of the families as the most

important factor in the national production process. Therefore, we could evitably trace the negative effects of the financial system malfunction of the health and medical sector in the process of capital culmination, and in the following economic production, progression and growth.

3-Some of the families might surrender pursuing treatments because of incapability or hardship of expenditure provision which this matter causes decrease in health and medical status of the families and the society.

4-Some of the low income families which are near to the bottom of poverty level, might get drowned in poverty, because of the burden of medical expenditures

A study in 2005, ordered by EMRO has been done in Iran, shows the results of calcula ng two indexes of IFFC (Index for fair financial contribution) and the ratio of families with catastrophic expenditures. The increasing process of the percentage of families encountering with the catastrophic expenditures during four years since 1378 ll 1381 on one sideand on the other, the decreasing process of equity index in financial provision, IFFC, in this very period, is the manifestation of an unbalanced (uncoordinated) function of the financial system of the medical and health sector of the country with the equity-oriented policies of this sector.

Regardless of the non-optimal process of the indexes, the percentage of the families encountering the catastrophic situa on is 2.1 op mis cally, shows the financial troubles in provision of the medical expenditures of a popula on more than 1.5 million, consisted of the rural and urban in the country and notifies the necessity of the principal corrections in the health sector financial system of the country. Do not forget that the statistical limitations have prohibited us from coming to an evident estimation of the population losing life because of surrendering taking medical services, because of financial poverty or inaccessibility of the health services, or are living in sickness.

Ratio of the Families Facing the Catastrophic Situation	Index of equity in Financial Provision (IFFC)	year
2.13%	0.8345	1995
2.13%	0.8334	1996
1.97%	0.8416	1997
2.13%	0.8355	1998
2.14%	0.8370	1999
2.18%	0.8358	2000
2.19%	0.8337	2001
2.32%	0.8330	2002

These studies manifest that families with the following socio-economic specifications, encounter the catastrophic situation more than the other families in the health expenditure provisions:

-The families living in the rural areas.

-The families under the attendance of the illiterate or low literate individuals

-The families with a higher number of children under 12 years old

-The families with a higher number the old members over 60 years old

-The families whose intendants work not under the protecting shelter of government for employment

-The families with a lower number of employed members having income

-Families with an average range of income

-Families with no medical insurance coverage

Scrutinizing the indexes of the headcount ratio of poverty and the poverty gap which is among the measuring indexes of unequity in health, in 1381 sta s cs manifest that in case the third institutions do not exist, e.g. health insurance or the subsided governmental services for the low income families imposed to pay for the medical and health expenditures, would drag 1.12% of these families under the poverty level, and the poverty gap would increase up to 10.68%. This amount is still optimistic in shifting the poverty indexes, as if we could consider the subject of "exemption" and its consequent damages to the poor families or the vulnerable families from accessing the medical services which are not considered in any of the statistics, the differences would be more and of importance.

Briefly, the phenomenon of poverty born from health expenditures has two consequences: first that a group of non-poor families are dragged into poverty and secondly, a group of families with the potentiality of coming out of poverty are kept in their present situation for a longer period of time.

The Percentage of the Families which are Pushed towards Under the Poverty Level, because of Health Expenditures	year
1.22%	1995
1.11%	1996
0.95%	1997
1.06%	1998
1.12%	1999
1.25%	2000
1.11%	2001
1.12%	2002

As regarded, during the studied period, at least 1.1% of the families have been pushed towards poverty after provision of medical expenditures, annually; and might have been kept in that situation because of the dynamic essence of poverty, and its defected cycle. The obtained results from the provinces studies in 2002 manifest that Charmahal has the best index, whereas Qom has the worst index in IFFC. Accordingly, Qom has the highest and Charmahal has the

lowest number of families which have encountered the catastrophic expenditures. Besides, Khorasan province has the highest and Tehran has the lowest poverty pushed families.

Province	Equity Index (IFFC)	Families Facing Catastrophic Expenditures	Poverty Pushed Families
Markazi	0.8290	2.25%	1.30%
Gillan	0.8144	3.36%	1.48%
Mazandaran	0.8259	2.80%	1.19%
Eastern Azarbayejan	0.8247	3.19%	1.26%
Western Azarbayejan	0.8438	2.69%	1.74%
Kermanshah	0.8098	3.78%	1.13%
Khoozestan	0.8692	1.30%	0.36%
Fars	0.8483	1.78%	0.78%
Kerman	0.8446	2.24%	0.64%
Khorasan	0.8120	2.98%	2.69%
Esfahan	0.8191	3.43%	1.64%
Sistan & Baloochestan	0.8358	1.81%	1.58%
Kordestan	0.8196	3.00%	1.62%
Hamedan	0.8169	2.95%	0.92%
Chaharmahal & Bakhtiari	0.8818	0.67%	1.41%
Lorestan	0.8513	1.72%	0.99%
Ilam	0.8513	1.14%	0.71%
Kohgilooye & Booyerahmad	0.8602	1.41%	0.50%
Booshehr	0.8731	0.89%	0.36%
Zanjan	0.8479	1.59%	1.10%
Semnan	0.8425	1.68%	0.85%
Yazd	0.8482	1.53%	1.32%
Hormozgan	0.8589	1.31%	0.83%
Tehran	0.8212	2.49%	0.27%
Ardebil	0.8481	2.01%	1.18%
Qom	0.7972	4.72%	0.88%
Gazvin	0.8273	2.74%	1.14%
Golestan	0.8378	2.18%	1.57%

Conclusion:

The results obtained from the debates and analyses could be delivered in the form of the following policy advices:

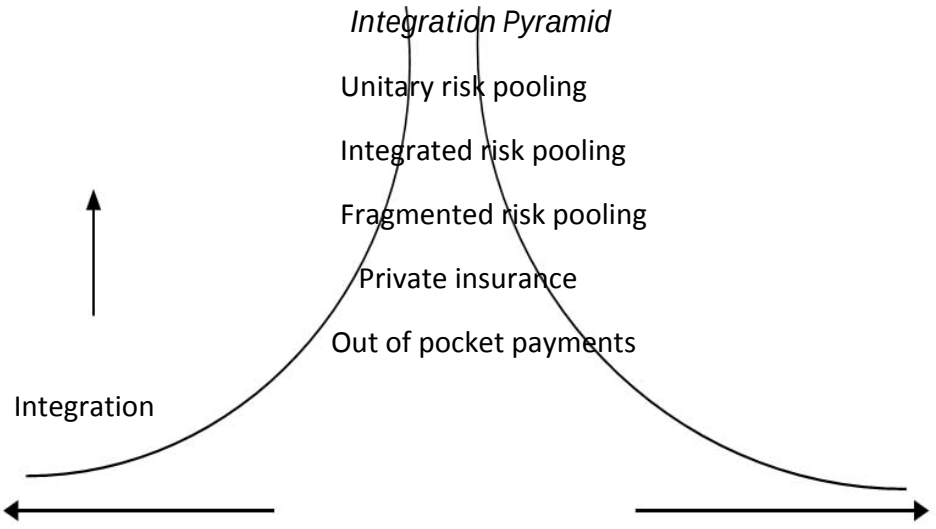
-The only way of getting to equity in financial contribution in health expenditures is obtaining the universal coverage.

-In this perspective, the first step is the exact identification of the socio economic specifications of the goal strata and reviewing the present policies of the financial system in health and medical sector.

-the medical insurance system of the country should be organized considering two major notifications. Firstly, the necessary steps should be taken, in order to cover all the uncovered strata in the country through the financial and other necessary provisions.

Secondly, the insurance funds should be provided through providing resources from the members' contribution according to their affordability progressively. Actually, the medical insurance of the country could pace towards realization of equity as an influential medium, besides maintaining a permanent financial balance. This mechanism of redistribution and just contribution of all strata based upon their income and wealth is also universally acceptable and efficient in the revenue system.

The important point here is that it is imagined to gain universal coverage, organizational integration is indispensable among medical insurance organizations, while considering the "Integration pyramid", noticing that Iran is located in the stage of fragmented risk pooling, before going to the unitary risk pooling stage, it is essential to go over the integrated risk pooling stage. Therefore, the prerequisite for the insurance organizations integration is the unity of the methods of financial provision, for the first step, and the second is unification of the ways of delivering their commitments, and the last step would be structural unity.



-Considering the results and the delivered analyses of the socio economic strata confronting health expenditure shocks, the government should notice the productive policies of the mentioned strata. In this regard, welfare and social security Ministry could guarantee the target-oriented protections and state revenues to a great extent through designing the more exact identification mechanisms of strata in two diverse socio-economic and regional-provincial facets, and increasing the productivity of expenditures and resources to a considerable amount.

The Welfare and Social Security as the center of accumulation and cooperation of the social protective policies of the country, should be the innating reference of the relevant studies to the equity in financial contribution, and provide the necessary prerequisites, and policy holding.

-Considering that the major mo o of the 9th government is “extending equity”, the importance of doing studies related to measuring the index of IFFC, regarding ar cle 90 of the 4th development program is highlighted to which is one of the duties of the government to get to equity, decreasing the percentage of the families encountering catastrophic expenditures, and decreasing the out of pocket payments. The Social Welfare Ministry should order qualitative and quantitative statistics, both national and provincial, as the primary prerequisites of these forms of studies.

-Noticing that one of troubles of the vulnerable families is their employment situation. Now that the condition of taking benefit from insurances is having an income through being employed, thence the income contribution has been determined, it is policy holders’ major duty to search and find a solution to affect the barriers maintaining the financial management principals and keeping the balance among medical insurance institutions. The high rate of the unemployed and the worrying extension of the unofficial employments in the country detain accessing the undeniable benefits of the medical insurances for a considerable range of the population. This is while these strata of the society are confronting health risks more than the others, because of their life and nutrition conditions. The governmental aids, based upon public resources, are to insure these social groups till resolving their employment problem, is an indispensable essentiality. In this ground, the present resources of the funds, even with the hypothesis of increasing the premium of the present members considerably, in no way afford the new comers expenditures provision.

-Regarding that the residents of the rural areas are at the risk of the dangers of the health financial system malfunctions more than the others, and that they are less secure while encountering medical expenditures shocks, it is necessary to deepen and propose the rural insurance design sooner, in order to cover 1/3rd of the whole population of the country under the shelter of medical insurance system.

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