Chapter 1

INTRODUCTION

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Chapter 1
INTRODUCTION

1.1 HEALTH AND WELL-BEING

The sense of health and well-being will vary from person to person. However, at the societal level there are some common elements. Health encompasses both mental and physical health. Healthy people often report a sense of connection to family, friends, and the larger community. They may also display confidence in their ability to make decisions, solve problems and make a meaningful contribution to their own families as also to the society in general. Good health is universally acknowledged to be of intrinsic value and it therefore constitutes an integral element of development. One can be rich at an economic level but ill enough not to enjoy any opportunities that wealth provides and poor health may translate to worsening economic opportunities as well. One can also be physically healthy but too poor economically to pursue valued objectives. The concept of health is intangible, where as disease and health can be seen, felt, smelt and suffered. Disease and death are socio-economically disruptive not just in terms of treatment costs but also in lost man-hours.

Every nation needs a healthy population for its prosperity. This is possible when children and youngsters maintain good standards of health. It was emphasised in the 1977 World Health Assembly that “Attainment of a level of health that will enable every individual to lead a socially and economically productive life.”
1.2 SOCIAL DETERMINANTS OF HEALTH

All over the world, there is a growing awareness that health is determined not merely by behavioral, biological and genetic factors but also by a range of environmental, economic and social factors which are referred as the “Social determinants of health”. Safe environment, adequate income, meaningful and valued social roles, secure housing, higher levels of education and social support within communities are all associated with better health and well-being.

According to the World Health Organisation (WHO), health is more than simply the absence of disease or infirmity, but also a state of physical, social and mental well-being. It is worthwhile mentioning the remarks of CSDH – WHO\textsuperscript{1} in the Interim Statement (June 2007): “Health is a universal human aspiration and a basic human need. The development of society, rich or poor, can be judged by the quality of its population’s health, how fairly health is distributed across the social spectrum, and the degree of protection provided from disadvantage as a result of ill-health. Health equity is central to this premise and to the work of the Commission on Social Determinants of Health. The realisation of right of obtaining the good health, however, will take not just access to health care but action on the Social Determinants of Health.”

Economic and social policies affect the distribution of the social determinants of health, which include resources or education, health, and financial security. It is clear,

\textsuperscript{1} Commission on Social Determinants of Health (CSDH-WHO) was set up in 2005 which works within World Health Organisaton (WHO) to integrate social determinants of health into policy and programmes at regional and country level. (Homepage: http://who.int/social_determinants/)
therefore, why the relationship between the Ministries of Health and Ministries of Finance is so vital to the social determinants of health. Recognition of the importance of social determinants of health means that government social policy, not just health policy, is vitally important for health equity. This taps deep into the value system of society. The promotion of health equity relies not only on values but also requires the strengthening of policy formation. Pro-health equity policies appear to rely in many cases on the State in providing an adequate degree of security – via welfare programmes and the provision of a universal social safety net. Such policies could include inter alia: housing, health and safety standards, family-friendly labour policies; active employment policies involving training and support; the provision of social safety nets, including those for income and nutrition; universal provision of quality health, education, and other social services.

Aiming at realising its vision, the Commission (CSDH-WHO) is building a global movement for change to improve global health and reduce health inequity. By building partnerships with governments, civil society, and international organizations, the CSDH is reviewing the global evidence base on health inequity, harnessing national and local knowledge for action, and advocating for change. It is ultimately concerned with action to tackle the range of health determinants – from structural conditions of society to the more immediate influences at all levels from global to local, across government and inclusive of all stakeholders from civil society and the private sector. Recommendations for action were made in the Commission’s Final Report in 2008. The leading global and

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national level policy-makers, scientists, practitioners and civil society leaders from all over the world, united by their concern about health inequity. They believe that a societal action is required to bring about the health-equity, and it is a concern for all. Commissioners bring their experience as former heads of their respective States.

According to Michael Marmot, Commission Chairperson and Director of the International Institute for Society and Health at University College London (UCL), “The problems in India are known to everyone and there are no easy solutions. There have been dramatic improvements, but these are not universally enjoyed and I see no reason why these gains cannot be across the board. Disparities will not be reduced in three years, but we can tell the Government what its socio-economic policy would look like if SDH are taken into account”. A far most detailed and exhaustive narration is furnished in Chapter 2 (Review of Literature).

Moving from the global scenario, a very brief narration\(^3\) of the specific area of study, namely, Rural Andhra Pradesh may be made. As use of health care services is strongly influenced by the standard of living, the divide between urban health and rural health is another indication of the government apathy to the rural sector. However it is also influenced by the characteristics like income and education.

The present study relates to Social Determinants of Health status (SDH) in rural Andhra Pradesh (AP). Before the main issues are considered it would appear useful to

\(^3\) A very detailed presentation of Andhra Pradesh rural area has been brought out in Chapter 2 (Review of Literature)
bring out the status of AP in the Indian Union with respect to several parameters which ultimately will have a strong bearing on the health status of its people. Andhra Pradesh is one of the four major constituents of the Southern states, the other three being Tamil Nadu, Karnataka and Kerala. The tradition, culture and custom, which play a reasonably dominant role in the determination of the health status is certainly different in the South Indian states from what is normally witnessed in the other parts of India notably in the Northern states. As a matter of fact the AP accounts for 8.37 percentage of Indian Territory, while it supports 7.41 percentage of Indian population. The share of India’s GDP works out to 7.54 percentage while the Per capita income stands at 17, 243 INR. The AP population is distributed between the rural and urban conglomerates in the proportion of 72.67 percentage rural area and 27.33 percentage urban areas.

The rural population in AP which is the crux of the present study is distributed among 26,613 inhabited villages. The entire State is geographically, politically, socially and administratively divided into three regions namely, (i) Coastal Andhra; (ii) Rayala Seema; and (iii) Telangana. In each of these regions, there are several districts. In Coastal Andhra the number of districts is nine (Srikakulam, Vizianagaram, Visakhapatnam, East Godavari, West Godavari, Krishna, Guntur, Ongole and Nellore). In the Rayala Seema region of AP, the number of districts is four: Chittoor, Cuddapah, Anantapur and Kurnool. In the Telangana region the number of districts is nine: Mahbubnagar, Ranga Reddy, Medak, Nizamabad, Aadilabad, Karimnagar, Warangal, Khammam and Nalgonda. In addition, the state capital of Andhra Pradesh namely Hyderabad is in the Telangana region which is substantially urban in nature. In these three regions of AP,
which are divided into several districts as mentioned above, the population has a characteristic urban and rural divide and the problems of the health status are naturally different as between the urban and rural segments of the population.

### 1.3 NEED FOR THE STUDY

The living conditions of people influence their health status substantially and also lead to inequalities in health. The success of a society can be judged from the quality and fair distribution of its population’s health. Good health enables people to effectively participate in society, with its potentially positive consequence for economic performance. The success in improving health and reducing the inequities depends on adequate attention to the underlying societal causes. Technical solutions within the health sector are important, but not sufficient.

The social determinants of health may yield greater and sustainable returns by an action on social determinants of health that empowers people, communities and the State/Country. In consideration of the above statements, the health status in the rural Andhra Pradesh would have political, social, economic and administrative dimensions. All these dimensions would have to work in close cooperation with a view to realise the desired health status to the rural masses.

The government has a significant role to play in this regard to motivate several organisations at the private level as also formulate schemes for the implementation by the respective departments of the government to achieve the goal of satisfactory health status.
Whatever the government does or does not do will be reflected in the degree of adequacy of the health status of the rural masses. Such a study is required to be conducted not just only once but needs to be repeated periodically. It is not known whether any such study has ever been conducted for the rural Andhra Pradesh and therefore the need for the study is overdue in its applicability and usefulness for policy making at a Government level.

1.4 SIGNIFICANCE OF THE STUDY

The health status and its appropriate level, has always been considered to be very essential both from the welfare, as also from the economic angle. The attainment of health status has been mostly a function of Government policy and a statistical study of the present type would help formulation of appropriate policy format and evaluation of schemes for the implementation of the structured policy. The need for such a study cannot be over emphasised, and particularly in the context of the rural population of the state of Andhra Pradesh. This would help in the formulation of appropriate policy and/or improving the allocation of resources to various schemes for the effective implementation of the structured policy format.

It is again not enough that this study is conducted as at the moment but a similar study would have to be conducted with regular time intervals for continued effectiveness of the policy framework. The time gap between different studies for this purpose could depend on several factors and the gap may differ but the need for its continuity will always be felt.
1.5 STATEMENT OF THE PROBLEM

The conception of Social Health is a fairly recent one. During the times of classical economics and even during the era of neoclassicists health was always treated as an individual problem and at best a societal level it was considered to be a function of the availability of medical facilities and the hygienic conditions prevalent in society. Later, the perception of health status as between the developed and the developing countries displayed a very great diversity. This aspect was reflected within a country in so far as the urban and the rural settings were concerned. It was subsequently realised that the concept of Social Health is desirable from the point of view of a functional and physically strong and capable labour force: but more importantly it was realised that a healthy population would always enhance the possibility of a superior standard of life thereby enhancing the welfare of the population. As this scenario got entrenched amongst the intelligentsia and the policy makers a search was on for identifying the determinants of social health.

It was realised that the Social Determinants of Health would be different as between the rural and the urban settings. Therefore the present study focuses on the Social Determinants of Health have been considered for the rural economy of the Andhra Pradesh. Having limited the scope of the study, ten determinants of social health were identified and each one of these as in turn influenced or governed by a set of parameters. It has been elaborated in the Chapter on Methodology, how the parameters governing each one of the determinants was influenced, and subsequently how each one had an impact on the social health of Rural Andhra Pradesh.
At an abstract level, the problem may be stated as follows: – The Social Health status is a target variable, while the ten identified determinants would constitute the instrument variables. Each one of these instrument variables would be a function of several determining parameters. The instrument variable so determined would constitute the instrument for determining the social health status. For quantifying the parameters which govern and influence the instrument variable (determinant), a familiar system of Rank Score Technique was used, while for quantifying the association between instrument variables (determinants) and the target variable, Analysis of Correlation was adopted. For studying the extent of influence of the instrument variables (determinants) on the target variable (social health status), Multivariate Regression Analysis has been used.

It has been stressed that social health status is not entirely a function of medicine and or medical services but is definitely dependent on psycho-social and techno-economic factors as well. All these factors are amenable to change in the required direction at the desired speed as a result of policy formulation and implementation.

This statement of the problem has been analysed in the context of the rural Andhra Pradesh and is very much in confirmation with the positions arrived at and the policy formulations structured at both the national and international levels.
1.6 TITLE OF THE STUDY

The title of the present study, as has been already mentioned is, *A Statistical Study of the Social Determinants of Health status in Rural Andhra Pradesh*.

The key words in the title of the study are as follows: –

RURAL ANDHRA PRADESH: According to Andhra Pradesh Government’s Official Portal (AP Online), Andhra Pradesh is a state with its capital, Hyderabad, situated on the eastern coast of India (Province of Andhrs) and is termed Andhra Pradesh, abbreviated as A.P. There are 28,123 villages in Andhra Pradesh which represents the rural frame of reference termed Rural Andhra Pradesh. Further details are in the chapter on the Features of the Study Area.

SOCIAL DETERMINANTS OF HEALTH: According to Krieger N (2001), the Social Determinants of Health (SDH) refer to both specific features of and pathways by which societal conditions affect health and that potentially can be altered by informed action. Examples are income, education, occupation, family structure, service availability, sanitation, exposure to hazards, social support, racial discrimination, and access to resources linked to health. The exhaustive coverage has been given to SDH in the chapter on the Review of Literature.

STATISTICAL STUDY: A Statistical Study involves the process of collecting and analyzing data and then summarising the data into a numerical form. It is a type of mathematical analysis involving the use of quantified representations, models and
summaries for a given set of empirical data or real world observations. According to Deming W Edwards (1950), A Statistical Study can be enumerative or analytic. In particular, enumerative study is a statistical study in which action will be taken on the material in the sample frame being studied, where as analytical study is a statistical study in which action will be taken on the process or cause-system that produced. Though the enumerative and analytic studies differ by where the action is taken, but the ultimate aim is to provide a rational basis for action.

1.7 OBJECTIVES

Against this backdrop, the objectives of the present study are as follows:

(i) To identify and to categorise the various indicators that are related to social health levels;

(ii) To demonstrate the extent of the influence on the rural people’s health of these categorised health determinants;

(iii) To study the interrelationships between the social health status and its determinants;

(iv) To make a comparative analysis of rural health levels between three different regions of the state of Andhra Pradesh; and

(v) To facilitate formulation of appropriate policy framework for the attainment of higher level of rural health.
1.8 HYPOTHESES

A list of hypotheses is presented as follows:

\(H_1\): Rural health status is a function of ten determinants, and the value of which in turn depends on several identified indicators in each category.

\(H_2\): With respect to the determinant, education, higher the level of literacy, a positive impact on the rural health status can be expected.

\(H_3\): Higher the levels of employment, a positive influence in the rural health status can be expected.

\(H_4\): Superior housing conditions always conducive to a higher rural health status.

\(H_5\): Higher the level of income, higher will be the rural health status.

\(H_6\): Rural health status is largely governed by the health infrastructure in a district which includes several indicators as brought out in the determinant, health resources.

\(H_7\): With better facilities to prevent diseases in the rural areas such as vaccination drives, the health status can be improved.

\(H_8\): Better connectivity of the rural areas of AP by rail and road, as also better communication facilities through the postal services or telephonic connections can improve the accessibility to the rural population. Also accessibility to medical facilities even in the urban areas is possible and hence a better connectivity will potentially imply a better health status.
\( H_9: \) The Demographic scenario inclusive of density of population per square kilometer and the other governing indicators like the birth rate have an impact on the health status. Lower the density of population, the rural health status could be improved.

\( H_{10}: \) A higher standard of living and pollution free environment always makes a higher health status.

\( H_{11}: \) Impact of the local economy on the health status is governed by the occupational pattern of the rural population and the consequent levels of income. Higher the level of employment and consequently level of income, better in the health status.

\( H_{12}: \) All the ten determinants used in the study have a cumulative influence on the rural health status in Andhra Pradesh and in case; a particular determinant (s) actually attains significant value to show the extent of influence. The policy implication obviously is to evolve the schemes for implementation so that the value of such a determinant (s) to improve further to afford a better Health status in the Rural Andhra Pradesh.

1.9 SCOPE OF THE STUDY

The scope of the present study is confined to the geographical jurisdiction of the state of Andhra Pradesh. Further it’s only the rural Andhra Pradesh to which the study will be related to, and the urban segments of Andhra Pradesh are not covered in the present study. The data with respect to the determinants as also the indicators which, govern the ultimate value of the determinants calculated have been obtained for each one of the 22 districts of AP and the three regions of the Andhra Pradesh namely, (a) Coastal Andhra Pradesh; (b) Rayala Seema; and (c) Telangana.
1.10 LIMITATIONS

The major limitation of the study may be pointed out that the health status as it is quantified by the determinants and the governing indicators would still leave a lot of un-quantified gap. But even so whatever observations which can possibly be made should indicate strongly the type of steps required to be taken by the policy makers. Such a study would have to be repeated at regular intervals so that the impact of the formulated policy on the health status could be ascertained. Continuity is the keyword and this cannot be treated as a study to be conducted as a one-time event. As and when the present problem is tackled again in the context of the rural Andhra Pradesh, it is quite possible that the environment influencing the social health status would have substantially altered. Therefore, even if the present methodology is refined with marginal modifications, the governing determinants and the parameters would change with the time. This could constitute a major limitation in any attempt to replicate this study.

1.11 ORGANISATION OF THE REPORT

The present thesis is divided into five chapters. Chapter 1 covers the introductory details relating to the subject under consideration, along with a comprehensive chapter wise scheme, while the Review of Literature is brought out in Chapter 2. Several details, relating to the methodology, the database, the time frame of the study, tools and techniques adopted have been detailed in Chapter 3. The Features of the study area have been presented in Chapter 4.
The Analysis of Data and Summary of Results are presented in Chapter 5 which is the crux of the present thesis. At the outset, this part brings out the various determinants which have been considered in ascertaining the rural health status in Andhra Pradesh. Each one of the determinants is governed by several indicators. As has been pointed out in the chapter spelling out the methodological details, the analysis of the indicators and the determinants, has been offered for each one of the 22 districts, for each one of the three regions, namely, Coastal Andhra, Rayala Seema and Telangana, as also for the entire Andhra Pradesh taken as a whole. In consideration of this aspect the Chapter 5 has been divided into 14 sections, where the first section provides details on the health status and then one each for every determinant. Additionally the two sections have been added for the purposes of application and presentation of the Multivariate Techniques which would fulfill the objectives of the present study, namely interrelations between health determinants and the health status and the assessment of the extent of influence of the health status on the health determinants in quantitative terms. The fourteenth section of Chapter 5 brings out the Summary of Results.

In Chapter 6, the concluding observations have been offered and an attempt has also been made to indicate the policy prescription in regard to the indicators which constitute the determinants of health in rural Andhra Pradesh.

The Chapter 1, in which the present study is being presented, are preceded by acknowledgement and contents which indicate the various chapters of the report, list of tables, list of figures, list of appendices and acronyms. Chapter 6 is followed by a select
Bibliography; and various appendices; Appendix-A contain the Statistical Programming of Multivariate Analysis Techniques, which is used in the software, *The SAS System 9.1.3 for Windows*, for the purpose of computations made to study the extent of influence of determinants of health on the health status; Appendix-B the certificate of authentic use of statistical softwares; and Appendix-C the Data Tables which provides the Profile of Rural Andhra Pradesh. Thus the report of the present study has the following Chapters:

- Chapter 1: Introduction;
- Chapter 2: Review of Literature;
- Chapter 3: Methodology;
- Chapter 4: Features of the Study Area
- Chapter 5: Analysis of data and Results; and
- Chapter 6: Summary and Conclusion.

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