Social Science and Health Services Research: Contributions to Public Policy

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SCIENTIFIC RESEARCH IN GENERAL IS UNDERGOING a thorough reappraisal in which the utility of its products is a central issue. In the physical and biological sciences, this concern has led to widespread public doubt of what were once basic premises, that research is closely linked to practical ends, and that scientists themselves are the best ultimate judges of scientific progress (Price, 1965, 1978; Brooks, 1978). The social sciences have enjoyed less lavish support from public funds and hence have had less control over the scope and nature of their research agendas, but the same assumption of a linkage between basic research and useful information has underlain their support. The great increase in social legislation during the 1960s gave social scientists unprecedented opportunities to ply their trades and to influence public officials in shaping policy for productive research. Now, public officials and thoughtful social scientists are taking stock, to determine whether social science has in fact contributed materially to improved public policy. Many of them doubt that it has (Aaron, 1978; Moynihan, 1969; Comptroller General, 1977).

The field of "health services research" emerged during the optimistic 1960s. It is thus but one object of the current pessimism surrounding the "Knowledge for what?" question. It is, however, a particularly instructive microcosm within which to consider the relations

among the realms of social science knowledge, professional practice, administration, and politics. First, although the field draws upon knowledge from biomedical and epidemiological research, and upon experience in clinical medicine and health care administration, its theoretical and methodological bases are drawn largely from the social sciences. Because of this, social scientists' styles have considerable bearing on how questions are framed and on the content of knowledge gained from health services research. Second, at several junctures, opportunities exist for social scientists to work alongside and to influence practitioners who represent strongly entrenched institutions, interests, and ideologies. These largely determine the structure and performance of our health services industry, as well as the form and content of health policy. Accordingly, the manner in which such opportunities are exploited has important implications for how social science knowledge is infused into public policy debate. Finally, and most important, is the extensive government intervention in the health services industry over the past decade. This trend has greatly increased governments' needs for information and knowledge, and has drastically altered the institutions and mechanisms through which health sciences research is carried out, communicated, and used. Moreover, because several extensions of government administrative authorities have occurred in the absence of a broad national consensus, the research has become highly politicized. This has raised several questions about the stance of social science vis-a-vis the world of politics, in an arena and at a time when their resolutions may have profound effects on both.

In this paper, I shall undertake the tasks of summarizing issues and offering recommendations about how social scientists might increase the usefulness of social science knowledge in the public policy process. My central theme is that the answer to the question, "How does health services research contribute to public policy?" depends upon how one conceives the notions of "public policy" and "usefulness" of knowledge. Accordingly, the paper begins with an overview of competing views on these issues and a summary of research on how public officials employ knowledge in their work. With these as background, I identify trends in the health care policy and health services research environments that are creating new opportunities for social scientists

and renewed cause for reconsideration of our traditional modes of dividing intellectual labor. I conclude with some recommendations regarding how social scientists might act in concert to improve their contributions to public policy.

Issues

Virtually all published commentary on the usefulness of health services research findings has involved criticisms from persons associated with the federal government or with clinical or administrative settings (Myers, 1973; Eichhorn and Bice, 1973; Williams and Wysong, 1977; Lewis, 1977)—the so-called users—and replies from academically based researchers (Spitzer and Starfield, 1977; Mechanic, 1978; Gibson, 1978; Shortell and LoGerfo, 1978; Williams, 1978). From the perspective of the sociology of knowledge, one should therefore not be surprised by the differing premises that underlie positions taken on the issues or, perhaps, by the all-or-nothing flavor that pervades much of this debate. Detractors and defenders alike are sympathetic to the ideal of a rational social and political order in which knowledge from objective inquiry plays a crucial role. They often differ, however, as to where and how rationality is to be attained. Indeed, the criteria by which "usefulness" is judged hinge almost entirely on how one resolves that question.

Public Policy and Uses of Knowledge

Two conceptions of public policy are apparent in discussions of the uses of social science knowledge (Rein and White, 1977; C.H. Weiss, 1977:11–13). Those who contend that health services research has had little influence on policy typically conceive of public policy as explicit and authoritative decisions taken by identifiable government officials. The utility of knowledge is assessed largely by its direct contributions to these decisions; knowledge is valued for its problem-solving or *instrumental* uses. Others view formal public policy as an accretion of decentralized, pluralistic actions and decisions. For example, Anderson (1967:42) defines public policy as "any set of values, opinions, and actions which moves decision making in the political,

social and economic system in certain directions, regardless of source in a pluralistic society." Knowledge is valued as a public good that informs and shapes debate and general policy directions. From this perspective, "good" health services research enters the health policy arena through its influences on private and public actors in the industry and through enlightening, *conceptual* uses made of it by public officials (C.H. Weiss, 1977; Mechanic, 1978).

Myers's (1973) early critique of health services research illustrates the formalistic, instrumental argument. In 1973, she observed that "health services research has had very little impact on or input to the formulation of national health policies" (Myers, 1973:352), charging that health services researchers had played an "insignificant role" in the twenty-five years of debate leading to the enactment of Medicare and Medicaid (Myers, 1973:355). More recently, from a survey of practitioners and researchers, Lewis (1977) was unable to identify significant innovations either in the organization and delivery of health services or in public policy that could be attributed to findings from health services research. Last (1977) concurred in this view, although Spitzer and Starfield (1977) found several clinical improvements that they believe could be traced to specific research projects.

Those inclined toward the more fluid notions of public policy and conceptual uses of research point to the accumulation of knowledge and methods from various traditions of research that antedate contemporary "health services research." Such expositions typically list illustrative landmark studies that raised new questions, shed new light on old ones, or employed novel techniques to explore questions heretofore relatively ignored; and counterpose the enduring and evolving nature of policy issues to the temporary and fleeting character of contemporary solutions and conventional wisdom (Mechanic, 1978; Shortell and LoGerfo, 1978). Indeed, health services research is credited with shaping succeeding eras of conventional wisdom through its evaluation of past and existing arrangements and its documentation of emerging problems.

Impediments to Use

Associated with these views on public policy and the usefulness of knowledge are characteristic diagnoses of impediments to the use of

research in policy-making and recommendations for improving it. Although most authors allow that several factors are simultaneously implicated, emphases quite clearly differ. Moreover, recommendations for reforms usually convey implicit, and sometimes explicit, ideas about what constitutes "good" health services research and "appropriate" stances of researchers vis-a-vis "users" of their products.

Those who lament the poor record of health services research as an instrument of forming public policy lay blame primarily on the researchers and their styles of work and communication (Myers, 1973; Williams and Wysong, 1977; Eichhorn and Bice, 1973). Social scientists are accused of remaining aloof from the realms of practical and political affairs, shielded by their doctrines of value neutrality and disciplinary purity. Further, they are charged with lacking sufficient insight into real-world needs and the routines of policy makers and of failing to take proper account of these in their conceptualization and communication of research. At worst, critics say, social science research is irrelevant to policy makers; at best, it is simply not packaged in ways that policy makers comprehend, or disseminated through channels that reach their attention.

Depending upon which diagnosis is stressed, apposite remedies follow directly. Some involve relatively minor reforms, such as the urging that social science knowledge be translated into language intelligible to policy makers and put where they are likely to encounter it. Others that accuse social scientists of lacking the will or the ability to deal directly with policy matters raise metaphysical and epistemological issues that go to the heart of the ethical precepts and intellectual traditions of the social science disciplines.

Those who gauge the value of research primarily by the conceptual uses made of it by policy makers find relatively few faults in the policy-research nexus. To the extent that they do, they attribute the problems to the institutions that establish policy, support research, and use knowledge (Mechanic, 1978). They observe, correctly, that we have no coherent national policy to which researchers can address instrumentally oriented research, and seemingly assume that the pluralism of our political traditions and institutions forever precludes a consensus. Confronted with diffuse and often competing priorities of agencies that purchase health services research, investigators re-

quest clearer and more readily accessible information about where to turn for support, guarantees that their proposals will be fairly and openly reviewed by their peers, and assurance that their result will not be misinterpreted or misused.[1]

These tenets agree with values espoused by academic researchers. They seek free and open inquiry unfettered by the demands of momentary crises and bureaucratic entanglements, and raise eschatological visions of inevitable long-term returns on today's research investments (Mechanic, 1978; Gibson, 1978). These, in turn, argue consistently for increased public spending for health services research and the loosening of constraints on the use of research moneys. If too much in the way of instrumental returns was promised in the past, policy makers and researchers should lower their expectations about immediate payoffs, and patiently and painstakingly build upon traditions of knowledge that accumulate from research and large-scale experimentation (Williams, 1978; Shortell and LoGerfo, 1978). In short, the appropriate relation between scientific researchers and policy makers should be one of arm's length, but the distance not so great as to hinder exchanges that are valued in both camps.

Research on the Uses of Research

I have purposely cast issues and points of view in stark dichotomies, largely because much of the debate in this area has done so. The belief that policy makers and social scientists hold diametrically opposed ideas and expectations about the utility of social science knowledge is so common as to have warranted the label of the "two-communities theory" (Caplan 1979). Furthermore, contrasting notions of utility embodied in the problem-solving and enlightenment models occupy polar positions. This has predisposed contenders to follow one or the other of these views and their associated conceptions of issues and solutions to logical extremes. In so doing, however, considerable room is left for more complexity and subtlety than either model is able to accommodate. Accordingly, recent research on how knowledge is

[1] For an assessment of the role of the federal health agencies in health services research, and recommendations for improvement, see Institute of Medicine (1979).

used by policy makers and on conditions that facilitate its use is showing that much of our commonsensical reasoning is not supported by the data.

Contrary to those who contend that social science knowledge is used very little by policy makers, Caplan and his associates (1975) found widespread and frequent reliance upon research. The most common use is of the instrumental, problem-solving type applied to day-to-day administrative matters. The far less numerous decisions pertaining to broader policy options more typically involve blending objective ("hard") information with extrascientific ("soft") knowledge from several sources (Caplan, 1979). In these situations, information from research is rarely decisive, but assists in the formulation of broad strategies.

Also contrary to widespread belief, policy makers are apparently receptive to views and information that have no direct implications for action insofar as they provide ideas about how to think about an issue. A study of mental health policy makers by Weiss and Bucuvalas (1977) revealed that elaborate distinctions among various types of uses are required to comprehend public officials' employment of research findings and that "action-orientation" is but one of the characteristics of research that promotes use. Moreover, these authors found that the consistently strongest predictor of the type of use is whether research offers knowledge or insights that challenge the status quo.

Academic investigators value research largely in terms of its scientific and technical qualities, and they are more likely than researchers in entrepreneurial settings to produce studies that satisfy conventional canons of quality (Bernstein and Freeman, 1975). However, high quality does not guarantee use. The Weiss-Bucuvalas (1977) study found that, other things being equal, the technical features of studies have relatively little influence on whether policy makers employ research findings, although such considerations weighed more heavily in some types of use than in others. For instance, technical quality has more influence on how policy makers use research findings when they are mobilizing support for their positions than when they are calling issues to the attention of others.

Common sense suggests that the quantity and quality of contacts

between researchers and policy makers would add to the utility of scientific knowledge, as is apparently the case. Caplan (1979) found that policy makers' day-to-day needs for information are typically satisfied by in-house or contracted research over which administrators have direct control. However, empirical associations between the uses of objective knowledge in larger decisions and indicators of his "two-communities" concept suggest that policy makers who are separated physically and ideologically from social scientists are less inclined than others to use social research.

Lingwood's (1979) study of the characteristics of researchers and work environments that facilitate the production of "usable research" supports these conclusions. His investigation of researchers in the Forest Service showed that those who are scientifically productive are also likely to engage in applied work. Researchers noted that a particularly important feature of this work is sensing clients' needs and translating them into questions for research. When asked to contrast actual practice with ideal behavior that would lead to greater use, investigators found the greatest discrepancies in problem-sensing and translation functions and in researchers' less-than-desirable amounts of direct interaction with potential users of their results.

Findings from a study of thirty-three of the nation's most prominent research institutes underscore the roles of organizational structures and proximity to policy makers in increasing their influence on government programs. Lehman and Waters (1979) found that bureaucratically controlled institutes have been more successful in this regard than institutes organized along collegial lines. The more highly structured research centers are more likely to be internally differentiated into areas of interest and expertise that match those of policy-making departments of the government and to employ former government officials. In turn, institutes involved in exchanges of personnel with government agencies had more consistent "track records" in meeting policy makers' needs than did the institutes outside this "revolving door."

Research on the uses of knowledge suggests that characterizations used to distinguish types of decisions that pose extremes of the "really big" and highly politicized, from those that are mundane, technocratic, and apolitical, are greatly oversimplified. Undoubtedly, these polar

types occur and have implications for the kinds of information and decision-making styles that are employed in dealing with them. Some suggest, for instance, that the limited use of analysis in Congress is due to the division of its work between a welter of isolated details, whose sheer volume precludes careful study, and occasional decisions of great moment in which political considerations predominate (Jones, 1976; Dreyfus, 1977). Such a characterization overlooks the facts that "really big" decisions usually embrace great varieties of smaller issues and that policy-making in democracies proceeds incrementally and remedially. Thus, instrumental and conceptual uses of research coexist in policy arenas, each serving important needs and functions. The nature and scope of decision-making within government make it impossible to distinguish the mundane and apolitical from the larger issues, except perhaps at the extremes.

None of the studies mentioned deals directly with health services research or systematically compares needs and uses among policy sectors. One might question whether their findings apply to the health care field. From experience as project director of the Institute of Medicine's (1979) study of federal health agencies, I can report that the major conclusions drawn from studies published to date are in accordance with impressions our staff gleaned from interviews with officials involved in health policy. Few persons expressed outright rejection of knowledge obtained from research, but few were able to point to clear-cut instrumental uses of particular studies. Those who were able to do so typically occupied positions in agencies where researchers and users worked in close proximity on issues that were relatively discrete and bounded by explicit agency mandates and functions. Notable examples are the small units involved in health care issues in the Congressional Budget Office of the Congress and in the Federal Trade Commission.

Most officials we interviewed had no well-formulated criteria for judging the usefulness of knowledge, although many hinted that they rely on impressions about the credibility of its source. Lacking such information or being unable to decipher the meaning or quality of particular studies, officials turn to friends and trusted colleagues, frequently in other agencies. Summaries of research findings such as those published by the National Center for Health Services Research

were in evidence throughout the federal health policy structure. Most officials indicated that they or their staff routinely peruse them for hints about studies bearing upon their work. When such studies are located, officials frequently consult persons who they believe might know something about them. In short, we found that the vast federal bureaucracy dealing with health policy comprises innumerable informal networks that transmit information and knowledge among trusted colleagues as needs arise.

Caplan's (1979) "two-communities" phenomenon was clearly evident. Persons with training in the social sciences—most of whom, incidentally, were economists—were receptive to health services research, although few knew precisely what the term implied. Their informal networks typically extended to universities and institutes where research was conducted in areas of personal interest, and many had circulated among research settings and government positions. By contrast, officials in agencies that employed few social scientists often had more than semantic difficulties in answering our questions about their use of health services research. In these other worlds, officials frequently denied connections with health services research, despite the fact that their agencies were involved in either performing or sponsoring inquiry that quite clearly fitted the description. To the extent that they admitted engaging in such research, it was frequently dismissed as merely ancillary to their principal missions, and of little consequence.

It might appear from studies of the use of knowledge gained from the social sciences and health services research that everything is as it should be. Certainly, the extreme view that such research is worthless and accumulates unnoticed by policy makers is dispelled, as are some prejudices about what constitutes useful research. Researchers are learning about how to better organize their work settings and relations with policy makers to ensure greater use of their products.

My concern about such optimism is that findings on the uses of social science and health services research may be interpreted in a much too narrow framework. Like all other research, studies in this area tell us what is or may be, not necessarily what should be. Investigations of the use of knowledge are similar to market research. The researcher's task is to determine what consumers will buy and how

products should be packaged for maximum market penetration. Studies of how to organize research efforts to promote greater use of the results also strike me as analogous to attempts in industry to achieve coordination between production and sales divisions.

Missing in the studies published to date are questions about what is being bought and sold, and whether more consumption of the current fare is equivalent to better policy. These issues parallel the history of research on the use of medical services. That tradition of inquiry began in an era when obvious deficiencies existed and optimism reigned about the benefits of improved health to be gained through medical care. A half century later, our policy makers find that they may have relied too much on that increasingly costly remedy. Undoubtedly, research on the usefulness of knowledge in policy-making will continue along these lines and eventually will confront the difficult issues of how much and what kind of knowledge best serves the health of the body politic.

Health Policy and Health Services Research: 1980

The Changing Policy Context

Needs for information within policy sectors, and the ways in which these needs are met, depend upon the contexts within which policies are formulated and implemented (J.A. Weiss, 1979). These contexts are identified by 1) the content of policy issues, 2) the degree to which decision-making is centralized, and 3) the characteristics of the individuals and organizations that implement policy. Anderson (1967) has noted that public policy consensuses establish frameworks within which research priorities are set. In turn, the principal institutions involved in framing and implementing policy determine who sponsors research and who uses its findings.

Historians of health policy and health services research have identified the 1960s as a watershed (Anderson, 1967; Klarman, 1979b). Earlier, public policy focused primarily on developing health services and providing the means to ensure their equitable allocation. The principal policy instruments were subsidy and direct service programs.

Federal policy and action were channeled through traditional grants-in-aid programs, which assigned primary administrative responsibilities to states and lower levels of government.

Research on health services followed a similar decentralized pattern. Initially, inquiry into the health of populations was sponsored by philanthropic organizations and reform-oriented government agencies to prod governments into providing for the poor. Later, as the federal government established subsidy and service programs, research grew alongside them. The principal purpose of federally supported research was to develop knowledge for use in improving the performance of private organizations and agencies of state and local governments. For instance, research carried out under Hill-Burton auspices was aimed at developing basic knowledge about the structure and operations of hospitals. National surveys on the use of health services investigated the degree to which voluntary insurance met the needs of various segments of the population.

Legislation of the 1960s created a considerably more centralized policy context. The numerous service programs established under the War on Poverty, and the Medicare and Medicaid programs, thrust the federal government into vastly enlarged administrative roles, and its needs for information grew commensurately. Unlike earlier periods, however, these newer needs applied primarily to programs that were being administered directly by federal agencies. Neighborhood health centers, clinics for migrant workers, and other service programs were (at least nominally) demonstrations whose legislative mandate included evaluation, and the Medicare and Medicaid programs required research on the characteristics of beneficiaries and their use of services. Research during this period thus became more mission-oriented, focusing on the operations and performance of various federal programs of service delivery and financing.

By the close of the 1960s, the current era of cost containment was upon us. The policy consensus shifted from one of subsidies and growth to a focus on controls and "shrinking" the system. The atmosphere within which perennial issues of access, quality, and costs are considered now involves formal public policies expressed in regulatory programs that are mandated and operated by governments. The policy context is therefore highly centralized. Unlike that of the

1960s, however, it has no foundation in the type of national consensus that eventually developed in support of Medicare and earlier federal initiatives. Moreover, the decentralized and multilayered structures through which policy is now implemented allow several opportunities for deflection and dilution of cost-containment objectives. Nevertheless, programs such as those established under the National Health Planning and Resources Development Act and the Professional Standards Review Organizations (PSROs) amendments provide the policy frameworks within which federal officials increasingly judge the usefulness of health services research.

Health Services Research

The field of health services research was recognized as a distinct area of inquiry in the early 1960s, and, later in that decade, it was given an organizational focus in the National Center for Health Services Research and Development. Under this new label, and assisted by funds from the Center and other federal agencies, the field developed an infrastructure of disciplinary specialties, training programs, organizational forums, and journals. Building upon traditions of research begun decades earlier, social scientists and others pursued research on all facets of health care and the health services industry.

During these early years, the field expanded rapidly and began a process of internal differentiation. The National Center's research, training, and centers programs gave great latitude to university-based investigators in setting their research agendas and provided ample financial support for a variety of interests. The Center's large-scale demonstration programs and the information needs of the operating agencies offered a lively business for research and consulting firms and academics engaged in evaluation research. By the mid-1970s, the field was populated by cadres of investigators working full time on health services problems, supported almost entirely by federal funds. One might say that a health services research estate had been created.

With the advent of the present policy context, the health services research industry has become further differentiated. To meet their needs for information, government agencies and private associations have enlarged their research staffs and have relied upon organized

centers, institutes, and research firms to satisfy demands that cannot be met internally. Scarcity of funds and growing needs of operating agencies have forced sponsors to give high priority to mission-oriented studies. In consequence, health services research agendas are increasingly being set internally by government officials and funded by contract mechanisms.

Academic researchers understandably view these developments with disquiet. Stricter government control over the research agenda limits cherished freedoms and imposes routines and constraints that are foreign to the traditional academic pace and style of work. Several universities have responded by establishing centers and institutes geared to the mission-oriented, contract research business. However, the findings cited earlier and comments by persons affiliated with such organizations suggest that they may face difficulties in competing with free-standing institutions that are organized for that sole purpose (Lehman and Waters, 1979; Wysong and Ludwig, 1974; DeFriese and Seipp, 1978). Moreover, one might be concerned that universities may pay insufficient attention to other vital contributions in their efforts to compete for contracted research.

The growth of mission-oriented research emphasizes the importance of constructive criticism and the need for alternative research agendas to complement those produced by interested government agencies and private associations. Without these, we may come to a point where administratively oriented research drives out more reflective investigations. Klein (1978) suggests that this has occurred in the United Kingdom. Alternatively, policy debate may ensue as confrontations among interested parties, each armed with partial and self-serving knowledge. This is not to suggest that research agendas and priorities set by interested agencies and organizations necessarily lead to biased results. However, one must be vigilant and sensitive to these tendencies.

Other less dramatic problems are raised by the emergence of centralized strategies for developing and funding research. Reliance upon government officials to develop research agendas presumes that they have the perspectives and opportunities to develop balanced priorities that give appropriate place to emerging and long-term issues among more pressing, short-term ones. It is arguable, however, whether the

routines and pressures of government environments permit the requisite reflection and continuity. In this respect, we might heed experience in the United Kingdom. In 1973, the government dismantled its counterparts of our study sections and vested responsibility for setting health research priorities in its Department of Health and Social Services. The change was motivated by a long-standing concern that insufficient attention was being given to applied research. Five years later, experts convened by the Nuffield Provincial Hospitals Trust agreed that the policy was fundamentally unworkable (McLachlan, 1978). Plagued by repeated changes in key personnel, the low priority attached to research, and pressing day-to-day problems, the department was unable to formulate a consistent research agenda. The persistent problem of setting research priorities is now being considered by a royal commission, which is entertaining the idea of establishing a health services research institute for that purpose.

Research strategies that rely upon buyer-seller relations have also failed to establish explicit means to ensure the quality of research. Traditionally, the scientific community has relied primarily upon peer review to monitor quality at two points. When an investigation is proposed, peer review applies conventional criteria to determine the likelihood that the project will produce the knowledge it seeks. After its completion, the project is again reviewed to determine whether it is worthy of publication. Although these mechanisms are often flawed in practice, they nevertheless are the cornerstones upon which scientific and technical merit has rested. A substantial portion of health services research currently escapes either type of review. When peer review is employed to evaluate competing submissions for contracts, attention is often fixed on technical and logistical details. Major conceptual and methodological approaches are largely determined by requests for proposals to which bidders initially responded. Similarly, many research reports provided to government agencies are not submitted for publication in the refereed literature, and journals rarely review such documents in their book review sections. In consequence, neither public officials nor the unwary public can be assured that the information they are given has been screened and found acceptable in terms of conventional research standards.

The recent Institute of Medicine (1979) report on health services

research identified several of these faults and made recommendations about how they might be remedied. However, the study dwelt exclusively on the management of health services research within the federal government and did not consider what might be done by those of us who are engaged in extramural research. I believe that we have an obligation to offer constructive recommendations to complement those put forward by the Institute of Medicine. However, I believe we should first attend to matters that heretofore have impeded concerted actions on matters of public policy.

The Fact-Value Issue

The argument that social science research is irrelevant to public policy because it avoids advocacy raises questions about the time-honored idea of value neutrality. I believe, however, that this thought is ancillary to the more significant view that the proper business of social scientists is to develop abstract theory within traditional disciplinary frameworks. Taken together, the prescription to aim for abstraction within a dominant conceptual framework, and the proscription against giving prominence to values in one's research, have led to invidious distinctions between "pure" and "applied" research (Gouldner, 1965; Janowitz, 1970). The latter is often characterized as being fraught with temptations and perils that some believe warrant special comment and attention. In sociology, for instance, distinctions are made between "sociology of medicine" and "sociology in medicine" (Freidson, 1970:41–58). The former is offered as a legitimate endeavor. It aims to apply sociological concepts and theories to phenomena in the health care arena for the purpose of contributing to an abstract, neutral body of sociological theory. The latter, being an effort to do something about practical problems, is suspect on the ground that it is neither consciously directed toward developing theory nor isolated from value premises of practitioners, politicians, or others who seek change.

Fox's (1979a) analysis of the decline of advocacy in economic research is the most recent contribution to the long-standing debate about facts and values in social science. His paper and the responses to

it raised several points of view,[2] and the issue remains unsettled. As Fox pointed out, the roots of social science lie in primordial attempts to enlist research in the service of practical ends. Such efforts were made by people who drew no sharp lines between knowledge and action or among various types of knowledge. Nineteenth-century social thought linked these realms in holistic theories of man and society. Their separation was accomplished by contemporary social scientists.

We can credit Max Weber (1963) and his disciples for laying the intellectual groundwork that led to current fact-value distinctions. In so doing, however, I believe we overinterpret their meanings by failing to consider the historical context. Weber sought to destroy legacies of thought that fused existential and moral and ethical considerations. Specifically, he was criticizing the Benthamite optimism in the possibility of a politics grounded in science, the economic determinism of socialist theory, and the Social Darwinists' ascriptions of moral correctness to the prevailing social and political order. His distinctions between questions of "What is?" and "What should be?" may have been overdrawn. Nevertheless, they were necessary steps for the creation of a critical social science capable of analyzing connections between aspirations and action.

The fact-value question is not moot, however. The notion that social scientists should "only analyze" and leave prescription to the political process is particularly constraining to those who analyze policy issues. Public policy inherently mixes facts and values, often in ways that complicate their disentanglement. The injunction that we should "deal only with the facts" thus conveys the subtle message that social scientists' appropriate role in public policy is to engage in problem-solving research whose findings have instrumental value. As we have seen, however, this is apparently not the type of research that policy makers are lacking. Rather, they seem to be looking for assistance in conceptually and empirically organizing the larger policy issues that they must address.

[2] See the commentaries by Falk (1979), Brewster (1979), Rorem (1979), Arrow (1979), Fein (1979), Anderson (1979), Somers (1979), Ginzberg (1979), Klarman (1979a), and Fleming (1979), and the rejoinder by Fox (1979b).

The fact-value distinction overlooks the fact that social scientists are part of the political process—both individually and collectively—regardless of their wishes. Several social scientists with irrefutable academic credentials engage in open advocacy. The alternative schemes for national health insurance proposed by Alain Enthoven and by Martin Feldstein are notable examples. More subtly, what they choose *not* to do has ramifications for public policy. As I noted earlier, the distinctions between "really big political" issues and the smaller, presumably "less political" ones are not sharply drawn in practice, especially not in today's policy contexts. Avoiding some types of issues because they are "primarily political," in the pejorative sense, risks unleashing a self-fulfilling prophecy in which a paucity of verifiable knowledge gives greater play to the tugging and hauling of interest-group liberalism (Lowi, 1969). In a more positive vein, our political institutions appropriately have responsibilities for divining competing values and compromising among them. Because social scientists have the insights and skills to define the content and estimate the prevalence of these values, they have a corresponding obligation to produce knowledge about how the values may be served or compromised by public policy.

Economists appear to be less concerned about fact-value issues than are sociologists or political scientists, or at least have come to a more realistic understanding about where these lines are to be drawn. Economists share with other social scientists Weber's view that moral correctness cannot be inferred from empirical data. Beyond this, they are less reticent than others to engage value-laden issues. I attribute this to the compatibility between economists' understandings of their particular forte and the tasks and emphases of policy-making. Economists and policy makers naturally turn to questions of efficiency and alternative uses of scarce resources, and, in periods of fiscal restraint, both are inclined to express efficiency as dollars-in-dollars-out. The prominence of economists in policy-making positions and of economic analyses in health services research is therefore not surprising in light of the current health policy context.

The lesser prominence of other social scientists is regrettable, however. Policy-making most certainly requires valuations expressed in terms other than financial ones. The concepts of "psychic costs" and

"tastes," for example, are akin to notions of attitudes and satisfaction, whose measurement and analysis require the tools of psychometrics. Moreover, efficiency is often traded against other values in the policy arena, as is clearly evident in the granting of rights (Okun, 1975). Such tradeoffs also occur in nearly all matters pertaining to the implementation of policy. For instance, because our society values pluralism, we place the task of health planning in broadly constituted community groups. In so doing, we trade efficiency for preferred processes. Accordingly, policy research on health planning should devote commensurate attention to such extraeconomic valuations.

The paradigms of the other social sciences do not point so directly to valuating criteria as that of economics, not because the other disciplines are newer or less developed, as some suggest, but because sociologists, social psychologists, political scientists, and others, are internally more divided by competing valuations. Sociologists, for example, when analyzing problems rarely make conscious choices among Marxist, structural-functional, or other intellectual frameworks. These are world views that are rooted in valuations and, as such, they are rarely put to empirical test. They are, instead, either accepted or rejected on extrascientific grounds. Because of this, disciplines that are divided among competing world views are likely to remain so forever.

This observation does not lead to the conclusion that social scientists should avoid value issues because they disagree among themselves as to whose values should prevail. To the contrary, dissension over values is all the more reason for social scientists to be involved with policy issues (Myrdal, 1973). To the extent that competing paradigms emphasize different values, they are frameworks for identifying and conceptualizing their empirical instances and policy implications. For example, organizational analysts employing theories of the so-called human relations tradition are inclined to study the effects of formal structures on the satisfaction of organizations' members. Analysts who employ traditional concepts of bureaucracy from the so-called classical schools are likely to concentrate on organizational outputs. Neither perspective is more valid than the other, but both are needed for balanced knowledge.

Balance and complete knowledge are essential for balanced and

comprehensive policy. Therefore, social science research should assess formally stated policies in terms of their value implications and investigate their realization as policies are implemented. Before doing so, however, social scientists should reflect on the insidious biases of their various presumably value-neutral paradigms so that they can recognize the limitations and potential uses of each (Myrdal, 1969; Rein, 1976, esp. pp. 37–95).

The Institutionalization of Ceteris Paribus

Contemporary social science has not only made artificial distinctions between facts and values, but it has also fragmented knowledge (Campbell, 1969; Wax, 1969). I refer to the processes that led to the present division of intellectual labor among the disciplines as the institutionalization of *ceteris paribus,* by which each discipline rewards its practitioners for their ignorance of the theories, methods, and knowledge of the others. One can readily understand how these cleavages have been perpetuated. Each discipline posts limits on the legitimacy of theoretical perspectives in order to advance the accumulation of internally consistent, albeit partial, knowledge of man and his institutions. Although the strategy has produced remarkable abilities to understand some features of the world about us, it has less to recommend as an approach to research on public policy.

The various disciplinary domains that have developed over the past century have no counterparts in the world that policy makers seek to change. Problems and facts in those realms are not strictly or inherently sociological or economic phenomena, for example. They become so only when organized by particular conceptual frameworks that single out some features and disregard others. Research within these frameworks thus produces partial answers to selected features of larger issues. As Rosenthal (1979:293) notes, "We increase the power of analysis by leaving out some of the complexity."

Selectivity is necessary for disciplined thinking and research, and no one can be expected to comprehend the totality of social science. However, left to themselves, practitioners within the various disciplines do not produce aggregate bodies of integrated knowledge about policy issues. Instead, several streams of research and knowledge flow within each of the disciplines, and they rarely come together.

The development of largely independent literatures among the social sciences is due, in part, to specialization within each of them. However, they are also artifacts of orthodoxies and jealousies. I recently experienced a small but pertinent instance of these in my capacity as a referee for the *Journal of Health and Social Behavior.* I recommended against publication of a paper submitted by a sociologist because he mentioned none of several studies done on his subject by economists. The author corrected this oversight and resubmitted the paper, which I recommended for publication. I later received the anonymous comments of the second reviewer, who believed the final paper was unsuitable for the journal because it relied too heavily on economic reasoning. Medical sociologists, the principal audience of this journal, are presumably not supposed to think about or be exposed to economics.

The *ceteris paribus* assumption has other more serious ramifications. It is a useful and valid device for dissecting a phenomenon to study its parts, and, when the parts are *additive,* knowledge about each can be assembled to provide understanding of the whole. Unfortunately, the assumption of additivity is probably untenable for many of the policy issues that confront us. Results from economic analyses may be contingent upon sociological or political forces, and vice versa. If so, knowledge from studies based on particular disciplinary frameworks is not only incomplete, but it may also be invalid.

This problem is evident in evaluations of the effect of policy programs that fail to take into account the variations in the means by which they are implemented and the contexts within which they function. An example is the recent investigation of PSRO conducted by the Department of Health, Education, and Welfare (HEW).[3] The study relied primarily on an input-output model in which the amounts of hospital use in various regions of the country were compared. Some had active PSROs; others did not. Comparisons revealed no aggregate differences, although lower-than-average use of inpatient service was

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[3] The study resulted in a ten-volume report, part of which deals with organizational and other matters. However, the findings pertaining to the effects of PSROs on utilization and costs attracted the most attention, and they did not rigorously incorporate organizational variables. For a summary of this study, see Dobson et al. (1978).

observed in about half of the areas with active PSROs. What does one conclude from this? The Office of Management and Budget took these findings as evidence that PSRO does not curtail the use of hospital services, at least not sufficiently to offset the program's costs (Iglehart, 1978). Noting the favorable results in some of the regions, the Congressional Budget Office (1979:25–34) speculated that the investigators overlooked important organizational and contextual factors that promote or impede success. Information about these matters is vital to policy makers, for in its absence they can make only go-or-no-go decisions.

Because implementation is the vital link between goals and accomplishments, research on how programs actually work is essential for remedial policy-making. In consequence, agendas for research on particular public policies should embrace as many perspectives as are necessary to address the various value premises and structural and contextual features of the programs.

Such agendas should also recognize the interrelatedness and possible interactions among emphases of the various social sciences. Strategies for research in major policy programs should exploit opportunities to link knowledge about their sociological, political, and economic dimensions. Otherwise, studies based on the various disciplinary frameworks will continue to produce fragments of information whose synthesis will remain problematic.

Recommendations

At several points in this paper I have identified issues that I believe social scientists involved in health services research can and should address as a collective. In summarizing these issues and offering recommendations, however, I do not suggest that social scientists adopt one set of solutions to which all must subscribe. Rather, I strongly believe that they have a responsibility to contribute to decision-making about research priorities for major policy programs. Therefore, most of my comments refer to processes that might be established to encourage concerted action.

As I have suggested, recent federal policies instituted to deal with the long-standing problems of access, quality, and costs have created

several layers of policy-making and programmatic responsibilities. They have also greatly enlarged the federal government's accountability for the performance of the health services industry. Because of this, priorities for health research are being set de facto by the several agencies that are involved in implementing various federal policies. In acquiring and using the information they desire, these agencies are relying upon mechanisms that provide limited opportunities for open discussion of research designs and interpretations of findings.

Within this context, I believe social scientists can make several important contributions. They cna be helpful in ensuring that health services research agendas are balanced and comprehensive and that information produced by government-sponsored studies meets the highest possible standards of quality. To accomplish these ends, I recommend using the specialty organizations and journals to a greater and more conscious extent as vehicles for formulating research priorities for health policy and for reviewing studies supported by public funds.

Specifically, I would like to see groups created within the social science associations to systematically review and comment upon the research implications of major policy programs. These should be broadly constituted to represent the various schools of theory within each of the disciplines. They should not take stands for or against particular policies; rather, their charge would be to analyze both manifest and latent objectives and value implications and to lay out general research and evaluation approaches. Falcone's (1976) formulation of a research strategy for health planning for political scientists is an example.

An important part of the work of such groups would be to improve communication among social scientists, policy makers, and those who implement policy programs. Research on the uses of social science research demonstrates the importance of the problem-sensing and translation roles that social scientists can play. These groups could engage in liaison between those who set and implement policy and their respective disciplinary colleagues by formulating policy makers' interests and concerns in language and frameworks that suggest research needs and priorities. Similarly, liaison among groups would increase the comprehensiveness and connectedness of view that are essential for the analysis of public policy. The fruits of these efforts

should be published periodically in special issues of or supplements to journals devoted to health services research and widely distributed among policy makers.

Related to the substance of health policy research are issues pertaining to where and by whom it is done and how it is funded. Opportunities to direct information-gathering and research to particular, concrete matters are greatest under in-house and contract arrangements with research firms; research grants to universities seem most appropriate for longer-term investigations and the development of innovative methodologies. Once said, however, the difficult tasks remain of setting priorities among these various needs for information and establishing suitable support for the necessary division of labor. Again, the organizations in the field of health services research should make recommendations about how policy makers might develop a health services research policy that makes best use of the comparative advantages of various settings, talents, and interests.

In-house and contracted research will continue to be an integral part of a comprehensive health services research strategy. However, as I have noted, these mechanisms pose problems in that they often circumvent conventional means of quality assurance and channels of dissemination. Accordingly, I suggest that the editors of our journals should devote portions of their publications to analyses and criticisms of such research reports, either in their book review sections or, as warranted, in commissioned papers.

Finally, I urge those of us involved as social scientists in health services research and teaching to continuously reconsider the philosophical arguments that often separate us from the world of practical affairs, and to scrutinize the parochialisms that divide our research and knowledge along conventional disciplinary channels. It is undesirable to return to the primordial fusion of science and ethics, but we should not dismiss the possibility of a more unified social science in the service of fundamental values.

References

Aaron, H.J. 1978. *Politics and Professors: The Great Society in Perspective.* Washington, D.C.: Brookings Institution.

Anderson, O.W. 1967. Influences of Social and Economic Research in the Health Field: A Review. In Mainland, D., ed., *Health Services Research*, 11–48. New York: Milbank Memorial Fund.

——. 1979. Commentary. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):358–360.

Arrow, K.J. 1979. Commentary. *Milbank Memorial Fund Quarterly/ Health and Society* 57 (Summer):350–352.

Bernstein, I.N., and Freeman, H.E. 1975. *Academic and Entrepreneurial Research.* New York: Russell Sage Foundation.

Brewster, A.W. 1979. Commentary. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):345–347.

Brooks, H. 1978. The Problem of Research Priorities. *Daedalus* 107 (Spring):171–190.

Campbell, D.T. 1969. Ethnocentrism of Disciplines and the Fish-Scale Model of Omniscience. In Sherif, M., and Sherif, C.W., eds., *Interdisciplinary Relationships in the Social Sciences,* 328–348. Chicago: Aldine.

Caplan, N.A. 1979. The Two-Communities Theory and Knowledge Utilization. *American Behavioral Scientist* 22 (January-February):459–470.

——, Morrison, A., and Stambaugh, R. 1975. *The Uses of Social Science Knowledge in Policy Decisions at the National Level.* Ann Arbor: Institute for Social Research, University of Michigan.

Comptroller General of the United States, Congress of the United States. 1977. *Social Research and Development of Limited Use to National Policymakers.* Washington, D.C.: U.S. Government Printing Office.

Congressional Budget Office, Congress of the United States. 1979. *The Effects of PSROs on Health Care Costs: Current Findings and Future Evaluations.* Washington, D.C.: U.S. Government Printing Office.

DeFriese, G.H., and Seipp, C. 1978. Building a National Capacity for Health Services Research. *Health Services Research* 13 (Fall):238–242.

Dobson, A., Greer, J.A., Carlson, R.H., Davis, F.A., Kucken, L.E., Steinhardt, B.J., Perry, T.P., and Adler, G.S. 1978. PSROs: Their Current Status and Their Impact to Date. *Inquiry* 15 (June):113–128.

Dreyfus, D.A. 1977. The Limitations of Policy Research in Congressional Decision Making. In Weiss, C.H., ed., *Using Social Research in Public Policy Making,* 99–108. Lexington, Mass.: Lexington Books.

Eichhorn, R.L., and Bice, T.W. 1973. Academic Disciplines and Health Services Research. In Flook, E.E., and Sanazaro, P.J., eds., *Health Services Research and R&D in Perspective,* 136–149. Ann Arbor: Health Administration Press.

Falcone, D. The Challenge of Comparative Health Policy for Political Science. 1976. *Journal of Health Politics, Policy and Law* 1 (Summer):156–213.

Falk, I.S. 1979. Commentary. *Milbank Memorial Fund Quarterly/ Health and Society* 57 (Summer):337–344.

Fein, R. 1979. Commentary. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):353–357.

Fleming, D. 1979. Commentary. *Milbank Memorial Fund Quarterly/ Health and Society* 57 (Summer):380–384.

Fox, D.M. 1979a. From Reform to Relativism: A History of Economics and Health Care. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):297–336.

———. 1979b. Rejoinder. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):385–387.

Freidson, E. 1970. *Professional Dominance.* New York: Atherton.

Gibson, G. 1978. Methodological and Substantive Research. *Health Services Research* 13 (Fall):219–222.

Ginzberg, E. 1979. Commentary. *Milbank Memorial Fund Quarterly/ Health and Society* 57 (Summer):365–368.

Gouldner, A.W. 1965. Explorations in Applied Social Science. In Gouldner, A.W., and Miller, S.K., eds., *Applied Sociology: Opportunities and Problems,* 5–52. New York: Free Press.

Iglehart, J.K. 1978. PSROs Reinstated in FY 1979 Budget After Califano's Plea. *Hospital Progress* 59 (February):17–18.

Institute of Medicine. 1979. *Report on Health Services Research.* Washington, D.C.: National Academy of Sciences.

Janowitz, M. 1970. Sociological Models and Social Policy. In *Political Conflict,* 243–259. Chicago: Quadrangle Books.

Jones, C.O. 1976. Why Congress Can't Do Policy Analysis (or words to that effect). *Policy Analysis* 2 (Spring):251–264.

Klarman, H.E. 1979a. Commentary. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):369–370.

———. 1979b. Health Economics and Health Economics Research. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):371–379.

Klein, R. 1978. The Rise and Decline of Policy Analysis: The Strange Case of Health Policymaking and Britain. *Policy Analysis* 4 (Fall):459–475.

Last, J.M. 1977. Health Services Research: Does It Make a Difference? *New England Journal of Medicine* 297:1073.

Lehman, E.W., and Waters, A.M. 1979. Control in Policy Research Institutes: Some Correlates. *Policy Analysis* 5 (Spring):201–222.

Lewis, C.E. 1977. Health Services Research and Innovations in Health Care Delivery: Does Research Make a Difference? *New England Journal of Medicine* 297:423–427.

Lingwood, D.A. 1979. Producing Usable Research. *American Behavioral Scientist* 22 (January-February):339–362.

Lowi, T. 1969. *The End of Liberalism.* New York: Norton.

McLachlan, G., ed. 1978. *Five Years After: A Review of Health Care Research Management After Rothschild.* London: Oxford University Press.

Mechanic, D. 1978. Prospects and Problems in Health Services Research. *Milbank Memorial Fund Quarterly/Health and Society* 56 (Spring):127–139.

Myers, B.A. 1973. Health Services Research and Health Policy: Interactions. *Medical Care* 11 (July-August):352–358.

Moynihan, D.P. 1969. Social Science and Social Policy. In *Maximum Feasible Misunderstanding,* 167–205. New York: Free Press.

Myrdal, G. 1969. *Objectivity in Social Research.* New York: Pantheon Books.

———. 1973. The Place of Values in Social Policy. In *Against the Stream: Critical Essays on Economics,* 33–51. New York: Vintage Books.

Okun, A.M. 1975. *Equality and Efficiency: The Big Tradeoff.* Washington, D.C.: Brookings Institution.

Price, D.K. 1965. *The Scientific Estate.* Cambridge, Mass.: Harvard University Press.

———. 1978. Endless Frontier or Bureaucratic Morass? *Daedalus* 107 (Spring):75–92.

Rein, M. 1976. *Social Science and Public Policy.* New York: Penguin Books.

———, and White, S.H. 1977. Policy Research: Belief and Doubt. *Policy Analysis* 3 (Spring):239–271.

Rorem, C.R. 1979. Commentary. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):348–349.

Rosenthal, G. 1979. Of Economists and Economics, *Ceteris Paribus. Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):291–296.

Shortell, S.M., and LoGerfo, J.P. 1978. Health Services Research and

Public Policy: Definitions, Accomplishments, and Potential. *Health Services Research* 13 (Fall):230–237.

Spitzer, W.O., and Starfield, B. 1977. Health Services Research Can Make a Difference! *New England Journal of Medicine* 297:1046.

Somers, H.M. Commentary. *Milbank Memorial Fund Quarterly/Health and Society* 57 (Summer):361–364.

Wax, M. 1969. Myth and Interrelationship in Social Science: Illustrated through Anthropology and Sociology. In Sherif, M., and Sherif, C.W., eds., *Interdisciplinary Relationships in the Social Sciences,* 77–102. Chicago: Aldine.

Weber, M. 1963. Methodology of the Social Sciences. In Natanson, M., ed., *Philosophy of the Social Sciences: A Reader,* 335–418. New York: Random House.

Weiss, C. H. 1977. Introduction. In Weiss, C.H., ed., *Using Social Research in Public Policy Making,* 1–20. Lexington, Mass.: Lexington Books.

———, and Bucuvalas, M.J. 1977. The Challenge of Social Research in Decision Making. In Weiss, C.H., ed., *Using Social Research in Public Policy Making,* 213–234. Lexington, Mass.: Lexington Books.

Weiss, J.A. 1979. Access to Influence: Some Effects of Policy Sector on the Use of Social Science. *American Behavioral Scientist* 22 (January-February):437–458.

Williams, A.P. 1978. Improving Health Services Research. *Health Services Research* 13 (Fall):223–226.

Williams, S.R., and Wysong, J.A. 1977. Health Services Research and Policy Formulation: An Empirical Analysis and Structural Solution. *Journal of Health Politics. Policy and Law* 2 (Fall):362–387.

Wysong, J.A., and Ludwig, E.G. 1974. Health Services Research Centers: The Concept, Experience, and New Legislation. *Health Services Research* 9 (Fall):183–194.

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