Measuring Health Worker Motivation in a Teaching Hospital in South Africa from December 01 to December 02

Submitted in partial fulfillment of Master's of Public Health (Health Economics) Degree

Mini-Dissertation

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15.7) Dimensions of Thinking in the proposal /operationalization	
The Questionnaire-copy	

I) PREFACE

ACKNOWLEDGEMENT:

One of the incentives is the "rewards" one gets from accomplishing a task or a goal. Like was in the Pavlov's experiments with dogs-to man it is not so much related; See I enjoyed very much my supervisor's way of instructing, by making sure he puts across if possible all my negatives before me! Unlike what many of our policy makers would like to anticipate i.e. positive rewards in most of the times, this is the sort of advisors fit in the "developing world" I presume. This is not other than Stephen Thomas, a senior lecturer and researcher in Health Economics Unit, UCT.

In my case of findings out the indicators or determinants that may be used in measuring motivation. This is like one looking from the other end –if one wants to monitor the impact of providers' motivation towards achievements of equity, efficiency (allocative/technical), quality of care and efficacy/output will look then for the prevalence of one of these indicators/determinants going up /down. Not only that as one can as well monitor other indicators of health improvement as IMR, LE, decrease in YLL, etc. Thus from the baseline to policy to input; then the processing through decision making and involvement of each one in the institution in the "planning spiral" to output (i.e. the development achievement/improvement of health status), I owe much to the undermentioned:

1) To my youngest daughter Jacqueline (7) who kept encouraging me "keep on writing dad" and when I had no more pens to write with she offered me her pencil.
2) To my wife DR B.S. Mayenga, MD who was ready to live below standards in order that I could as well go through my master's degree course.
3) To Prof. Di McIntyre-for changing my perception of the world from eastern 'quasi" African socialism to market economy.
4) To Prof. J. Myers and his assistant DR Young, for correcting the study design

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6) To DR Stilwell Barbara- WHO headquarters for her encouragement.
7) To DR Nicole Cotzee-who kept charging me–"run man …keep on running!
8) The Canons Collins Educational Trust for Southern Africa for support on my living and transportation costs in Cape Town –South Africa.
9) Our Class convenor Prof. Rodney.

Lastly if not the least, I gratefully acknowledge the staff of Wolfson's and Health Science computer laboratories for their tireless efforts assistance they offered me during the data collection and write up of the project.

II) GLOSSARY

TANU-Tanganyika African National Union

ATP-Ability To Pay

ANC-African National Congress

CCM-Chama Cha Mapinduzi (the present ruling party in Tanzania, literally meaning "revolutionary party")

CUPD-Clinics Upgrading and Building Program

DOT-Directly Observed Treatment

EME- Established Market Economies

HDI-Human Development Index

NHA-National Health Accounts

NEPAD-New Partnership for Africa's Development.

MMD-Movement for Multi-party Democracy

OPEC-Organization of Petroleum Exporting Countries

OECD-Organization for Economic Co-operation and Development

SSA-Sub-Saharan Africa

PHC-Primary Health Care

PHE-Public Health Expenditure

PPP-Price Purchasing Power

GNI-Gross National Income

GDP-Gross Domestic Product

MEC-

STD-Sexually Transmitted Diseases

STI-Sexually Transmitted Infections

THE-Total Health Expenditure

WTP-Willing To Pay

YLL-Years of Life Lost

LE-Life Expectancy- (an indicator of ill-health-survival) is the average number of years that a person lives from birth if the age specific mortality rates apply.

IMR-Infant Mortality Rate (an ill-health indicator) is the number of infant deaths in a year divided by the number of live births in the year.

III) INTRODUCTION:

HEALTH WORKER MOTIVATION STUDY

Motivation is hereby examined from two angles –the participant observation – whereby after the findings that almost about half of those participated in the study complains of inaccessibility to decision making: thus reducing their internal power and hence contributing to poor technical efficiency possible. Two, though in literature many thinks that emigration may help the country of origin (from payments sent home to their families by the workers temporarily abroad), however, there is little prospect of the so called rich countries allowing immigration on a significant scale,

again it matters a lot, on the question of feeling proud of one's nation. Still a question of academics, on "brain drain."

The emphasis on curative or tertiary hospital resource bias rather than PHC with efficient referral system is again looked from the perspectives of biomedical and silver platter models rather than "medical anthropological" and cost-effective treatment approaches.

The initial format proposed was found in the preliminary questioning and observation that the "action environment" of the base population and especially so in Western Cape, though thought at first glance to be conducive; is not so. Not only that the prevailing conditions, that there was a health workers' "unrest" in the setting during the study period, was also a big set back. This gave a picture that what was suggested more than 10 years ago in one SSA country concerning the minimum take home of a GP (as about 1500 US $) still make sense in many other SSA countries. This being made not to materialize is exacerbated by poor allocative efficiency (e.g. many participants complained of not being used efficiently in their place of work-sort of induced "technical inefficiency" as well as, or presence of departments of health almost equivalent to a ministry of health in every province in South Africa); poor equity and resource generation in many settings.

My little worry is; since every cadre can urge its case how important it may be, as important as is our mouth in taking in food it is also important for the posterior Os (anal orifice) in expelling out the fecal matter. Therefore, if government X spending is G at its maximum on services and investment, and if offers its workers H: Q salary level which is tax deductible; and if somehow some workers wants salary level at Q+Y at a level from which not tax deductible say, it will then "force" government X to spend more than its maximum earmarked, thus leading to budget deficit which in turn may lead to inflation. Hence the argument on increasing the size of the "pie," though the government program and or institutional organization also matters, calling for the participatory effect of the professions and community in decision making, a much delayed culture in many institutions. (JEM, October 2002).

The Groote Schuur tertiary hospital is situated in the Cape peninsula in Cape Town few kilometers from the city center. Cape Town is the capital city for the Western Cape Province, one of the nine provinces in the country-South Africa. The province has 4.2 million people of whom 75% are Whites. The province population is about (9.7% of total population) out of 41.7 millions of the country's total population. (1998, SAHR-2000). The province has 22.6% of total doctors in the country and about 14.5% of the total country nurses. Most of the Western Cape workers are employed in formal sector or self employed, and thus enjoy as well health care services through medical schemes fairly biased towards the formal sector. (See also Table 1 and 3). Source –PERSAL personnel administration system 09/03/1999.

JEM, 2002

IV)

ABSTRACT:

The research is about Human resource development.

The objective of this study is to measure health worker motivation in a South African context. South Africa is a middle income developing country. Health workers consume up to 60% of public health budgets in South Africa, and yet unlike many developing countries, it is possible that resource re-allocation may lead to some drastic changes in health workers' motivation. In one unpublished study (Putting Equity in Health back onto Social Policy Agenda: Experience from South Africa, by Di McIntyre and Lucy Gilson), it was noted that one of the causes of health worker demoralisation was the unavailability of equipment, or the poor quality of the equipment. Health worker demoralisation has serious consequences, because doctors and allied health staff are allocating resources in every action they perform every day, whether they are aware of it or not. When the efficiency and effectiveness of these actions are considered, it is clear that staff morale makes a big difference. This is the simplest way to present the importance of motivation in health care.

The more motivated worker will be more accessible physically, socially, psychologically and even technically, and will be using his/her skills much better. In

terms of efficiency-services, the motivated worker will provide optimal necessary and appropriate rather than maximum care, and in a more sustainable way.

The methodology to be followed will be that developed by Partnerships for Health Reform [PRH], but if found not applicable to the context, another general study design will be sought. The psychoanalytical framework, e.g. affective and cognitive outcomes, (such as general work satisfaction, organisational commitment cognitive motivation), includes: -Workers assessed performance (such as conscientiousness, timeliness)

-Supervised assessed performance (using same indicators as for workers assessed performance) based on Likert's scales to assess the determinants of motivation will be used. The relevance of this conceptual framework will be assessed. From this appropriate interventions for South Africa and other developing countries will be identified at both the individual but particularly at organisational levels.

The key methodological tool is a questionnaire which will have qualitative components (allowing for more detailed comments by respondents) and quantitative elements using yes/no questions and various measurement scales (see attached annexe).

No risks to the trial subjects will be encountered;, as the study is not going to engage in any invasive procedures. Furthermore no reports or publications will reveal any details that can lead to identification of any person(s) in personal involvement in the study.

The study is being designed to benefit the population of South Africans as well as other developing countries. The results will be made available to relevant health services, health providers;

community bodies and any further stakeholders for their implementation in new or future plans and health policies.

Summary of the responses:

The response was very much affected by what was happening in Southern Africa region during the period of study; That were many trade unions calling for strikes in the country of study itself. In neighboring country Zimbabwe, there was a nationwide GP and or Health worker strike going on. These made some of participants in the study to think or might think the study was a sort of "trap" to know their stand in their place of work. One senior doctor put it this way; " For sure your questionnaire is good but am sure it will very much be affected by what is going on in our region (Southern Africa?) at the moment, and possibly the respondents may be scared!"

Still the results show the stand of our institution or units of work place on efficiency, equity of accessibility, and quality of services we provide. It also points out the importance of development in capacity dimensions viz. the action environment itself e.g. economic growth, political factors, social factors; others being public institutional context, task network, organization structure, human resources and performance output. There is no way one may leave aside either of these ifs seriously wants development and good performance and of course sounds output.

V) EPIDEMIOLOGIC DESCRIPTION/PREFACE:

Health Worker Motivation: - In most developing countries, the health inputs have been heavily concentrating on the curative services e.g. on the specialized hospitals often taking more than 40% of total budget to Ministry of Health. The other area of concern is the health worker /staff and their selective behavior of favoring working in urban VS rural/periphery –disadvantaged areas. Given that staffs consumes more than 40%-60% of most health expenditures in many developing countries when it comes to decentralization of health care services and health care financing; these issues are of paramount important.

In a country like South Africa where historical backgrounds on political, social and economical classes created more burden of diseases on the poor (anxiety/emotional or mental illness) and more so on the black majority, resource re-allocation, investment in facilities and equipment needs a deeper understanding of the unconscious mind at work, the anxiety and pain hidden by all such problems in a society. Thus at the moment –if one needs to make changes in the health care service delivery system pyramid –that more emphasis is put on the lower levels –the households, the clinics/health centers and district hospitals –where most of essential clinical problems take place; and investing in public health of which are more cost effective, then understanding the health worker (carer taker) is again of paramount

importance. [World Bank Report –investing in health –2001]. Studies have revealed in some countries like Chad, 71% of all central hospital consultations were for problems that could have been treated at lower level facilities. It is in these facilities – where it is more cost-effective treatments are met than when the same conditions are treated in the tertiary centres. [Page 135 World Bank report 1993]

When one thinks of incentives, whether non monetary or material wise –to the health worker provider one has to know who are these providers; why they are acting the way they are doing so, either individually or as a group, (an organisation say doctors, nurses, physiotherapists, or allied health workers etc.) to safeguard their profession and interests. Health care organisations operate upon persons and not upon the qualities and behavior of material things. The interaction between care workers (people with particular sets of attitudes about their kind of work) and their raw material of other persons (patients or clients also with attitudes towards this work) is more complex, subtle and subjective than the cultural attitudes of an industrialwith inanimate raw material. (R D Hinshelwood-Observing organizations –anxiety, defense and culture in health care –page 5)…However, while the features of an institutional culture are carried by the individual members; they cannot be reduced to individual psychology; they exist within the reality of the whole organization. [Hence the aims of the study and the objectives below]. The individual however, has his or her own objectives, conscious and unconscious, for taking part in it. (Hence the questionnaire will try to formulate or come out with the outcome an explanation of this hidden /unconsciousness which may either be brought up by emigration (brain drain) or the unspoken shared attitudes, the unacknowledged anxieties and conflicts as well as the quality of work done (e.g. adherence /compliance to prescribing generic

brands of drugs rather than trade names/brands cast consciousness of their actions) of the atmosphere and its unconscious aspects.

The study then while employing an action research approach or a prevalence cross-sectional survey, following a cohort exposure history ethnographically these anxieties, and defenses which ends up shaping the staff organization and work output/goal achievement.

Within this the comparison of work experience are made within the cohort across subgroups defined by one or more exposures. Examples includes cohorts defined from membership lists of administrative, or social units, such as cohorts of doctors, nurses, or cohorts from employment records etc. [Rothmans J K –Modern epidemiology –non experimental studies]

Such then will be looked up in three ways –specific kinds of anxiety, which are connected with particular forms of work (within the health care system);

-The people drawn to particular professions and certain fields within them are usually people with certain kinds of personal anxieties and defense mechanisms, and this in itself has a strong influence on the health worker culture.

-Thirdly –there are very different ways of dealing with these general and personal anxieties within an organization (the health workers/ hospital staffs/) leading to different kinds of culture. However, all three are interconnected in many ways. (R D Hinshelwood, W Skogstad), and the major concern is the economic point of view. This might take major part of the discussion and or suggestions to policy maker.

This might already put you in a dilemma of division of studies. The division of epidemiological research into descriptive and analytic compartments has given rise to illusion that there are different sets of research principles that apply to descriptive and analytic studies. This notion devolves from a mechanical view of scientific research,

and diverges from prevailing doctrines of scientific philosophy. The view that "descriptive data for exploratory studies" generate hypotheses, whereas, the data from analytic studies are used to test hypotheses, doesn't cohere with a broader understanding of science. Hypotheses are not generated by data, they are proposed by scientists. The process by which scientists use their imagination to create hypotheses has no formal methodology and is certainly not prescriptive. Any study then can serve to refute or serve hypothesis. [Modern Epidemiology by Rothman KJ 1st edition page xiii]. Other notion needs mention here too; while hypotheses are often stated in qualitative terms, the testing of hypothesis is predicated on measurements. The role of measurements is central to all empirical sciences, not only epidemiology, no matter how qualitative the theories under evaluation. Examples are qualitative stated hypotheses about evolution-the formation of the earth, the effects of gravity on light or the method by which birds find their way during migration by measurements of the phenomenon that relate to the hypotheses. (Rothman page 30)

It is noted that since Hippocrates time physicians recorded history about causes of diseases, however, it was until scientists began to measure the occurrence of disease rather than merely reflect on what may have caused disease that scientific knowledge about causation made impressive strides. {Rothman); see also objective number 1 of the study below.

2) Title

2.1) MEASURING HEALTH WORKER MOTIVATION IN A TEACHING HOSPITAL, WESTERN CAPE PROVINCE IN South Africa.

2.2) Aim:

To assist policy makers to develop interventions to improve health worker motivation by identifying motivational determinants

2.3) Objectives:

2.3.1) TO DEVELOP APPROPRIATE TOOLS FOR USE IN DEVELOPING COUNTRY CONTEXTS TO MEASURE HEALTH WORKER MOTIVATION.

2.3.2) TO IDENTIFY DETERMINANTS OF HEALTH WORKER MOTIVATION IN A TEACHING HOSPITAL.

2.3.3) **TO RECOMMEND STRATEGIES TO IMPROVE HEALTH WORKER MOTIVATION AND ADDRESS ISSUES OF UTILIZATION OF THE FINDINGS, INCLUDING AREAS OF FURTHER RESEARCH.**

3) LITERATURE REVIEW, COUNTRY CONTEXT (Background):

Health problems addressed in the project and their role within national health priorities

Even though salaries are relatively high in the southern parts of Africa, health workers still look for greener pastures, which contributes to a continual 'brain drain' of professionals (including health professionals) from all parts of Africa. The need to address this 'brain drain' highlights the importance of understanding health worker motivation in detail and taking action to address factors contributing to low motivation.

Health system structure and current situation

The Health system of South Africa is re-structuring from fragmented system, which existed before 1994.

–Health care reform of South Africa has two aims-firstly, to reallocate resources towards primary care, and secondly –" to shift resources from better resourced urban to under funded rural areas" page 5.2 [Health System Reform of South Africa]. While some progress has been made in both these areas, more remains to be done in keeping professionals in neglected areas. Health worker morale is known to be poor (South African Health Review 1999): many factors related to the special transformation processes, which have taken place in South Africa, militate against a contented and motivated workforce.

Key to strengthening the health system is attention to human resources motivation and satisfaction, and this is the field of work to be addressed by this project.

. National context of health system, and international influences:

South Africa has undergone, in recent years, drastic political changes. From the minority rule of more than 40 years by whites, together with the tragic policies of the apartheid era, South Africa is still regarded as one of the most unequal societies in the world [Fallon and da Silva 1994]. Thus, a key issue on the policy agenda of the country is that of equity, e.g. .the Reconstruction and Development Program (RDP) described a package of social and economic policies that were aimed at redressing the massive inequities within all spheres of South African life. Improving overall health status, and reducing inequities in health status between different groups, is a particularly important policy goal for South Africa. Many of the broader social sector policies (e.g. improved access to water and sanitation) were specifically motivated in terms of their likely positive impact on health status. Equitable access to health services is another factor that will contribute to improved health status in South Africa.

The National context of health system and international influences is very harmonious here in South Africa at the material time. The country is doing some health sector reformation including privatization, decentralization and public/private mix. The population is about 41.7million with 12.5% unemployed, and 66% are not active in employment (mostly Blacks) and only 22% employed. About 45% of the population earn below R1000 which is about 100US$ per month. Primary health care within 5kms is available to about 80% of African urban, 40% African rural, 75% Whites, Coloreds and

Indians. Only 11% of the national budget is used on health; and more than half in the more resourced urban areas.

Health system problem to be addressed by the project:

Recent studies have indicated that a number of factors adversely affect equitable access to health services in South Africa. These include infrastructure problems, gaps in drugs availability and most concerning, staff discourtesy towards, and even abuse of patients [Jewkes and Mvo 1997, Oskowitz et al 1997; Schneider et al 1998; Tint et al 1996]. Many of these access issues influence, and are influenced by, health worker motivation. It is thus critically important to obtain a better understanding of the level of health worker motivation, and the determinants of motivation, in order to take policy action to improve motivation and associated staff attitudes to achieve equitable access to health services.

As in all other sectors of the economy workers were not consulted nor did they participate in post independence public health sector management and bureaucracy and organizational culture were not conducive to sound labor relations. Efforts were made over the years to reform the services, but the socio-political order prevented this. Since 1994 there has been commitment to fundamental reform of the health system including the human resource elements. [South African Health Review 1999].

-Some confusional state and neglect has met in the pace of all these. Nevertheless there have been complaints of continuous disruptive effects of restructuring on motivation; relationships and staff turn over.

Similarly "new" and "old" management styles and organizational cultures have clashed. In some provinces the new management is accused of not wanting to learn from past experiences before implementing new systems and policies. Discontent of policies being decided "up there"[at the national level] for the provinces just to implement and leaving their hands "cut off" in the face of persistence problems. Staff also complains about delivery being squeezed out of staffs who are over stretched. There is neither co-ordination nor focus. Thus staff are showing signs and symptoms of "burn out" [South African Health Review 1999.

INTERNATIONAL COMPARISON OF HEALTH STATUS AND OTHER INDICATORS:

Country	GNP per capita (US$)	HDI (1993)	IMR per 1000 births	LE at birth yrs	IR of TB per 100000 pop	% of children 12-23 with wasting	% of children 24-59 mo with stunting
S. Africa	2560	0.649	54	62	250	10	53
Southern African countries							
Mozambique	80	0.261	149	43	189	-	-
Zambia	360	0.411	106	47	345	10	59
Zimbabwe	650	0.534	48	62	207	2	31
Botswana	2530	0.741	36	68	-	6	37
Selected middle income countries							
Malaysia	2520	0.826	15	71	67	6	32
Venezuela	2730	0.859	34	72	44	4	7
Argentina	2790	0.885	25	72	50	-	-
Uruguay	2840	0.883	21	74	15	-	16
Brazil	2940	0.796	58	66	56	6	29
Mexico	3030	0.845	36	70	110	6	22

World Bank 1993

Table above shows the differences among different health indicators.

While South Africa has better health status indicators than some of its neighbors, its health status is worse than Botswana and Zimbabwe? Zimbabwe has GNP per capita four times lower than South Africa. Same to South Africa and some Latin America countries (all middle income) with same level of economic development but its health

status and its HDI are considerably worse than those from the Latin American countries are. [The mortality rates for South Africa may be much worse as by then it is estimated as many as 45% of deaths within South Africa population were not registered. Bradshaw and Schneider 1995].

A lot can be said about the apartheid legacy of inequity and health care. On racial differences as per IMR (1990s) 11.5 times more in Africans than Whites. Maternal mortality rates (1991) was 31 times more in blacks than Whites; Provincial differences on mortality rates and LE worse indicators in poorer provinces which include large components of the former homelands, e.g. in Eastern Cape, Mpumalanga, North West and Northern Province. Per capita public sector expenditure (1992/93) 3.5 times in most well –resourced provinces to those poor resourced. Same to personnel availability to the population dependent on public sector health services x6 more times GP doctors and x60 more specialists and x3 more nurses in the most well-resourced provinces compared to least resourced.

There were also intra provincial differences on per capita expenditure on public sector health services (1995/96) up to 400% differences between most and least well resourced health district within some provinces. The rural/urban differences (1995/96) socio-economic differences on health utilization per capita health expenditure up to 15x among relative high-income members of comprehensive private health pre-payment schemes compared to public sector health expenditure. (See tables 1 and 3).

To policy makers post 1994 this needs

-Redistributing public health sector care between and within provinces

-increase primary health care utilization levels for currently disadvantaged groups (women, children under 6, rural population) including redistributing resources between levels of care to improve resourcing of primary care services, while still maintaining adequate referral services.

-Reduce barriers to primary care access (financial barriers, engendering a caring ethos among health care providers; and such things calls for needs based formulae for restructuring or redistribution.

-Addressing the public/private mix to make resources located in the private sector available to broader section of the population and or redistributing resources from the private to the public sector.

I will refer back to this simple setting when coming to discuss demoralized workers and slow going or boycotting work and the relationship to our high salary demands from our pie GDP/GNI equation.

Policy/health system actors and processes to be addressed by the project:

Shortages of health professionals, doctors, pharmacists, radiographers, emergency care practitioners do exist and not only that disparities and mal-distribution. Short – term strategies like importation of foreign doctors [country to country contracts] is not a solution. Measures to sustain or retain /staffing levels in the public service is one of the project's target. The introduction of community service again is debatable in sustainable/viability. In retention other strategies include –rural allowances and accommodation for doctors excluding other workers; but studies have shown that not only that the higher ratio of doctors to population matters when it comes to question

of health improvement! The new public health regulations [effective from 1st July 1999] may bring flexibility to provinces MECs to play around with incentives.

-Targeted recruitment, sponsoring, training of own human resources for shortfalls are to varying degrees in place in all provinces. Relocation of nursing colleges in deprived areas and purposeful recruitment of student nurses from such areas.

Financial allocation [global equitable share] budgets to equalize disparities

Redressing of interprovincial inequity –historical backlogs like having no infrastructure facilities that are dilapidated and "real needs" and complexities of the provinces.

The project then has to find the inner details of redressing deep onto these strategies. There is a political will –we are looking forward for stakeholders willing and ability to pay (i.e. learning the way to play a role in redressing these problems and use of their technical efficiency better of. The condition or action environment favors the researchers participation in the solution.

Expected benefits of research project for policy/health system development:

Out of the project will surface strategies to overcome shortages and disparities in human resources and to develop the morale of demoralized workers. Useful information will be provided for provincial departments of health and National Department of Health for Human Resource development.

Creative strategies to affect morale of staff may include building of nurses homes, good working offices, transport for staff training courses merit awards etc. stand by and overtime allowances to mention a few.

4) CONCEPTUAL FRAMEWORK

Motivation is defined as an individual's degree of willingness to exert and maintain efforts towards organizational goals [Kanfer 1999]. The Collins Dictionary states that motivation is a reason for a course of action towards a goal.

It is important to separately measure the factors, which determine or contribute to health worker motivation as well as to assess the actual levels or outcomes of motivation. Recent research on health worker motivation conducted by [Bennet and Franco 1999] used the following concepts and indicators to assess determinants of motivations:

- **Individual differences**:
  - Expectations
  - Values and work ethic
  - Work-related personality (such as desire for achievement)
  - Emotional personality
  - Job preferences
- **Perceived contextual differences:**
  - Organizational culture (such as pride in the organization and organizational citizenship)
  - Organizational characteristics (such as management openness, resource availability, management support, salary levels)
  - Job characteristics (such as job autonomy and feedback)

outcomes will be explored in South African context. A possibility of maximizing reliability in the study will be encouraged at the data extraction phase as well as data entry phase.

5.1) ETHICS

The study is being done to benefit the population of the South Africa as well as other developing countries. No reports and publications will reveal any details that can lead to identification of any person(s) in personal involved in the study. It will be a catalyst to explore strategies to improve health worker motivation. The results will be made available to relevant health services, health providers; community bodies any further stakeholders for their implementation in new or future plans and health policies.

Research questions and/or hypotheses:

6) RESEARCH QUESTION (S) / HYPOTHESIS AND EXPECTED BENEFITS

6.1.1 What are the motivational determinants for health workers in South Africa?

6.1.2 How can policies and strategies to improve motivation be developed?

7) STUDY DESIGN: ACTION RESEARCH APPROACH AND PREVALENCE CROSS –SECTIONAL SURVEY

Reasons for the choice: One, motivation is an internal psychological construct and can be explored by looking the outcomes of the motivation-retention and turn over of staff standards of performance e.g. exploring personal attitudes. [Stilwell 2001). Action research also gives chance for participants and myself as a researcher to be linked in a

way to assess the perspective determinants; identify and confirm the problem and in giving feedback on the findings; not only increases the validity and reliability of the study but also is a way to implement those findings!

Resultant limitations: One is that motivation has different meanings to different researchers. In adapting the scales and also terms already used in other studies an attempt is made to bring us together in finding a common format in studying motivation. However, the local culture and its context must always be born in mind. Thus by use of questionnaire and meeting the participants in focus groups to explain the tool of measure (i.e. the questionnaire through open questioning and probing for relevant information.) I will record the findings from the interviews myself in writing and do the analyzing. Analysis will be conducted throughout the process of data collecting. Confidentiality will be assured and the participants will be informed that the findings will be aggregated and that not personally attributable.

Constraints regarding validity and conclusions: See also section 2.6.6. The results may be published in appropriate journal whenever possible and presented to the relevant stakeholders. This study will be available to other interested parties to further research of the topic in Africa and other developing countries or implement similarly in a comparable population or situation. The results are also intended to highlight ways to health worker retention, prevention of brain drain, and thus assist in improving health equity, promotion and improvement in the study population.

STAKEHOLDERS

All those people, groups, institutions and organizations that have a vested interest in the promotion of health and health improvement and especially when it

is taken into consideration –human resources is consuming up to 60% of the health budget in most of developing countries. Thus health planners and health policy implementation bodies are also targeted.

Population and/or actors to be studied:

The study design is explorative action research approach, which will include both qualitative and quantitative components. The key methodological tool will be a questionnaire [see attached model copy] which will have a quantitative component (using yes/no questions and various measurement scales) and a qualitative component (allowing for more detailed comments by respondents). It will be completed by a range of health workers, including doctors, nurses, allied health workers, supervisors, support workers etc. The questionnaire will cover the perception of the hospital goals, attitudes towards hospital environment [availability of resources] and the culture of the people been studied. It will also include components focusing on the perception of characteristics of fellow workers, possible effects on performance in different work conditions and lastly proposed interventions to improve motivation if any. Taking into account the sensitivity of some questions on motivation, the questionnaire will draw on question design and scales that have been used in previous studies (see conceptual framework) that pose questions in a sensitive way.

A sample of health workers will be requested to complete the questionnaires. Either a purposive sampling strategy (i.e. to include key stakeholders/workers) or a stratified random sample of different categories of workers e.g. nurses, allied health professionals will be used. The sample size will

be about 5%-10% of health workers in an institution. The questionnaire will be self-administered in small groups, with an introduction from a trained fellow worker or by the principal investigator.

There will also be 'thick description assessment' of the hospital staff involved in the study about major factors associated with worker motivation.

The applicant will undertake the majority of data collection, given that the study will be a part to fulfillment for my MPH dissertation. However, a research assistant may be involved who is more familiar with the real world setting of the study respondents. Limitations taken to avoid bias are big sample size, stratified randomization and feedback to the health workers of what will be the findings.

8) Key variables and indicators:

8.1 **Determinants of motivation**

8.2 Expectations

8.3 Values and work ethic

8.4 Work related personality (such as desire for achievements)

8.5 Emotional personality

8.6 Job preferences

8.7 **Perceived contextual differences:**

8.8 Organizational culture (such as pride in the organization and organizational citizenship)

8.9 Organizational characteristics (such as management openness, resource availability, management support, salary levels)

Job characteristics (such as job autonomy and feedback

The concepts and indicators used to measure motivational outcomes, include:

Affective and cognitive outcomes (such as general work satisfaction, organizational commitment and cognitive motivation

8.10 **Worker-assessed performance** (such as conscientiousness, timeliness)

8.11 **Supervisor-assessed performance** (using same indicators as for worker-assessed performance)

. 9) DATA SOURCE AND PRELIMINARY ANALYSIS

Although the major component of data will be qualitative in nature, as it is phenomenological [appearances and experiences of these workers] as well as ethnographical [as pertaining to their culture towards work], it will be possible to use EPI-INFO, STATA, Multiple Logistic Regression models for most of the data analysis. The indicators and scales to be used in this analysis have been used in other studies, [Franco et al 2001] so this will enable comparative analysis of the findings of this study with those from studies [such as Stilwell Barbara, Health Worker Motivation in Zimbabwe (WHO-publication, unpublished paper), Bernet and Franco in Geogia and Jordan studies [ref.1 and 2], Measuring Health Worker Motivation in Developing countries, by Ruth Kanfer, January 1999 and The impact of health sector reform on Health Worker Motivation in Zimbabwe November 1998, by Dorothy Mutizwa-Mangiza]

Data will be collected through questionnaires responses as a tool to 1:10 stratified sampling of health workers of different cadres-doctors, nurses, pharmacists and allied health workers from a teaching hospital, Groote Schuur in Cape Town. The sampled workers are those who have been in the center for more than six months. Samples also include departmental /supervisors of the working sections. Thus the information on the questionnaire has a range of coverage about all the individual or different characteristics, expectations, work values employer characteristics wage and hours of work, basic job characteristics, as seen in the following tables below on preliminary analysis.

Specialty of the doctor, nurse's degree or diploma and or experience, age, of first registration and employment size of the employer already indicated above, as well as location. (See also page 6 first paragraph and page 43).

SAMPLE CHARACTERISTICS: The sampling will try as much as possible to balance gender, except in the nursing profession where female dominates; all the males may be included to match as much as possible. Same to age, qualifications, e.g. grades or equivalent/degree/diploma will also be matched.

Job related characters: - post basic training, professional organization membership, work patterns, e.g. shifts, of which is of one's preference choice; Control over their working, undertaking duties outside their expected roles, what reward if any for additional responsibility; reasons for joining the profession, or specialty, and all other work values as pertained in the framework.

PRELIMINARY ANALYSIS AND OR INTERPRETATION: -

RANKING OF THE JOB SATISFACTION, AS MOTIVATED OR DEMOTIVATED by use of point ranking or scales. If sample size could not permit a simple correlation will be conducted and interpreted throughout the results or findings. OTHERWISE,

THEN, BY USE OF A BINARY LOGIT MODEL A logit command will be reached and used to run in stata. Such model can use dependent variables on two possible values computing the independent variables realizing certain possibilities, which when greater than a chosen threshold value will result in the dependent variable taking on the value of 1 or 0 if the probabilities are less than the predetermined threshold amount say of utility [MOTIVATION], Long 1997. These models are quite used in social sciences- thus our case here of motivation.

The model will present dependent variable MOTIVATION and several independent variables /determinants of motivation. See a mathematical formulation of the suggested regression and example of few variables tabulated.

Mi = B0 + B1X1 + B2X2.....B45X45

Where these variables are defined as

Mi = hwmotive motivated/demotivated, 1 if the health worker is in a teaching hospital and 0 if in the peripheral hospitals

X1 = wage relative is 1 or 0 if not relative

X2 = gender 1 dummy for male

X3 = married 1 dummy 0 not married

X4 = Training encouraged at workplace 1 dummy 0 not

...

X45= organisational citizen citizenship 1 for 0 not

Hwmotive = B0 + B1[WAGE] + B2 [GENDER]+ B3[MARRIED] + B4[TRAINING]+B5[....]+B45[CITIZENSHIP].

TABLE SHOWING A PRIORI SIGNS OF EXPECTED COEFFICIENTS:

Salary +

Training +

Fairness +

Shifts –

+ = MEANS positive motivated and a negative sign meaning negatively motivated.

No availability of equipment – etc. etc.

The Regression output is as follows:

Svylogit hwmotive wage, male race married age degree diploma pay pride training

.....reward size secure.

NOTE THAT SOME FACTORS MAY BE DROPPED LATER IF COLLINEARITY MISSING.

a) **Individual characteristics**

b) Age 25-29, 30-34, 35 –39, 40-44, 45-49, >50

c) Male, white, other race, married, degree, diploma, other grades, speciality, non-specialist, number of children,

2) **Expectations**

a) work control,

b) personal,

c) social ,

d) undertakes tasks below grade,

e) acting up to a higher grade,

f) grade not a fair reflection of duties,

g) training encouraged at work place,

h) has a second job

3) work values

a) help others important

b) flexibility of working hours

c) job security

d) fairness

e) promotion prospects

f) pay important

) Employer characteristics

a) size

b) pride

c) organisational citizenship

5) **Wages and hours**

a) relative wage

b) number of hours worked

6) Basic job characteristics

a) Enrolled nurse

c) enrolled doctor

d) surgical worker

e) medical worker

f) pediatrics

g) obstetrics worker

h) doing post basic training

i) tenure in current post

j) shifts –day only /night only

member of professional organization...etc. Methods to ensure validity and reliability of observations:

TWO SUCH previous studies were done in Georgia and Jordan [2]

Thus a previous validated tools will be used, and statistical testing and finally feedback to the health workers of what will be the findings.

The use of specificity and sensitivity here is not going to be easy to use say gold standard. The indicators and scales to be used in this analysis have been used in other studies, [Franco et al 2001] so this will enable comparative analysis of the findings of this study with those from studies [such as Health Worker Motivation in Zimbabwe by Barbara Stilwell, (unpublished paper), Bernet and Franco in Geogia and Jordan studies, Measuring Health Worker Motivation in Developing countries, by Ruth Kanfer, January 1999 and The impact of health sector reform on Health Worker Motivation in Zimbabwe November 1998, by Dorothy Mutizwa-Mangiza]

All the same it will be possible to assess validity in this study, as I will be extracting data from health workers towards motivation. Here it is difficult to apply the ideal gold standard principles, however in those quantitative areas where applicable I will do so.

Specific scales [quantitative and qualitative] used to measure motivational determinants and outcomes will be explored in South African context. A possibility of maximizing reliability in the study will be encouraged at the data extraction phase as well as data entry phase.

Strategies to deal with threat to validity will include taking a big sample size, stratified randomized sample, matching of the respondents where applicable and feed back of the findings to the participants. Also dissemination of the results and recommendations to policy makers and planners as well as supervisors and hospital managers.

A fair short familiarization of the hospitals [to be knowledgeable of the environment] to be studied will be sought if applicable.

Main conceptual challenges in project design/methodology, and expertise required to overcome them:

It has been difficult to report "everything" one could observe, since as I put it before, here is a "context" where one is observing almost two worlds in one. The period from 1994 till today might be fairly not enough to judge others, but still one can see a lot is being done for not only to improve equity but also to reconcile.

Although the major components of data will be qualitative in nature, as it is phenomenological [appearances and experiences of these workers] as well as

ethnographic [as pertaining to their culture towards work], it will be possible to use EPI-INFO, STATA, Logit Binomial models for most of the data analysis.

Statistical methods: Sample calculation using MOH available data of health workers different categories [Health System Research of South Africa 1998, 1999 and 2000]

-Possibility of taking big sample as accordance to statistical calculations

-USE OF EPI-INFO, STATA, and developing LOGIT BINOMIAL MODELS FOR multiple regression of the variables after dummy and coding them. The PRIORI GIVEN is according to literature review but the results may differ with probably having different coefficients and signs.[+/ -].

Qualitative interpretation methods: Ethnography [as pertaining their culture towards work]

Phenomenological [appearances and experiences of these workers by observation]

Thick data extraction [through questionnaire as a tool of measure Thick data extraction [through questionnaire as a tool of measure

-Possibility of taking big sample as accordance to statistical calculations

Data interpretation by experts/policy makers:

ADVICE OF STATISTICIAN AND POSSIBLY POLICY MAKERS WILL BE SOUGHT THROUGHOUT THE STUDY AS ONE PARTLY TO GET INVOLVED ESPECIALLY THE POLICY MAKER/HEALTH PLANNERS FOR WHOM THE RESULTS WILL BE DISSEMINATED, AND TWO TO UNDERSTAND THE WHOLE PROCESS OF WHAT IS GOING ON NOT ON ONLY "HOW" BUT " ALSO WHY"? SIDE OF THE STUDY.

PARTICIPATING WILL MAKE EASIER FOR THEM TO ASSOCIATE WITH THE PROBLEMS AND OWN THE RESULTS AS THEY ARE PART AND NOT JUST TO INFORM THEM.

SAMPLE SIZE CALCULATIONS

AS STATED ABOVE EITHER EPI INFO VER. VI WILL BE USED OR STATA

a) IF EPI INFO

ASSUMPTINS	ODDS	PROPOTION	EXP. SAMPLE SIZE	
95% CI; POWER=0.8	P1 Doctors	P1	.n1	
95% CI; POWER=0.8	P2 Nurses	P2	.n2	
95% CI; POWER=0.8	P3 Pharmacists	P3	.n3	
95% CI; POWER=0.8	P4 Allied Health Workers	P4	.n3	
95% CI; POWER=0.8			N	

N = TOTAL NUMBER OF HEALTH WORKERS IN EACH SAMPLED HOSPITAL [E.g. a teaching hospital or either one of the other two hospitals]

IN CASE OF STATA

Let the proportions of different cadre of health workers in each hospital be p1, [doctors], p2 [nurses], p3 [pharmacists] and p4 [allied health workers]

And a = 0.05 [95% CI]

POWER = 0.8

ASSUMPTION	POWER	A = 0.05	P	Sample size
95% CI	0.8	-do-	P1	.n1
95% CI	0.8	-do-	P2	.n2
95% CI	0.8	-do-	P3	.n3
95% CI	0.8	-do-	P4	.n4
TOTAL				N

STATA COMMAND: sampsi p1 p2 p3 p4, alpha(0.05) power(0.8)

OR Comparing two proportions [different cadres of health workers] testing Ho: T1 = T2; Ha: T1 ~ = T2

. z = (p1 – p2) / p(1-p) [1/n1 + 1/n2]

where p =(n1 p1 + n2 p2) / (n1+n2); z value is taken as 1.96 the value corresponding to a 95% level of confidence interval [when a = 0.05]

T = A rough estimate of the unknown population proportion [which will be known anyway from hospital data] but one can use 0.5 for most conservative estimate.

.n1 is size of sample 1 and p1 is proportion in sample 1.

10) TIME LINE: The Project was limited to one year.

Month Starting .in Jan 02-Dec 02	1	2	3	4	5	6	7	8	9	10	11	12
2	*	*										
3			*	*								
4	*	*	*									
5	*	*	*									
6				*	*	*	*	*	*			
7				*	*	*	*	*	*	*		
8									*	*	*	

KEY:

2=Training of Research assistant/team

3= Health workers record acquisition

4 = CORRESPONDENCE /OSPITALS

5= REVIEW OF RECORDS

6 = DATA CAPTURE

7 = DATA INTERPRETATION AND REPORTING

8 = IMMEDIATE REPORT AND FINAL REPORT

11) REF:

1) Sara Bennet, Lynne M. Franco, Patrick S. The Development of Tools to Measure the Determinants and Consequences of Health Worker Motivation in Developing Countries, February 2001[MAR 5 Technical Paper # 2 PHR, Abt Associates Inc.

Bennet S., Lynne Miller F., Kanfer R., and Patrick S., Health Worker Motivation in Jordan and Georgia: A Synthesis of Results December 2000 [MAR 5 –Technical Paper #3 PRH

Bibliographic references

2) , Abt Associates Inc.

3) Issues in Health services delivery –Human resources for health -Achieving the right balance: The role of policy making processes in managing human resources for health problems –Discussion paper #2

4) Issues in health services delivery- Improving provider skills –Strategies for assisting health workers to modify and improve skills: Developing quality health care –a process of change –Discussion paper #1 [WHO/EIP/OSD /00.1]

5) Public service Reforms and their impact on Health sector personnel [DSE/ILO/WHO]-Round Table Berlin 13-15 October 1999

6) Strategies of Qualitative Inquiry, by Norman K. Denzin & Yvonna S. Lincoln1999-chapter 2

7) Qualitative Data Analysis , Mathew B. Miles, A. Michael Huberman-chapter 11

8) Putting equity in health back onto the social policy agenda: Experience from South Africa, Di McIntyre, and Lucy Gilson [unpublished paper]

9) National Health Accounts: Public Sector Report-NHA-Team

10) Schneider et al 1997, study of health centers in Soweto

11) Mooney 1996, Gilson et al 1999- Health care Reforms in South Africa

12) McIntyre 1998, Health care reforms in South Africa page 27

13) Doherty van der Heever, 1997 Health Care Reforms page 5.2

14) Health Professional Council of South Africa 1998

15) South Africa Nursing Council 1998

16) Technical Report to chapter 10 of South Africa Health Review 1998

17) SOUTH AFRICAN HEALTH REVIEW 1999, Overview, chapters 3, 16

Stilwell Barbara 2001, Health Worker Motivation in Zimbabwe.

12) PART II (QUANTITATIVE)

STUDY DESIGN: PREVALENCE CROSS-SECTIONAL SURVEY

TOPIC: HUMAN RESOURCE DEVELOPMENT [MOTIVATION]

TITLE: Measuring Health Worker Motivation in A Teaching Hospital in South Africa [December 2001 to December 2002]

12.1) The **AIM/PURPOSE**: **To assist policy makers to develop interventions to improve health worker motivation by identifying motivational determinants. [The prevalence of these determinants]**

THE characteristics of reformed organizations, without which reforms are unlikely to succeed: are accountability of managerial decisions; the capacity to specify objectives and standards of performance; and to monitor outputs (of which you will not be able to do unless you are involved/know the task ahead and or objectives themselves). And more so on the outcomes, still are the resource uses and analytical separation between the functions of purchasers (planners) responsible for defining needs, specifying tasks and monitoring spending and performance, and above all, those of providers. [See questionnaire].

Thus Exposure /found determinants are risk factors which are expected to be responsible for the outcome [economic emigrants/'brain drain' or who quits and who remains behind]. These are on the negative side; while the outputs and outcomes of the interaction of resource allocation and technical know-how inputs, on the other hand. Then which will be intervention measures to increase workers motivation [hence preventing or controlling this economic emigration /brain drain] and increasing technical efficiency, equity and quality of services. Some measures of intervention have been demonstrated. When one thinks of incentives, whether non-monetary or material wise –to the health worker/ provider one has to know who are these providers. Why they are acting the way they are doing so, either individually or as a group, (an organisation say doctors, nurses, physiotherapists, or allied health workers etc.) to safeguard their profession and interests. Limited resources or weak institutional capacity are additional, mutually reinforcing factors undermining decentralisation in Sub-Saharan Africa countries. This is a result, at least partially, of the limited national

economic base/low GDP/GNI and a cause of low morale and poor performance a generic problem of low salaries. [Waddington CJ, 1992]. Health care organisations operate upon persons and not upon the qualities and behaviour of material things. The interaction between care workers (people with particular sets of attitudes about their kind of work) and their raw material of other persons (patients or clients also with attitudes towards this work) is more complex, subtle and subjective than the cultural attitudes of an industrial manufacturing enterprise. "The scope for mutual impact between one set of attitudes and emotional experiences and the other is obviously great and is missing from work with inanimate raw material." (R D Hinshelwood-Observing organisations –anxiety, defence and culture in health care –page 5)…However, while the features of an institutional culture are carried by the individual members; they cannot be reduced to individual psychology; they exist within the reality of the whole organisation. [Hence the aims of the study and the objectives below]. The individual however, has his or her own objectives, conscious and unconscious, for taking part in it. (Hence the questionnaire will try to formulate or come out with the outcome an explanation of this hidden /unconsciousness which may either be brought up by economic emigration (brain drain) or the unspoken shared attitudes. The unacknowledged anxieties and conflicts as well as the quality of work done (e.g. adherence /compliance to prescribing generic brands of drugs rather than trade names/brands cast consciousness of their actions) of the atmosphere and its unconscious aspects.

Resource reallocations are often an essential complimentary policy for effective reform [Reich MR. The politics of health sector reform in developing countries] but already advantaged groups/regions may prevent them-and decentralised systems consequently have the potential to exacerbate inequity. Reforms also challenge the power of the medical profession, which has until now dominated health sector policy-making and so may resist change that threatens that power. The political system and or bureaucrats often consolidate the power of these advantaged groups by limiting the extent of popular discussion. [See also italic paragraph above]. This to some extent is very detrimental to the outcome and or outputs of any institution.

At present there is high level of demoralised workers *[a prevalence which the study needs to find out] and their risks of poor performance. This leading to poor accessibility, inefficiency, ineffectiveness, and poor sustainability of delivery of health care services in rural/urban areas and especially in the lower levels of health care system pyramid.*

Due to less financial resources/sponsorship it will be not possible to conduct an Incidence case control cohort study [prospective] which could be an ideal one or the previously opted for i.e. Action research. This would require much time of follow up [prospective case finding] to individual or cohort of workers to find out the personnel year contribution to the denominator or to extract thick data. THUS A **PREVALENCE CROSS-SECTIONAL SURVEY (COHORT) STUDY** IS DONE INSTEAD.

. [However, such same study will be repeated in two different consultant hospitals in Tanzania, one a mission hospital and the other of same settings as GSH, in Cape Town,

later next year on the series of further studies on this topic/problem.]; not for the purpose of submission which is the case at present.

12.2) OBJECTIVES:

1) To develop appropriate tools for use in developing country contexts to measure health worker motivation

2) To identify determinants [risk factors/exposures] of health worker motivation in a teaching /autonomous hospital in Western Cape Province.

3) To recommend strategies to improve health worker motivation and address issues of utilization of determinants of the findings indicating areas of further research.

12.3) STUDY DESIGN/METHODOLOGY:

PREVALENCE CROSS-SECTIONAL SURVEY (COHORT STUDY). Results to be interpreted and not analysed. This is because subjects /participants are not selected by outcome/exposure and the outcome are the one being looked for. [RESULTS]. That is what makes one motivated /demoralised; quits or remain in his/her health sector /employment/improve quality/efficiency/output.

POPULATION AND SAMPLING:

Source population: All professional health workers in one teaching hospital [Groote Schuur] in Western Cape Province. These include doctors, nurses, and pharmacists/allied health workers as sub cohorts.

CASES/SAMPLING: 2-10% of every cadre at one point in **time [CROSS-SECTIONAL]'** Thus a prevalence ratio/ prevalence odds ratio/simple correlation may be calculated. Incidence ratio of different factors will not be possible since these workers are not followed for a period of time (to find prospective case finding).

SAMPLE SIZE: ***The population of the respective hospitals, say Groote Schuur as a teaching hospital has 3000 professional h/workers thus 10% is about 300 and to make the increase the study power this may be brought up to 500. But for the purpose of interpretation150-200 is a fair enough sample size.***

DEFINITION AND SELECTION OF CASES/PARTICIPANTS

1. Any professional medical/allied health worker working in the sampled hospital for more than 6 months will be eligible to be taken as a participant/case. The hospital manager will be informed about the study and no blind proof will be instituted. However, permission has been sought from ethic committee as well as concerned departments. To minimize bias the participant will be given prior information of the project and the study is being done to benefit the population of the South Africa as

well as other developing countries. No reports and publications will reveal any details that can lead to identification of any person(s) in personal involved in the study. It will be a catalyst to explore strategies to improve health worker motivation. The results will be made available to relevant health services, health providers; community bodies any further stakeholders for their implementation in new or future plans and health policies.

12.4) INSTRUMENTS/TOOLS OF MEASURE:

Detailed QUESTIONNAIRE –self administered [Through e-mail]/post/by hand.

To control for confounding: variables like age, sex, professional category, income, marital status, number of children, race /nationality will be assessed and standardization made. [This was not done since no logistic regression or stratification was needed for this later study design.]

VALIDITY AND RELIABILITY:

Pilot study will precede the project, and its results will be assessed by principal investigator and two other different medical colleagues an economist and a statistician. The questionnaire will be subjected to about 20 individuals (the tool measure i.e. questionnaire were e-mailed to them) who are not within the study population but fairly resembling the study population [sort of purposeful matching].

The setting will be also fairly in resemblance to the study setting [environment].

Already rudimentarily questions have been put across to colleagues and friends and also few health workers in random in investigating the wording and the clarity of some questions.

The aim of the piloting is to pick up glaring problems and clarifying the wording of the questionnaire.

The addressed groups in the pilot study includes doctors, nurses, pharmacist, allied health worker, one or two supervisors, which are increasingly similar to that target population possibly not within Groote Schuur Hospital.

This will help in logistic issues such as timing, coding and even re-arranging the options for the main study.

CHANGES AFTER PILOTING THE QUESTIONNAIRE

The assistant researcher and I will make comments and criticize the whole process for the benefit of the final questionnaire.

Rechecking of the coding block numbers and if any cases of miscount.

Other comments from the supervisor.

ANALYSIS/INTERPRETATION

Different determinants /risk factors /exposures will be calculated/simple correlation which will enable interpretation of the results and possibly hypothesis testing.

RELEVANCE, FEASIBILITY, PRECISION AND VALIDITY of the study design.

Precision and validity allows for assessing multiple factors [exposures] necessary to the study aim and objectives. TWO SUCH previous studies were done in Georgia and Jordan [2]. Though has been not possible to test the resemblance of the measuring tools used in these two studies within our context of study.

Thus previous validated tools will be used, and simple correlation testing and finally feedback to the health workers of what will be the findings.

The use of specificity and sensitivity here is not going to be easy to use say gold standard. The indicators and scales to be used in this interpretation have been used in other studies, [Franco et al 2001] so this will enable comparative interpretation rather than analytical of the findings of this study with those from studies [such as Health Worker Motivation in Zimbabwe by Barbara Stilwell, (unpublished paper), Bernet and Franco in Geogia and Jordan studies, Measuring Health Worker Motivation in Developing countries, by Ruth Kanfer, January 1999 and The impact of health sector reform on Health Worker Motivation in Zimbabwe November 1998, by Dorothy Mutizwa-Mangiza] All the same it will be possible to assess validity in this study, as I will be extracting data from health workers towards motivation. Here it is difficult to apply the ideal gold standard principles, however in those quantitative areas where applicable I will do so. Specific scales [quantitative and qualitative] used to measure motivational determinants and outcomes will be explored in South African context. A possibility of maximizing reliability in the study will be encouraged at the data extraction phase as well as data entry phase.

Strategies to deal with threat to validity will include taking a big sample size, stratified randomized sample, matching of the respondents (age group) where applicable and feedback of the findings to the participants. Also dissemination of the results and recommendations to policy makers and planners as well as supervisors and hospital managers. Thus some of these are possible within the limitation of interpretation.

A fair short familiarization of the hospitals [to be knowledgeable of the environment] to

be studied will be sought if applicable.

BIAS: Selection bias, if refusal to participate due to exposure status e.g. one thinks his information is very important /sensitive say about salary scale/banking or not, desire to quit/remain or any fear then validity could be affected. This can be neutralized by restriction to admission of such participants if predicted or replacement by other such cadres of same similarities. Participation is voluntary. Information bias –giving exaggerated information or report on one's response to the questionnaire or unreliable response may lead to misclassification of results. If many participants are non-differential may bias results to null hypothesis. That some factors or exposures more likely lead to increase morale in health workers.

WEAKNESSES OF THE DESIGN:

Confounding –exaggeration in responses

Not telling the truth –fear of one's position in work place/especially this period of trade union call outs for sort of uncalled for demands/cheap popularity to semi educated trade union leaders.

Measurement bias- [questionnaire will be corrected by piloting the questionnaire before start of study.

-Income –is a difficult factor as many people have different tastes to money /values leading to different ways of life hence different meaning to different levels of income. Standard definition is again a problem in health. (Gilson 1993)

ALTERNATIVE STUDY DESIGNS/METHODOLOGIES: [in theory on this same issue of motivation]- Incidence case control cohort [prospective] study with two components –qualitative and quantitative questionnaires, the qualitative action research approach, concentrating on thick data extraction and more so on ethnographic issues.

Problems: It is TIME consuming as will need following up workers for several years/long period of their working life thus expensive and difficult design.

RANDOMIZED CONTROL TRIALS-Incidence /prevalence. However, randomized control cluster sampling may be difficult or impossible due to ethical issues and where naturally possible it will be very difficult.

III) RESULTS:

THE GENERAL QUANTITATIVE RESULTS:

Three methods of reaching the participants were used: I) 156 e-mail with the tool of measure (questionnaire) attached were

Sent; RESPONSE: 36 Out of which only 14 answered the questionnaire, rest were complaining either couldn't extract the form or did not respond at all.

ii) Questionnaires sent through departmental secretaries 100 (Enclosed in an envelope and a spare envelope for mailing back or to collect from the same secretaries)

Only 27 responded.

iii) 50 Envelopes with questionnaire and an empty envelope to post back –highest response (By hand delivery).

iv) Another 50 envelopes as above –but through post office delivery [sent a week ago] Response –until this moment, (11th September 02 when first copy was released) none had responded. (By today 24 October, 02 only 7 have responded, but as the interpretation is done already, these will not be included).

I also interviewed 14 different staffs (blindly and 7 who had seen the questionnaire prior to my interview).

Total participants 271

Respondents 101

Spoilt 12

It is interesting to note that almost all participants except (2% about 4) mentioned the following:

Poor income (poor salary/pay structure/low pay) was high on the list. What does this mean, will be discussed later or further in the discussion below; but in a nut shell it means the size of the "pie" is small! [GDP= G + C + (X-M) + I].

On Objectives and or tasks –it is again interesting to note that most of the senior staff or participants (>75% of respondents) in this group could pick this "right" but majority of the rest of the participants answered NO on whether they know institution objective and or tasks ahead. This goes with the question of participation –in decision making from planning of tasks or these objectives if possible. It is noted that there is poor

communication within institution or unit or departmental objectives or tasks to those who are the main actors in implementation e.g. providers of care/services. This brings us to equity of accessibility as was seen by many participants that there was poor access for provider or provision of services to clients (patients).

The question on resource was reported by almost all participants as not adequate leading to increased waiting time to clients (patients) as high time to get, long time to reach, full booked clinics and medicines out of stock demanding clients to come back if available. This also is affected by poor financial accessibility (in monetary terms or time terms) incurred on transport taking into consideration geographical accessibility as well; as patients or households with an ill person will struggle to cope with these costs associated with the illness. [See also discussion below]. The equity of access also affects professionals (when not involved in planning/decision making e.g. in objectives /tasks formulation, leave alone proper communication to them on these issues. Several participants put it this way: no working as a team, administration has to consider others' opinions, "many superiority complexes". One senior medical participant went further and said that "administration is invisible, out of touch and incompetent', however, this was only mentioned by one participant-only that is a very senior person and sometimes "old is gold".

The question on quality of services –majority agreed on the issue and pinned out inadequate resources human/investments and medicines leading to occasional patients have to come back several times. About 40% of participants pointed out poor technical efficiency (not fully utilized –concerning their skills), when good work is done not acknowledged but once one mistake is taken very seriously and reprimanded and

penalized. It appears like was in the Jordan study that question on pride of one's nationality is not touchy here as only 10% or less mentioned on this. (See again discussion). However, question on nationality/racial was minimally seen. Many preferred either South African, or White African (first time to hear the term but it does make much sense-see also discussion below, probably a good maturity in reconciliation.) rather than White/ Colored/ Black/ Asian as used to appear in many reports. Only 2% said the care provided by hospital as a whole is not good, however, about 40% complained on the care provided by nursing staff though almost all pointed out that there is staff shortage and nursing cadre is the most affected! [Even myself as an outsider may agree with the cleaning, arrangements as seen from outside but one have to note what those from within are saying/complaining about.]. Few, about one third pointed out that public do not care for nurses; anyway a bit vague complain see discussion on economic growth/GDP/GNI.

About half of the participants mentioned about poor standard of quality of services (taking into consideration their age group almost all within 30-40 years of age one might go further to find out where do they base. However, less than 20% of the senior participants also noted this; (Quality might not have standard definition –see Hanson and Gilson 1993) referring to adequate accessibility, (too fully booked clinics) and on poor patient-provider relationship.

On efficiency, technical efficiency –about 30% mentioned that their skills are not fully utilized in their work place. Thus, there might be production inefficiency as well. However, it was difficult to assess or interpret allocative efficiency without visiting the

service production centers. Senior staff majority of them with comparing costs if possible –how resources spent –only possible to organize in participatory managing systems, of which they complain it lacks. This could also assist in allocation of resources inter-institution to different types of programs within an autonomous hospital like Groote Schuur Hospital. (See Gilson and Hanson 1993). Thus to those complaining not fully utilized might be concerned with produce the most service (output) with a given quantity of resources or producing a given amount of output with the minimum amount of resources. This also touches technical services with adequate access provider /patient relation satisfaction. Such then will increase demand –supply curve hence improves income. In other words the demand of the product is high and will influence on willing to pay and of course stimulate ability to pay. (See also discussion below).

The questionnaire also posed some questions to esquire on provider suggestions on tackling motivation. About 20% of the participants showed that there is need to increase income growth, and or create opportunities for economy to grow and develop. (See discussion on RDP-Reconstruction and Development Program-here discussed as an orthodox methodology VS GEAR-Growth, Employment and Restructuring of the economy-probably a brighter vision for future growth of the country's economy to increase the size of the "pie". Many mentioned coping with low income by doing two jobs to make the ends meet. Again see below on the Poverty trap an experience of the Tanzanian GP practice 1993/1998. Others few in this case suggested overtime allowances creation, call allowances, improve salary structure, promotion to follow merit not time spent in the institution, give car and travel/mileage allowances, clothing allowances? (Does it mean uniform allowance?), put keen records for achievements all these to

improve incentive benefits. Again one can see they all go around something must be done for the equation GDP/GNI = G + C + I + (X-M) as will be elaborated below.

Other suggestions were /are do not reduce budgets, and on the drawbacks to good quality of services; almost all mentioned about poor promotion scheme (60%). Poor job security mentioned by (40%), overworked (40%), poor technical efficiency (not fully utilized in their work stations-20%), not sure of accommodation if working in rural /public services-10%). Others were no commitment/poor national pride (10%), major superiority complexes (10%); too many women (leading to grumbling at work place-2), no moving out to leave posts for young blood (2) and stressful personnel, never a smile (3). Poor resources –human and materials and investment (2), poor management (2%), good work not acknowledged (2), too much bureaucracy with excessive administrative procedures (dominating i.e. central control) –5%. The following were mentioned by one each-no delegation of power, poor participation in decision making at administrative level, poor incentives to be at the job, needs or allow public/private mix, increase accountability and increase vision by sharing planning of tasks/decision making if possible at all levels. However, many were still going round on the already mentioned problems on poor equity, accessibility, management, efficiency and so on. One small comment as an observer during collection of data is over protection of outsider to know what is really happening inside. This is fair enough but when rendering public service, it is fair too to be transparent enough; as to be thus is safe but to be safely thus.

IV) DISCUSSION:

Let us revisit the definition of motivation we put forward earlier.

Motivation is defined as an individual's degree of willingness to exert and maintain efforts towards organisational goals [Kanfer 1999]. The Collins Dictionary states that motivation is a reason for a course of action towards a goal.

At least one has to consider the effect of being part and parcel of the society. Thus from an individual to a household and many of these households will make a government or a nation. Consider a class of 35 student and a lecturer. If 1 student leaves still 34 remains. The lecturer can still see that there is a class. If 33 left and two remains still to the lecturer, there is a class. But when one left and now only one remains the lecturer will start wondering about his future benefits, since when this last one leaves there will be no class and no lecturing.

Such poor inefficiencies as when one complaining that is not fully utilized in his/her place of work, same may happen in one unit, one institution and so on. Either right in the action environment as can take place right in the political side as we may recall the painful case of South Africa during apartheid era. All these will lead to technical, production or allocative inefficiencies of sort. See table on page 17 and the explanations that follow after the table. What really came out of that era was purposeful allocative "inefficiency" of its kind but using race as the main reason! The famous allocative inefficiency of every race with its own department of health; even if the pie was fairly big or GDP was fairly sound this would not reflect in the health status outcome or improvement. Another example was in Tanzania with its cum island of peace. In my country at one time politicians had answers to every question from any angle of society you could ever asked them! I used to see this as a disease of its kind; grandiosity or semi-

god domination of decision making in a society. In this cum peace, the right for the technicians and the-know how side was taken away without their permission. The results was what we see in that country today, a sleeping giant on resources! It is important then to take all dimensions of capacity together when we plan our objectives or tasks ahead. Such anomalies happened in these two countries-that at a time you was wrong at whatever you suggest if you are not one of the ruling parties-here the White only party and up there the famous TANU and then CCM. Justice also follows the very same streams, what a shame to human rights, and what a shame to development, as while down here there was a political isolation from the rest of the world, in my country we isolated ourselves from our "quasi" socialism beliefs. We remained a sleeping giant.. and if you awaken a sleeping dog…lest will bite you. It is like rowing a boat from point A to destination B. If all those on the boat know where exactly we are going to and not only the captain –the task become more easier and enjoyable.

Before going to discuss on relative income or income inequality within provider re-embursement: Let us take note that, of the six provider payment methods; i.e. line item budget, (which is either prospective/retrospective), global budget (with its spending artificial set rather than through market forces, not always linked to performance indicators, and cost shifting is possible if it covers limited services, as well as rationing). The other prospective payment systems being capitation, case based payment, per diem and the retrospective one FFS (fee for service/ per unit of service), will not be discussed here much, regardless of their incentives positively or negatively to provider's performance; because in "our" action environment-they are not fairly practiced, same is the case in most SSA countries. The reason then, my concentration will be directed towards salary payment method, touching very little on per diem or on call allowances. (Refer also Provider payments: Methodological discussion from economic literature prepared by Daniel Maceira, M.S. Abt Associates Inc., WHO, 1998).

Having said that, let us see what will make our pie size better and bigger. This is because already have said there is no government without individuals /households. There is nothing from above will just increase our take home if not ourselves! To be able to tackle the concerns of workers' demoralization; as pertaining to low income, inequity, poor accessibility, accountability, quality of care/services and health status improvement.

What are these determinants of income growth then?

Taking our equation GDP= G + I + (X-M) + C further.

Normally we use gini coefficient to measure GNP.

The determinist of gini coefficient are the GNP per capita (PPP) and since these determinants will depend on the level of income in a given country then no wonder these have to be different between countries, but motivation? Is debatable.

Nevertheless whatever, is used as either from income or consumption of service or goods as the appendix 1 on health care financing; using general tax, income taxes, direct and indirect, insurance private or social health and out of pocket. These will differ in time place and depending on the health policy and legislation concerning how risks are insured in different countries and how providers are compensated. The income level then matters a lot when it comes to health care if financed according to ability to pay. When it is case in the developed world where poverty is relative rather than absolute like in South Africa or India or any other SSA country. Recall as a principle of poverty hypothesis or P-Dalton depicts that it will matter very little if transfer of income is from rich to relatively poor than is from rich to absolute poor person as the case may be in our set up. In the former it might not make a difference on the mortality rates but in the later it does.

From the table appendix 1 the indirect tax is regressive with Kakwani* index of (–0.181). This is the fact that even households 27-30 pay indirect tax on consumption. On the other hand out of pocket payment are regressive means of financing health care. This means then if private health insurance is a major means of financing method of health care covering the majority of households as is the case in Switzerland and USA, these

tends to be highly regressive. In our cited appendix Kakwani index is –0.52, the poor relatively pay more out of pocket than the high-income households do. Thus while PHI is more regressive over all methods of health care financing than Social health insurance the reason being that whereas the later, is assessed on basis of earnings, at least up to a point, the former is not. [Adam Wagstaff 1993 page 45].

Taking the equation GNP=C+I+G+(X-M)

Arguing along the line of health care expenditure and utilization. However on the investment expenditure private and government investment in fixed capital formation. These are factor governed by government policy on health or education or agriculture of different countries does differ. The progressive direct tax or regressive indirect tax can influence one health outcome or improvement on both the patient and the provider.

The relative income hypothesis –the level of well being depends on the distribution of income and assets, not only on the absolute size of economic standard. [See also Sen's equation of poverty and Preston curve on income per capita and Life expectancy, 1975]. Again though different countries may have similar GNP per capita (PPP $ 1995) still has significant different gini indexes and different Robin Hood indexes as elaborated all may have different resource distribution, policy and legislation as well as different National Health systems. The above debate brings in equity in health care expenditure as affected by income inequality i.e. economic growth and health. (See table-Distribution of income WB-2000).

If a country with a high average income has a great deal of income inequality, then there are relatively large number of people with low income whose health is poor.

[South Africa for instance]. And if a country has a lot of poor people, it will have a low average health relative to its per capita income. In South Africa the insurance system favors the rich, it to private insurance (PHI), and even the subsidies from government [tax] to the medical aid schemes. At the most obvious, the effects of per capita income mirror those individual income, and becomes less important the richer is the country. [refer again the principle of Gini coefficient]. Eventually we would expect income inequality to loose its effect too, but it is not enough that average income be high enough [like in EME, OECD countries], we also need everyone's income to be high enough. This is not the case. The bottom tail of income distribution has to be pulled up beyond the point at which income has much effect on health. Before that there will be still poverty even in rich countries, so that income inequality will still matter as well as average income. Thus the absolute income or poverty hypothesis implies that, among the countries average income is what matters for population health and income inequality is relatively less important.

As a result a country becomes richer and average income rises the effect on population health of income inequality becomes more important relative to effect on population health of average income. Even when income is large enough for the effect of average income to be zero; the effect of inequality remains constant.

Individual health is affected by many things other than individual income, and it is possible that the relationship between health and income itself is spurious, with income standing proxy for some other variable. Examples are education, if conditional on education, income has no effect on health. Same to number of doctors to population ratio, it does not mean having many doctors per capita is solving health problems. This makes

me to recall a famous saying from one great teacher that if doctors think their medicines are very important, let them take it by themselves! This is given more weight by the famous decline of TB in England and Wales in 1800-1950s even before the discovery of antibiotics and BCG vaccine. This happened only due to economic development and thus good standards of living. In the USA the relationship between income and mortality is not much affected by controlling for education, Elo and Preston 1998, Deaton and Paxson 2001a, but there are few other studies or data sets that will allow separate roles of income and education.

Further still health is determined not by absolute income but income relative to some aspiration level or relative to income of others. [Easterlin 1975]. In developed countries health is a basic human right as it is basic payments for survival, the opposite is true in SA or SSA. In an economy where one can borrow and lend without restrictions each person's investment should not be restricted by each person's own resources. If one has an investment opportunity that can be expected to earn a good rate of return it should be undertaken; the money needed to fund it will be earned by the investment, with profit left over. The lack of access to borrowing on reasonable terms may prevent many poor people from making profitable investment in themselves or in their children's education. Such inability to borrow is likely to afflict the poor more than the rich. For one thing, the poor do not have other assets that can be used as collateral. In such situation redistribution of income or assets from rich to poor may increase level of education and health.

Personal income may be defined as the algebraic sum of (1) the market value of rights expressed in consumption and (2) the change in the value of the store of property rights between the beginning and end of the period in question. (Simon's 1938 pg. 50). Also income can be defined as individual household income earned in the form of wages, interest, rent and profits calculated before any deductions are taken for income taxes.

About the correlation between income distribution and health, Preston 1975- …among the poorest countries increase in average income are strongly associated with increases in life expectancy but, as income per head rises the relationship flattens out, and is weaker or even absent among the richest countries. Countries with more equal distribution of income will have a higher average life expectancy. The health of the rich is not much affected by their income, so that transfers of income from rich to poor will improve the average health of the nation. South Africa is a middle income country. In South Africa health care ought to be financed according to ability to pay. Equity in finance of health care can be examined by the way of vertical and horizontal in the public finance. Vertical equity addresses the issue of progressivity in finance, payments according to ability to pay as opposed to horizontal equity, which is the extent to which those of equal ability to pay actually making equal payments, regardless of grade, marital status, occupation, place of residence. [W. Hsiao, 1997/1998]. Though equity is not the major question here, it is fair to have it at the back of the mind as when one comes to conclusion on how income inequality affects or is related to health in a situation like South Africa.

The term equity and equality are not always interchangeable. Equity is "a system of justice based on conscience and fairness", equality is " the state of being equal"

(Longman New Universal Dictionary 1982,). Equality is thus a particular interpretation of equity. It is concerned with equal shares. Equity however, is about fairness, and it may be judged fair to be unequal. In health care it may be judged equitable to have unequal access to services; groups more likely to be ill should perhaps be given greater access to provider/services/resources in general. Measuring equity in two communities e.g. equality of access of health care the following barriers need to be the same; geographical factors e.g. travel distances to health care facilities, availability of transportation resources (and communication services, waiting times for appointments and treatments and equally informed patients (i.e. about ill-health and the effectiveness of health care treatments). Some of these barriers have natural units of measurements and are therefore relatively straightforward to measure and monitor; e.g. operating waiting times, appointments to see GP/specialists. However, measuring and monitoring the extent to which patients have "full information" is more complex and open to differing interpretation. One may use indirect measurements, e.g. schedules analyzing patient knowledge, such measurement difficulties inevitably mean that equality of access can often be only partially or inadequately measured, or at least best approximated.

In devising a scheme of fair contributions to take account of the different forms of payment that can be made to compensate provider and finance health care. Such as out of pocket expenses, insurance premiums and tax revenues e.g. general income tax, local income taxes, payroll taxes, indirect taxes, and some will be more progressive than others will. It is important to establish not only the contribution of taxation to health care financing but also to source of taxation. Income conditioned taxation is the most progressive. (Maxwell 1981). Thus a tax financed health care system or a social

insurance would normally be expected to achieve some degree of vertical equity. Those health care systems that rely heavily on large out of pocket payments for finance are more likely to require additional regulation (means testing) to protect low income and high user groups satisfactorily. It is at such juncture Carin and Vereecke 1992 suggest that equity objectives in SSA relate to equality of utilization, with improvements achieved by redistribution of public health resources from urban to rural areas. (Needs based resource allocation formulae). A society might agree on the rationing of health services "if local communities were involved in the decision making process. The general public might be less concerned about limits on health care spending if they could be more involved in decisions about resource allocation. We saw in the study complains about professionals not being involved in decision making –while we keep singing everyday community participation, let us involve the community while keep our house which is in shambles, in order. In fact let us start now working as a group and exemplify this to the communities we work with. [Renaud , Why are some people healthy and others are not? 1994).

In the very same triangle, together these will be complemented by the other two angles i.e. government program or policy and institutional organizational task network, of the problem in question.

Income equality promotes health because income does more for the health of the poor, (the majority 80% of South Africans receiving less than 35% of the total income,

and the country being one seen as among the most inequitable countries in the world). It also serves as a marker for other desirable features of society. Equal societies have more equal cohesion, more solidarity though this is also found among poor people, less stress, offering their citizens more social support and more social capital and satisfy humans' evolved preference for fairness. However, in the end one may debate on the "absolute income hypothesis" to emphasize that it is income that matters for health, not income relative to other people's incomes. Income inequality or fair enough is the "poverty hypothesis", that ill health is a consequence of low income, in the sense that more income improves health by more among those with low incomes than among those with high incomes.

Having said that –let now look at the health through inequalities in the underlying determinants: These will include the following, investment and economic growth and poverty reduction, economic policies, institutions and legislation e.g. protection of property rights, geo-climatic factors and population structure to mention a few. Higher income per capita is not enough and that poverty reduction also requires better distribution of income and wealth. South Africa may have a good GDP/GNP, but low on the HDI [Human Development Index], when compared to other countries in SSA or third world with lower GDP/GNP but with better distribution of income and wealth. Along the same lines given the low level of per capita income in many SSA countries, it is difficult to see how re-distribution alone could provide a lasting solution to the problem of poverty; Tanzania may be a good example here with its famous Azimio la Arusha and 1974 property nationalization, still the country is one among the poorest in the world.

In that country a kilo of sugar was divided among 36 million population and this ended up everyone getting a grain of sugar in a cup of tea; thus tea without sugar. Many nationalist leaders did the same in one way or another –the stories about redistribution. This was so because many thought flag independence is freedom to everything. That political freedom is freedom to economic freedom, but just that is or was the start of the beginning to economic freedom. It is clear that there can be no appreciable and lasting reduction in poverty unless the size of the pie is substantially increased, so economic growth appears to be one of the best ways to reduce poverty. Any policy that aims at redistributing income at the expense of economic growth will have very low pay offs in terms of poverty reduction.

Geography and climate –that SSA is tropical and therefore suffers from diseases like malaria, oncocercasis, river blindness; poor soil, and many countries are land locked. [In the table S. Africa, Poland, Tunisia are not tropical countries]. Though may contribute one has also to look at the deficiencies in institutions and government health programs/ policies-as will be discussed later. This is because same geo-climatic conditions has not prevented Thailand, Indonesia, Malaysia and Singapore, the Hong Kong and Taiwan from making growth per capita income that remain impressive. Same to the Southern US states. Concerning landlocked factor, Swiss and Czech economies would have been given a very low probability. It is true the difference between income in Western Cape and Eastern Cape provinces which are having much coast area with population density favored for economic development (access to trade) as compared to Northern Cape

sparsely populated poor and with higher IMR. All in all –in poor countries with poor infrastructure –raise the costs of being land locked as road and railways are poor occasionally with no trade liberalization or for our case in South Africa, which was in politically isolated for many years of the apartheid regime. This could affect advancement in technical efficiency not forgetting the racial discrimination with its poor allocative efficiency of e.g. duplication of health departments almost equal to Ministry of health in each of the provinces and each race with its minister for health in its own health affairs.

Investment and growth –investing in education especially female education –and agriculture many empirical studies clearly suggest that raising investment ratios must be a key part of any strategy to increase growth and improve standards of living. Same evidence indicates that private investment has significantly stronger favorable effect on growth than does government investment –probably because it is more efficient and perhaps less closely associated with corruption. But why low level of private investment in SSA is the perception by both domestic and foreign investors of a low after tax, risk adjusted rate of return on capital. Such major sources of risk as macroeconomics instability, loss of assets due to non-enforceability of contracts, physical destruction caused by armed conflicts. Conflicts and post conflicts problems –if one keeping in mind that our equation of economic growth is better if GDP is high and GDP= C+I+G+(E-M) and if these destroy human lives and physical structure, disrupt the working of institutions, and above that can lead to higher government spending threatening macroeconomics stability. Also tilt government expenditure towards military outlays and therefore crowd out expenditure on human capital and infrastructure, threatening the

important element of growth and poverty reduction strategy. Sanctions by denial or interruption of assistance would amount to punishing equally the aggressor and the victim of the aggression. War then is a political problem, which requires political judgments and decisions, not bureaucratic procedures or technical rules. Assistance aimed at improving political rights and strengthening democratic institutions will tend to reduce incidence of conflicts. Risks also affect the decision of how much to save and where to save leading to low saving rate at home and to capital flight. [Collier Patella 1999]. They also found capital flight from SSA has been very high (~40% of private wealth) in relation to the workforce. It has been much higher than in other developing country groups, associated with relative high degree of exchange rate overvaluation and indebtedness, and to the perception that investment in the region is particularly risky.

Net rates of return on capital influenced by level of marginal taxes, accompanied with large budget deficit negative for economic stability and inflation rate. Debt overhangs discourage private investment by reducing expected after tax rate of return of capital. Link between debt reduction and poverty, but direct link to social expenditure less straightforward. In view of these difficulties it would seem that the possibility of using space provided by debt relief to improve the basis for growth and stability for example by investing in infrastructure or reducing domestic debt, should not be ruled out. There is also variety of economic distortions and institutional deficiencies that lower the rate of return on capital and labor as well as total factor productivity. Lack of openness to international trade (as one may say give us more trade fairness than aids/donations), poor infrastructure and insufficient education of the labor force, bad governance and

enhancing competitions in all sectors, including in particular agriculture and even in health. Can SSA countries/NEPAD put enforce a "price control" on their primary products like is for OPEC?! Buffer stocks not a possibility in our setting!

Raise the share of government spending directed to education and health while making sure that this is accompanied by effective improvement in the delivery of services in those areas. Here one may mention the efforts of South Africa in RDP [Reconstruction and Development Program –in health, education, all sectors] on education emphasis on female /girls as well as housing and sanitation etc. Land compensation to those theirs was taken for urban development, but one will caution –re-allocation of land as happened in Tanzania in 1974 of land used to be good plantations for coffee and wheat which later on turned to be forests and same happening in Zimbabwe today as where a farmer who was born many years in a country like Zimbabwe where will he go after confiscating his properties including land? Worse still if that land will sooner or later be inefficiently and ineffectively managed. Not that am trying to be pro settlers in Zimbabwe or anti-blacks, but this world must be made peaceful to live for every human kind, since is man who created borders same man must think about it today when he is more developed and socialized.

Having said that, one can draw a map of say South Africa –showing geographical distribution of poor health –outcomes e.g. by IMR or LE in provinces like Northern as compared to Eastern/Western Cape. The later along the coast both highly populated, favored by good infrastructure, trade accessibility etc. as well as disease patterns and burdens is lower. Thus a greater difference of income in these areas is correlated with higher infant mortality rates or the situation of poor housing leading to high respiratory

diseases including TB. One may recall the reduction of TB in England and Wales even before the discovery of antibiotics and vaccines solely due to increase in standards of living. One may show as well the different rates of crime within Johannesburg according to the standards of housing and income differences between those staying in sharks and those in affluent housing environment. The same to countries with high gini coefficients and high inequality of wealth distribution.

In South Africa at present-initiatives are on the line to improve access to primary care services by improving financial access (free primary services)

-Giving more priority to primary health care

-Expansion of physical infrastructure (CUBP)

-Improve provider availability (doctors e.g. compulsory services for medical graduates to the rural population), development of essential drug list and standard treatment guidelines, procurement and distribution of medicines. All gearing to improve quality and efficiency (through Hospital Strategy Project 1996).

Others addressing geographical resource disparities and thus increasing allocative efficiency. In this case –population based formula and weighted per capita equity in provincial health budgets within a shorter period (1996). From 1998 in some sort of fiscal federation now provinces are awarded global budgets allocated according to population based formula. Efforts to reduce financial barrier of access and promote geographical accessibility and service quality through improving the financial, physical human and pharmaceutical resources at the primary care level. Thus there are policies and programs targeting vulnerable groups and diseases of poverty, action to improve maternal, child and women's health including free care for children under 6 and pregnant women.

National program of action for children, women's empowerment policy, primary school nutrition program and national cervical screening program and National TB control (DOT).

On the private sector

-a medical scheme act 1999 intends to prevent some of the practices of the private pre-payment medical scheme industry which undermine equity such as risk –rating, and dumping patients who have exhausted their benefits back to the public sector while strengthening management and governance within the industry. Other health promoting and equity oriented policies are –measures to control tobacco advertising and to limit sales by raising the excise duty also as a step to fight smoking.

Although RDP offices have been closed, other social policies including GEAR (Growth Employment and Redistribution 1996) try to provide basic needs e.g. basic education, housing (for homeless) and rural electrification. In pursuing vertical equity within the health sector by geographical resource reallocation, increasing access to primary care, however, as argued above /before improving financial access must accompany geographical access if it is to address the needs of the relatively undeserved and most vulnerable poor. Thus the pattern of (Clinics Upgrading and Building Program) in South Africa implementation reflects vertical equity as opposed to horizontal equity as recommended by WHO (Govender and Di McIntrye 1997). In order to be translated into real access gains, improvements in financial and geographical access must finally be accompanied by the improvements in service quality that encourage the use of the health care services. Already mentioned are the measures to prioritizing services provision for

vulnerable groups and tackling diseases of poverty. These must go together with pursuing procedural justice (Bill of Rights October 1996 clause 27 (I)).

DRAWBACKS TO EQUITY PROMOTION:

-Weak conceptualization of policy needs (50% of the population of South Africa) are poor earning less than R352.53 per month and 27% are "core poor" earning less than R193.77 per month; where should the policy focus? An alternative is to generate the resources necessary to strengthen the public primary care level, which highlights the links between public and private financing and between hospitals, and the rest of the system is to introduce Social Health Insurance to cover the costs. Again increasing the size of the pie…

-Other constraints are –institutional weak capacities as many mentioned in the study.

-Macroeconomics policies of RDP were already an orthodox economic policy, which looks to many as not feasible. (Di McIntyre 1997). Probably GEAR may ensure a macro economic stabilized situation /environment necessary for investment, growth and re-distribution.

When one speaks of motivation in SSA is in a region where one cannot isolate poverty from our daily lives. The people around us, our clients are poor people. When doctors or health workers neglect their patients for the sake of good payments is like military coup'detat. The later is robbing peoples' democracy by use of the very same power entrusted on them by the very people while the former is delivering a death certificate or warrant to the very people who place you second to God for the sake of

saving their lives. This call one to mention just in passing that what does poverty has to do with health.

POVERTY AND HEALTH: This is somewhat similar to that on inequality and health. Poverty is a situation involving a lack of income and consequent low level of consumption and /welfare. But which level should we judge?

Absolute Poverty –is an assumption of a minimum level of consumption (or similarly of income that constitutes poverty and that is independent of time or place. It might be a diet that is sufficient to sustain health and provision of housing and clothing. If the incomes of all households rise there will be eventually no poverty. It is possible to eliminate absolute poverty. [Rowntree 1901, 1941]

Relative Poverty-is lack of necessities –where necessities are whatever the custom of a country renders it indecent for creditable people, even of the lowest order, to be without. Thus it follows norms and standards of a given society at a given time. Also does the household posses sufficient resources to allow it to participate in the activities, which are customary for the economy to which it belongs. [Towsend 1979].

Poverty Line –Level of incomes or below which a household defined as in poverty. Thus no standards measures of poverty as such, however, a different axiomatic approaches do exist and often it is not the precise level of poverty that matters but changes in the level of poverty over time and across countries. Recall also Ad Hoc poverty indices and the income gap ratio, as well as law of diminishing marginal utility (A-Kolm index).

heart from hardness of water, fluorosis either excess or deficient due to geographical location etc. So one may model many conditions depicting poverty and health. Some like Sen's measure of poverty as S= H[1+(1-I)G, where G= gini coefficient is itself a modeling of its kind. The epidemiological transition of diseases worldwide i.e. Material deprivation (with diseases of poverty-the infectious diseases) .....economic development (social disadvantage causing diseases of stress and chronic illnesses) is again a model of itself. [Wilkinson 1996]. H= p/n or head count ratio. All will worsen the income growth at the end of the day.

Equality of expenditure or resources per capita, budget or human resources allocation pro rata with the size of the regional or province population. This is equitable allocation. If prices of different resources (medicines, land use, food etc) vary across different regions then a second view of equity should suggest that those regions with higher than average prices should not be penalized as would be above. Allowance should be made for differential prices so that the resources (human, labor, and capital) which can be purchased with the allocated expenditure are the same per capita. Equity of input for equal need; age/sex structure, children/elderly and need for gynecological beds will be related to female population and the others do influence the health needs of the population. In flow of patients in and out in different regions will vary utilization levels. Thus one population of same size may require more resources on such merits and still it remain an equitable distribution. Equality of opportunity of access of equal need; in those areas faced with high costs as opposed to prices of delivering health care, to provide same level of services can be more expensive in rural areas than in urban areas. Equal access here is then defined as equal costs to patients as well as providers. Equality of utilization

for equal need; Since utilization is a function of both supply and demand, if supply side has been organized in such a way that there is equality of access for equal need, this means that the only remaining variable creating the inequity is demand. Behind the concept of demand lies that of satisfaction for the consumer /patient. The greater the utility an individual expects to obtain from a good the greater the amount is willing to pay for it, hence the question of quality.

If then we argue that the goal of an equitable health service is to make the level of health the same in all regions and or in all social classes, this requires much greater positive determination and required by any of the input determination definitions above. This last definition then will make health service delivery very unequal distribution of health resources and possibly not efficient. If we define equity as equal utilization for equal need then, to achieve it, we can think of implementing policy to influence either demand or supply. Here the provider has a very big role to play.

Man is a social animal, so when one is ill in the household, all the others are somehow disrupted. Their performances decreases and hence production and investment do the same, sometimes even selling capital/assets to cope with an illness. Suppose there is a boycott of the provider of any sort to provide services this ill patient may even die and incur more costs on the household and end results is reduction in GDP.

As mentioned earlier, health care in South Africa ought to be financed according to ability to pay. Equity in finance of health care can be examined by the way of vertical and horizontal in the public finance. Vertical equity addresses the issue of progressivity in finance, payments according to ability to pay. The concept of vertical equity in financing (consumption of health services) is based on the principle of "equal sacrifice"

in utility. [W.Hsiao 1998]. Since the marginal utility of income declines as income rises this principle calls for higher tax rates on higher incomes in order to ensure that the reduction in utility of payer is equal. A progressive system is one in which health care payments rise as a proportion of income as income in which payments fall as a proportion of income as income rises. A proportional system is one in which health care payments account for the same proportion of income for everyone regardless of their income.

Horizontal equity, is defined in terms of the extent to which those of equal ability to pay actually making equal payments, regardless of gender, marital status, occupation, place of residence. [W.Hsiao 1997]. Wagstaff (1993 –431-457) propose that equity in health care entail distributing care in such a way as to get as close as is feasible to an equal distribution of health. Equity in the delivery of health care is generally set on the premise that health care should be distributed according to need rather than willingness and ability to pay. Horizontal equity is taken in certain context to mean that people in equal need of health care should receive the same treatment regardless of their income. Thus no wonder most studies of equity on the delivery of health care have been based on the concept of horizontal equity. Such then will tend to follow each country according to its policy setting. In the appendix 1 –the National Health System –may be ideal in a society with clear equity objectives. It is mainly financed by general taxes, that tend to be progressive and less indirect taxes, which are regressive and hence the burden of financing health care will lie on the hands of the rich rather than the poor. However, horizontal inequity could as well occur through anomalies in the personal income tax system e.g. if tax relief or exemptions exists.

This is so because when one is concerned with an equity oriented health policy criteria ought to answer two main questions i.e. is who pays? (distribution of burdens of care) and two who benefits (distribution of benefits); On the financial burden, degree of progressivity, i.e. does a particular financing option impact more on the rich than the poor? Concerning the distribution of health services; allocative efficiency as well as technical efficiency (costs organizing and managing systems on resources, the impact on utilization of health services on health outcomes and health status improvement and the impact on service provision on its quality improvement, sustainability, acceptability from clients, providers and political key stakeholders.

In a nutshell, there must be a public commitment on financing-on the arrangement for risk sharing, what should the government finance, involve of private sector and how should the revenue be raised. Whether social insurance or taxation, what type of taxes to be used, the equity issue as discussed above has to be incorporated in all of them; and how should the providers be compensated. Thus the level of funding, have the ability to mobilize additional resources to balance gross revenue VS net revenue for viability/sustainability and to govern or avoid displacement of other revenue sources. The health policy also must concern itself with the ownership and production of health services on a well regulated, if possible decentralized and governed by the law of the land with legislation and supervision of its implementation. This will include with others the provision of public goods and of externalities as well as taking health as a basic human right as applicable as economic situation permits within the context of the nation in question. There exists several other normatives besides egalitarian (committed to the pursuit of community health) and libertarian (leaving things to the market forces i.e.

values consumer sovereignty and market forces); but whichever one follows still the level of our income growth is very decisive.

This is not only health worker motivation but health status improvement and development.

From this juncture, one may now come to the other side of the coin, on motivation. As mentioned several times earlier, the discussion is not complete until one touch on the behavioral aspect and possibly societal approach on motivation. If one may recall back the findings that, ***about 40% of participants complain about decision making inaccessibility and or under utilization of their capabilities (technical) brings in two very important points: Power and authority. This will be looked onto from the perspectives of motivation and very much so in connection with bureaucratic models. However, before going into that, let us review again quickly some salient literature with much more relation to biomedical and silver platter models; in issues of health care accessibility, equity and quality improvement.***

Health system problem to be addressed by the project:

Recent studies have indicated that a number of factors adversely affect equitable access to health services in South Africa. These include infrastructure problems, gaps in drugs availability and most concerning, staff discourtesy towards, and even abuse of patients [Jewkes and Mvo 1997, Oskowitz et al 1997; Schneider et al 1998; Tint et al 1996]. Many of these access issues influence, and are influenced by, health worker motivation. It is thus critically important to obtain a better understanding of the level of health worker motivation, and the determinants of motivation, in order to take policy action to improve motivation and associated staff attitudes to achieve equitable access to health services. One of the financial strategy innovations in health sector reform is to change the behavior of the health care providers. Making providers conscious of the costs falling on users and the needs to minimize these and or of the need to continue to attract custom; when

alternative sources of care are available; and providing additional income at the level of health facility which enables services quality and the motivation of providers to be improved.

As in all other sectors of the economy workers were not consulted nor did they participate in post independence public health sector management and bureaucracy and organizational culture were not conducive to sound labor relations. (Unlike the situation we find in the two studies in Georgia and Jordan). Efforts were made over the years to reform the services, but the socio-political order prevented this. (The action environment in South Africa by then). Since 1994 there has been commitment to fundamental reform of the health system including the human resource elements. [South African Health Review 1999].

-Some confusional state and neglect has met in the pace of all these. Nevertheless there have been complaints of continuous disruptive effects of restructuring on motivation; relationships and staff turn over.

Similarly "new" and "old" management styles and organisational cultures have clashed. In some provinces the new management is accused of not wanting to learn from past experiences before implementing new systems and policies. Discontent of policies being decided "up there"[at the national level] for the provinces just to implement and leaving their hands "cut off" in the face of persistence problems. Staffs also complain about delivery being squeezed out of staffs who are over stretched. There is

neither co-ordination nor focus. Thus staff are showing signs and symptoms of "burn out" [South African Health Review 1999

Not only that, the "will do" and "can do" components of individual capacity development rely very much on motivation. (Stilwell, 2001. Page 8).

Interview with a small sample health workers in Zimbabwe shows that motivational determinants influencing retention and performance seem to be different. Pay and conditions have a large negative impact on motivation in so far as willingness to stay in the public health sector is concerned. This supports previous findings by Mutizwa Mangiza (1998). Health workers are reported to be leaving for better pay and conditions and this is often related to specific life-span needs, such as education for children, saving to start a home or get married or for retirement.

However, those health workers who are staying in public sector in Zimbabwe appear to be highly motivated to perform well, especially given the increased stressed stress imposed on them from caring for people living with, or dying from, HIV/AIDS, and the resource shortages which they currently experience, including shortage of staff. (Stilwell Barbara, 2001, Health worker motivation in Zimbabwe. Page 26)

One of the most important lessons learnt from Zimbabwe experience is that in this context remuneration is the single most important factor influencing health worker behavior at present. The economic environment is harsh that meeting basic

needs is a struggle for most health workers. Even when these are met, financial rewards continue to be an important factor influencing the behavior of most. Health workers who have left the MOH &CW and going to work for nursing agencies in the United States and Britain. Cultural factors such as extended family make it necessary for Zimbabweans to focus more on money than other issues. Taking into account the high inflation rate, it seems unlikely that the MOH &CW will continue to experience high rates of turnover, strikes and other such behaviors. Factors such as job security, the work itself, training and advancement opportunities, supervision and recognition, even if met, will not improve worker motivation as long as the remuneration is perceived to be unsatisfactory.

Health institutions and professions are based on rational-legal principles, but the behavior of most of health workers is underpinned by pre-industrial cultural values, such as valuing kinship over public interest. This gives rise to patrimonialism and other behaviors, which are incompatible with professionals as perceived from an Anglo-American perspective.

The dominance of the doctors in the MOH &CW is a cause of intra-profesional rivalry and poor morale among other health workers and is inimical to team spirit which is essential to effective health care delivery. (Dorothy Mutizwa-Mangiza, The Impact of Health Sector Reform on Public Sector Health Worker motivation in Zimbabwe, 1998.)

Miller Franco and Ruth Kanfer writing on the same issue of health worker motivation from Jordan and Georgia concluded the following: " The results of these two country studies do not provide a definitive answer to the question "how do we motivate health workers"? but they do provide insight into motivating factors. Although the two countries have very different cultural and socio-economic environments, there were many similarities among key determinants between the two countries: self-efficacy, pride, management openness, job properties, and values had a significant impact on motivational outcomes in both countries. These are similar to findings from the United States (Pinder, 1998), and suggest that a number of features of the current organizational context might be modified to create a work environment that more effectively enhances work motivation. (Morrison et al., 1997); Blankertz and Robinson, 1997; Vinokur-Kaplan et al., 1994. Note the underline is mine).

The differences found for results between the two countries also highlight the importance of local culture on motivational issues. *For example, individual differences in motivation determinants were significant related to gender and age in Jordan, but not in Georgia. In both countries there significant differences among professional groups, but not in the same way. These findings highlight the need to more fully consider the local workforce and to tailor motivational interactions to the specific needs of specific groups within each culture. (Sara Bennett et al., 2000).*

Health in Africa and South Africa might not follow the biomedical model as a doctrine.

What are the motivational determinants for health workers in South Africa?

How can policies and strategies to improve motivation be developed?

These might be difficult questions to answer, but one has to think along such lines.

Thus reason why study culture of service providers in South Africa, is biomedical model followed unthinkingly? Donors and other organizations set the rules? (Universals and Silver Platter model? Local knowledge and authority ignored? (Community will listen to indigenous leaders /important others much effectively (Socio-cultural model). Are resources wasted (due to unconscious professional defense mechanisms e.g. nurses/doctors? It is at this point one is called to think along the lines of societal approach or behavioral or rather anthropologically.

Anthropology is regarded as a discipline that studies the communities of others "them". While this view may be historically valid, much of current anthropology has a far broader reach that includes not only other communities, but the global physical and social environment and political, economic and administrative contexts of those communities, as well as the community of anthropological investigators themselves. Through its methods for understanding communities and populations, contemporary anthropology lessens the distinctions between "us" and "them". It recognizes expertise, rationality, and authority in others. Rather than ethnocentrically assuming that only we are right and just, anthropology begins with the humanizing assumption that others, like ourselves, live in more or less orderly conditions. While the Western world has much to offer, its donors

will be more respectful and effective when they respond to local realities, values, and social life. [Bridging differences in culture and society, Robert A. Hann].

Worker Motivation: - In most developing countries, the health inputs have been heavily concentrating on the curative services e.g. on the specialized hospitals often taking more than 40% of total budget to Ministry of Health. The other area of concern is the health worker /staff as a cohort and their selective behavior of favoring working in urban VS rural/periphery –disadvantaged areas. Given that staffs consumes more than 40%-60% of most health expenditures in many developing countries when it comes to decentralization of health care services and health care financing; these issues are of paramount important and of public health significance.

In a country like South Africa where historical backgrounds on political, social and economical classes created more burden of diseases on the poor (anxiety/emotional/violence sometimes at subconscious mind or mental illness) and more so on the black majority; resource re-allocation, investment in facilities and equipment needs a deeper understanding of the unconscious mind at work; the anxiety and pain hidden by all such problems in a society. Thus at the moment –if one needs to make changes in the health care service delivery system pyramid –that more emphasis is put on the lower levels –the households, the clinics/health centers and district hospitals –where most of essential clinical problems take place; and investing in public health of which are more cost effective, then understanding the health worker (carer taker) is again of paramount importance. [World Bank Report –investing in health –2001]. Studies have revealed in some countries like Chad, 71% of all central hospital consultations were for

problems that could have been treated at lower level facilities. It is in these facilities – where it is more cost-effective treatments are met than when the same conditions are treated in the tertiary centers. [Page 135 World Bank report 1993]

When one thinks of incentives, whether non-monetary or material wise –to the health worker/ provider one has to know who are these providers. Why they are acting the way they are doing so, either individually or as a group, (an organization say doctors, nurses, physiotherapists, or allied health workers etc.) to safeguard their profession and interests. Health care organisations operate upon persons and not upon the qualities and behaviour of material things. The interaction between care workers (people with particular sets of attitudes about their kind of work) and their raw material of other persons (patients or clients also with attitudes towards this work) is more complex, subtle and subjective than the cultural attitudes of an industrial manufacturing enterprise. "The scope for mutual impact between one set of attitudes and emotional experiences and the other is obviously great and is missing from work with inanimate raw material." (R D Hinshelwood- Observing organizations –anxiety, defense and culture in health care –page 5)…However, while the features of an institutional culture are carried by the individual members; they cannot be reduced to individual psychology; they exist within the reality of the whole organization. The individual however, has his or her own objectives, conscious and unconscious, for taking part in it. (Hence the questionnaire and the observation will try to formulate or come out with the outcome an explanation of this hidden /unconsciousness which may either be brought up by economic emigration (brain drain) or the unspoken shared attitudes, the unacknowledged anxieties and conflicts as well as the quality of work done. Example is adherence /compliance to prescribing

generic brands of drugs rather than trade names/brands cast consciousness of their actions) of the atmosphere and its unconscious aspects.

In the study then while employing an action research approach following a cohort exposure history ethnographically these anxieties, and defenses which ends up shaping the staff organization and the primary task, work output/goal achievement.

Within this the comparison of work experience are made within the cohort across subgroups defined by one or more exposures. Examples includes cohorts defined from membership lists of administrative, or social units, such as cohorts of doctors, nurses, or cohorts from employment records etc. [Rothman J K –Modern epidemiology –non experimental studies]

Such then will be looked up in three ways –specific kinds of anxiety, which are connected with particular forms of work (within the health care system);

-the people drawn to particular professions and certain fields within them are usually people with certain kinds of personal anxieties and defense mechanisms, and this in itself has a strong influence on the health worker culture.

-thirdly –there are very different ways of dealing with these general and personal anxieties within an organization (the health workers/ hospital staffs/) leading to different kinds of culture. However, all three are interconnected in many ways. (R D Hinshelwood, W Skogstad).

From World War II –many developed world countries had made many strides on death rates falling, life longevity, mother and child health, environmental sanitation etc. However, enormous health problems still confront most of our people. Why should this be? Regardless we have long acquired the skills needed to provide pure water, environmental sanitation, designed nutritionally balanced diet, teach personal hygiene and food safety and agricultural ways better crop production. If these skills made much great transformation in health that took place in the industrialized world-at the time of the first industrial revolution (Ramalingaswami 1986-1097) we thought could do the same in our set up. But according to this author we are failing because of political cultural, ethical, and bureaucratic factors-all sociocultural.

Reminding ourselves, the PRIMARY TASK IN HEALTH SECTOR IS HUMAN SERVICES THAT is TO IMPROVE HEALTH.

In any institution like a consultant hospital in Dar Es Salaam or Groote Schuur hospital in Cape Town, teaching and medical research are also incorporated. However, the aim of this writing or study that since our problems lie in the fields of politics and commitments of planning for health needs and of administration of programs and projects, then medical research alone cannot bring the primary task to effective achievements.

Thus the "results"partly is based on information one acquired through participant observation. That the researcher speaks the language of and participates as fully as possible in the life of the members of a group say hospital environment with specific

goals in mind (To find out motivational determinants) and the going to accomplish the primary task. Information gathered in this fashion tends to be interpreted rather than "analyzed". Such information is product of direct questioning, or from the feedback of the "snap shot" as called by economists or a cross –sectional survey from the tol of study –the Questionnaire". Anthropologically one has to ask of such data, What does this add up to? What do the data tells us about human behavior, about social organization of that institution, and culture. One may be puzzled for example why new public health centers failed to attract the clients for who were designed? Or why a malaria control programs in Dar ES Salaam/Matombo, Bagamoyo fail to accomplish the goal in the community for who was designed?

Like was for Tendler 1975-10 on evolving methods for technical aid –it is not very different to the services we render to our clients today. "Development assistance was established on the premise that the developed world possessed both the talents and the capital for helping backward countries to develop. Development know-how was spoken about as if it were like capital –a stock of goods capable of being transferred from its owners to the less privileged. (Tendler 1975-10). Like it was entered in 50 years ago on delivering technical aid we can use the same argument here in institutions to see what makes us fail to achieve our primary task /goal.

In the Silver Platter model health personnel felt their task was /is to attack problems with the techniques and institutional forms that worked well in industrialized countries. Thus health strategies that have served the West are Universals equally suited to Boston or Bombay or Cape Town or Dar Es Salaam. This is not true. If one sees health

programs as exercises in the transfer of techniques, in the implementation of educational, preventive and curative services based on Biomedical model –in which the major challenge is to persuade people to abandon their traditional beliefs and practices in favor of the new. This will produce inappropriate and ineffective health services in the third world countries.

If one sees that major problems in transfer of advanced technology (ies) e.g. health sciences are rooted in society and culture of the recipient peoples, and that programs and projects aimed at redressing poverty, poor health, inefficient agriculture and illiteracy must be designed to fit the needs and expectations of these people. These people (the clients) want to raise their standards of living and are willing to modify their behavior where they perceive advantage in the new ways. But psychological, social and cultural "barriers" or boundaries inhibit these changes. We have to break these barriers or boundaries between "us" and "the "providers" or even the communities we work with, the sooner the better.

If these barriers can be identified (e.g. the determinants of heath worker motivation) through sociocultural research, and if the motivations to change can be identified, then developments assistance can be presented in such a way that client peoples will eagerly accept it. This is a two way traffic to client and as well as the provider. This is a step forward over the silver platter model. It is correct to say: without an understanding of the local community, its world view, and its comprehension of the innovative alternatives presented to it, planners and technical specialists (doctors) are working blindly.

The previous model may fail to produce the desired results. This will lead us to understanding of sociocultural forms of innovating organizations. As one could find barriers to change in the workers (e.g. going to work in the periphery rather than towns/urban areas) so are they found in the structure, values, and operating procedures of developmental bureaucracies, and in the individual personal qualities of planners and change agents. (By the way more than 50% of the world population is now living in towns or cities). [World Bank 2001].

The Bureaucratic model says to develop most effective programs it is essential to understand the culture of the agency (the hospital/ health system) developing and guiding a program, as well as national and international assumptions (both conscious and unconscious) that shape bureaucratic cultures. Health personnel think the community and the community alone, is the problem. Why in the sociocultural models the problem is defined as "out there" away from the center of the policy, planning and programs operations. No one in the innovating organization need feel responsible, or on the spot, in accepting this model.

The bureaucratic model is valid but still many feel psychologically difficult to admit that we are part of the problem. Those professionals denied access to decision making process or feedback or management is "out of touch" with superiority complexes explains part of this. The results is regardless of staff members of bureaucracies full understand the limits of their organizations, of their inherent rigidity, and of many constraints they place on reflective thinking and action. Efforts to bring about major orgnaizational changes so often seem futile, the workers find it easier to accept

organizational norms as a given and place their hopes on changes in community forms that will make clients more receptive to their programs.

Rationalizing budgets:

Our resources are scarce; but this does not mean justifying our budget requests by quick results, especially results that can be counted, number of latrines installed, children vaccinated, and family planning methods demonstrated or condoms distributed. Long range strategies that take time to produce results suffer in comparison to such programs. [George M. Foster, Bureaucratic aspects of International health programs].

In the methodology and the approach –the definition of motivation was often if not always kept ahead.

Motivation is defined as an individual's degree of willingness to exert and maintain efforts towards organisational goals [Kanfer 1999]. The Collins Dictionary states that motivation is a reason for a course of action towards a goal. In anthropology it has a broader meaning.

In observing,

Doctors as a group of health workers or as an individual as well as nurses the same implies.

Health worker in this study is taken as a doctor or a nurse for a matter of simplicity. Also a sample from the administrative part and all those involved as clients or stakeholders to health sector in Western Cape Province.

WHEN –***The observation took place during delivering of their services to their clients or doing other activities related to the primary task-Health Improvement of their clients. This started from the day one of collecting the information. Thus observation will be conducted during ward rounds, theater work, seminars, meetings professional or administrative Vs staffs or fieldwork. Where it failed due to some bureaucratic formalities like the former two, theatre and ward rounds will still be interpreted why one thinks that could be so. It might be "the way society takes care of its primary, secondary or tertiary culture" in any form, or it might be the "action environment I mentioned earlier.***

THE ORGANIZATION HERE IS HEALTH AND HUMAN SERVICES

We cannot approach organizations with the same research methods as we employ in a psychoanalytic practice. In observing a complex organization like (Health institution) and human services we do not have the brief to treat and give interpretations and so feedback on our conclusions is limited. In this respect our position is closer to researchers using psychoanalytical ideas than to those in a psychoanalytical clinical practice. [R D Hinshelwood et al].

In exploring how health workers deliver their services at unconscious level –both a general theory and for a specific "organization" we need to consider the methodological approach. Psychoanalytically informed social psychology has employed a large number of methods –I) Questionnaire and interviewing technique

ii) an anthropological fieldwork method, iii) action approach and iv) the results gleaning from commercial consultancy work. In the psychoanalytical practice there is involvement of a variety of a very special skill -that of the participant observer.

This has five aspects in clinical setting: I) a way of observing with "evenly hovering" attention and without premature judgment ii) the careful employment of the observer's subjective experience (sharpened as much as possible by personal psychoanalysis)
iii) the capacity to reflect and think about the experience as a whole
iv) the recognition of unconscious dimension
v) the formulation of interpretations which afford a means of verifying (or falsifying) the conclusions the psychoanalyst has arrived at through this process.
With the exception of this last dimension, the interpretation belongs only to the clinical setting; all the others can be transferred to psychoanalytic research outside the clinical setting. Though the method of infant observing is not very much going to be adopted in this methodology but still something closer to it i.e. the method of observing organization. [RDH]

This method is arising mainly as a training exercise [that the questions in the tool of study] the questionnaire will arouse an attitude of mind towards consciousness to effectiveness, efficiency and probably sustainability of the organization daily actions or activities. An aim going hand in hand with the aim of the study is to develop a sensitivity to the human (resource) dimension capacity and culture on the health institution and to the anxieties and pressures within it. Thereby it can only sharpen one's own sensitivity

within the work role [the planning spiral] involvement in the institution and thus to give help in thinking about the pressures and pulls of the culture of institution (whether authoritarian, domination, suppression or splitting) in defense. Are these defense mechanisms as important as they are of cost effectiveness, or more efficiency to our output?

My role as an observer –is a sort of intruding into the health institution say a hospital or clinic or a ministry itself. Thus I might have no any formal procedure to play and therefore working as a "spyglass" in their organization sharing the framework of their concepts with infant observation. No wonder in a community like South Africa with its specific historical backgrounds –my negotiation to observe e.g. in their seminars, clinics, ward rounds, theater work, meetings, may in most cases end in failure or may prove complex and even at times failed to get permission.

However, this approaching and entering the institution (health sector) and negotiating the start of the project and now post mid term is in itself an integral part of the observation. Thus the reaction I have been receiving, the web of authorities, who often seem to be involved in getting permission (from the day I submitted the proposal to the ethic committee). The attitude of willingness, skepticism or fear (as one was asking why doing such a study here) is first important indicative experiences. Not only does this measures maturity of whatever is happening but also the whole culture of the institution running. Thus I was able to observe some of the functioning of the sector –as it deals with intrusion from an outsider and with the idea of being scrutinized. The way I was treated,

all these will appear in the results not as judgment but as important observation material. You have to bear in mind, here is a society for 40 years was under a sort of uncompromising policy (apartheid) now it is only 7 years or so post such era.

The Observation:

Reading and participating in clinics, ward rounds, theater work, seminars, meetings, /meeting individuals in class or lectures or coffee break hours.

-This help start thinking about the institution dynamics –Of course this follows the pre first stage of negotiating permission for observing or doing the study.

-How does roles /planning, implementing, monitoring or evaluating and the culture of group work or sharing is in practice.

-The second phase a more difficult one –The actual observation

In this one participates out at a neutral position taking details of the processes.

Occasionally reporting back for advice and support.

Later, one sits down and subjectively make the write up. [Wilhelm Skogstad]

As an observer one has to keep an eye on these roles:

-You may attract a number of expectations (positive or negative e.g. a critical figure, a supporter, or a "spyglass". These will reflect the culture of the sector as comparable to transference manifestations in a therapeutic relationship. Sometimes a surprising personal attachment [afterwards?]

-Adopt an attitude of open interest in whatever is going on as much as possible.

Unlike the relationship between mother and baby, the one here is broader –equivalent to culture.

-The implicit way people relate to each other

-How they perform their tasks (activities)

-The way they seem to go about achieving particular objectives.

As the observer is to get the sense of the atmosphere of the institution or organization generally, the emotional quality of the interactions on a specific day as were observed.

Thus with the experience I have with such organization –then the gauging in witnessing the activities, the pull to join or retreat from them, the feelings of approval or disapproval or like or dislike, and so on.

All the time keeping an eye on three things-

-I) the objective events happening

ii) the emotional atmosphere with one's inner experiences

iii) the countertransferances

These then together will make the CULTURE OF THE ORGANISATION.

At times one may be ready to give /interact in a cup of tea/coffee, explain the project, identify his or her background profession or whatever. Give an authoritative opinion /advice. One has not to be stonily silent, but approaches these courteously, neither

seeming to be needy, secretive nor over defensive. Avoid destruction of the observation from the wider field of observation. This is relatively passive qualitative but an anxious one, so partly because it is passive. Avoid much involvement to an extent to feel or seem a rejecting figure. [A challenge here as when stressful/joyful things happened /took place the urge to become much involved creates an internal struggle in the observer].

The Interaction:

This will stimulate or clarify the theoretical reading about the aim and objectives of the project

-Either support the observer's initial negotiations with the organization

-May hears or discusses process reports of the previous sessions or observed material

-Assist and advice the "digestion" of the materials.

The claims of this model or method of observation must be modest and take the form of DESCRIPTIVE work or {thick data extraction}. This gives rise to Hypotheses for further work and for understanding that is useful in the institutional practice – especially so when dealing with variety scope of professional disciplines as is the case here. Doing this as a mini dissertation is being unfair to many. Here is to help the participants to develop an analytic attitude towards an institution. Observing and thinking about an institution may sensitize one to the dynamics of the organization one is working in and may help one think about rather than act upon, the pressures within the

organization e.g. by running away (economic emigrants) or by counter attacks e.g. strikes.

The learning gained by participating in such a project may move "psychically" to inform one's position as a professional worker immersed in just these processes. Such change of "role" may bring change in effectiveness and efficiency.

Thus the ACTION RESEARCH APPROACH. [Observing Organizations –Anxiety, defense and culture in health care-R.D.Hinshelwood]

Reasons for the choice: One, motivation is an internal psychological construct and can be explored by looking the outcomes of the motivation-retention and turn over of staff standards of performance e.g. exploring personal attitudes. [Stilwell 2001). Action research also gives chance for participants and myself as a researcher to be linked in a way to assess the perspective determinants; identify and confirm the problem and in giving feedback on the findings; not only increases the validity and reliability of the study but also is a way to implement those findings!

Resultant limitations: One is that motivation has different meanings to different researchers. In adapting the scales and also terms already used in other studies an attempt is made to bring us together in finding a common format in studying motivation. However, the local culture and its context must always be born in mind.

Thus by use of questionnaire and meeting the participants in focus groups to explain the tool of measure (i.e. the questionnaire through open questioning and probing for relevant information.) I will record the findings from the interviews myself in writing and do the analyzing. Analysis will be conducted throughout the process of data collecting reporting. Confidentiality will be assured and the participants will be informed that the findings will be aggregated and that not personally attributable.

Constraints regarding validity and conclusions: The results may be published in appropriate journal whenever possible and presented to the relevant stakeholders. This study will be available to other interested parties to further research of the topic in Africa and other developing countries or implement similarly in a comparable population or situation. The results are also intended to highlight ways to health worker retention, prevention of brain drain, and thus assist in improving health equity, promotion and improvement in the study population.

STAKEHOLDERS:

All those people, groups, institutions and organizations that have a vested interest in the promotion of health and health improvement and especially when it is taken into consideration –human resources is consuming up to 60% of the health budget in most of developing countries. Thus health planners and health policy implementation bodies are also targeted.

Making sense of the findings:

The communication beyond the discipline of anthropology itself:

The language (common language avoiding jargons), thus you will find the elaboration of power, authority and their concepts in the primary task.

-Theoretical exposition focused on solution of the problem at hand

-Ethnographic detail focused on the problem

-Reports organized to clearly indicate the utility of the information provided theories and methods used findings, and implications.

At the end one may find or not find a practical conclusion that addresses the problem if not a proposed project will be ineffective and should be revised or abandoned.

In our daily health services delivery-some untested policies are raised to the level of doctrine. More so because of the enthusiasms and special professional interests (surgery or obstetrics and gynecology, community development, primary health care etc.) of those in a position, to make such decisions than because of objectives consideration of what is known. And once policy becomes doctrine, it is the rare staff member who can afford to question it. The life expectancy of the whistle blowers in bureaucracies is not long. Here one does not have to commit himself to judgment that in ward so and so, that is it! The feedback reading will do the work of "correcting ourselves."

THE ANAYZING/INTERPRETING PROCESS.

Bureaucrats do not, and cannot be expected to, function with formalistic impersonality. They have likes and dislikes, prejudices, influence their role performances, and hence the functioning of their organizations. Personality traits like these are individual. Other personality traits may be thought of as group based (doctors/nurses and their defense mechanisms at work) characterizing the members of the professions like nurses and their denial, idealization, depersonalization, projecting or splitting in their roles or doctors and authoritarian VS authoritative misuse of position or power and professionals as a class. They also affect the performance of individuals and consequently, organizational activities. Competent professionals have a positive self-image, they have confidence in their ability and they take pride in their work. (See questionnaire). Some professionals can work quality satisfied with their knowledge (inner power-see power below) that they are doing a good job. But many more exhibit or conceal with varying degrees of success on need for ego, gratification from their peers. They like to promote activities in which they can demonstrate their professional skills; care to be taken as sometimes this lead to confusion of personal and organizational needs. Pride in performance and a positive self-image obviously are important elements in stimulating the best possible work. But when present in excess in projects where CO-operative efforts (e.g. surgery) and inter sectoral policies (community health) are desirable, these personal professional factors can jeopardize planning and programs operations. For, carried away with enthusiasms, same professionals readily believe that their contributions are the key for program success and that they should have first call on resources! In primary health care, for example lip

service is paid to the importance of integrated programs that include agriculture, education, access roads, and the like. Yet few whose primary field is health doubt that health activities and particularly their own specialties should receive first attention. [A. Obholzer-the unconscious at work-Individual and organizational stress in the human services]. Also is observation of doctors' pompous towards other health workers.

At this juncture, one has to rebuild an institution by asking some few questions

-Can reflexive bureaucratic model is institutionalized so that more realistic premises will underlie the definition of problems in health program planning?

-How can the necessary resources be built into large organizations so that they are better able to profit from their own past experiences and from relevant experiences of other organizations?

-How can the dangers of the early enunciation of policy doctrines restricting innovating thinking in health services provision be avoided?

-How can the threat of attempting to satisfy the Western ideology (biomedical model) concerns by incorporating in the institution planning be controlled?

-To what extent then, do professional personality factors impinge on planning processes?

-Does over all balance in projects suffers because of the influence of powerful personalities?

-Does the seminar or workshop syndrome divert institutional personnel from other activities to the extent that the over all goals of the institution are compromised?

=Should number of meetings be limited? Or increased?

-How can the scope of behavioral research, on the individual be broadened to include not only the recipient (clients) but also the provider that plans and carry out the program?

- What can be done to ensure greater use of such research in setting policy and in program operations?

Other features to be looked for are those, which may pose as anti-task phenomenon, these are found in any institution or organization in one form or other.

AUTHORITY-The right to make decisions which are binding on others.

Authority from above-is a quality derived from one's role in a system and exercised on its benefit.

Shareholders ----choosing Board of the company ----this chooses Director-----who works on OUTCOMES.

Thus authority derives from a system of delegation from shareholders to board to director.

Authority from below- (an internal component of authority) may be explicit and conscious or unconscious and therefore not available to be worked with. Nature of and extent of ambivalence affecting the delegation of authority to those in charge. Here a situation of withholding of authority from below in the form not sanctioning, means that full authority cannot be obtained, and there is an increased of undermining and sabotage. Since there is no such thing as full

authority, an integral part of this state of mind would an on going monitoring of authority enhancing and formal decision making and of authority sapping processes in the institution.

Authority from within apart from the delegation of authority from above and sanctioning from below, there is a vital issue of authorization or confirmation of authority from within individuals. (Yes the minister wants re-allocation of human resources to the periphery but are the resources prepared that way?). This largely depends on the nature of their relationship with the figures in their inner world, (Who is powerful the preventive doctor or the curative oriented doctor/? The market prices if at all it does exist?), in particular past authority figures. The heart surgeon VS preventive health professor. The attitude of such in the mind authority figures is crucial in affecting how, to what extent, and with what competence external institutional roles are taken up. An individual may be appointed to a position of authority sanctioned from below, yet be unable to exercise authority. Competently on account of undermining of self –in role by inner world figures such "barracking" by inner world figures is key element in the process of self doubt, and, if constant and evident, is likely to prevent external authorization in the first place.

The opposite dynamic also exists! with inner world figures playing into a state of psychopathological omnipotence, which makes for an inflated picture of the self as regards being in authority and is likely to produce authoritarian

attitudes and behavior. The behavior of some doctors –that could do no wrong as when appointed a consultant post, and increasingly pompous, arrogant and hard to bear by staff and patients alike. This leading to incapacity to listen, to learn from his own or others experience and on thus to modify one's behavior –arising from inner world constellation. The way medics are brought up in such an individualistic manner as if was mother's only child, her adored companion who could do no wrong. This transferred to the outer world behavior the consequences would be disastrous to primary task of any institution he/she works in.

Summarizing the anti-task phenomenon above:

Here unlike authoritative –a depressive position state of mind, in which the person's managing authority are in touch both with the roots and sanctioning of their authority, and with their limitations. The medics (of the type- authoritarian) by contrast refers to a paranoid-schizoid state of mind, being cut off from roots of authority and processes of sanction, the whole being fueled by omnipotent inner world processes. The difference is between being in touch with oneself and one's surroundings, and being out touch with both attempting to deal with this by increased use of power to achieve one's ends. Whereas good enough authority at its best, is a state of mind arising from a continuous mix of authorization from sponsoring organization (or ministry of health in our case here) and connection with inner world authority figures. Unlike in quantitative results, one cannot in

this part point a finger to individuals as the causes of our failures rather, but through same involvement they might "pick up" and cause changes towards better output or performance!

POWER-The ability to act upon others or upon organizational structure. Unlike authority, it is in attribute of persons rather than roles and it can arise from both internal and external sources.

Externally power comes from what the individual controls such as money, privileges, job preferences, promotion and the like-and from the sanctions one can impose on others. [But if such privileges could be dished to health workers e.g. nurses/doctors would they increase morale/motivation? Not as simple as that –see below].

Power also derives from the nature of one's social and political connections –how many individuals of prominence can be summoned to one's aid in role.

Internally power comes from individual's knowledge and experience, strength of personality, and their state of mind regarding their role, how powerful they feel and how they therefore present themselves to others. The perceived power or powerlessness counts more than the actual, both of which depend on the inner world connectedness, mentioned above. Powerlessness is often a state of mind related to problems with taking up authority. [Are our medical students brought up in that way of culture? Are they trained to be ready to take authority or to be authoritarian?]. The biomedical and silver platter models refer to the later, I presume.

At times there is interplay between this state of mind and an actual lack of external resources that could otherwise bolster power. However, an individual in a state of demoralization or depression may well have adequate external resources to affect some change, but feel unable to do so on account of undermining state of mind. IN this case power is projected, perceived as located outside the self, leaving the individual with a sense of powerlessness. By contrast, someone who attracted projected power is much more likely to take a leadership role. The nature of the projections hated or feared, or loved and admired. [Grubb Institute 1991, A Hann, et al, Anton Obholzer, Contributions from group relations training]

Both authority and power are necessary in organizations. Authority without power, leads to weaken, demoralized management. Power without authority (our hospital technical staffs) leads to an authoritarian regime. Thus it is the judicious mix and balance of the two that makes for effective on-task management in a well-run organization/institution. Thus what a pointer to indication of authority /power mix ratio in a title. Director, manager or chairman implies a mix of authority and power while one who dictates the essential component of his managing or solving problems is power. The duration and type of appointment matters too when comes to motivation and perception of power and authority of a post. It differs one being appointed general manager and other acting manager, or being given fixed term or permanent VS contract.

Clarity of structure and constitution –task, objectives (see also questionnaire) –make it possible to assess whether or not the system of authorization is functioning, and what steps would need to be taken to withdraw authorization, should that be decided. In authoritarian regimes, it is not possible, as any constitution either does not exist or else subverted; rule or management is on the basis of power rather than law. There is need to be a match between authority and power, and responsibility. Responsibility for outcomes involves being answerable or accountable to someone, (client/else) in the organization or else in one's mind as part of an inner world (pride) value system. But a sense of responsibility without having adequate authority and power (resources) to achieve outcomes often leads to work related stress and eventually burn-out mentioned earlier.

As part of analysis- is assessing the nature and functioning of an organization. Whether as a member or an outsider, the time used in clarifying the nature, source and routing of authority, the power available, and the names describing various organizational functions (manager, superintendent, director, dean, premier etc.) is time well spent.

Leadership and management: Management is a form of conduct by those in authority that is intended to keep the organization functioning and on-task, while leadership looking to the future, pursuing an ideal or goal. Task performance then, requires active participation on the part of the followers as well

as the leader. A passive accepting BASIC ASSUMPTIONS –[Basic assumption of Dependency, basic assumption of Fight and Flight and Basic assumption of Pairing}] state of followership such as one might find in a demoralized organization is quite different from a state of mind of experiencing on one's own authority to take up the followership –role in relation to the task. [Anton Obholzer].

V) CONCLUSION:

The hypothesis then, is that main problem lies within "us", with our biomedical model doctrine we inculcate an inner world "fantasies" in the different cadres of health workers we produce to behave as the only mother's child. That with the Silver Platter model, they have the goods to deliver "out there." Coming to real world "out there" the fantasies" we built in them are not met in the developing world settings of Asia, Latin America and Africa. This leads to a depressive state of mind and hence a demoralized state featuring with many among others, economic emigration (brain drain) to the most destructive form strikes or patient abuse or both. We may do many studies "out there" and until we come right "in there," we shall be beating the ball out of the primary task, which is to bring the "World Cup home". Since we are not accepting our mistakes, that we are also part of the problem (bureaucratic model); we place the problem "out there" on "them" (socio-economic model) either to keep the viscous cycle the north Vs south secular seculori. The whistle blowers life expectancy in bureaucracies is not long.

The final part i.e. implication of the change as applied to the solution to the underlying problem will solely depend on the findings as appears in this discussion. (See also the "Course Road Map to Policy Implications" and the graphic "From Conceptual Framework Perspectives of Health Worker Motivation" at the end).

The reaction towards such setting, of power and or powerlessness, authoritative or authoritarian and or good enough authority and power at its best mix ratio leading to different emotional, anxieties experiences is of paramount important to one being motivated, depressed or demoralized. This can happen at a level of an individual or institution or organization itself. And as noted above, a demoralized organization is quite different from a state of mind of exercising on one's authority to take up the followership role in relation to the (primary) task.

That coping from developed world (EME), may not be feasible, though we have to copy anyway what our national social/cultural context can accommodate or it is difficult to follow the steps of Britain as it did in Industrial revolution; on historical basis is not possible. One may then prepare human resources as required by the context of the nation in question.

What one thought to be of priority like RDP, might already be out dated or an orthodox way of approaching and solving our economic problems at present. The presentation of GEAR-Growth, (economic growth –see discussion in part 2 of the presentation), Employment (create more chances for employment) and Restructuring –see different views on equity and health policy below) might be of more visionary to bright future. This brings us to the importance of increasing the

size of the pie rather than thinking or budgeting on others properties for the sake of cheap popularity or out dated policies of African equality, which does not exist.

Let the future generation work more as a team and forget the past in whatever form. Let them share decision making from brain storming to implementation of their daily tasks/objectives to output evaluation. The goal is to aim high at sharing abundance and not re-allocating scarcity. This will solve low income, improve quality and efficiency and hence health status and development.

SOME POINTS TO NOTE:

Let us start developing pride of our nations i.e. feeling pride of being a South African or a Tanzanian.

It is not possible for all Western Cape population to come and live in the Cape peninsula or all South Africans to come and live in Western Cape. Same to those other professionals from other countries (SSA) may find a loaf of bread taken at home environment sweeter than roast meat taken on a beach in a foreign land.

Improving decision making by incorporating others (professionals /non-professionals) in planning the tasks/objectives and implementing them is easier and evaluating them will be much more easier. Educate each citizen the importance of feeling pride of being part of the nation thus in thinking how to improve economic growth rather than thinking that there is someone called "government" from above who have all the money! Stop thinking of dividing what "scarce" available and aim at creating abundance first! That no one to be asked for better pay than oneself to be involved in causing it become true. It is more civilized to think of what you have done to your nation rather than what your nation have to do for you! This is true because to where we think is "green pasture" lands –they as

well have their problems, is better to face the environment of your country and later boast that you did this and that to your future generation.

DRAWBACKS:

1) Poor responses of the participants
2) One to be able to analyze according to previous format of study design- (do stratification, multiple logistic regression) thus to control for bias (confounding/selection /recall) he/she needs a sample size from 5%-10% of the source/base population. In my case then I needed about 500 or more.
3) It also needs to include different environments urban VS rural settings. [Given that I had no funds for this study nor did I had a sponsor in the first year of my course work at this university –this was a big draw back to meet what I had in my initial plan model.
4) I intend to repeat this same study in my home country (Tanzania) as from late November/December 2002.

Having said that; I may put it this way. At least have opened the way for one to repeat this same study in this country in a more conducive and encouraging environment especially so if happens to be a citizen of this country who may be fluent in Afrikaans, English and Xhosa languages.

VI) REMARKS:-

In a nutshell, if to improve motivation, one has to increase "incentives" and in order to do so-the growth of the economy is important. Given that our resources are scarce and our 'wants" or needs are unlimited; resource allocation needs must target at containing costs (share of GDP), maintaining/attaining equity in access to health care and thus to improve efficiency and hence quality in health care provision. This will be much easier in a fairly decentralized context-which in the material time depends on the stage or form achieved. (Vishal Brijlal et al, 1998). In decentralized forms the tasks will be to improve services (convenient, cost-effective services at proper levels, local planning, policy making, financial management etc.)

-Community involvement and development, same to "provider involvement and development!"

-Local accountability-(varying degrees of authority influences)

-Distribution /equity-(to priority areas, of resources according to needs with equal opportunity policy)

-To win public support for different local government or political parties

-To improve providers' motivation or job satisfaction, (multi-disciplinary teams, friendly environment, task network, and central support; not only in revenue generation but in all the processing of planning from brain storming to evaluation.

VII) THE IMPLICATION/ADVICE TO POLICY MAKERS

Understanding of equity is that ill-health and poverty, and the strategies required to address them, are inter-linked. (Dreze J., and Sen A., Hunger and Public Action, OUP, Oxford 1989). A concern for health, thus requires, for poverty and evaluation must specifically include consideration of the impact of policy on the low income groups who are vulnerable to both ill-health and poverty. The causes of vulnerability are complex (14) an equity assessment needs to explore the impact of reform across a range of population groups: e.g. categorized by socio-economic status, age, gender and place of residence (urban/rural) (15). This has also to consider the process of decision making. This process will facilitate the achievement of equity must instead be participatory, allowing for the representation of all groups within society, even the poorest, and ensuring accountability to the users of health care (ultimately the decision makers) for the implementation of decisions. Allow widespread dissemination of information, for example to facilitate informed health care utilization decisions; lead to determination of an acceptable equity goal for health and wider social and economic policies; and generate support for the "public action" necessary to combat ill-health and poverty. (11, 16)

The impact or implication here is the way our found indicators or determinants of motivation will be used indirectly or directly to find the way to improve our output i.e. maintaining, restoring or improving the health status of individuals as well as population/population groups. In real sense one will find himself on these tracts of health care financing reformation with the following tasks ahead: viz.

To find how to- increase the total funds available for health sector: Without this will be difficult to improve quality of care, with knock on the consequences for consumer and provider behavior, or to concentrate tax finance on the poorest.

-Improve quality and coverage of available care-especially to those providing additional funding under community financing, but under user charges and social insurance schemes, benefit distribution is influenced by wider actions concerning the targeting of public subsidies. (2, 8, 21)

-Concentrate tax financing to the poorest by ensuring that the better- off contribute to the cost of their own health care.

-Improve health utilization patterns by "excessive" or "frivolous" utilization, and ensuring that the most appropriate type and level of care is used ..the referal system, proper gate keeper etc. (19, 24)

-Change the behavior of health care provider by making providers conscious of the costs falling on users and the need to minimize these, and or the need to continue to attract custom when alternative sources of care are available (24); and providing additional income at the level of the health facility which enables service quality and the motivation of providers to be improved.

Thus as we have seen the determinants of motivation, one may not forget at the back of one's mind the determinants of health care expenditure, viz.

-Population structure- the under five or above 65 years old tends to use health more than the rest of the population. This is due to they are more prone to the communicable for the former, and non-communicable chronic diseases of elderly for the later e.g. hypertension, heart diseases, degenerative diseases and sometimes diabetes. Thus a country with a bigger such population size tends to use more on them from the THE.

-Life expectancy is rather a measure of health status and hence an indirect estimate of health care expenditure. Low LE means much burden of diseases and hence more utilization on health sector or poor economic growth. Same to that high LE means more burdens of diseases of the elderly. Fertility is another on population growth rate and is much faster means more expenditure on health or low GDP if it does not tally with economic growth.

-Migration and urbanization- is often accompanied by diseases of stress and or deprivation or overcrowding leading to respiratory diseases like TB or even HIV/AIDS., alcoholism and violence/suicide or abuse of children /elderly, thus increasing burden of diseases or YLL.

-Aging –the higher the population above 65 years the more health care expenditure needs. The age group <14 years tends to use more health care. Adolescent age the minimum.

-Socio-economic development –HDI –combines GDP, LE, and levels of education and give a broad measure of socio-economic development (see table 2-HDR –2000, same is to younger age below 6or 5 years old the more health needs.

The causes of different levels of health expenditure (see table1).

The causes of different levels of health care expenditure cant be discussed without analyzing the issue of why health care expenditure or financing needs a reformation in Southern Africa /SSA. This is more so because of scarce resource if used inefficiently or using public funds inappropriately and in cost-ineffective services then is at any cost not acceptable. Bad management, poor monitoring no ensurance of value of money will exercebate poor accessibility of care. It is also made worse due to poverty, geographical location, (tropical disease burden) age, (majority of the population is under 5 years old with much need in h/care), sex, unemployment, unavailability of services to treat particular problems e.g. STI, and bad planning of and management of services.
Others are poor acceptability due to poor quality of services, regardless of being there. Unmotivated and poor trained staff may lead to long waiting times, inconvenient clinics hours, inadequate supplies of drugs and lack of many confidentiality and privacy. In private sector at risk of financial exploitation (poor regulation and monitoring) with no safeguards to against potentially dangerous treatments. (Nabarro and Cassels 1994).

Thus without institutional and structural change –it is likely the above problems d/t existing managerial and organizational structures will continue. Through health care reforms on financing, defining priorities, refining policies and reforming the institutions through which those policies are implemented. Every country's context has to be taken separately. In Zambia, for example, despite the fact reforms was arguably needed throughout the 1980s, the serious attempt at fundamental changes that is now underway had to await the elections of the MMD Government in 1991. The similarly radical political change has now unlocked the potential for reform in post apartheid South Africa.

Thus political, economical and social dimensions of capacity /context or platform needs to be ripen for that.

It is important to understand health care system –a health care system is the combination of resources, organization, financing, and management that culminate in the delivery of health services to the population. (Roemer 1991). The relationship between the institutional actors as basis for characterizing health care system.

Levels of policy are also important as is levels of decentralization or Systematic, programmatic, organizational and instrumental. (Frenk 1994). Changes at systematic level addresses equity concerns through reform and realignment of institutional linkages between main actors in the health system. Programmatic changes –deals with allocative efficiency through the definition of cost-effective packages of services. Organizational changes ensures technical efficiency through improvements in productivity and quality of services and instrumental policies to generate the information needed to ensure improved performance e.g. data source, IMR, LE, GDP, and other sector expenditures. (See table 3)
The institutional components-For a comprehensive approach to health care expenditure analysis will draw on knowledge and experience from a number of different sources.
-Civil service and public sector organization reform –on administrative and performance, (ODA, 1989, Moore, 1993a)
-Developmental in financing the social sector –financing health services, -(An agenda for Reform in 1987, World Bank 1987). –on introduction for user fees, community financing, voucher system and different forms of insurance. (WHO 1993b, Gilson et al 1995).
Managed market health care reforms-provision of sufficient incentives to generate cost-

effective or user friendly services regulated private markets, to enhance public/private mix, (Broomberg 1994). Development in epidemiology (demography and research) and health economics to understand global and regional burden of diseases and cost-effectiveness of different health interventions. Use of analyses of the potential health gain per dollar spent than was previously possible (WDR-Nabarro 1993-Save the Children Fund 1993). [see also table 2-Components of health sector reform programs]. Institutional reform is necessary to keep sight of the policy objectives, improve efficiency, equity, more responsive services, and ultimately better health outcomes, that is designed to achieve. Thus better system and methods for monitoring policy implementation. One has to take a note that health sector financing and its reformation in h/sector reform as a whole is a political process, it will never be in everyone's interests and cannot be advanced through technical analysis alone; as seen above in the correlations of different sectors' expenditure codes. It needs robust political leadership and informed technical advice. Experience has shown strength of provider interests often supported by media broadcast are more likely to focus on individual than community interests, can present a major obstacle to making health care system care more responsive to societal needs. Improvement in budgeting (program-budgeting), disbursement, accounting and auditing systems as well as increasing the role of private providers and the autonomy of provider institutions.

All these have to strike a careful balance between taking on the do able whilst not disappointing the often ambitious expectations of the public and their political supporters.

Referring again to the background above, it is politically more difficult to reduce staff (or through emunerations) than to reduce other costs factors on increasing health budget up to 80% is consumed by salaries followed by drugs. HIV/AIDS and Chloroquine resistance forms of malaria has put more additional strains on National health budgets. However, it is not surprising that in most countries (SSA) with public assistance systems individual households already spent substantial proportions of their income, both in cash and in kind on drugs and health services. Private households are reported to contribute up to 50% or more of the THE in SSA (including Southern Africa countries) [The Economics of Drug financing in SSA; The community financing approach page 18-Center for Development Studies –University of Antwerp 1986].

Providers (private) fall in different categories with very different standards of care, including legal or illegal private practices of physicians and paramedical workers, mission hospitals, private pharmacies, traditional healers, quacks and drug peddlers. These then need legal and proper supervision and monitoring. This gap has led to "black and gray" market often without appropriate qualifications and with exorbitant profit ranges. Studies have shown only a relatively modest share of the h/hold income is required to modern health services (1-3%) (6) People declare the willing to pay higher fees, provided that this would assure availability of medications. However, the definitions of WTP and ATP remain unsatisfactory.

Together with these strategies are the "adjustment" for health care financing:-
These falls under –Cost recovery,
-Risk sharing and – Rationalization of resources; all can compliment each other.

Cost recovery-raising user charges to recover part of recurrent cost of drugs, maintenance and services have been practices in non –profit-NGOs; but played a marginal role in government services in health care provision in SSA. [Vogel 4]. Drawbacks are political considerations, pressure from groups (cities/urban) can cause government discomfort when unpopular decisions are implemented. Bias to the poor but limited with the poor management capacity to implement with occasional linkages to workers and military police etc. Administrative costs of collecting and handling fees in relation to the revenues are higher at lower level facilities than hospitals.(8). The Bamako Initiative creates an inherent tendency to promote curative rather than preventive services enhancing the sale of drugs have little impact on the health status improvement.

In mission hospitals in SSA providing quality services and charging appropriate fees can be very successful to serve the poor population. Many of these hospitals are partly financed by user charges, still give access to the poor by applying sliding scales or special exemptions. Thus if donors and government improve services and drug supply leading to improved services and maintained by collected revenue. Hospitals and clinics could be allowed to utilize at least part of the collected revenues and reinvest in service improvement.

Other inner side of success in mission hospitals is the little fluctuations of staff primarily at management level with increased efficiency, dedication and highly motivated workers working with reliable supply of drugs. This attracts patients from affluent strata of the society. On the other hand making cost-recovery the primary objective in government sector involves the risk of putting the cart before the horse.

Mark up on drugs-the Bamako Initiative with an idea of financing recurrent costs for health care at periphery of rural areas by sale of drugs; however, its "pipe dream" of achieving self –efficiency could not materialize. (Kanji 11).

Risk –sharing strategies: To assist the poor and seriously sick to be assured access to adequate treatment and protected against unbearable economic losses. However, possible, if economic consequences and treatment are distributed among sufficient number of people.

Drawbacks: Many are centrally health insurance schemes-eligible to formal sector and taking a big amount of the THE. Thus it is good if government implement a compulsory membership for almost everybody. In rural areas state-prescribed organized CO-operatives for farmers and fishermen etc. Also poor capacity leading to difficulties in setting up and guaranteeing the functioning of a low cost and efficient administration; problems to assess the capacity of h/h to pay, to determine affordable premia and collecting them. (13). From the prospective of economic efficiency catastrophic health risk insurance is considered the most desirable form of risk coverage. (8)

Other drawbacks are lack of reliable data on the incidence of illness and its costs of treatment (14); Competition in the private health insurance sector is practically absent, thus no incentives for potential clients to work out competitive conditions. Poor banking system and lack of organizational structure to ensure transparent resource use at rural areas. Thus a market economy under present conditions can hardly be expected to take care of the needs of the rural populations in SSA. Protecting the interests of population groups in areas with weak structure is intrinsically the task of the state.

Decentralized forms of risk sharing leave room for flexible development of schemes that can be suited to the needs of the participants and local conditions e.g. clients of rural health centers, or population of community or province. One may charge user fees at community health facility a first step towards risk sharing e.g. by disease episode, rather than individual services /drugs. It still needs more information and motivation including the involvement of local opinion leaders to get more acceptances. Use of sliding scales and splitting up consultation and prescription fees can also be tested. Other community participation includes contributions in cash, in-kind (harvesting time), labor form, and joint control and administration. Drawbacks: Insufficient development of organizational patterns (to the realization of PHC) with community resources; who is responsible to whom; Inefficient use of resources, poor performance of PHC workers. Thus needs effective administration and management of small funds and transactions, e.g. management of revolving funds at village level, but needs almost same degree of know – how and organizational structure as the handling of much larger amounts. It is also an important element of community participation (decision making) and planning as such associated with expectations of social and political emancipation and greater equity not only an aspect of cost recovery.

The revenues are designated to cover not only costs of health services including drugs, laboratory chemicals, maintenance of facilities, training and supervision but also create capital reserve and improve quality (infrastructure etc.).

Another area of rationalization of resource use is -

To restructure to support priority activities at the primary levels (clinics/health centers/district hospitals). (20). Still in many SSA countries distribution of resources reflects the conventional health care structures, though they claim to adopt PHC approach. For example in Tanzania more than 50% of the National Health budget is consumed by only three major hospitals. Patients tend to bypass health centers/primary care centers and travel direct to the next referral center (thus a need for an efficient and effective gatekeeper).

Further advice to policy makers will include:-

Use, procurement and supply of pharmaceuticals leave room for substantial savings without sacrifices regarding quality of care. Fight over prescription and indiscriminate prescription; lack of standardized treatment schemes/guidelines; Discourage brand name drugs over generic drugs, discourage flooding market with non-essential drugs unnecessary and unco -ordinated expensive purchasers; Introduce national drug policy. Use of selective PHC funds are targeted to a small number of interventions that save the highest number of years of life (YLL) at the lowest possible cost. Community participation is not only the cost sharing and volunteer work but improve their life styles and in decision making.

All require political commitment, high level awareness/motivation among health professionals and users.

The need for reforms of inadequate health financing system must be independent of economic prescriptions resulting from the debt crisis. External support

for governments to render services like "public goods and externalties" and even care to the poorest is indispensable until self- supporting structure for health financing has been developed. The process needs joint efforts of communities, governments and donors, for at least some few decades. (R. Korte et al)

EVALUATION, EQUITY AND EFFICIENCY:

Allocative Efficiency –allows judgment about whatever an activity is worthy doing by reference to its costs and benefits. Operational efficiency –the lowest costs production of a fixed quality of health care or maximum production within a fixed budget limit assuming that the activity is worthy undertaking. AE –infers operational efficiency "if something is deemed worth doing then it must be carried out in a way which ensures the optimum use of resource." [Economics of Health Care financing –The Invisible hand – 1993] Both involve quality and administration efficiency; allocative efficiency and the use of resources will result in a high quality and effective service and maximize on the health status. (see also table 13.3).

Tables and figures attached: (Policy /advice to policy makers)

1) Lessons of experience; Conditions for positive Efficiency and Equity impact of Financing reforms.
2) The political economy of user fees with targetting
3) Components of Health Sector reform Programs

4) The Health system –Key Institutional components

5) Evaluating Health Care reforms.

Reference:

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TABLE 13.3

Evaluating Health Care Reform

Issue	Evaluative Questions
Impact	
Efficiency	Have reforms: (1) influenced provider behavior? (e.g. referral practice, treatment choices) (2) influenced user behavior? (e.g. reduced 'frivolous' use, more appropriate use of the referral system) (3) influenced managerial practice? (4) influenced the degree of accountability over providers/managers exercised by health care users/the wider community? and so, (5) influenced the pattern of service provision? (e.g. balance primary/tertiary care; packages of care offered at different levels of health system, especially primary) (6) contributed to lower costs/same quality, or increase in cost justified by proportional/greater increase in quality?
Equity	Have reforms: (1) influenced the pattern of health care utilization by different population groups? (2) improved services by extending coverage and/or improving quality? (3) had an impact on perceived quality? (4) ensured access to information among the population? (5) influenced the distribution of the payment burden between population groups? (6) protected the poor/most vulnerable from payment? (7) influenced the extent of accountability over providers/managers exercised by health care users/the wider community? This evaluation should specifically consider: • the differences between socio-economic groups or appropriate proxies such as geographical areas; • the change in their situation as a result of reform; • the impact on the public sector relative to the private sector.

continued on next page

TABLE 13.3

Evaluating Health Care Reform (continued)

Issue	Evaluative Questions
Factors Influencing Impact	
Content	(1) what were the objectives of the reform? (2) what were the elements of the reform? – what incentives are inherent in the reform? – what management mechanisms are part of the reform? (3) what complementary policies were packaged with the reform, e.g., resource reallocations? (4) what steps were taken to address weaknesses in institutional capacity as part of the reform?
Context	(1) what were the policy-relevant features of: – the national economic and political situation? – the national health profile, system and policies? – the national environment and culture? (2) how did these features influence the range of feasible reforms, and their content? (3) how did the influences of these varying features interact? (4) how did these features influence the interests and role of actors concerned with the policy?
Actors	(1) who were the policy-relevant actors at different stages of the reform process? (2) what interests did they have in the reform? (3) how strong was their influence? (4) how did they influence the various stages of reform? (5) what were their mechanisms of influence?
Process	Did the process of reform: (1) allow for debate? (2) establish and implement the pre-conditions necessary to reform, before reform implementation? (3) allow for experimentation?

Source: Andrew Cassels 1994a

reform programmes, set out as areas of work or menus, each of which contains a number of options.

Table 2: **Components of health sector reform programmes**

Area 1: Improving the performance of the civil service	Reducing staff numbers, new pay and grading schemes (including performance related incentives and salary decompression), better job descriptions and appraisal systems, improved financial disbursement and accounting, establishing executive agencies
Area 2: Decentralisation	Decentralising responsibility for the management and/or provision of health care to local government or to agencies within the health sector
	Establishing self-governing hospitals or autonomous district boards
Area 3: Improving the functioning of national ministries of health	Through organisational restructuring, improving human and financial resource management, strengthening policy and planning functions, setting standards for health care provision and developing systems for monitoring performance, defining national disease priorities and cost-effective clinical and public health interventions
Area 4: Broadening health financing options	Through the introduction of user fees, community finance, voucher systems, social insurance schemes and private insurance
Area 5: Introducing managed competition	Promoting competition between providers of clinical care and/or support services through single or multiple purchasers
Area 6: Working with the private sector	Establishing systems for regulating, contracting with or franchising providers in the private sector including NGOs and for-profit organisations

: ADAPTED FROM HSR. Key Issues in LDC. by Andrew Cassels.

TABLE 13.1

Lessons of Experience — Conditions for Positive Efficiency and Equity Impact of Financing Reforms

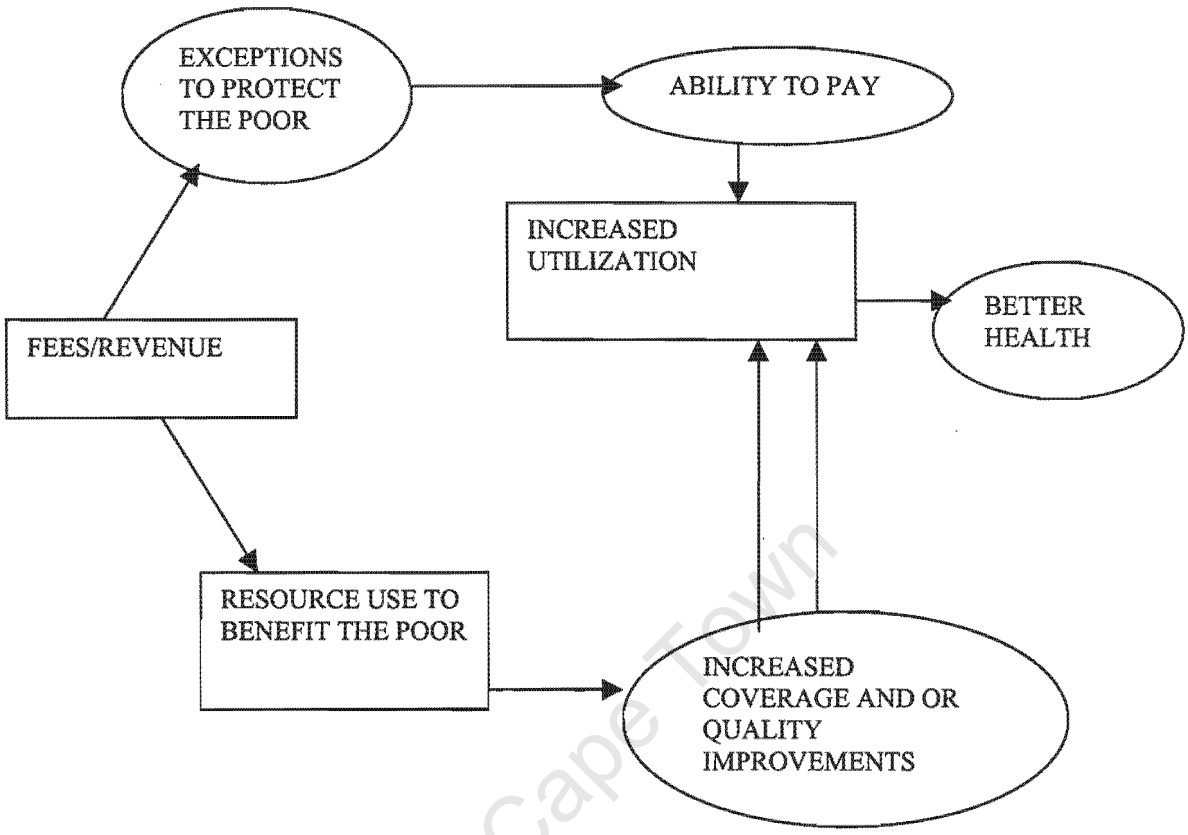
Reform	Design	Complementary Government Policies	Contextual Requirements
national user fee systems	• co-ordinated price structure across health system levels • 'affordable' price levels • periodic readjustment of prices • effective exemption mechanism • revenue generation sufficient to improve (perceived) quality • some revenue retained at point of collection • revenue used for perceived quality improvements	• maintenance of government funding for system as a whole • revenue used for re-allocations to cost-effective services and those used more by low income groups • effective resource allocation mechanism and procedures • effective reward and discipline system for health staff • effective drug procurement and supply system • decentralization	• institutional capacity within health system • wider institutional support (e.g. banking facilities) • consumers' willingness and ability to pay • health workers' responsiveness to financial incentives • professional ethics to counterbalance 'profit motive' of providers • political support for appropriate design/policy • plural political system
community financing strategies	• "affordable" price levels, adjusted periodically • use of locally-adapted payment mechanism (e.g. pre-payment, payment in-kind, payment at harvest time, exemption mechanism) • revenue generation sufficient to improve (perceived) quality, retained locally and used for that purpose • community management mechanisms • design adapted to capacity of community organizations	• co-ordinated price structure • free referral for those using community financing schemes • management and clinical supervision and support for community schemes • effective drug procurement and supply system • effective reward and discipline system for health staff • decentralization • maintenance of government funding for overall health system, with resource allocations favoring low income groups • wider policies to redress social and economic inequalities	as above, plus • local organizations which can be developed as insurance bodies (where relevant) • adequate management skills within community • positive community attitudes towards risk-sharing

TABLE 13.1 (continued)

Lessons of Experience — Conditions for Positive Efficiency and Equity Impact of Financing Reforms

Reform	Design	Complementary Government Policies	Contextual Requirements
social insurance	• provider payment mechanism that gives the right incentives • affordable premium • use of co-payments • degree of subsidization by government • revenue raising capacity • strong gatekeeper function to limit access to unnecessary referral services • service integration to encourage cross-subsidization of preventive by curative care	as for user fees, in particular • complementary policies to develop health services used predominantly by the poor	as for user fees

Source: A. Cassels 1994a



NOTE: FACILITATED BY DECETRALIZATION
THE POLITICAL ECONOMY OF USER FEES WITH TARGETTING

An Idealized view of Promoting EQUITY THROUGH USER FEES AND TARGETTING

Adapted from Andrew Cassels- HSR

Health Sector Reforms in SSA: Lessons of the Last 10 years, by Lucy Gilson, and Anne Mills.

Basic Patterns in national health expenditure, Philip Musgrove, Riadh Zeramdini and Guy Carrin

VIII) INDECES/NOTES:

NOTE:

1) ** =

2) Kakwani index is an approach to assess whether a system (financing health care) is progressive, regressive or proportional. In a Lorenz curve if a concentration curve lies outside the L-curve the system is progressive and it lies inside the L-curve, the payment system is regressive and along the diagonal line –the system is proportional.

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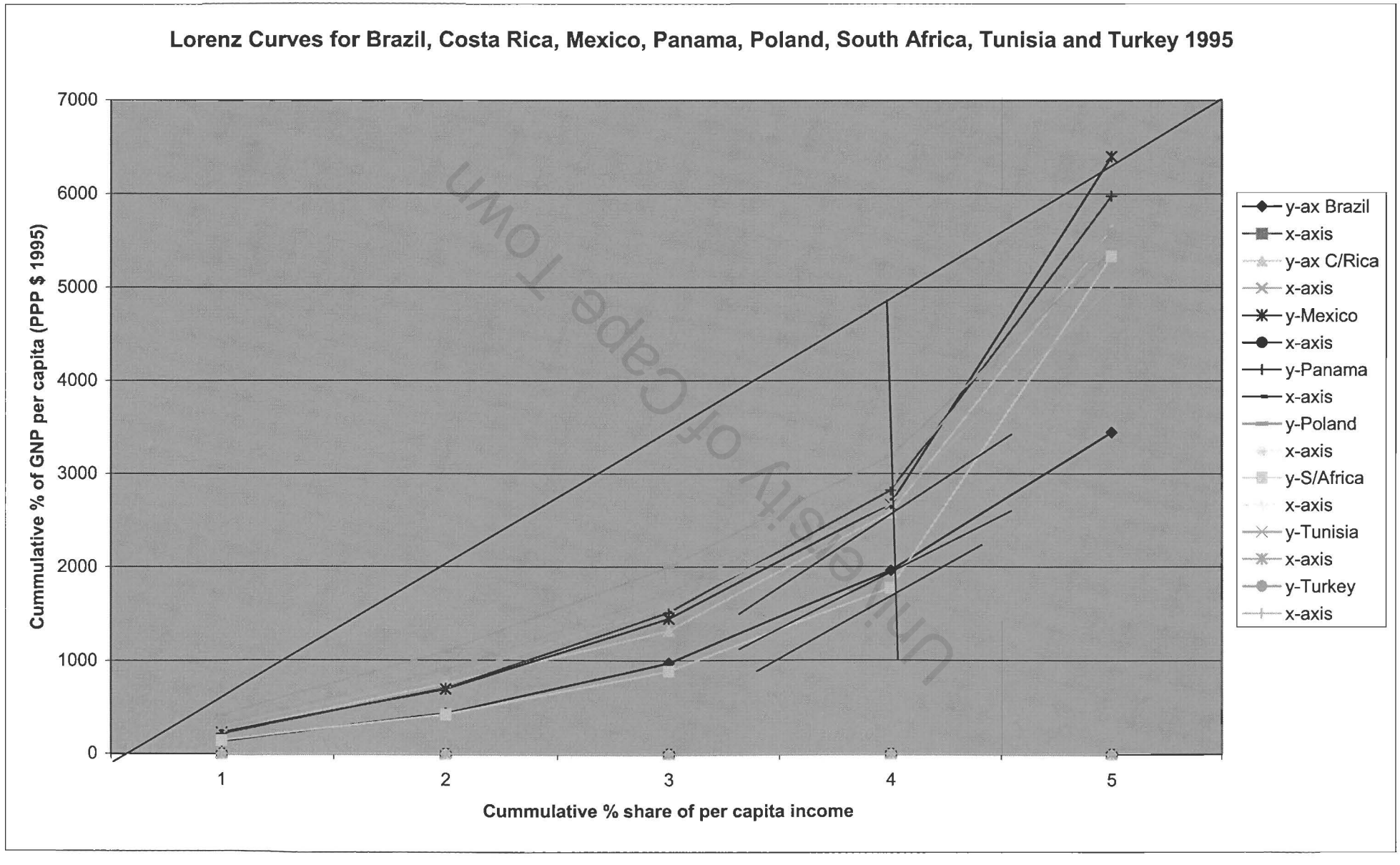


NHS (tax finance system)

[Hypothetical case study

Income	Tax-rate
0-200	0%
201-500	5%
501-700	10%
701-1000	15%
1001-2000	20%
>2000	25%

	Pre-tax income	Rank	Pretax*rank	Income Tax	IncTax*Rank	Total consumption	Indirect Tax	Ind Tax*Rank	Private Insurance	Priv Ins *Rank	Oop Exp.	Oop Exp*Rank	Weighting	Weight*Rank
Household 1	2000	1	2000	400	400	1300	130	130	100	100	100	100	730	730
Household 2	1750	2	3500	350	700	1300	130	260	50	100	5	10	535	1070
Household 3	1500	3	4500	300	900	1200	120	360	0	0	0	0	420	1260
Household 4	1200	4	4800	240	960	1000	100	400	100	400	12.5	50	452.5	1810
Household 5	1000	5	5000	150	750	850	85	425	0	0	6.25	31.25	241.25	1206.25
Household 6	900	6	5400	135	810	800	80	480	100	600	125	750	440	2640
Household 7	800	7	5600	120	840	700	70	490	50	350	0	0	240	1680
Household 8	800	8	6400	120	960	650	65	520	0	0	0	0	185	1480
Household 9	700	9	6300	70	630	600	60	540	50	450	0	0	180	1620
Household 10	650	10	6500	65	650	725	72.5	725	0	0	0	0	137.5	1375
Household 11	625	11	6875	62.5	687.5	600	60	660	0	0	12.5	137.5	135	1485
Household 12	600	12	7200	60	720	550	55	660	0	0	0	0	115	1380
Household 13	600	13	7800	60	780	550	55	715	0	0	0	0	115	1495
Household 14	575	14	8050	57.5	805	600	60	840	0	0	5	70	122.5	1715
Household 15	550	15	8250	55	825	500	50	750	0	0	0	0	105	1575
Household 16	500	16	8000	25	400	500	50	800	0	0	12.5	200	87.5	1400
Household 17	425	17	7225	21.25	361.25	450	45	765	0	0	0	0	66.25	1126.25
Household 18	375	18	6750	18.75	337.5	400	40	720	0	0	0	0	58.75	1057.5
Household 19	300	19	5700	15	285	250	25	475	0	0	100	1900	140	2660
Household 20	250	20	5000	12.5	250	300	30	600	0	0	0	0	42.5	850
Household 21	200	21	4200	0	0	250	25	525	0	0	12.5	262.5	37.5	787.5
Household 22	200	22	4400	0	0	300	30	660	0	0	0	0	30	660
Household 23	150	23	3450	0	0	250	25	575	0	0	125	2875	150	3450
Household 24	125	24	3000	0	0	200	20	480	0	0	0	0	20	480
Household 25	100	25	2500	0	0	200	20	500	0	0	12.5	312.5	32.5	812.5
Household 26	100	26	2600	0	0	225	22.5	585	0	0	25	650	47.5	1235
Household 27	50	27	1350	0	0	200	20	540	0	0	12.5	337.5	32.5	877.5
Household 28	50	28	1400	0	0	150	15	420	0	0	0	0	15	420
Household 29	0	29	0	0	0	200	20	580	0	0	25	725	45	1305
Household 30	0	30	0	0	0	100	10	300	0	0	50	1500	60	1800
	17075		143750											

$G = 1-(2/n^2\gamma) * (y_1+2y_2+....+ny_n) + 1/n$

average	569.1666667
$(2/n^2\gamma)$	0.0000039
$(y_1+2y_2+....+ny_n)$	143750.0000000
1/n	0.0333333
G	0.4720839

$C_{tax} = 1-(2/n^2T_x) * (t_1x_1+2t_2x_2+....+nt_xx_n) + 1/n$

	Direct tax	Indirect Tax	Private Insur.	Out of Pock.	Weighting
average	77.91666667	53	15	21	167
$(2/n^2T_x)$	0.00002852	0.00004193	0.00014815	0.00010396	0.00001328
$(t_1x_1+2t_2x_2+....+nt_xx_n)$	13051	16480	2000	9911	41443
1/n	0.033333333	0.033333333	0.033333333	0.03333333	0.033333333
C_{tax}	0.661105169	0.342348008	0.737037037	0.00292398	0.48283105
KAKWANI	0.189021	-0.129736	0.264953	-0.469160	0.010747
Average Weighted Kakwani	0.132314858	-0.090815155	0.013247655	-0.11729	-0.06254

Income	Tax-rate
0-1000	10%
>1000	25%

The different indirect taxes (sales tax etc.) are on average 8 per cent on total consumption.

	Pre-tax income	Rank	Pretax Inc *Rank	Inc. Tax	Inc. Tax * Rank	Total consumption	Indirect Tax	Ind Tax*Rank	Salary	SI Fee	SI Fee*Rank	Employee fee	Empl Fee *Rank	Out-of-pocket exp.	Oop*Rank	Weighting	Weight*Rank
Household 1	1750	1	1750	437.5	437.5	1200	96	96	1500	75	75	5	5	100	100	713.5	713.5
Household 2	1500	2	3000	375	750	1100	88	176	1400	70	140	5	10	12.5	25	550.5	1101
Household 3	1200	3	3600	300	900	1100	88	264	1100	55	165	5	15	0	0	448	1344
Household 4	1100	4	4400	275	1100	950	76	304	1050	52.5	210	5	20	0	0	408.5	1634
Household 5	950	5	4750	95	475	825	66	330	850	42.5	212.5	5	25	5	25	213.5	1067.5
Household 6	900	6	5400	90	540	800	64	384	900	45	270	5	30	100	600	304	1824
Household 7	800	7	5600	80	560	750	60	420	775	38.75	271.25	5	35	0	0	183.75	1286.25
Household 8	750	8	6000	75	600	620	49.6	396.8	750	37.5	300	5	40	6.25	50	173.35	1386.8
Household 9	700	9	6300	70	630	590	47.2	424.8	700	35	315	5	45	0	0	157.2	1414.8
Household 10	650	10	6500	65	650	725	58	580	650	32.5	325	5	50	0	0	160.5	1605
Household 11	630	11	6930	63	693	650	52	572	600	30	330	5	55	10	110	160	1760
Household 12	625	12	7500	62.5	750	575	46	552	625	31.25	375	5	60	0	0	144.75	1737
Household 13	600	13	7800	60	780	550	44	572	550	27.5	357.5	5	65	0	0	136.5	1774.5
Household 14	575	14	8050	57.5	805	575	46	644	550	27.5	385	5	70	5	70	141	1974
Household 15	550	15	8250	55	825	525	42	630	550	27.5	412.5	5	75	0	0	129.5	1942.5
Household 16	400	16	6400	40	640	490	39.2	627.2	400	20	320	5	80	20	320	124.2	1987.2
Household 17	380	17	6460	38	646	400	32	544	380	19	323	5	85	0	0	94	1598
Household 18	375	18	6750	37.5	675	400	32	576	375	18.75	337.5	5	90	0	0	93.25	1678.5
Household 19	275	19	5225	27.5	522.5	275	22	418	275	13.75	261.25	5	95	100	1900	168.25	3196.75
Household 20	250	20	5000	25	500	275	22	440	250	12.5	250	5	100	0	0	64.5	1290
Household 21	225	21	4725	22.5	472.5	250	20	420	200	10	210	5	105	15	315	72.5	1522.5
Household 22	200	22	4400	20	440	300	24	528	225	11.25	247.5	5	110	0	0	60.25	1325.5
Household 23	150	23	3450	15	345	225	18	414	150	7.5	172.5	5	115	125	2875	170.5	3921.5
Household 24	130	24	3120	13	312	175	14	336	130	6.5	156	5	120	0	0	38.5	924
Household 25	110	25	2750	11	275	200	16	400	100	5	125	5	125	12.5	312.5	49.5	1237.5
Household 26	105	26	2730	10.5	273	230	18.4	478.4	110	5.5	143	5	130	30	780	69.4	1804.4
Household 27	75	27	2025	7.5	202.5	175	14	378	75	3.75	101.25	0	0	12.5	337.5	37.75	1019.25
Household 28	40	28	1120	4	112	160	12.8	358.4	40	2	56	0	0	0	0	18.8	526.4
Household 29	20	29	580	2	58	200	16	464	20	1	29	0	0	25	725	44	1276
Household 30	0	30	0	0	0	125	10	300	0	0	0	0	0	25	750	35	1050

$G = 1-(2/n^2\gamma) * (y_1+2y_2+....+ny_n) + 1/n$

$C_{tax} = 1-(2/n^2T_x) * (t_1x_1+2t_2x_2+....+nt_nx_n) + 1/n$

		Direct tax	Indirect Tax	Soc. Ins Fee	Employee Fee	Out of Pocket	Weighted Ave
average	533.8333333	average	81.13333333	41	25	4	20	172
$(2/n^2\gamma)$	0.0000042	$(2/n^2T_x)$	0.00002739	0.00005406	0.00008726	0.000512821	0.000110421	0.00001291
$(y_1+2y_2+....+ny_n)$	140565.0000000	$(t_1x_1+2t_2x_2+....+n$	15969	13028	6876	1755	9295	46922
1/n	0.0333333	1/n	0.033333333	0.033333333	0.033333333	0.033333333	0.033333333	0.033333333
G	0.4481944	C_{tax}	0.595946316	0.329062601	0.433355148	0.133333333	0.006970324	0.427682424
		KAKWANI	0.147752	-0.119132	-0.014839	-0.314861	-0.441224	-0.020512
		Ave Weight Kakw	0.036937979	-0.02978295	-0.00741963	-0.015743	-0.088244815	-0.096833

Income	Tax-rate
0-200	0%
201-1000	10%
>1000	25%

The different indirect taxes (sales tax etc.) are on average 8 per cent on total consumption.

	Pre-tax Income	Rank	Pre-Tax*Rank	Inc Tax	Inc Tax * Rank	Total consumption	Indirect Tax	Ind Tax*Rank	Private Insurance	Priv Ins*Rank	Out-of pocket exp.	Oop*Rank	Weighting	Weight*Rank
Household 1	2500	1	2500	625	625	1300	104	104	100	100	120	120	949	949
Household 2	2100	2	4200	525	1050	1300	104	208	50	100	6	12	685	1370
Household 3	1900	3	5700	475	1425	1200	96	288	200	600	0	0	771	2313
Household 4	1500	4	6000	375	1500	1000	80	320	100	400	15	60	570	2280
Household 5	1200	5	6000	300	1500	850	68	340	50	250	7.5	37.5	425.5	2127.5
Household 6	1100	6	6600	275	1650	800	64	384	100	600	150	900	589	3534
Household 7	900	7	6300	90	630	700	56	392	50	350	0	0	196	1372
Household 8	800	8	6400	80	640	650	52	416	50	400	0	0	182	1456
Household 9	700	9	6300	70	630	600	48	432	100	900	0	0	218	1962
Household 10	650	10	6500	65	650	725	58	580	50	500	0	0	173	1730
Household 11	625	11	6875	62.5	687.5	600	48	528	0	0	15	165	125.5	1380.5
Household 12	600	12	7200	60	720	550	44	528	70	840	0	0	174	2088
Household 13	600	13	7800	60	780	550	44	572	50	650	0	0	154	2002
Household 14	575	14	8050	57.5	805	600	48	672	50	700	6	84	161.5	2261
Household 15	550	15	8250	55	825	500	40	600	50	750	0	0	145	2175
Household 16	500	16	8000	50	800	500	40	640	70	1120	15	240	175	2800
Household 17	425	17	7225	42.5	722.5	450	36	612	50	850	0	0	128.5	2184.5
Household 18	375	18	6750	37.5	675	400	32	576	50	900	0	0	119.5	2151
Household 19	300	19	5700	30	570	250	20	380	0	0	120	2280	170	3230
Household 20	250	20	5000	25	500	300	24	480	50	1000	0	0	99	1980
Household 21	210	21	4410	21	441	250	20	420	50	1050	15	315	106	2226
Household 22	205	22	4510	20.5	451	300	24	528	70	1540	0	0	114.5	2519
Household 23	150	23	3450	0	0	250	20	460	50	1150	150	3450	220	5060
Household 24	105	24	2520	0	0	200	16	384	50	1200	0	0	66	1584
Household 25	50	25	1250	0	0	200	16	400	50	1250	15	375	81	2025
Household 26	50	26	1300	0	0	225	18	468	50	1300	30	780	98	2548
Household 27	0	27	0	0	0	200	16	432	0	0	15	405	31	837
Household 28	0	28	0	0	0	150	12	336	20	560	0	0	32	896
Household 29	0	29	0	0	0	200	16	464	0	0	30	870	46	1334
Household 30	0	30	0	0	0	100	8	240	0	0	60	1800	68	2040

$G = 1-(2/n^2\gamma) * (y_1+2y_2+....+ny_n) + 1/n$

average	630.67
$(2/n^2\gamma)$	0.0000035
$(y_1+2y_2+....+ny_n)$	144,790.00
1/n	0.033
G	0.5231501

$C_{tax} = 1-(2/n^2T_x) * (t_1x_1+2t_2x_2+....+nt_nx_n) + 1/n$

	Direct tax	Indirect Tax	Private Ins.	Out of Pocket	Weighting Ave
average	113.38	42.4	54.33	25.65	235.77
$(2/n^2T_x)$	0.00001960	0.00005241	0.00004090	0.00008664	0.00000943
$(t_1x_1+2t_2x_2+....+n$	18277	13184	19060	11894	62415
1/n	0.0333	0.0333	0.03333333	0.033333333	0.033333333
C_{tax}	0.67511882	0.342348008	0.25378323	0.002923977	0.445044536
KAKWANI	0.151969	-0.180802	-0.269367	-0.520226	-0.078106
Weighting Average	0.03039	-0.036160	-0.1481518	-0.130056532	-0.28397

Table 1: Race and gender representation in management positions (South Africa) in the public health sector, mid-1999 (excludes academic managerial positions)

POPULATION: 42 209 490									
	AFRICAN		WHITE		COLOURED		INDIAN		
South Africa	Male	Female	Male	Female	Male	Female	Male	Female	TOTAL FILLED
Director General	1	0	0	0	0	0	0	0	1
Superintendent General	1 33.3%	0	1 33.3%	0	1 33.3%	0	0	0	3
Deputy Director General	2 18.2%	3 27.3%	3 27.3%	0	1 9.1%	0	1 9.1%	1 9.1%	11
Chief Directors	7 25%	3 10.7%	11 39.3%	1 3.6%	1 3.6%	2 7.1%	2 7.1%	1 3.6%	28
Directors	29 22.1%	32 24.4%	39 29.8%	10 7.6%	5 3.8%	4 3.1%	8 6.1%	4 3.1%	131
Deputy Directors	30 11.5%	109 41.8%	27 10.3%	71 27.2%	4 1.5%	7 2.7%	5 1.9%	8 3.1%	261
Assistant Directors	30 4.2%	376 52.6%	11 1.5%	224 31.3%	2 0.3%	49 6.9%	5 0.7%	18 2.5%	715
Medical/Dental Superintendent	71 28.4%	19 7.6%	74 29.6%	35 14.0%	12 4.8%	0	24 9.6%	15 6.0%	250
TOTAL	171 12.2%	542 38.7%	166 11.9%	341 24.4%	26 1.9%	62 4.4%	45 3.2%	47 3.4%	1400
Race Representivity	**50.9%**		**36.2%**		**6.3%**		**6.6%**		**100%**

Source: PERSAL data, mid-1999

Table 3: Comparison of distribution of selected health professionals between public and private sectors, 1998

PROVINCE		EC	FS	GT	KZN	MP	NC	NP	NW	WC	SA
Total Population size		*6 469 754*	*2 703 381*	*7 543 404*	*8 640 356*	*2 875 024*	*862 618*	*5 060 162*	*3 443 841*	*4 061 866*	*41 660 406*
% of total population		*15.5%*	*6.5%*	*18.1%*	*20.7%*	*6.9%*	*2.1%*	*12.1%*	*8.3%*	*9.7%*	*100%*
Public Sector Dependant Population		*5 952 174*	*2 216 772*	*4 526 042*	*7 517 110*	*2 472 521*	*681 468*	*4 655 349*	*2 961 703*	*2 924 544*	*33 907 683*
% Provincial population dependant on Public Sector		*92%*	*82%*	*60%*	*87%*	*86%*	*79%*	*92%*	*86%*	*72%*	*81%*
Private Sector Dependant Population		*517 580*	*486 609*	*3 017 362*	*1 123 246*	*402 503*	*181 150*	*404 813*	*482 138*	*1 137 322*	*7 752 723*
Medical practitioners											
	Total	1 963	1 528	10 214	4 699	966	371	750	846	6 214	27 551
TOTAL	*% total doctors*	*7.1%*	*5.5%*	*37.1%*	*17.1%*	*3.5%*	*1.3%*	*2.7%*	*3.1%*	*22.6%*	*100%*
	Ratio	**1:3296**	**1:1769**	**1:739**	**1:1839**	**1:2976**	**1:2325**	**1:6747**	**1:4071**	**1:654**	**1:1512**
PUBLIC	total	820	491	2183	1800	281	87	476	329	1149	7 616
SECTOR	*% total doctors*	*3.0%*	*1.8%*	*7.9%*	*6.5%*	*1.0%*	*0.3%*	*1.7%*	*1.2%*	*4.2%*	*27.6%*
	ratio	**1:7259**	**1:4515**	**1:2073**	**1:4176**	**1:8799**	**1:7833**	**1:9780**	**1:9002**	**1:2545**	**1:4452**
PRIVATE	total	1143	1037	8031	2899	685	284	274	517	5065	19 935
SECTOR	*% total doctors*	*4.1%*	*3.8%*	*29.1%*	*10.5%*	*2.5%*	*1.0%*	*1.0%*	*1.9%*	*18.4%*	*72.4%*
	ratio	**1:453**	**1:469**	**1:376**	**1:387**	**1:588**	**1:638**	**1:1477**	**1:933**	**1:225**	**1:389**
Dentists											
	total	229	163	1828	539	159	54	103	144	973	4192
TOTAL	*% total dentists*	*5.5%*	*3.9%*	*43.6%*	*12.9%*	*3.8%*	*1.3%*	*2.5%*	*3.4%*	*23.2%*	*100%*
	ratio	**1:28252**	**1:16585**	**1:4127**	**1:16030**	**1:18082**	**1:15974**	**1:49128**	**1:23916**	**1:4175**	**1:9938**
PUBLIC	total	34	15	126	35	19	4	16	22	53	324
SECTOR	*% total dentists*	*0.8%*	*0.4%*	*3.0%*	*0.8%*	*0.5%*	*0.1%*	*0.4%*	*0.5%*	*1.3%*	*7.7%*
	ratio	**1:175064**	**1:147785**	**1:35921**	**1:214775**	**1:130132**	**1:170367**	**1:290959**	**1:134623**	**1:55180**	**1:104653**
PRIVATE	total	195	148	1702	504	140	50	87	122	920	3868
SECTOR	*% total dentists*	*4.7%*	*3.5%*	*40.6%*	*12.0%*	*3.3%*	*1.2%*	*2.1%*	*2.9%*	*21.9%*	*92.3%*
	ratio	**1:2654**	**1:3288**	**1:1773**	**1:2229**	**1:2875**	**1:3623**	**1:4653**	**1:3952**	**1:1236**	**1:2004**

Table 3: ***Comparison of distribution of selected health professionals between public and private sectors, 1998 (continued)***

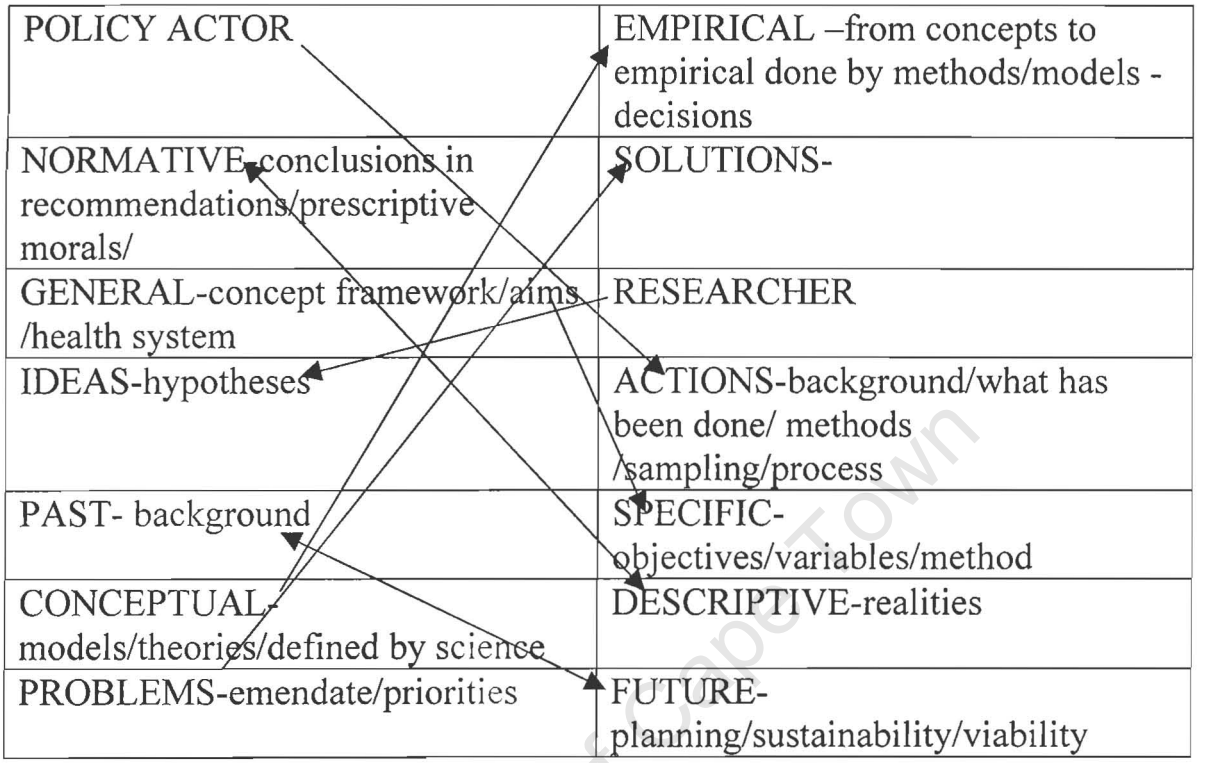
PROVINCE		EC	FS	GT	KZN	MP	NC	NP	NW	WC	SA
Pharmacists◆											
TOTAL	total	829	467	4127	1478	373	108	251	444	1638	9715
	% total pharmacists	*8.5%*	*4.8%*	*42.5%*	*15.2%*	*3.8%*	*1.1%*	*2.6%*	*4.6%*	*16.9%*	*100%*
	ratio	**1:7804**	**1:5789**	**1:1828**	**1:5846**	**1:7708**	**1:7987**	**1:20160**	**1:7756**	**1:2480**	**1:4288**
PUBLIC SECTOR	total	129	66	282	285	64	17	94	59	188	1184
	% total pharmacists	*1.3%*	*0.7%*	*2.9%*	*2.9%*	*0.7%*	*0.2%*	*1.0%*	*0.6%*	*1.9%*	*12.2%*
	ratio	**1:46141**	**1:33587**	**1:16050**	**1:26376**	**1:38633**	**1:40086**	**1:49525**	**1:50198**	**1:15556**	**1:28638**
PRIVATE SECTOR	total	700	401	3845	1193	309	91	157	385	1450	8531
	% total pharmacists	*7.2%*	*4.1%*	*39.6%*	*12.3%*	*3.2%*	*0.9%*	*1.6%*	*4.0%*	*14.9%*	*87.8%*
	ratio	**1:739**	**1:1213**	**1:785**	**1:942**	**1:1303**	**1:1991**	**1:2578**	**1:1252**	**1:784**	**1:909**
All Nurses*											
TOTAL	total	22427	12226	46183	33345	7550	3471	11311	11939	25195	173647
	% total nurses	*12.9%*	*7.0%*	*26.6%*	*19.2%*	*4.3%*	*2.0%*	*6.5%*	*6.9%*	*14.5%*	*100%*
	ratio	**1:288**	**1:221**	**1:163**	**1:259**	**1:381**	**1:249**	**1:447**	**1:288**	**1:161**	**1:240**
PUBLIC SECTOR	total	16896	7087	18265	23142	5268	1563	11816	7329	10834	102200
	% total nurses	*9.7%*	*4.1%*	*10.5%*	*13.3%*	*3.0%*	*0.9%*	*6.8%*	*4.2%*	*6.2%*	*58.9%*
	ratio	**1:352**	**1:313**	**1:248**	**1:325**	**1:469**	**1:436**	**1:394**	**1:404**	**1:270**	**1:332**
PRIVATE SECTOR	total	5531	5139	27918	10203	2282	1908	-505	4610	14361	71447
	% total nurses	*3.2%*	*3.0%*	*16.1%*	*5.9%*	*1.3%*	*1.1%*	*###*	*2.7%*	*8.3%*	*41.1%*
	ratio	**1:94**	**1:95**	**1:108**	**1:110**	**1:176**	**1:95**	**###**	**1:105**	**1:79**	**1:109**

Notes: Totals *do not* include registered personnel currently residing outside of South Africa.
Please refer to the chapter text for explanation of some of the data in this table.

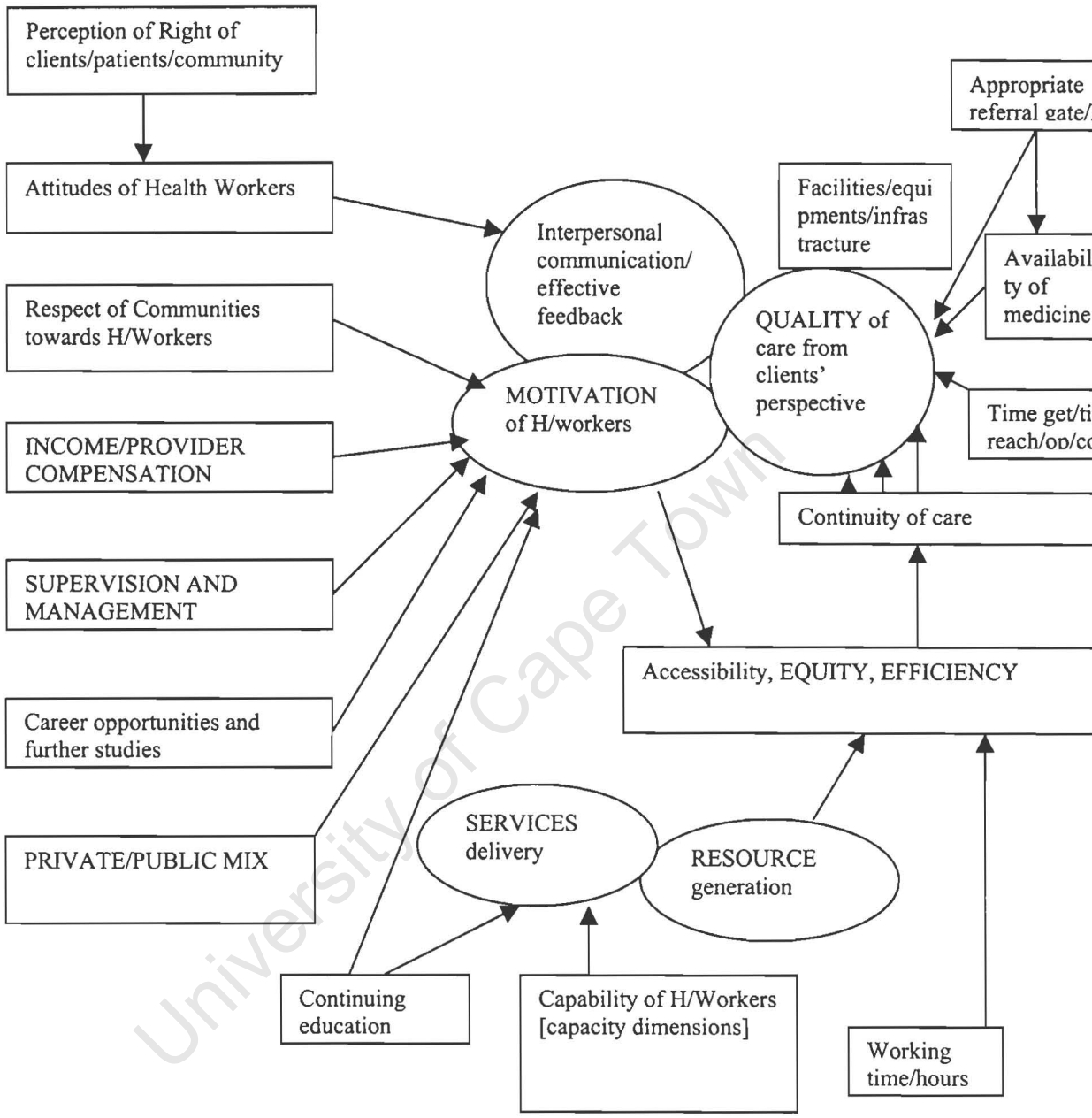
Sources: PERSAL personnel administration system 09/03/1999
Health Professions Council of South Africa, 1998
◆ Technical Report to Chapter 10 of the South African Health Review, 1998
* South African Nursing Council, 1998

DIMENSIONS OF THINKING IN THE PROPOSAL /MAIN FORMAT:

OPERATIONALIZATION-

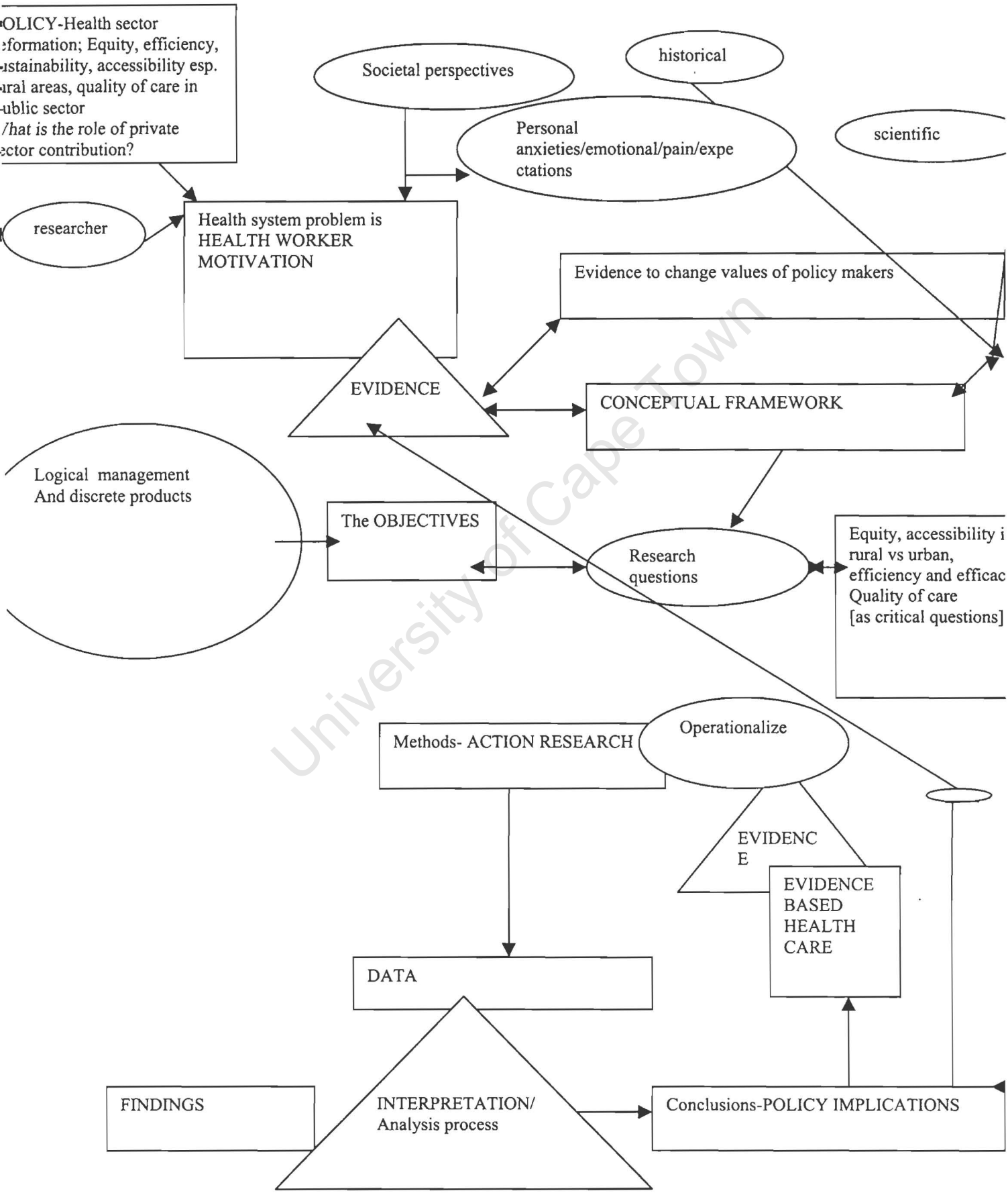


A HEALTH PROBLEM IS BETWEEN NORMS AND DESCRIPTIVE MODALITIES.



FROM CONCEPTUAL FRAMEWORK PERSPECTIVES –HEALTH WORKER MOTIVATION:

COURSE ROAD MAP TO POLICY IMPLICATIONS



DRAFT QUESTIONNAIRE FOR INDIVIDUAL HEALTH WORKER

MEASURING HEALTH WORKER MOTIVATION IN South African CONTEXT [WESTERN CAPE PROVINCE]

QUESTIONNAIRE FOR INDIVIDUAL HEALTH WORKER SURVEY

(For office use)

Thank you for taking the time to complete this questionnaire –it should take you about 30-45 minutes to do so. All responses will be kept anonymous, and will only be seen by the research team. After completing the form ,

PLEASE POST TO HEALTH ECONOMIC UNIT, DEPARTMENT OF PUBLIC HEALTH AND PRIMARY HEALTH CARE, OBSERVATORY 7935
J. E.M.
CAPE TOWN

FOR EACH QUESTION, PLACE AN X IN THE RELEVANT SPACE OR CIRCLE THE LETTER /NUMBER CORRESPONDING TO YOUR APPROPRIATE RESPONSE. WHERE RELEVANT, PROVIDE ADDITIONAL INFORMATION IN THE SPACE PROVIDED.

SECTION A-GENERAL DEMOGRAPHIC INFORMATION

1. Please indicate your gender (for official use only)

1.1 Male					
1.2 Female					

2. Please indicate your age

2.1 Under 20					
2.2 21-30					
2.3 31-40					
2.4 41-50					
2.5 51-60					
2.6 61 or above					

3. Please indicate your marital status

3.1 Married					
3.2 Divorced					
3.3 Single					
3.4 Widowed					

4. Do you have any children?

4.1 No			
4.2 Yes			
4.3 If you answered "yes", how many are still dependent (under 18 years old?)			

5. What is your nationality?

Section B- EMPLOYMENT DETAIL AND QUALIFICATIONS

6. To which category of the health team do you belong

6.1 A NURSE/MIDWIFE					
6.2 A MEDICAL DOCTOR					
6.3 A MEDICAL DOCTOR [SPECIALIST]					
6.4 A DENTAL SURGEON					
6.5 A DENTAL SURGEON [SPECIALIST]					
6.6 A PHARMACIST					
6.7 HEALTH WORKER EDUCATOR					
6.8 THERAPIST [specify]					
6.9 A COMMUNITY HEALTH WORKER					
6.10 Any other member of the Health Team [Please specify]					

8) Do you work in

8.1	A hospital		
8.2	District hospital		
8.3	Provincial hospital		
8.4	Central/tertiary teaching hospital		
8.5	A rural clinic		
8.6	A primary health care		
8.7	A clinic in the city		
8.8			

9) How many years have you been in your present job? ☐

10) How many years since you qualified? ☐

11) From question 11 on wards circle the number which best corresponds to your own attitude to each statement

1= strongly agree 2= agree 3= neither nor disagree 4= disagree 5= strongly disagree

11	**I am proud of the service we provide for our patients**					
12	**For the work I do I am well paid**					
13	**I really enjoy the team work I have with my colleagues**					
14	**Doctors are valued members of society**					
15	**The management style in my workplace is strict and domineering**					
16	**I often have a chance to go on courses relevant to my work**					
17	**I worry that I will have no pension for my retirement**					
18	**I can save money quite regularly**					
19	**My salary is always paid in time**					
20	**There are good allowances for working in rural area**					

48 List what you think are the three most important recommendations for your facility to consider in order to improve the quality of services provided to clients. 1 2 3	
49 Please list issues or shortcomings in your institution that you consider as having a **negative** impact on the **quality of services** that you need to offer . 1 2 3 4 5 6	

50 Please list **the main complaints** that you get to hear from your patients about the quality of the services offered by your institution 1 2 3 4 5 6 7 8 9 10							
51 List the things you would like your employer to do for you to either make you stay in your job or to help you improve the quality of care that you know you should be offering to your patients 1 2 3							
BY USING THE KEY PROVIDED [1TO 5] PLEASE INDICATE HOW YOU **RATE THE QUALITY OF CARE PROVIDED IN YOUR FACILITY** IN EACH INSTANCE LISTED BY PUTTING AN "X" IN THE APPROPRIATE COLUMN. KEY: 1= Excellent; 2 = Good; 3 = Average; 4 =Not good; 5 =Very poor	1	2	3	4	5		
52 Care provided by me							
53 Care provided by nursing/midwifery colleagues							
54 Care provided by medical colleagues							

55 Care provided by other categories of health workers						
56 Care provided in general in this institution as a whole						
PLEASE INDICATE WHETHER YOU AGREE WITH THE FOLLOWING STATEMENTS						
94 58 If you work in the public service it is necessary to do two (or more) jobs to make ends meet	YES		NO		NA	
59 My place of work provide me with a good **medical aid scheme**	YES		NO		NA	
60 **I receive study benefits for my children from my place of employment**	YES		NO		NA	
61 My place of work **provide day care facilities** for my children	YES		NO		NA	
62 Do you know your output daily performance? [number of clients seen/number of tests done/ number of stations visited/supervised] [1.98]/2.0	YES		NO		NA	
63 .... your weekly output performance? .....your monthly output performance? [1.98/2.0]	YES		NO		NA	
64 Do you know the task ahead /target/objectives or output of your unit/department/per month/per year?						