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REPORT ON MULTICENTER PROJECT: HEALTH AND THE OLDER PERSON

Research Coordination
Division of Health and Human Development
Pan American Health Organization
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PROPOSAL FOR A MULTICENTER STUDY
A PROFILE OF THE HEALTH CONDITIONS OF OLDER PERSONS IN SEVEN URBAN CENTERS OF LATIN AMERICA AND THE CARIBBEAN

Family Health and Population
Health Promotion and Protection

Washington, D.C.
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A PROFILE OF THE HEALTH CONDITIONS OF OLDER PERSONS IN SEVEN URBAN CENTERS OF LATIN AMERICA AND THE CARIBBEAN

Summary Statement

We propose a project to study the health situation of elders in Barbados, Brazil, Chile, Costa Rica, Cuba, Mexico, and Uruguay.

The study is designed to provide an assessment of current health status and health conditions among older persons (with special attention to illnesses, physical, mental and functional impairments) and their access and use of health care and health services. Of special importance is the description and documentation of differentials across cohorts, gender, and social classes regarding health status as well as access to and use of health care.

Finally, the project will document in a preliminary form the existence of relations between selected covariates (including social and economic conditions, health histories and individual behaviors) and health profiles and health conditions.

We believe that the assessment of health status and conditions we propose to carry out in this project will be of importance for the formulation of interventions since they will provide a baseline to forecast short and medium run health needs of older persons. Information about these interventions could be formulated to maintain or improve conditions while simultaneously addressing equity concerns.

This study is particularly well timed since its final report would be published just before the preparations for the International Year of Older Persons in 1999.

I. Background and Rationale

A. The graying of Latin America cannot be stopped

The formal dynamics of fertility, mortality, and age structure implies that the trajectory of vital rates of countries in Latin America over the past forty years will systematically and inexorably lead towards the aging of the population in the continent (Horiuchi and Preston, 1988; Preston et al., 1989; Kinsella, 1988; Martin and Kinsella, 1994). This heritage from past trends cannot be tinkered with, halted, or modified in any way, except through unlikely sudden events or bizarre population policies. The die has been already cast.

By the end of 1995, in only five countries: Argentina, Barbados, Cuba, Martinique and Uruguay, the proportion of the population older than 65 approximated or exceeded 10 percent, a level slightly below those attained in Canada and the United States (about 12 percent). However, the bulk of other countries in South and Central America and the Caribbean will attain or exceed such levels very soon, almost surely within the next ten or twenty years. Current projections indicate that for the year 2025, more than half of the countries in the continent will be on their way toward substantial aging of their age structure. (PAHO, 1990b) Of course, the path toward aging will appear more accelerated if we define more inclusively the older population as the subset aged 60 and above.

The aging of countries in the continent will not follow a unique, homogeneous course. Indeed, there will be substantial intercountry heterogeneity in the timing, levels, and other characteristics of the aging process. The timing and speed of past fertility declines will largely determine the timing and speed with which the aging of the age structure is occurring or will occur. Thus, for example, Brazil and Mexico will age later but in a more compressed period of time than Chile and Costa Rica or Uruguay and Argentina. An essentially equivalent, but less dominant, role will be played by the widespread survival improvements in infancy and early childhood that took place during the post-World War II period. Finally, prospective changes in adult and old age mortality will shape the age distribution of the older population, particularly the relative sizes of the youngest old (aged between 65 and 84) and the oldest-old (aged 85+), and thus determine a most central characteristics of the aging process.

B. Health as a strategic dimension in the aging process

Dimensions of the aging process

B.1.

The aging process has a sizable and formidable impact on a number of dimensions that affect the normal functioning of societies and the relative well-being not just of elders but also of the younger generations. The most important among these dimensions are pension and retirement systems, composition of the labor force, family and household arrangements, intergenerational intra-family transfers, and health status and health conditions of elders (Preston and Martin, 1994; Martin and Kinsella, 1994). The relative importance of each one of these aspects is of course variable and dependent on peculiarities of the demographic regimes and the institutional idiosyncracies of countries. But, as the experience in Europe and North America plainly demonstrates, none of them is likely to be as paramount and influential as the health status and health conditions of older persons.

The gradual impairment of physical and mental health conditions that accompany the individual aging process (Olshansky et al., 1993; Fries, 1983; Singer and Manton, 1994), the resulting reduction in the expected years of active and healthy life expectancy (Crimmins et al., 1989; Manton, 1991), the reduction or complete cessation of participation in the labor market (Wise, 1996), and the increased dependency on income transfers from various public and private sources (Lee, 1995), all dictate that the growth of the older population should lead to mounting demand for health care and health services. Since the most relevant health conditions of older persons are chronic rather than acute and progressive rather than regressive (Manton and Stallard, 1994), this demand could also entail steep escalation of health care costs. As the case of the United States, England and most Western European countries attest, these costs can attain formidable magnitudes (Lee and Tuljapurkar, 1996; Aging America, 1991). And as the sad experience of Eastern European countries also shows, inability to confront these problems leads to rapid deterioration of the health status of elders and to the shocking loss of years of life expectancy (Mesle et al., 1996)

B.2. Equity issues

The health problem associated with the growth of the older population also involves important equity issues. First of all, there will be **class differentials** since members of different social classes will experience sharply different health profiles. Similarly, the ability to access and use comprehensive and high quality health care will differ substantially across social strata. Unless properly addressed, the aging process in these societies will result in sharp increases in inequality in the quality of life and well being of members of different social classes.

Second, there will be **gender differentials** to contend with since male and females experience very different mortality regimes and are affected by significantly different health problems (Kalache and Coombes, 1995; Kinsella, 1994). Moreover, since women have had a history of lower levels of labor force participation, their access to health care and services when they age will differ substantially from that of men. This is likely to generate important deterioration of women's well being at very old ages, where the majority of them are widowed.

Finally, the growth of the older population will be accompanied by important **intercohort differentials**. This will occur for two reasons. First, members of different cohorts were exposed to very different regimes of disease, behaviors, and health care during their youth. This is because, as is well known, past exposure to diseases, behavioral practices and health care all affect subsequent health of the individuals (Barker and Martyn, 1992; Elo and Preston, 1995). Second, to the extent that the nature of the labor force participation and education of members of a cohort affect their ability to demand and receive resources, younger and older cohorts will experience important differentials in their access to resources in general and to medical and health care in particular.

To understand the nature and magnitude of the health problem and the equity-relevant issues associated with it, to identify the social institutions that will bear the costs, and to ensure that policies implemented in the future translate into acceptable standard of well-being among older persons without unduly eroding equity concerns, it is necessary to evaluate the health status of those who are elders now and, equally importantly, of those who will become elders in the near future.

C. Dearth of information on the health status of older persons in Latin America and the Caribbean

In a recent review of the health status of elders in Latin America, the authors note with some frustration that

> "...the difficulties outlined in this paper associated with the aging of the population in the region are compounded by the lack of adequate information systems which could inform decision-makers on the best course of action for specific problems.

> This lack of 'quality data' also prevents the long-term evaluation of interventions: in the absence of baseline data measuring their impact, such interventions become fruitless exercises..." (Kalache and Coombes, 1995).

It is worrisome and paradoxical that whereas in the United States, Canada, Europe and even Asia, aging was anticipated and accompanied by a surge of research into the nature and consequences of the problems associated with it, particularly on the health dimension, nothing of the sort is occurring in Latin America. A recent publication of the United States National Academy of Sciences identifies about 25 surveys, completed or in course, designed to study various aspects of aging, and about half of them are dedicated to health (National Academy of Sciences, 1996). Similarly, Canada and most countries in Western Europe have fielded or are in the process of fielding numerous surveys which directly or indirectly retrieve information on health status of older persons and other related aspects.

This lack of information in Latin America is worrisome not just because Latin American countries will face problems associated with aging in the very short run but because the combination of demographic regimes and institutional contexts are likely to increase the magnitude of the problems and to force their occurrence in a much more compressed period of time than ever before. This lack of information is also paradoxical for while funding for family planning continues unabated as levels of Total Fertility Rates rapidly dip below 3, only scarce resources are flowing to investigate the aging consequences of the unprecedented sudden and rapid fertility decline for which family planning programs are partly responsible.

Comparative studies on the health conditions of elders in Latin America simply do not exist. The only pertinent and most comprehensive data base ever assembled was produced through an intercountry study sponsored by PAHO (Pan American Health Organization, 1989a,b; 1990a, 1990b). However, the results of these studies are based on protocols that are not consistent across countries and that retrieve information on only the most elementary aspects of health status of elders, necessary but insufficient to characterize thoroughly the health profile of elders. These studies cannot be used to study the prevalence of important illnesses that are typical among older persons or to compare prevalence across countries, nor can they be utilized to support an understanding of the type of medical and health care that older persons require, demand, and effectively receive. Similarly, these data are of limited value to draw inferences about relations between behavioral aspects of risk profiles and health conditions nor to carry out a study in a comparative perspective to explain how country-specific factors affect the prevalence of physical or mental disability and disease or the extent to which the associated needs of elders are satisfied.

The information on the health status of older persons or, for that matter, any other dimension of the aging process in Latin America, consists of studies of local populations (Ramos, 1992; Veras, 1992; Contreras De Lehr, 1992; World Bank, 1989; Ebanks, 1986; Machado and Abreu, 1991; Gomez and Nugent, 1996), most of which are highly selected and thoroughly unsuitable to draw inferences about current and future health status profiles.

D. The need for a comparative data collection project

In the absence of information of any sort, collection of single country data sets is useful whether or not the data sets resist tests of rigorous comparability. However, for scientific and policy purposes, it is more efficient to invest resources in comparable data sets. As stated before, past demographic trends dictate that the experience of population aging in countries of Latin America will occur at sharply different speeds and so will the societal and economic stressors generated by it. Similarly, each country offers unique social, political, and cultural conditions conforming an institutional context where aging occurs and offering the resources to deal with the problems posed by it.

The nature and magnitude of the aging problem and of all its dimensions is determined by the interaction of these two factors, the demographic regime itself and the socio-political-cultural institutional context. If so, a comparative perspective for the study of any dimension of aging is not only useful but necessary. The study of a single case is not without value--particularly for understanding the case itself--but it is hopelessly limited as a basis for making broad inferences or for drawing sweeping policy implications. Comparative studies have important return to scales and unique benefits relative to a set of unconnected single country studies.

A comparative data collection project about health status and conditions of older persons is invaluable for scientific and policy purposes. Basic research into the aspects that determine health status and conditions among elders requires at the very minimum an assessment of the status and condition among current elderly cohorts. Ideally, the project should be longitudinal and apply protocols already validated elsewhere thus enhancing comparability with the experience of other countries.

Similarly, the foundation of any health policy formulation cannot be erected without an evaluation of current health status and health conditions and an assessment of the relation between current status and conditions, on the one hand, and behavioral and social and economic determinants on the other. The latter is a crucial input for reliable

and robust forecasts and projection of the short and medium run of the magnitude and nature of the health demands of older persons.

II. Research Goals, Objectives, and Anticipated Results

A. Main goals

The proposed project has two main goals:

- to collect information on the health status and health conditions of older persons in seven Latin American and Caribbean countries representing a broad spectrum of demographic regimes and institutional contexts, and
- to assess and analyze cohort, gender, and socioeconomic status differentials with regard to health status and health care access and utilization.

The data collection instrument that we propose will follow, with important modifications, two instruments utilized and validated in the United States. In addition, however, we will introduce two novel tools that will make the project one that is entirely new for either developing or developed countries. These novel tools are: *a)a survey of a target sample individual, his/her spouse and one randomly selected sibling and b) linkage of survey data to administrative and hospital records.*

The data collection will focus on three dimensions: a) prevalence of chronic and acute illnesses, (b) prevalence of physical and mental impairment and disability; (c) access to and use of health care. The collected information should be sufficient to establish a preliminary profile of health status and conditions among the older population in these seven countries and of the degree of cohort, gender and socioeconomic inequalities. In addition, the instruments we propose to use will enable us to carry out analyses, albeit limited, to identify health status determinants and to verify strategic hypotheses.

B. Secondary Goal

The data collection proposed here is the initial step required by a comprehensive research agenda to develop robust data sets for analysis of trends and health conditions of elders in Latin America. Other studies within our research agenda will build on lessons learned in this first study and will amplify it to develop nationally representative data sets and a temporal component by including a panel structure with two or three waves of follow-ups.

Thus and very naturally, the secondary goal of the proposed project is to pilot the protocols--including the survey of triplets of related individuals and linkage of administrative records--that will constitute the basis for a comprehensive nationally representative longitudinal study of older persons.

C. *Anticipated results of the study*

Once the study is completed we will have attained four goals:

a) acquired important knowledge about current health status and conditions of older persons;
b) assessed the magnitude of differentials in health status and health care across cohorts, gender and social classes;
c) validated some very basic relations between health status and risk profiles to make forecasts of mortality and health status, and
d) validated instruments of data collection that will be useful in a more comprehensive longitudinal study.

III. Populations To Be Studied

The proposed study will be carried out in the following seven urban areas: Bridgetown (Barbados); Santiago (Chile); San Jose (Costa Rica); Mexico City (Mexico); Havana(Cuba); San Paulo (Brazil); Montevideo (Uruguay). These are all large urban centers in countries representing a broad spectrum of demographic regimes and institutional contexts. Barbados, Uruguay and Cuba are countries experiencing gradual and 'early' aging in the Latin American context whereas Chile and Costa Rica will do so slightly later, and Brazil and Mexico represent examples of demographic regimes with more sudden but 'late' aging. Similarly, these countries represent a fairly broad population of 'institutional contexts', from one totally relying on the role played by central governments to those where support for the elderly is virtually all in the hands of families and private enterprise.

Finally, the target population will include a well designed and representative sample of males and females aged 50 (or 55) and above rather than, as is more conventional, on individuals older than 65 only. By relaxing the conventional definition we will accomplish two goals. First, we will be able to enhance the study of inter-cohort differentials in health status and health care and, second, we will be able to utilize estimated relations between selected covariates and health profiles and health status to forecasts the health status of

individuals that will be, in a few years, part of what is more conventionally considered the older population.

IV. Project Design and Instruments of Data Collection

In what follows, we briefly describe the nature of the information to be collected, the instruments of data collection, and selected data analysis and hypotheses testing.

A. Health status, health care and health profiles

The health status of the elderly will be evaluated along five interrelated dimensions. The first one refers to **experience of illness**. By this, we understand the presence/absence of chronic and or acute conditions that contribute to morbidity and mortality of older persons. We will single out diabetes mellitus, kidney function, angina, cirrhosis of the liver, heart and circulation problems, cerebrovascular diseases, ulcer, dementia and other forms of mental disease (Alzheimer's, etc.). The second dimension refers to **chronic functional disability** as measured by the presence/absence of Activities of Daily Living (ADL) and Instrumental Activities of Daily Living or some modifications of these. The third dimension refers to **chronic physical impairment** which consists of physical limitations that may or may not contribute to chronic disability but that, in any case, affect the individual's well-being. We include here cataract, prostate enlargement, ear disturbance, scoliosis, osteoporosis, rheumatism, arthritis. The fourth dimension are **mediators of health conditions** or, conditions that in themselves are not necessarily harmful, but if left untreated may lead to deleterious health consequences. We include conditions such as hypertension, high serum cholesterol and depression.

Illnesses, functional limitations and chronic physical impairments as well as mediators of health conditions are health outcomes that result from complex processes involving the individual's genetic endowment, his/her past behavioral practices, and environmental exposure as well as his experience of health care and medical treatment. Ultimately, the goal of biodemography is to identify the causal processes that lead from past behaviors, exposure to environmental conditions, genetic endowments, and medical care to health outcomes. The goal of our proposed research is not the ambitious one of unraveling the above mentioned causal processes. Instead, we seek, first of all, to describe the **current health status profile** of the elderly in terms of illnesses, functional and physical disabilities and mediating health conditions. This will be done by estimating the prevalence of corresponding health outcomes in the population and within subpopulations

(by cohorts, gender and social classes). Information on health outcomes will be retrieved via personal interviews with target individuals or their proxies and by seeking linkages to hospital and administrative records.

Second, we seek to characterize the distribution of the population by type of health care received (if a condition is present) and the health care to which individuals may have access (when conditions develop). We will inquire about access to local, regional and national health care institutions and service delivery as well as identifying the role played by the private sector and, in particular, the importance of family based care. Of central importance in our study is the association between cohort, gender and social class, on the one hand, and the access to and use of health care, on the other. The information about access to health care and use will be obtained through personal interviews with target sample individuals or their proxies. In addition, for individuals who have recently experienced health conditions, we will use information from hospital administrative records.

Third, we seek to identify broad associations between illnesses, functional and physical disabilities and health mediators, on the one hand, and individual behavior and exposure on the other. Since these relations involve processes that evolve over long periods of time, we need as complete knowledge of the temporal dimensions as possible. In a cross sectional survey, such as the one we are proposing, we can only do this by eliciting individual retrospective histories involving social and economic conditions, health related behavior (consumption of tobacco and alcohol, diet), and health histories (past experience with strategic illnesses). The resulting measures may not be as pure as those that result from genuine longitudinal studies but will nevertheless be very useful to trace basic associations.

B. Instruments of data collection

The workhorse of our data collection effort will be a survey applied to urban samples of the elderly population. The survey will follow in its broad outlines two instruments used with great success in the United States, the Health and Retirement Survey (HRS) and the Longitudinal Survey of Care of the Aged (LSCA). We will of course modify their content to adapt it to the Latin American context. Through the survey we will obtain information on the following items: a) social and economic conditions; b) family background and family history (marital and fertility history); c) family and household arrangements; d) occupational history; e) history of illnesses; f) conditions experienced within a year before the survey (illnesses, physical and mental limitations and impairment; health mediators);

g) access to health care; h) modalities of health care received; h) labor force participation;
i) participation in retirement and pension plans;
j) family support and intergenerational transfers.

Our project will add two unique components. First, we will not only interview a target (sample) individual but also his/her spouse and one randomly selected sibling. The information collected can be used to test hypotheses regarding the relative influence of genetic endowments, shared environments, and individual characteristics, which are the center of concern at the forefront of the biodemography of aging (Mare and Palloni, 1989; Yashin and Vaupel, 1995).

The second unique component is that we will attempt to link information for the target individual and his/her spouse and siblings with hospital/medical and administrative records. For all individuals who have experienced illnesses and received medical care or treatment during the year before the survey, we will add information from the corresponding medical records by accessing hospital and medical files. In addition, in countries where the requisite data bases exist (Cuba, Costa Rica and Chile) we will also collect information from other administrative records (social security and pension fund records).

The information retrieved from surveys applied to target individuals and their spouses and siblings, and the enriched data base created by adding hospital and administrative records will constitute a unique information source that will enable us to describe current conditions, identify important differentials and test selected hypotheses.

C. Selected analyses and hypotheses testing

We will use conventional actuarial and statistical techniques to offer a parsimonious description of the data. In addition to this, however, we plan to carry out novel analysis in several areas. Due to space constraints, we will only identify the main techniques for description and analysis.

C.1. Life Table of active and disability-free life expectancy

Through the use of routine actuarial procedures in combination with information about illnesses, physical, and functional limitations and their duration we will construct life tables portraying the impact of illnesses and limitation on the amount of time spend free of them. These tables will be of great utility to describe the impact that the passage of

age has on the ability of older persons to function without requiring assistance of any sort and the class, cohort and gender gradient exhibited by each country.

C.2. Multivariate analysis of illnesses and limitations

The information on illnesses and disability and limitations can be utilized to estimate multivariate multistage hazard models representing the transition rates between states of illness and health and the effects that factors such as social class, age, cohort, gender, personal behavior, and diet have on those rates. The resulting estimates can be used to construct simple simulations to forecast the future rates of morbidity, disability and mortality among those who will become part of the older population a few years from the time of the survey.

This type of analysis is of great importance for planning policy interventions as they anchor them on accurate assessments of total needs and demands as well as on an evaluation of needs for particular diseases and conditions.

C.3. Refined estimates of effects on illnesses and limitations

With the available information on siblings and spouses, we will be able to produce more robust estimates of the effects that individual behaviors and socio-economic conditions have on total morbidity and morbidity due to a particular condition or limitation. This is because, through specially formulated multivariate hazard models, we can utilize the information on siblings and spouses to purge the contaminating effects of genetic endowments and shared environments. The net result will be better estimates to produce more accurate forecasts of conditions at least in the short run (10 to 20 years ahead).

V. Dissemination Plan

The dissemination plan includes three related strategies:

a) a general report with results for all countries, with descriptive information as well as comparative analysis to be published as the formal report of the study;
b) a Regional Conference for researchers and policy-makers in which findings are presented and a Regional Research Agenda is discussed.
c) a series of media-releases and country-based public information forum for the media and advocates to discuss results and implications for public policy.

VI. Collaborating Centers

The National Institute on Aging, a WHO Collaborating Center, is an important partner in this project. They have agreed to participate in the review process of the protocols; and, if approved by the peer review process to fund part of the project (see budget, Appendix A). In addition, the project will be coordinated by the Center for Demography and Ecology of the University of Wisconsin-Madison. The University has agreed to waive all indirect costs and fund 50% of the P.I.'s salary.

The contributions of researchers and Centers in each of the seven countries is a particularly strong component of this proposal. In each country, we will be working with Research Centers and Universities and building on their technical expertise to make an ambitious project a reality within a limited amount of time. In each country we will select a team of a demographer and a geriatric physician or epidemiologist to advise and contribute to all aspects of the project.

VII. Project Administration

The project will be managed by PAHO's Regional program, Family Health and Population, HPF/E; and Regional Research Coordination, HDR. PAHO's external support will be provided by: a) the Center for Demography and Ecology of the University of Wisconsin-Madison, Alberto Palloni (P.I.); b) a core advisory group; and c) a team of ad-hoc advisors serving as needed for specific aspects of the study. The process of extensive technical consultation will ensure that the project adheres to the highest and strictest standards of scientific research.

The preparation of the instrument, planning of the pilot study, fielding of the survey and analysis will be accomplished in consultations between collaborators, Coordinator (P.I.) and advisory committee. Sample selection, field work, data entry and elaboration of the data base will be the responsibility of each country’s collaborating center.

The core advisory group will include:

Franklin M. White (PAHO/HCP/HCN) and Alcida Pérez de Velásquez (PAHO/HSP/HSO); Eduardo Arriaga and Kevin Kinsella, U.S. Bureau of the Census (statistician and demographer, respectively); Elza Berquó, NEPO, UNICAMP (demographer), José Gómez de Leon, Consejo Nacional de Población Secretaría

General, Mexico (demographer); Denise Eldemire, University of the West-Indies, Jamaica (geriatrician/epidemiologist).

The Panel of Invited Scientific/Technical Advisors may include:

A. Kalache, Chief, Aging and Health, WHO; (epidemiology); A. Uthoff, CEPAL (economics); J. Vaupel Odense, Duke University; (biodemography); A. Hermalin, University of Michigan; (demography and aging) R. Willis, University of Michigan (Health and Retirement Survey); J. Smith, Rand Corporation; (economics and aging); D. Wolf, University of New York, Syracuse (public policy and aging); Jacob Brody, University of Illinois, Chicago (epidemiology); Carlos Cano, Universidad Javeriana, Bogota; (geriatric medicine); Jean-Marie Robine, Réseau Espérance de Vie en Santé, France; Maria Victoria Zunzunegui, School of Public Health, University of Andalucia, Granada, Spain.

The full advisory committee (including members of the scientific panel) will issue critical recommendations during the stage leading toward the formulation of the overall project design, preparation of the questionnaires, and selection of information from administrative and hospital records. This committee will also act to oversee activities leading to data analysis, report preparation, and organization of workshops.

VIII. Budget and Proposed Financing

A. General remarks about timetable and funding sources

The project will be finished within 18 months of the award announcement. The data collection will be finished in 12 months and the analysis and project report will be delivered six months after the final data is collected.

The complete funding package for this project will be put together from a variety of sources. (For a more detailed timetable chart and budget cost, see Appendix A). PAHO's funds will carry out the most important activities related to Regional technical collaboration with and in each country. In addition, the University of Wisconsin has agreed to give the P.I., Alberto Palloni, 50% release time for his work on this project and we expect the National Institute on Aging, a WHO Collaborating Center, to fund the remaining 50% of Dr. Palloni's time (pending peer review of a full proposal to be submitted to NIA). We will seek additional funds from the European Commission, UNPFA, and the Rockefeller Foundation.

APPENDIX

Appendix A

TIME-TABLE AND BUDGET

March 1997 to September 1998

Activities	DATES	PAHO	OTHER
Draft (1) of project design and data collection instruments. Design of sampling frame.	Mar/Apr 1997	10.000 HDR	50,000 In-kind (UW)*
Technical Advisor Meeting/WDC	May/97		30,000 **corp. sponsor
Draft (2) of project design and data collection instruments, translated (3 languages).	June/July 1997	25.000 HDR	
Core Advisory Group Meeting/Uruguay	July/1997	25.000 HDR/HPP	
Pilot test of instruments in 3 cities	Aug/1997	12.000 HDR/HPP	
Final draft of instruments; survey manuals and training of interviewers	Sept/Oct. 1997	12.000 HDR/HPP	10.000 NIA***
Data collection plan implemented	Nov./Feb. 97/98	20.000	140,000 Country match
Data analysis and description	Feb/Jun 1998		40,000 NIA***
Final report	July 1998	10.000 HDR/HPP	
Policy briefings and workshops	Jul/Sept. 1998	20.000 HDR/HPP	
Totals:		120.000 (HDR) 24.000 (HPP)	270,000

*The University of Wisconsin-Madison has agreed to give Dr. Alberto Palloni 50% release of his time to work in this project.

**We are seeking corporate sponsorship.

***Funding for the other 50% of Dr. Palloni's time will be requested from NIA as part of the regular pilot grant competition.

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