

ORIGINAL RESEARCH

Appraisal Of Health Insurance Schemes For Orthopedic Surgeries – Health Economics Perspective

E. Ganesan¹, Balaji Arumugam^{2,3}, S. Rathinavel³

ABSTRACT

Introduction: Health insurance schemes insure the people against major illnesses and guarantee the security. As far as India is concerned, there is no universal health insurance for all people. The schemes vary in different aspects and provide services to beneficiaries. One such health insurance scheme in Tamil Nadu provides comprehensive health insurance to the poor people called Chief Minister's Comprehensive Health insurance scheme. With this background, this study was carried out with the main aim of assessing the government health insurance schemes currently in practice in Tamil Nadu especially for orthopedic surgeries.

Materials and methods: This study was done as a retrospective analysis of the records among the patients admitted for various orthopedic surgeries during the last 2 years under chief minister's comprehensive health insurance scheme. The data were entered in MS excel and analysis was done using SPSS software.

Results: A total of 61 patients had undergone orthopedic surgeries of which 54% were males with the mean age of 46 years. 28 patients underwent discectomy and 7 underwent spinal stabilization surgeries, 2 underwent total hip replacement and the remaining were surgical correction of nonunion of fracture long bones. Total money disbursed / utilized under the scheme was, 58,000 INR with the mean INR of 26,000 approximately.

Conclusion: Chief minister's comprehensive health insurance was really made available to all the underprivileged population which was so beneficial to them, so that the very costly procedures / surgeries were made available because of this insurance scheme.

Keywords: Health Insurance Schemes, Health economics, CMCHIS, Insurance policy

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INTRODUCTION

Health is wealth; one must be prepared to manage such a situation in life. So there is no debating on the importance of having a medical insurance in a country like India. There were several health insurance schemes in India, like Rashtiya Swasthiya Bima Yojana (RSBY), Employment State Insurance Scheme (ESIS), Central Government Health Scheme (CGHS), Aam Aadmi Bima Yojana (AABY), Janashree Bima Yojana (JBY), Universal Health Insurance Scheme (UHS).¹ Most of the schemes covers the below poverty line families with the objective to provide protection to below poverty line households from financial liabilities arising out of health shocks that involves hospitalization. The coverage, premium and the benefits differ from scheme to scheme. But the main objective of these government insurance schemes are to address the health needs of the below poverty line families. Similarly Chief Minister's Comprehensive Health insurance Scheme in Tamil Nadu provides services like emergency and life saving surgeries to below poverty line people which was started in 23rd July 2009. This scheme aimed at benefiting 1.34 crore poor families, for the families with annual income less than 72,000/- and the sum assured for each family would be Rs.1 lakh every year. Approximately 250 hospitals and at least 6 in each district were listed to provide the services under the scheme. The scheme covers 1,016 procedures, 113 follow up procedures and 23 diagnostic procedures.² The cost of tests required for treatment would also be part of the insurance cover. National and state level health insurance schemes were intended to provide necessary services to the needy people in the last 3 to 5 years and the beneficiaries would attain tremendous benefits due to these schemes. With this background, this study was planned to assess and evaluate the usage of chief minister's comprehensive health insurance scheme for orthopedic surgeries which are generally more costly in the private health sector.

Aims and objectives of the study were to estimate the

benefits obtained by the beneficiaries for orthopedic surgeries through CMCHS, to assess the cost effectiveness of the orthopedic surgeries and to analyze the utility of the chief minister's insurance scheme – CMCHS.

MATERIALS AND METHODS

This study was done as a retrospective study with the available records in the orthopedic department, at Tagore medical college and hospital. The patient records were entered in the MS excel sheet with the details available in the case sheets of each individual patients. All the variables and information pertaining to the patient were entered in the MS excel sheet. The data on patients age, gender, diagnosis of the orthopedic complaint, X ray and other diagnostic details, surgical information and post operative X ray and diagnostic details, duration of stay all were entered in the MS excel sheet.

STATISTICAL ANALYSIS

Analysis was done using SPSS - 13 and the results were expressed in percentages and frequencies. The test of significance was done by Chi – square test.

RESULTS

A total of 61 patients had undergone orthopedic surgeries of which 54% were males and the remaining 46% were females. The mean age of the study population was 46 years. The beneficiaries' age ranged between 18 years to 85 years. Majority 56% were from 18 to 45 years of age and the remaining 26% from 46 to 60 years, 18% from 61 years and above. Among the total 61 patients, 28 patients underwent discectomy and 7 underwent spinal stabilization surgeries, 2 underwent total hip replacement and the remaining were surgical correction of nonunion of fracture long bones. Surprisingly majority of the spinal surgeries were done for females than males in this scheme so far since 2 years. Total money disbursed / utilized under the scheme was 15, 80, 300 INR with the mean INR of 26,000 approximately (Table-2 and Figure-2). Comparison of beneficiaries' showed that males ($p < 0.024$) and lesser age group ($p < 0.031$) persons were better benefited from this insurance scheme, which was statistically significant using chi-square test.

DISCUSSION

The recent development of insurance schemes in India, from different points of view shows another

India's mission to give medical services to all and in fact to the neediest below poverty line people. The experiences from western and other developing countries like China showed that the road to universal health insurance is the main way of achieving the quality health care. This was supported by Wagstaff & Lindelow et al (2008)³ that insurance appears to encourage people to seek more care from the expensive tertiary care providers, and it was further confirmed by Wagstaff, et al (2009)⁴, who showed that both outpatient and inpatient expenses of the households seems to have gone up considerably after the insurance schemes. Our study was done with the main objective of exploring the benefits of such insurance schemes in Tamil Nadu which is Chief Minister's comprehensive health insurance scheme. Although many such schemes were followed in India in different states the services provided by them differs according to the beneficiaries and the utilization of people. The various schemes in India started and implemented at different times based on beneficiaries and their contribution, unit of enrollment, type of care etc. are follows.

1. Rajiv Aarogyasri Health Insurance Scheme in Andhra Pradesh; 2007
2. Tamil Nadu's Chief Minister Kalaingar Insurance Scheme for lifesaving Treatments.- 2009
3. Yeshasvini Co-operative Farmers Health care Scheme in Karnataka; 2003
4. Vajapayee Aarogyasri Scheme in Karnataka; 2010
5. Apka Swasthya Bima Yojna in Delhi
6. Critical Life-Saving Health Insurance Scheme (RSBY Plus) in Himachal Pradesh;
7. Central Government Health Scheme (CGHS); 1954
8. Employees' State Insurance Scheme (ESIS); - 1952
9. Rashtriya Swasthya Bima Yojna (RSBY), a centrally sponsored scheme being implemented in 24 states in India - 2008

Prof Srinath Reddy et al study on the socio economic research has assessed the various insurance schemes in India and it was proved that every scheme was unique and provides better health services to below poverty line people⁵. A study conducted by Prof Pugazhendhi et al⁶ on satisfaction of beneficiaries on health insurance schemes in Tamil Nadu has proved that they are very much satisfied with the government health insurance schemes especially with the present CMCHS. Similar benefits were shown by various Indian studies by Aggarwalet al⁷ and Kuruvillaet al⁸ conducted in different states. Our study had explored two important aspects of the usefulness and utility of

Orthopedic surgeries	Gender		Age group		
	Male	Female	18 to 45	46 to 60	> 61
ACL repair	11	0	11	0	0
Discectomy surgeries	10	18	17	06	05
Long bone nonunion surgeries	06	07	04	06	03
Spinal stabilization surgeries	04	03	02	03	02
Total hip replacement	01	01	00	01	01
Total	32	29	34	16	11

Table-1: Showing age and gender groups underwent orthopedic surgeries

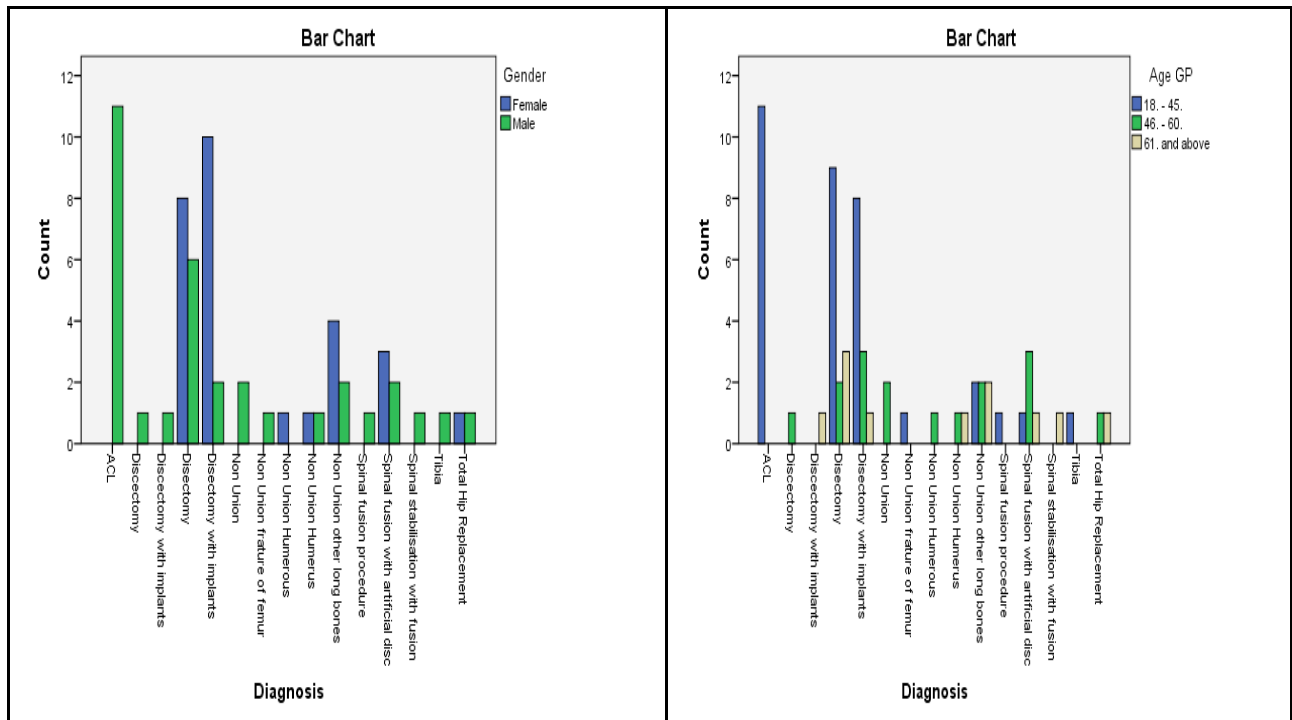
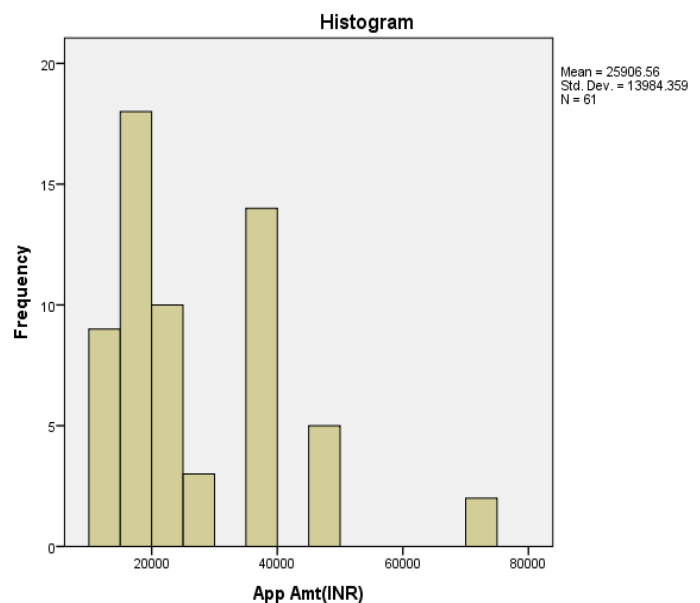


Figure-1: Bar charts showing the gender and age group classifications according to the orthopedic conditions treated

Table – 2: Total amount disbursed under the insurance scheme (Descriptive statistics)

Mean	25906.56
Median	21000.00
Mode	17500
Std. Deviation	13984.359
Minimum	10500
Maximum	72000
Sum	1580300

Figure – 2: Histogram showing the insurance money disbursed to the beneficiaries



the government health insurance scheme. One is the orthopedic surgeries like spinal stabilization and discectomy which are very costly in the private sector made available to the below poverty line people and most neglected women also got benefited due to this scheme and second aspect is that most productive age group 18 years to 45 years underwent most number of orthopedic surgeries.

CONCLUSION

Our study had found out that the major orthopedic surgeries which were not at all affordable for the underprivileged population, made available at free of cost through the Chief Minister's comprehensive Health Insurance scheme and it was better utilized by the community as well with high level of satisfactory outcome.

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