

DE LA SALLE UNIVERSITY

Causes of Death: A Study of Regional Trends
and Patterns in the Philippines

A Thesis presented
to the Faculty of the Behavioral Sciences Department
College of Liberal Arts
De La Salle University

In Fulfillment
of the Requirement
for the Degree in Bachelor of Arts
Major in Behavioral Science

By

Katrina Pabelico

Joyce Rodriguez

April, 1990



DE LA SALLE UNIVERSITY

ABSTRACT

This research aims to determine the existence of significant association between the leading causes of death in the different regions on one hand, and the region's income, education, occupation, and volume of health manpower and health facilities.

Through document study and aggregate analysis, the patterns and trends in mortality indices in the years 1980-1987 were examined. From the findings, it was revealed that the ten leading causes of death include pneumonia, disease of the heart, tuberculosis, disease of the vascular system, malignant neoplasms, diarrheas, accidents, avitaminosis and other nutritional deficiencies, measles, and nephritis, nephrotic syndrome and nephrosis. It was discovered that the mortality rates of the leading causes of death is fluctuating and the causes remained the same for the past ten years.

To highlight, results show that there exist no relationship between mortality rate among the leading causes of death and income, occupation, education, and volume of health manpower and health facilities in 1985. Despite improvements in the income, education, occupation, health manpower and facilities, mortality rates of leading causes remained unchanged. This finding may be attributable to the individual health practices of the people. Hence, mortality rates of the leading causes of death may perhaps be affected more by the behavioral practices rather than the socio-economic condition of regions.

Among the different age-groups, infant and childhood mortality are most prone to diseases as measles, pneumonia, and diarrheas. Among elderly individuals, disease of the heart, tuberculosis, disease of the vascular system, malignant neoplasms, accidents, avitaminosis & other nutritional deficiencies, and nephritis, nephrotic syndrome & nephrosis, are the predominant diseases.



DE LA SALLE UNIVERSITY

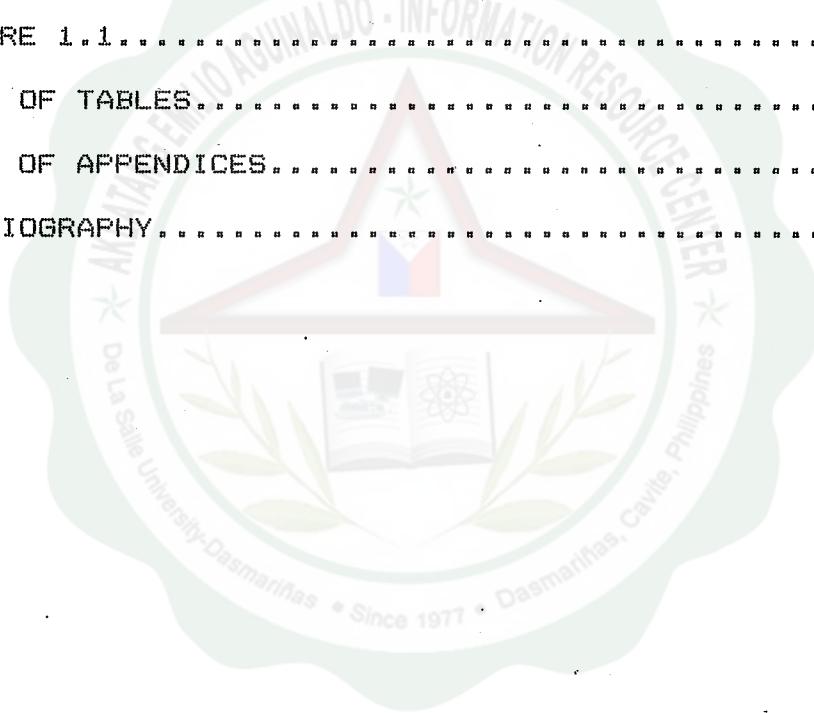
TABLE OF CONTENTS

	<u>Page</u>
Chapter 1 Introduction.....	1
1.1 Statement of the Problem.....	5
1.2 Statement of the Hypotheses.....	6
Analytical Framework.....	7
1.3 Significance of the Study.....	13
1.4 Definition of Terms.....	16
1.4.1 Mortality.....	16
1.4.2 Health.....	16
1.4.3 Age-Standardization.....	17
1.4.4 Socio-Economic Aspects.....	18
1.4.5 Causes of Death.....	19
1.5 Scope and Limitation.....	22
Chapter 2 Review of Related Literature.....	24
2.1 Patterns and Trends in Mortality.....	24
2.1.1 Case of the Underdeveloped Countries.....	24
2.1.2 Case of the Developed Countries.....	29
2.2 Determinants of Mortality.....	32
2.2.1 Case of the Underdeveloped Countries.....	32
2.2.2 Case of the Developed Countries.....	41
2.3 Causes of Death.....	52
2.4 Synthesis.....	56
Chapter 3 Methodology.....	61
3.1 Research Design.....	61
3.2 Document Study and Aggregate Analysis.....	61
3.3 Method of Data Analysis.....	63
Chapter 4 Results.....	66
4.1 Socio-Economic Profile of the Different Regions.....	66
4.2 Leading Cause of Death.....	97
4.3 Factors Related to Causes of Death.....	120
4.3.1 Pneumonia.....	120
4.3.2 Disease of the Heart.....	125



DE LA SALLE UNIVERSITY

4.3.3 Tuberculosis, all forms.....	130
4.3.4 Malignant Neoplasms.....	132
4.3.5 Diarrheas.....	135
4.3.6 Accidents.....	137
4.3.7 Measles.....	138
Chapter 5 Discussion.....	140
Chapter 6 Summary, Conclusions, and Recommendations.....	157
6.1 Summary.....	157
6.2 Conclusions & Implications.....	161
6.3 Recommendations.....	164
FIGURE 1.1.....	8
LIST OF TABLES.....	i
LIST OF APPENDICES.....	ii
BIBLIOGRAPHY.....	282



DE LA SALLE UNIVERSITY

LIST OF TABLES

	Page
Table 4.1 Enrolment in Government and Private Schools by Level of Education by Regions: SY 1984-1985.....	68
Table 4.2 Enrolment in Government and Private Tertiary Institutions by Major Field of Study by Region (SY 1984-1985).....	69
Table 4.3 Enrolment in Government and Private Tertiary Institutions by Field of Study.....	70
Table 4.4 Literacy Rate, 1985, by Region.....	75
Table 4.5 Number of Employed Persons, by Region, by Major Occupation Group (Fourth Quarter--1985, in thousands).....	77
Table 4.6 Number of Families and Total and Average Family Income by Region: 1975 and 1985 (Total Income in thousands).....	81
Table 4.7 Number of Health Manpower, by Category, Philippines, 1985.....	85
Table 4.8 Number of Government Hospitals and Private Hospitals, 1985, by Region.....	90
Table 4.9 Bed, Government Hospitals, Private Hospitals Population Ratio, 1985, by Region.....	92
Table 4.10 Number of Rural Health Units and Barangay Health Stations, 1985, by Region.....	94
Table 4.11 Leading Causes of Death, per year, 1980-1987.....	98
Table 4.12 Leading Causes of Death, per Region, 1985.....	100
Table 4.13 Leading Causes of Death, Percent Change Proportion.....	105
Table 4.14 Leading Causes of Death, by age groups, 1985.....	109
Table 4.15 Correlation Matrix: Income and Causes of Death.....	121
Table 4.16 Correlation Matrix: Literacy Rate, Rate of Enrolment and Causes of Death.....	121
Table 4.17 Correlation Matrix: Manpower Resources and Causes of Death.....	122
Table 4.18 Correlation Matrix: Occupation and Causes of Death.....	123
Table 4.19 Correlation Matrix: Health Facilities and Causes of Death.....	124



DE LA SALLE UNIVERSITY

LIST OF APPENDICES

Appendix 1 Provinces, by Region.....	168
Appendix 2 Letter of Request.....	171
Appendix 3 Mortality: All Causes by Health Region (Percent Distribution, Philippines, 1985).....	172
Appendix 4 Mortality: All Causes by Age & Sex.....	173
Appendix 5 Mortality: All Causes by Sex & by by Health Region.....	174
Appendix 6 Mortality: All Causes by Age.....	175
Appendix 7 Mortality: Ten (10) Leading Causes 5-year Average (1975-1979) & 1980.....	176
Appendix 8 (Graph) Mortality: Ten (10)Leading Causes 5-year Average (1975-1979) & 1980.....	177
Appendix 9 Mortality: Ten (10) Leading Causes 5-year Average (1976-1980) & 1981.....	178
Appendix 10 (Graph) Mortality: Ten (10) Leading Causes 5-year Average (1976-1980) & 1981.....	179
Appendix 11 Mortality: Ten (10) Leading Causes 5-year Average (1977-1981) & 1982.....	180
Appendix 12 (Graph) Mortality: Ten (10) Leading Causes 5-year Average (1977-1981) & 1982.....	181
Appendix 13 Mortality: Ten (10) Leading Causes 5-year Average (1978-1982) & 1983.....	182
Appendix 14 (Graph) Mortality: Ten (10) Leading Causes 5-year Average (1978-1982) & 1983.....	183
Appendix 15 Mortality: Ten (10) Leading Causes 5-year Average (1979-1983) & 1984.....	184
Appendix 16 (Graph) Mortality: Ten (10) Leading Causes 5-year Average (1979-1983) & 1984.....	185
Appendix 17 Mortality: Ten (10) Leading Causes 5-year Average (1980-1984) & 1985.....	186
Appendix 18 (Graph) Mortality: Ten (10) Leading Causes 5-year Average (1980-1985) & 1985.....	187
Appendix 19 Mortality: Ten (10) Leading Causes 5-year Average (1981-1985) & 1986.....	188
Appendix 20 (Graph) Mortality: Ten (10) Leading Causes 5-year Average (1981-1985) & 1986.....	189
Appendix 21 Mortality: Ten (10) Leading Causes 5-year Average (1982-1986) & 1987.....	190
Appendix 22 (Graph) Mortality: Ten (10) Leading Causes 5-year Average (1982-1986) & 1987.....	191
Appendix 23 Mortality: 150 Cause-Groups by Age & Sex, Philippines, 1985.....	192



DE LA SALLE UNIVERSITY

Appendix 24 Notifiable Diseases: Reported Cases & Deaths by Health Region, Province & City, Philippines, 1985.....	242
Appendix 25 Tertiary Enrolment in Government and Private Schools by Field of Study and by Region (First Semester of SY 1984-1985).....	266
Appendix 26 Performance Indicators for Government Elementary Schools (SY 1984-85).....	267
Appendix 27 Number of Health Manpower*, by Category, Philippines, 1985.....	268
Appendix 28 Ratio of Health Manpower to Population by Category, Philippines, 1985.....	269
Appendix 29 Government Hospitals under the M.O.H., by Category, by Region, Phil., 1985.....	270
Appendix 30 Distribution of Hospitals (Government and Private) by Region, No., Bed Capacity and Bed Population Ratio, Phil., 1985.....	271
Appendix 31 Government Hospitals under MOH by Classification, by Region, Phil., 1985.....	272
Appendix 32 Hospitals under the Ministry of Health by Category, Number and Bed Capacity, Philippines, 1985.....	273
Appendix 33 Hospitals by Category under other Gov't Agencies, by Region, Philippines, 1985.....	274
Appendix 34 Relative Distribution of Hospital Beds according to type of Hospital, 1985.....	275
Appendix 35 Distribution of Hospitals (Government & Private) by Region, No., Bed Capacity & Bed Population Ratio, Philippines, 1985.....	276
Appendix 36 Distribution of Rural Health Units and Barangay Health Stations, by Region, Philippines, 1985.....	277
Appendix 37 Variables for Correlation (by Regions)....	278
Appendix 38 Observable Variables (per year, per age, per region) by Cause.....	280
Appendix 39 Summary Table of Correlates.....	281

