

User Views on Data Collection by the Government Statistical Service

The Radical Statistics Group has recently received from Jenny Church the following request for user input concerning statistics collected by the Government.

As you may already be aware, the Government Statistical Service (GSS) is seeking to involve users more in determining priorities for data collection within the limited resources available. Bill McLennan, the Director of the CSO and head of the GSS, wishes to establish where the gaps might be in the overall statistical picture for the UK and earlier this year the Prime Minister gave his support to this review. As part of this process, the GSS Committee on Social Statistics (GSS(S)) has been asked to examine the requirements of government and other users for social statistics.

2. I am thus writing to you as secretary to GSS (S) to seek your views on the quality and range of social statistics produced by the GSS. The sort of broad issues on which the Committee would welcome your views include:

- (i) Which of the current GSS outputs on social statistics do you find most useful?
- (ii) What are the gaps you perceive in the current availability of social statistics? What are your priorities amongst these? Do you think the GSS is best placed to fill these and, if so, why?
- (iii) Are there areas where data are available, but you experience problems in access, timeliness, frequency or similar issues?
- (iv) What are your views on paying for government statistics, particularly if the GSS were to collect information not directly required by government?
- (v) How do you see your demands for social statistics changing over the next 5-10 years? How do you see the GSS needing to change its outputs in response?
- (vi) How effective are the mechanisms which already exist for you to exchange information and views with the GSS? How might they be improved?

3. I would welcome an initial response by the end of November. If you would like to follow this up with a meeting, I would be happy to arrange this. Separate Committees have been set up on economic statistics, regional statistics, computing, dissemination and EC matters and may be contacted separately on some of these topics. If, however, you wish to touch on them in your response to this letter, I will ensure that such comments are copied to the relevant Committee secretaries.

4. I am writing similarly to those on the attached list and will also be placing open letters in the RSS News and The Times Higher Education Supplement. Please let me know of any other organisations you feel should be consulted.

Please send any comments direct to:

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St Albans Traffic Study

Helping a local Action Group articulate its views.

The Environment

St Albans is a historic city in the process of adjusting to the changing conditions and needs of industry, commerce and land use. It also provides extensive restaurant facilities up to a late hour at its centre. However, it is still served by a network of roads based on the original medieval pattern.

The growth of distribution activities around the periphery has led to a significant increase in "ring" traffic through previously designated residential areas. Overloading of junctions also results in routine traffic queues at certain points every working day.

The Local Action Group

The growth of traffic on one of the "ring" roads has now reached 17,000 vehicles a day, including an increasing proportion of heavy goods vehicles. These vehicles have very high and continuous noise and pollution levels, illegal vehicle speeds and increased accident risks.

The local residents have formed a Traffic Action Group with the objective of ensuring that all their interests are considered and that a more tolerable and equitable solution can be found.

District Council Initiatives

About three years ago, a major one-way system was introduced without adequate consultation or planning. After a short period of increased traffic problems, this scheme was withdrawn leaving the problems unresolved.

St Albans Council have recently financed a new traffic study by the consultants W S Atkins at a reported cost of £300,000; the same problems are also being addressed by the County Council Road Safety Department.

There is every indication that the solution proposed by the Consultants will make the situation for many residents worse unless a modified approach can be agreed.

Community Support

The local residents felt that they needed some help to attempt to balance the technical facilities available. Members of the Community Operational Research Network were consulted and have been able to assist in a number of ways.

The Action Committee carried out an open ended Pilot Study of the concerns of the residents. Subsequently, a comprehensive questionnaire was produced and distributed individually to every household on the "ring" road.

A response of more than 70% has been obtained. Help has been provided with data input, analysis and graphical presentation of the results. These have been incorporated in an initial Executive Summary which has been prepared for general discussion.

Future Initiatives

Work continues on a number of fronts to represent the interests of the residents and the environment. At present, it is felt that too much weight is being given to the short term interests of cars and lorries, most of which are travelling through St Albans.

New optimisation methods appropriate to the situation are being developed which will, hopefully, identify alternative proposals which can be compared with official plans for the area. More comprehensive reports will then be prepared.

Radical Statistics Involvement

Many local campaigns are underway without a framework to learn from the experiences of others. Do any members know of similar exercises benefiting from "expert help". Should we provide a pilot service which may be able to fill this gap whilst giving work experience for members with free time.

Comments to:

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Book Reviews

Review of Authorities and Partisans The Debate on Unemployment and Health Mel Bartley £37.50 pp258 1992

This is an important book which should be read by all statisticians whose work has social implications. It is very appropriate to review it for *Radical Statistics* since Rad Stats members play a prominent role in the story.

The book is divided into two parts: 'The debate on unemployment and health' which broadly covers the historical development of the relevant research in the UK since about 1975, and 'Authorities and Partisans' which discusses research in sociological terms to examine the relationship between research and policy.

The first part of the book is written as a series of stages, beginning in 1975 when a unit for the study of Health Policy was set up at Guy's hospital. It is undeniable that unemployed people suffer more ill health. The question was, why? Crudely speaking there were two camps in the debate. On one side (the right?) it was argued that this is because ill people are more likely to become unemployed. The other side argued that being unemployed actually makes you ill. The focus of the debate changes from one camp to the other and Mel Bartley provides a very interesting account of the combat. The opening assault was a number of articles, and a 'World in Action' program highlighting the work of an American M Harvey Brenner, who looked at the experience in the USA and in the U.K. and concluded that rises in unemployment were associated with increased mortality. His work was then criticised by a group of econometricians led by Hugh Gravelle, who argued that people who were found to be unemployed were always 'different' to those employed. Further ammunition for the 'causationalists' came from work on suicides and unemployment by Steve Platt in Edinburgh but again the evidence was based on populations and not individuals and again this was subsequently criticised by Hugh Gravelle, on similar grounds to his objections of Brenner's work.

For the author the critical results came from the OPCS Longitudinal Study, as presented by David Jones at an Institute of Statisticians Conference in July 1984. For the first time the effects of being made unemployed could be observed on individuals, on whom some aspects of health prior to unemployment were known. In this paper, which he presented in 'typical LS style', was the initial outing of the 'wearing off' hypothesis. The key concept of this is that if a difference in mortality between any two groups in a population is caused by some form of selection, then mortality differentials

should disappear over time. In fact the opposite is seen to occur in the LS study, over time there is an *increase* in all cause mortality associated with unemployment. This study should have clinched the argument, but the debate went on. Further work, by Kath Moser and colleagues muddled the waters by appearing to show a *lower* mortality in people seeking work in the week preceding the 1981 census. However, factors to be taken into account included the fact that the numbers of men 'permanently sick' and 'early retired' had also risen greatly, so that those still in the labour market, even if unemployed, might be more likely to be selected for *good* health.

By now, however, the debate had shifted to claims that were more overtly political; should health inequalities be tackled by policies aimed at the behaviour of individuals, or by economic policies bearing on poverty and unemployment. It would appear that the media had grown tired of the scientific debate.

In part two Mel starts with a very interesting section on the history of public health and then discusses the organization of statistical and econometric research in the government. The next section deals with why scientists are interested in particular topics. In a paragraph that should be shown to all new researchers, including statisticians, she points out that for an academic researcher time is her means of production and 'the successful scientist will know when to terminate a poor investment, when to 'move on to other things''. Thus priorities shift in research, and individuals move on to different questions. Scientists involved in research on unemployment and health were altering their priorities and the research trickled to a close. She has quite a few damning comments about statisticians: 'Irrelevant excellence' 'statisticians caution is notorious' and finally 'the failing of the statisticians...was that their technical defence of their position never became translatable into terms accessible to potential allies'. There is a lesson in this for us all. She concludes with a discussion on the relationship between research and policy, on the way pointing out that Government statisticians, who were part of the group who claimed a causal relationship between unemployment and health, were also feeling vulnerable to criticism at that time, in the wake of the Rayner review.

In short then, this is a very interesting book. If I had a criticism, it is that it is a rather difficult book to read. Time scales are mixed up, abbreviations used often (although there is a list of abbreviations at the beginning) and the text liberally sprinkled with quotations. Although the debate is fascinating, I found the style of writing such that I could not read large chunks at a time and had to keep coming back to it. If only Richard Dawkins (say) could have been persuaded to assist in the writing!

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Health, Housing and Social Policy. Lorna Arblaster & Murray Hawtin Socialist Health Association 1993 £5.00

This slim volume is the sixth of the of a very informative series published by the Socialist Health Association under the title 'Towards Equality in Health'. If you do not have a copy of the earlier volume by Allison Quick and Richard Wilkinson on 'Income and Health', then you should remedy that lack: it demolishes the belief that behavioural life style is a key determinant of health and shows the remarkable correlation ($r=.86$) correlation between expectation of life in rich countries and the relatively equitable distribution of income to the poorer half of the population.

The present volume on housing does present the genuine puzzle of how such devastation of housing policy has been allowed to happen with very little public protest. The book is a very good source of all the statistics you could ever want to demonstrate the unfairness and blind stupidity of government housing policy. First the unfairness: government funding on housing is now less than the cost of mortgage income tax relief, having fallen (in real terms) from 13 in 1980 to 5.8 billion in 1992. The number of families accepted as homeless (even using the very restricted definition used to try to reduce cost) has tripled in the same period and two thirds of applicants are turned down. The government has reduced council expenditure on new social housing over threefold over the period 1989 to 1992, the needs for new households are not being met and building standards have been reduced to make it more difficult to provide housing for disabled people and others with special needs. Those renting from housing association who are working will have found a real reduction in their real income after paying rent. This arises from the government assumption that such tenants should pay one third of their income in rent: let them try that on mortgage payers and there would be a riot.

Of course all this has had a substantial effect on health. People, especially children, in temporary accommodation, suffer from more accidents, injuries and deaths from fires and infections. Around 1.5 million homes are unfit and a third of the homes in Scotland are damp, leading to respiratory problems. Mental health is severely affected in such conditions. There has been an increase by 50% over the last five years whilst in 1992 the water utilities showed profits of £1.5 billion. Water disconnections tripled from 1991 to 1992 with all the attendant (but not documented) increase in infections.

Now for the manifest stupidity. About 450,000 jobs have been lost in the building industry. It is estimated that the recession has cost the Exchequer four billion pounds in lost taxes and in welfare benefits. Receipts from sale of council houses account for 28 billion pounds, more than gas, electricity and BT. It costs twice as much to provide B/B accommodation as compared with council housing and private sector leasing yet little of that money has been permitted to be spent on new housing stock which would maintain employment. There has been a flight of the more affluent local authority tenants to buy so that estates have a more deprived social mix. As a result

some new estates are running into the same problems as older run down estates, despite being built four years ago. The longer term costs of such developments are likely to dwarf any short term costs. In addition lack of investment in energy conservation means that billions of pounds of social security money are being spent in heating the air above houses.

The book does at several points mention the aggregate effects of local groups of housing but does not fully develop the theme. More might have been made of the fact that it is the housing locality which has been shown (for example in the study of Inequalities in Health in the Northern Region) to have a profound effect on premature mortality. It is accepted that much of the drive away from local authority housing arose from the bureaucratic and insensitive attitudes of such authorities in the 60's and 70's.

More could have been made of how we could build on lessons of successes and failures in order to move forward. It is difficult to know how to stop the Tory juggernaut laying waste to what remains of the welfare state. It is not enough, as this book does, to present the facts and call for more equitable and efficient policies for health. We need to be able to begin to bridge the chasm between where we are now and what we want for the future. We do need to look to build support at local level. Local authorities certainly need to do more to try to win friends amongst their clients. Much of town hall practice is byzantine and out of touch. Genuine progress towards implementing the WHO vision of Health For All with its stress on genuine local participation could do much to energise people to change the political agenda and to might develop the collaboration of local councils and Health Authorities. In fact one innovative scheme of joint planning for investment in Newcastle is mentioned approvingly in passing. That would seem to be a good basis for suggesting the first steps we need to take.

As noted on several occasions, the government has made a serious mistake in publishing targets for improvement in health in 'The Health of the Nation'. It is pursuing so many policies which are are damaging to health that it will very publicly be seen to fail. Before these targets are quietly modified substantially (or even buried completely) they provide levers with which to challenge current policies. Oddly enough, arguments about equity and health policy are congruent: reducing inequalities and providing better services for the have-nots and the have-lesses are the only means by which significant health gains can be achieved. We do need to build on this logic, using the social and economic data which are liberally supplied in this book.

Frank Ledwith

From Markets to Common Sense Papers on Future Policies for Health Medical World/Socialist Health Association 1993. £2.00

This collection of papers are the result of a conference held in June 1993 to examine issues of the effects of changes (which one participant insisted should not be called 'reforms') in the NHS and to explore future policies for health.

There is a typically forthright and thoughtful piece from Andrew Wall discussing the conditions necessary for an organisation to learn in order to adapt to changing circumstances. As he points out the purchaser/provider split contravenes one crucial condition since there is a split between those who plan and those who deliver services. Ros Levenson deals with issues on consumer participation, suggesting that the reality of change in puny in comparison with the enormous weight of rhetoric.

David Blunkett indicates some broad strands of policy development towards prevention, increasing equity and strengthening accountability for the proper spending of public funds. Peter Westland provides the most detailed and devastating critique of government policy. He points out some of the contradictions: that health purchasers are being amalgamated into larger units as local authorities are being made smaller. There is a preference for giving funds to the NHS (where central control is firmly in place) in preference to local authorities. However these latter, though often Labour led, actually means test clients whereas NHS services are free. In addition he suggests that 'commercial confidentiality' from NHS Trusts will and does prevent forward joint planning of services beyond the next financial year. In essence the structures and policies laid out by government cannot work. The unanswered question is who will be held to blame for the resulting mess.

It was refreshing and novel to read Paul Marks, Deputy Head of Health at Unison, admit there has been and will continue to be rationing in health care provision. Rather than a simplistic condemnation he addresses the serious issue of a need for a much wider and better informed public debate on how we are to ration. He also refers to another requirement for a learning organisation which the government have ignored: the need continually to renew the vision and sense of values of the staff to secure their commitment. The government have demonstrated their managerial incompetence by riding roughshod over all manner of professional staff. The adverse consequences will be with us for a long time, long after any purported efficiency savings have been realised.

The article by Terry Davis MP is long on rhetoric and short on specifics. He does refer to the need to involve people in participation in planning, rather than just consultation. Sadly we see little of such process in the working of the Labour Party.

The papers do provide some interesting analyses of the mess we are in at present. What there is much less is some coherent vision of where we might head. I would have hoped that we might have some coherent vision and some suggestions of how it might be achieved. The vision of Health For All, with its stress on equity, participation and collaborative working would be a start. The Greater London Council, which exemplified many of the principles is mentioned approvingly. Have we all forgotten how little it was loved by the Parliamentary Labour Party for its so called 'loony left' sympathies including making links with all kinds of organisational mavericks? The notion that accountability for health care effectiveness will be solved or even much improved by having elected authorities seems simplistic. Local authorities are elected but do not on the whole have a good record on consulting and involving their customers, though things appear to be improving under pressure from the Audit Commission and (we have to admit) central government. In addition I think the government were elected and look where that has got us in terms of accountability.

I have been a Labour Party member for a long time, more in hope than in satisfaction of what has been achieved. There is not much I hear that sets my pulse racing about the possibilities for a new future. If I, as a committed supporter feel that, what would other radical thinkers feel, not to mention the large body of floating voters without whose support we will never see another Labour Government. George Bush seemed to have problems with 'the vision thing'. So apparently does the Labour Party. George lost the presidential election from an apparently invulnerable position. Maybe that gives a pointer to why the Labour Party has been singularly unsuccessful in its electoral quest this last decade and more.

Frank Ledwith

Medical Statistics: A Commonsense Approach 2nd. Edition

Michael J Campbell & David Machin

John Wiley 1993 £14.95

This introductory text-book seems to have stood the test of time since this is the second edition, with some revisions in the light of experience in use. It is aimed at medics who read research papers as well as those who might carry out research though would be useful to other researchers into health care. Its scope is wider than might be expected since it covers questionnaire design (albeit superficially) as well as more usual experimental and quasi-experimental designs and even cases where $N=1$.

As promised by the title the approach is commonsense with some useful examples of poor research which produces misleading data and a refreshing and helpful warning about over-reliance on tests of statistical significance: the use of confidence intervals as descriptors and aids to inference is well recommended. The section on the sensitivity and specificity of diagnostic test is particularly useful. Using a simple presentation of Bayes' theorem, it shows how the predictive value of a test is

dependent on its sensitivity and the prevalence of the condition. In addition it refers (though without anything like adequate explanation) to signal detection theory in suggesting that different levels of sensitivity and specificity can be linked to a single metric of discriminatory power for purposes of comparison between tests and within diagnostic tests. Maybe the paper I have been thinking of writing for 20 years to expound this point still needs to be written. If any reader knows that it has already been done, I would be glad to hear of it.

The book covers most of what I would expect to see in such a basic text: factorial designs, the analysis of categorical, discrete and continuous data. It sometimes seem to flirt with the notion that parametric tests require continuous and ratio data which I believe (but am not categorically sure, not being a mathematical statistician) are not required. I learned something about how to handle data from two sets of data which are expected and designed to correlate well together: testing for statistical significance is meaningless in such a case and an alternative approach is suggested. There is some mild steering away from one-way statistical testing on pragmatic grounds without exploring the conceptual mess involved.

Where I found the book weakest was in a systematic presentation of the link to the particular threats to valid inference posed by particular data and how you should design data collection in order to minimise them. In addition there might be more warning of the misuse of some statistical tests (Chi square is the most frequent in that respect). Presumably there is an assumption (hopefully justified in most cases) that a would-be researcher would consult an statistician at the outset. If so, there still would seem to be a gap in enabling readers of research systematically to consider the various threats to validity such as maturation, history and the reactive effects of testing.

I have referred health service staff who are research students to it as a handy text and they seem interested in the breadth of its scope. Its well balanced approach has grown on me as I have thought about using it a text for postgraduate courses. It does not have a very radical approach which would be sought for by readers of this journal but it does seek to avoid the rigidity of most mainstream medical statistics approaches.

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