
Summary

A Proposed Research Agenda for Health Promotion and Disease Prevention for Children and the Elderly

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The objective of the Conference on Health Promotion and Disease Prevention for Children and the Elderly, sponsored by the Foundation for Health Services Research in October 1983, was to develop an agenda for research on prevention for children and the elderly. The agenda, presented here, was drawn up as a guide to public and private funding agencies in their efforts at pinpointing gaps in knowledge and priorities for health services research.

Conference participants were provided an extensive set of background demographic, social, and health data pertaining to children and the elderly. In addition, prior to the conference each participant received two extensive background papers on "Health Status and Risk Factors" and "Intervention Strategies" related to the age group of his or her interest. These "state-of-the-art" reviews (published in this volume) were used to stimulate the working group discussions and served as a starting point for the formulation of agendas for research on preventive needs of children and the elderly.

To maintain small groups of 20-25 members, two working groups on children and two on the elderly were formed. Discussion leaders led a modified "nominal group" process discussion during which research

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issues were identified by group participants and priority scores were assigned. Priority issues identified by the four workshops were discussed in general session, and a combined agenda was developed. The next section outlines the priority research issues on health status and risk factors and intervention strategies, first for children and then for the elderly.

Following the research agendas for children and the elderly, research issues common to both groups are discussed. The third section addresses funding and other issues related to implementing the proposed agenda, and the final section discusses the role of health services research in relation to prevention issues.

PRIORITY RESEARCH ISSUES FOR CHILDREN AND THE ELDERLY

PRIORITY RESEARCH ISSUES FOR CHILDREN: HEALTH STATUS AND RISK FACTORS

1. Measures of health and illness for children are inadequate.
2. Better data are needed on the impact of family status (that is, socioeconomic conditions) on child health.
3. Longitudinal studies of defined child populations are essential to a better understanding of the relationship between risk factors and health status.
4. Small-area data sets and analytic methods are needed for the development of community profiles of child health status.
5. Greater specificity is needed in reporting, collecting, and tabulating infant mortality statistics (both neonatal and postneonatal mortality) at the state and national levels.
6. The impact of severe chronic illness on children and their families needs further study. Studies are needed on (a) the psychosocial reactions of parents and siblings to the child's chronic illness, (b) the social and family situation differences between the chronically ill child and the healthy child, and (c) the economic impact of high-cost medical and rehabilitation services for families with chronically ill children.
7. Better predictors of personal health risk-taking behaviors among children and adolescents as well as more information on the clustering of risk-taking behaviors (for example, smoking and drinking) are needed. This should include an

- effort to develop better environmental, family, and behavioral predictors of childhood accidents and home injuries.
8. The links between child health status (including both acute and chronic illness) and achievement in school need further study.
 9. Predictors of low birth weight—including racial, ethnic, and cultural differences—and other perinatal outcomes need additional research.
 10. More rigorous quantitative models are needed to predict health outcomes, including more health and nonhealth determinants.

**PRIORITY RESEARCH ISSUES FOR CHILDREN:
INTERVENTION STRATEGIES**

1. Characteristics of successful (and unsuccessful) demonstration programs need to be better understood to improve dissemination and adoption of effective child health interventions.
2. More rigorously evaluated intervention programs designed to modify maternal behavior (for example, smoking cessation, alcohol use modification, home visiting programs for parenting skill development, etc.) are needed.
3. Better data are needed on the effects of safety legislation to reduce child and adolescent injuries and deaths.
4. The feasibility of incorporating health education into the conventional provision of personal health care services needs further investigation.
5. The specific components of prenatal care that improve pregnancy outcome need to be identified. Special attention should be placed on identifying prenatal care interventions which are cost-effective for women of certain ages, races and income levels. This should include assessment of programs specifically for nutrition supplementation, home visiting, genetic screening, hypertension screening, smoking cessation, and alcohol abuse prevention. The cost-effectiveness and efficacy of monitoring fetal alcohol syndrome among pregnant women should be also studied.
6. The impact of various financing mechanisms on the availability and use of preventive services for mothers and children should be examined.

7. Age-specific interventions that are effective in reducing homicide and suicide among children and adolescents should be assessed.
8. The most effective periodicity schedule for preventive services for children and adolescents should be developed.
9. More rigorous studies are needed to assess the cost-effectiveness of diagnostic and screening procedures provided in a primary health care setting.

**PRIORITY RESEARCH ISSUES FOR THE ELDERLY:
HEALTH STATUS AND RISK FACTORS**

1. How public policies on cost and financing of health care services affect both the use of health services and the health status of the elderly needs further study.
2. The coping skills used by the elderly to deal with personal social and health problems need additional research.
3. The age stratification of personal health risk factors needs to be better understood.
4. More research is needed on the factors that increase or decrease the probability of an "impairment" becoming a "handicap" in older persons.
5. Information is needed on the prevalence, incidence, and reversibility of specific illnesses and on the level of adaptation to these illnesses among the elderly.
6. The effect of family and societal reactions to the elderly (such as labeling, family acceptance or rejection, and institutionalization) on the health and functional status of elderly persons needs further study.
7. Issues related to drug use among the elderly need further study. This should include compliance with medication, packaging of over-the-counter medications, self-medication practices, the role of the pharmacist in patient drug education, and drug interactions and adverse drug reactions among the elderly.
8. The biological and social risk factors affecting cognitive impairment need further study.
9. Longitudinal studies of abilities to perform activities of daily living (ADL) among different groups of the elderly are

- needed so that population-based normative ranges can be established for these different groups.
10. More research is needed on the impacts of housing conditions and living arrangements on the health and functional status of the elderly. This should include a consideration of the relationship between both macro- and microenvironmental conditions on the functional status of older persons.
 11. Research into the effects of physical exercise (of various types, durations, and intensity) on functional status and well-being among the elderly is needed.
 12. The adequacy of knowledge and motivation among health care practitioners in addressing the problems of the elderly needs to be assessed.
 13. Longitudinal cohort studies are needed of the aging process, including natural histories of diseases, the loss of ADL functional abilities, and the relationship of health and functional status (by disease) to health services utilization.
 14. Studies are needed on perceptions by the elderly of their risk of "social segregation" due to age or functional status.
 15. The characteristics of those providing care to the elderly (including family caretakers) need additional investigation.
 16. Better information is needed on the critical periods during the life cycle when the effects of specific health and social risk factors are likely to be of greater salience for the elderly.
 17. The impact of poverty on the elderly needs further study.
 18. Research on the "normal" process of aging in terms of health, functional status, and social participation is needed.
 19. The extent of possible interrelationships between physiological and psychosocial health status needs further investigation.
 20. The impact of self-care/self-help practices among the elderly on the process and outcomes of caregiving needs to be studied. For example, how do the social and cultural values of "self-responsibility" affect personal health behaviors of the elderly and their caregivers?
 21. The effects of societal and family belief systems on longevity (health and functional status) and expectations related to the quality of life in old age need to be researched.

**PRIORITY RESEARCH AGENDA FOR
THE ELDERLY: INTERVENTION STRATEGIES**

1. The relationship of the organization and financing of health delivery systems to the use of preventive health services and to the health and functional status of the elderly needs further study. Of particular importance are data on the impact of health maintenance organizations, preferred provider organizations, and other types of organized primary care delivery systems.
2. Carefully designed evaluations of program interventions designed to promote healthful behaviors of the elderly (that is, interventions to increase feelings of usefulness and independence such as social support and self-help groups) should be encouraged.
3. More rigorous evaluations are needed of alternative health educational strategies to achieve behavioral change among the elderly. This should include basic research on the most effective education strategies for addressing specific risk factors (for example, smoking, alcohol abuse, physical exercise and fitness, stress reduction, injury control, etc.).
4. The costs and benefits associated with improved health and functional status among the elderly should be researched.
5. Existing methods for the assessment of geriatric patients need to be evaluated and expanded to include the measurement of behavioral and mental health dimensions associated with overall health and functional status.
6. Better descriptions of the design, implementation, and effect of existing intervention programs for health promotion and disease prevention for the elderly are needed.
7. Alternative strategies are needed to deal with depression and other mental health problems among the elderly.
8. More effective techniques for monitoring the medical as well as functional status of the elderly are needed. Such methods would have a wide applicability in the clinical care of older persons.
9. More studies are needed on the possible role of computers as aids both for providers of health and social services and for elderly persons to enhance their learning and functional performance.

CROSS-CUTTING RESEARCH ISSUES AND THEMES

Although this conference did not search explicitly for commonalities between health promotion initiatives for children and for the elderly, a number of areas were identified in which research on health promotion and disease prevention could proceed jointly to resolve certain problems of common concern. In an era of constrained resources, research which can address issues applicable to a number of population groups is clearly a good investment. The following research issues were of "generic" importance to both children and the elderly:

- The impact of illness/handicaps on the family
- The organization and delivery of home care services
- The impact of health and social services on functional status
- Generic measures of morbidity and "well-being"
- Quantitative models and descriptive analyses of health and non-health determinants associated with improved health outcomes including quality-of-life measures
- Small-area data analyses to link health promotion/disease prevention interventions and selected risk factors at the community level.

Several common themes were also repeated throughout the conference:

- A broad definition of health and non-health risk factors is essential in addressing health promotion and disease prevention.
- Distinctions must be made between "medical" and "functional" outcomes.
- Because of the multicausal nature of many of the issues addressed in this conference, the conduct of rigorous "explanatory" studies with predictive power often is not feasible. Instead, descriptive studies are needed to approximate the nature and extent of the problem, to provide a series of hypotheses for future predictive research, and to identify the variables or factors which might be included in prospective explanatory studies.

FUNDING AND IMPLEMENTATION ISSUES

At the concluding plenary session, conference participants discussed several additional issues regarding the funding and implementation of these prevention research agendas:

- *Funding for health services research in health promotion and disease prevention is inadequate.* Funding for basic research in health promotion/disease prevention is limited. Most public and private sources of support for programs in this area tend to fund primarily large-scale demonstrations (with associated evaluations), rather than more basic health services research.
- *Funding for longitudinal studies is insufficient.* Most preventive strategies require many years for their presumed benefits to materialize. It is difficult, and sometimes impossible, to perform longitudinal studies adequately and to evaluate accurately the consequences and outcomes of these interventions under the constraints of currently available sources of funds.
- *Funding agency priorities are too restrictive.* Most funding agencies interested in health promotion/disease prevention projects support only projects that address the “cost-effectiveness” or “behavioral outcomes” of these endeavors. The result is that projects which include other “good ideas” (for example, developing measures for morbidity) may be overlooked.
- *Joint funding arrangements are limited.* Given the multicausal nature of many problems facing children and the elderly, it is advisable to pursue joint funding of health promotion/disease prevention projects. However, joint funding by multiple agencies is difficult to arrange and administer.
- *Public interest in support of research on disease prevention and health promotion for children and the elderly is inadequate.* At the present time, it is unclear that there is an audience, other than researchers and program staff, for research findings on child health promotion or on enhancement of the health and functional status of the elderly.
- *Mechanisms to incorporate prevention into traditional health care delivery systems should be developed.* Throughout these discussions, general interest in finding ways to incorporate health promotion/disease prevention experiments into the ongoing health care delivery system was expressed. Creative ways must be found both for funding and for initiating new procedures under (controlled)

conditions favorable to research and evaluation in operational health and social service delivery systems. Arrangements of this kind will make it possible to mount new research and evaluation without having to seek financial support for both the service program and the research.

CONCLUDING REMARKS

Finally, the conference participants noted the broad scope of what has become known as the "health promotion/disease prevention arena." Health services research, similarly a broad and diverse interdisciplinary field, has a distinctive and important role to play in the study of health promotion and disease prevention. But the field of health services research cannot address all issues relevant to the promotion of health and the prevention of disease. It must carefully demarcate the dimensions of its work in this area, therefore, as it does in others, distinguishing between hypotheses appropriate for examination by health services researchers and those hypotheses which ought to be addressed by others.

We are confident that the issues, research gaps, and recommendations identified in the stimulus papers and these proceedings will provide a useful framework for future health services research relevant to health promotion and disease prevention for children and the elderly.