

Using meta ethnography to synthesise qualitative research: a worked example

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Objectives: To demonstrate the benefits of applying meta ethnography to the synthesis of qualitative research, by means of a worked example.

Methods: Four papers about lay meanings of medicines were arbitrarily chosen. Noblit and Hare's seven-step process for conducting a meta ethnography was employed: getting started; deciding what is relevant to the initial interest; reading the studies; determining how the studies are related; translating the studies into one another; synthesising translations; and expressing the synthesis.

Results: Six key concepts were identified: adherence/compliance; self-regulation; aversion; alternative coping strategies; sanctions; and selective disclosure. Four second-order interpretations (derived from the chosen papers) were identified, on the basis of which four third-order interpretations (based on the key concepts and second-order interpretations) were constructed. These were all linked together in a line of argument that accounts for patients' medicine-taking behaviour and communication with health professionals in different settings. Third-order interpretations were developed which were not only consistent with the original results but also extended beyond them.

Conclusions: It is possible to use meta ethnography to synthesise the results of qualitative research. The worked example has produced middle-range theories in the form of hypotheses that could be tested by other researchers.

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Introduction

Methods for synthesising the results of quantitative research are well developed. The science of meta analysis has established its own norms and procedures, the criteria for which are in the public domain.¹ Meta analysis is a central part of the methodological canon of evidence-based medicine. Although, historically, qualitative research has not enjoyed the same degree of acceptability as quantitative research, the situation is changing.² With the greater acceptance of qualitative methods have come calls for appropriate methodologies for synthesising the results of qualitative studies.

The methods of meta analysis are not transferable to qualitative research for a number of pragmatic and epi-

stemological reasons. Computerised literature searches are likely to miss much qualitative research that is published in books. Criteria for judging the quality of published research are contested, as is the very idea of developing such criteria.³ Statistical methods for aggregating quantitative data are inapplicable to qualitative research. Thus the attempt to find methods for synthesising qualitative research is not about fitting the round peg of qualitative research into the square hole of quantitative methods but about developing separate methodologies.

The increase in the number of published qualitative studies in recent years has not yet led to the building of a cumulative knowledge base or to much theoretical development. The traditional method of summarising a field of research is the narrative literature review. In such a review, earlier work is summarised in order that the author(s) can make an informed judgement about the current state of knowledge. More recently, methods for reviewing literature systematically have been developed to allow readers to judge the quality, scope and comprehensiveness of published reviews.⁴ However, the goal of synthesis is to go beyond both narrative and systematic literature reviews. Strike and Posner⁵ have argued that synthesis involves some degree of conceptual innovation. Like a secondary analysis, qualitative synthesis

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could involve re-interpretation, but unlike secondary analysis it would be based on published findings rather than primary data.

Our attempt to conduct such a synthesis is based on a number of assumptions, which are discussed at the end of this paper. Given the contested nature of qualitative research,³ it is unlikely to gain universal endorsement from other qualitative researchers. It may, however, contribute to the debate by showing that such a synthesis is possible. In concentrating on the question of synthesis, we are leaving aside questions of the selection and appraisal of qualitative papers. The topic we have chosen is the perceived meanings of medicines and their impact on medicine-taking and communication with health care professionals. Blaxter and Britten⁶ have already reviewed this subject in relation to community pharmacy and our aim was to show how meta ethnography can add to such narrative reviews.

Method

There are no standard methods for conducting syntheses of qualitative research, but Miles and Huberman⁷ have identified some possible methods within an overall approach to qualitative data analysis that they classify as cross-case analysis. Other methods include the case survey method suggested by Yin⁸ and the multiple exemplar strategy described by Denzin.⁹ One further approach used in educational research and applied in a limited way in nursing research^{10,11} and other settings¹² is meta ethnography.¹³ As this is perhaps the most well-developed method for synthesising qualitative data, and one that clearly has origins in the interpretive paradigm from which most methods of primary qualitative research evolved, it was the method selected.

Meta ethnography provides an alternative to traditional aggregative methods of synthesis. It is a method that involves induction and interpretation, and in this respect it resembles the qualitative methods of the studies it aims to synthesise. The product of such a synthesis is the translation of studies into one another, which encourages the researcher to understand and transfer ideas, concepts and metaphors across different studies. It is this aspect of mutual translation that distinguishes meta ethnography from more traditional methods of literature review. While the translations allow for comparison between different studies, they should preserve the structure of relationships between concepts within any given study. In general terms, translations can either be literal, word for word, translations or they can be idiomatic translations, in which the meaning of the text is preserved. The meta ethnographic approach emphasises this preservation of meaning. Interpretations and explanations in the original studies are treated as data, and are translated across several studies to produce a synthesis.

In a synthesis, studies can relate to one another in one of three ways: they may be directly comparable as reciprocal translations; they may stand in opposition to one another as refutational translations; or taken together they may represent a line of argument.

Noblit and Hare¹³ outlined a seven-step process for conducting a meta ethnography (Box 1). As ethnographers, they were primarily interested in working with metaphors. We use the term meta ethnography as it is the one used by Noblit and Hare, even though the method is applicable to studies that are not ethnographies. In this worked example of lay beliefs about medicines, we use concepts rather than metaphors, and illustrate a reciprocal synthesis.

Results

Getting started

The scope of the earlier review⁶ was too wide for our proposed synthesis. The specific research question we aimed to address in the synthesis was: How do the perceived meanings of medicines affect patients' medicine taking behaviour and communication with health professionals? The earlier review had concluded (p 16):

All in all, the literature shows that lay meanings of medicines are potent, varied, and probably very different from health professionals' own meanings, although this latter question has not been explored. Engagement with lay people's beliefs by health professionals is likely to lead to better communication and more effective advice and counselling about medicines, although this also needs further investigation. It is known that what people say depends in part on who they are talking to, and in particular, that people prefer not to say certain things to their doctors.

By choosing an area that we had contributed to ourselves, we were able to explore the question of asking the authors of synthesised papers to comment on a synthesis of their work.

Deciding what is relevant to the initial interest

The scope of a synthesis is a crucial question, and one that was side-stepped by the decision to provide a worked example in this exploratory study. Noblit and Hare¹³ made it clear that the scope of a meta ethnography will often be more restricted than that of many narrative reviews, due to the wish to avoid making (or trying to make) gross generalisations across disparate fields. For the worked example, we decided to focus on studies that had examined the meanings of prescribed medicines

Box 1 Seven steps of Noblit and Hare's meta ethnography¹³

1. Getting started
2. Deciding what is relevant to the initial interest
3. Reading the studies
4. Determining how the studies are related
5. Translating the studies into one another
6. Synthesising translations
7. Expressing the synthesis

for patients with a limited range of conditions. We arbitrarily chose three papers written by some of the present authors, and one similar study conducted with a contrasting group of patients.¹⁴⁻¹⁷ The first three of these studies had been included in the earlier review. The synthesis was based on the assumption that the studies being synthesised were of acceptable quality, as in this paper we do not address the question of appraisal of qualitative research.

Reading the studies

This stage involved the careful reading of the chosen papers in order to identify the main concepts. It soon became clear that, as well as identifying the main concepts, we needed to record the details of the study setting and participants, including the nature of the sample and the type of medication; these provided the context for the interpretations and explanations of each study.

Determining how the studies are related

This stage required that the relationships between the concepts arising from the different papers were considered. We looked across the different papers for common and recurring concepts. These key concepts were: adherence/compliance, self-regulation, aversion, alternative coping strategies, sanctions and selective disclosure. The first two of these concepts represent different aspects of medicine-taking. Adherence/compliance represents the traditional view¹⁸ of medicine-taking in which the patient follows the doctor's orders and does what he or she is told. Self-regulation represents a different view of medicine-taking in which patients make their own decisions and use medicines in ways that reflect their own priorities. The concept of aversion represents beliefs and attitudes that express dislike of medicine-taking or which emphasise the negative aspects of medicine-taking, such as side-effects. The concept of alternative coping strategies refers to other ways (than the use of prescription medicines) in which people treat themselves, and may include alternative and complementary therapies as well as self-help strategies such as diet and exercise. The concept of sanctions refers to a range of strategies employed by health professionals, or other people acting on behalf of health professionals, to either encourage or coerce patients to take their prescribed medicines. Finally, the concept of selective disclosure refers to the ways in which patients withhold certain pieces of information about themselves or their medicine-taking behaviour from health professionals.

In order to be explicit about how the concepts compared with one another, we created a grid into which we placed the concepts from each paper (see row labels in Table 1). The first four rows of the grid include relevant details of the study setting and research design. These methodological details are essential contextual information for the synthesis. From the fifth row onwards, each row of the grid represents a key concept.

In labelling the rows we aimed to use terminology that encompassed all the relevant concepts from each paper. The last row of the grid represents the main explanation or theory arising from each paper that was relevant to our research question.

In developing the grid, we used Schutz's notion of first- and second-order constructs.¹⁹ Schutz used the term first-order construct to refer to the everyday understandings of ordinary people and the term second-order construct to refer to the constructs of the social sciences. Thus, in Schutz's terms, the explanations and theories in the last row of the grid are second-order interpretations.

Translating the studies into one another

We then completed the grid, entering each paper into a separate column in Table 1. Entries in parentheses contain explanations of the contents of the cell; thus the entry in the adherence/compliance cell of the table for the Donovan paper¹⁴ is placed in parentheses because respondents in this study did not perceive compliance to be an issue. The empty cells are those for which there were no relevant data in the paper concerned. At this stage we also needed to include the second-order interpretations arising from each paper. Those in quotation marks use the original author(s)' own words; those not in quotation marks are based on our paraphrasing of the original papers.

As a way of remaining faithful to the meanings and concepts of each study, the terminology used in the original paper is preserved in the grid. Each cell of the grid was considered in turn. First, we needed to identify the actual concepts described in the paper concerned; second, we needed to make sure that the concept was encompassed by the key concept used to label that row of the grid. Sometimes the key concept borrowed the terminology of one of the constituent papers (the key concept self-regulation, for example, was taken from the Rogers et al paper¹⁷) and some key concepts were taken from other literature. Thus, by completing the grid, we had established that each concept in each paper was encompassed by one of the key concepts in the grid.

Synthesising translations

In the same way that it is often difficult to explain exactly how qualitative analysis is actually done, this stage of the synthesis cannot be reduced to a set of mechanistic tasks. By reading the concepts and interpretations off the grid, it was possible to establish the relationships between these four studies. It became clear that the studies were not refutations of one another even when a particular concept was not identified in a particular paper (the empty cells of Table 1). The relationships between them seemed to be reciprocal, from which a line of argument could be developed. In Schutz's terms, the building blocks for the synthesis were the second-order interpretations of the original studies, from which we constructed several (third-order) interpretations. The first three of these third-order interpretations remained

Table 1 Completed grid: lay meanings of medicines

Methods and concepts	Donovan and Blake ¹⁴	Morgan ¹⁶	Britten ¹⁵	Rogers et al ¹⁷
Sample	54 patients with suspected inflammatory arthropathy	60 white and Afro-Caribbean patients treated for hypertension for at least one year	30 patients, attenders and non-attenders	34 patients with a diagnosis of schizophrenia or schizo-affective disorder
Data collection	Home interviews pre and post consultation; observation of consultations	Home interviews	Home interviews	Interviews
Setting	Three rheumatology units	15 general practices	Two general practices	Different points in the mental health system
Type(s) of medicine	NSAIDs and second-line drugs	Antihypertensive drugs	Unselected	Neuroleptic medication
Adherence/compliance	(Patients do not perceive compliance to be an issue)	Stable adherence and problematic adherence	Correct behaviour and routine medicine-taking	(Patients mentioned benefits of taking medicines)
Self-regulation	Levels of non-compliance	Leaving off drugs	Preference for not taking drugs	Adjustment of medication, self-regulation
Aversion	Dislike of taking drugs, fear of side-effects, weakness, dependence	Fear of side-effects, addiction, harmful effects of drugs	Aversion to medicines, medicines as harmful	Wide range of side-effects
Alternative coping strategies	Range of alternative remedies	Traditional (herbal) remedies	Use of alternative medicine	Alternative coping strategies
Sanctions	-	Patients warned by doctors and told severely about the need to take the tablets regularly	-	Coercion from significant others, fear of coercion from mental health professionals
Selective disclosure	Patients did not tell doctors of altered doses	-	-	Management of information to psychiatrists
Explanation/theory (second-order interpretation)	'Patients carry out a "cost-benefit" analysis of each treatment, weighing up the costs/risks of each treatment against the benefits as they perceive them'	Medicine-taking is influenced by cultural meanings and cultural resources	Patients may not articulate views that they do not perceive to be medically legitimated	'the self-regulation of medication appears to have been circumscribed or inhibited by the impact of the threat of social and professional sanctions'

NSAIDs, non-steroidal anti-inflammatory drugs.

Note: Entries in parentheses are explanations for what would otherwise be empty cells; entries in quotation marks are the original authors' own words (see previous page).

close to the original interpretations, whereas the fourth was derived from the first three. The steps of the synthesis, including the key concepts and second- and third-order interpretations, are given in Table 2.

In Table 2, a line of argument is developed by considering each concept and second-order interpretation in turn. The line of argument, which constitutes the synthesis achieved in this worked example, is as follows. There are two distinct forms of medicine-taking: adherent medicine-taking and self-regulation. The latter reflects aversion to medicines. The use of alternative coping strategies is one expression of this aversion. In self-regulation, patients carry out their own cost–benefit analyses, informed by their own cultural meanings and resources. Thus the concept of self-regulation includes the use of alternative coping strategies. Sanctions from health professionals, such as warnings, coercion or the threat of coercion, serve to inhibit self-regulation which can only flourish if sanctions are not severe. There is selective disclosure in the way in which patients manage the information they give to health professionals. Patients may not articulate views or information that they do not perceive to be medically legitimated, such as their use of alternative coping strategies. Fear of sanctions and guilt can produce selective disclosure.

At this stage of the synthesis, the first author (who had been responsible for the preliminary work) fed the results back to the other authors, who included the authors of two of the synthesised papers. They were able to confirm the congruence of the third-order interpretations with their own data. Some of the concepts that had not been included in the chosen papers had in fact been published elsewhere. For example, the concept of selective disclosure (not telling doctors of altered doses) did not appear in the actual paper that was included for the worked example¹⁶ but was described in another paper about the same study.²⁰ In a comprehensive synthesis, both papers would have been included if they had each contributed something different. The explanations and theories described by the authors of the four included papers

reflected what they chose to focus on in those papers. Other, unarticulated, explanations might also be compatible with the data. There was a general agreement that each concept or explanation was applicable to all four studies, although coercion was most apparent in the psychiatric study.

Expressing the synthesis

This paper is one attempt to express the synthesis. The potential audiences for this kind of synthesis include practitioners (doctors, nurses, pharmacists), policy-makers and qualitative researchers. Practitioners may be more interested in the clinical and practical implications of this work for their own practice; researchers may be more interested in the details of the methodology and the questions it raises for future research. For practitioners, we suggest that a full synthesis along the lines suggested here would help clinicians manage the tension between sanctions, however mild, and open communication about medicine-taking. This could be facilitated by the acknowledgement and acceptance of self-regulation and patients' reasons for self-regulating. Policy-makers will want to know which findings are generalisable across settings and which are not. A full synthesis could sensitise policy-makers to the factors likely to enhance open communication in a range of settings. For researchers, we suggest that this methodology is a promising one for qualitative researchers wishing to synthesise their work in a systematic and rigorous fashion, and to develop its theoretical and conceptual aspects. This worked example suggests further hypotheses about medicine-taking that could be tested by other researchers. All the third-order interpretations are in the form of testable hypotheses.

Discussion

We have demonstrated the use of one method, meta ethnography, to synthesise the results of qualitative research. Building on the explanations and interpretations of the

Table 2 Synthesis, including concepts and second- and third-order interpretations

Concepts	Second-order interpretations	Third-order interpretations
ADHERENCE/COMPLIANCE: stable adherence; correct behaviour and routine medicine-taking SELF-REGULATION: problematic adherence; levels of non-compliance; leaving off drugs; preference for not taking drugs; self-regulation	(a) Patients carry out a 'cost–benefit' analysis of each treatment, weighing up the costs/risks of each treatment against the benefits as they perceive them	(c) Self-regulation includes the use of alternative coping strategies
AVERSION: dislike of taking drugs; fear of side-effects; aversion to medicines; harmful effects of drugs	(b) Medicine-taking is influenced by cultural meanings and cultural resources	
ALTERNATIVE COPING STRATEGIES: range of alternative remedies; traditional remedies SANCTIONS: patients are warned by their doctors and told severely about the need to take the tablets regularly; coercion from significant others, fear of coercion from mental health professionals	(d) Self-regulation is . . . inhibited by . . . the threat of social and professional sanctions	(e) Self-regulation flourishes if sanctions are not severe
SELECTIVE DISCLOSURE: Patients do not tell doctors of altered doses; management of information to psychiatrists	(f) Patients may not articulate views that they do not perceive to be medically legitimated	(g) Alternative coping strategies are not seen by patients as medically legitimate (h) Fear of sanctions and guilt produce selective disclosure

constituent studies, we developed third-order interpretations, which were at the same time consistent with the original results and also extended beyond them. It is these third-order interpretations that justify the claim that meta ethnography achieves more than a traditional literature review, but in relation to a more focused question. They represent a conceptual development that constitutes a fresh contribution to the literature. In particular, six key concepts have been identified and linked together in a line of argument that accounts for patients' medicine-taking behaviour and communication with health professionals in different settings. The worked example has produced middle-range theories in the form of hypotheses that could be tested by other researchers.

The difference between this synthesis and a traditional narrative or systematic literature review lies in the systematic identification and charting of the key concepts in the papers being synthesised. In this synthesis, the concepts of each study were compared one by one with the key concepts in order to test the extent to which they endorsed or contradicted them. The conclusions of each study were extracted in the form of an explanation, interpretation or description as appropriate. These explanations, interpretations and descriptions were then compared across the whole set of studies. The worked example we have provided does not include examples of refutational studies, and in developing this approach such studies would need to be considered. The inclusion of a larger number of papers would also allow the key concepts to be described in more detail.

The synthesis is based on several assumptions that need to be made explicit. It is assumed that the studies are commensurable, that the results of each study are not specific to one particular context at one particular point in time, and that concepts are transferable across settings. These assumptions are unlikely to be endorsed by all qualitative researchers. Some will argue that it is impossible to synthesise studies that are carried out in such different contexts and that the attempt to do so ignores the rich detail which characterises good qualitative research. They will argue that the resulting generalisations fail to do justice to the original studies. Others will argue that the attempt to devise functional equivalents of meta analysis is epistemologically naïve and inappropriate. Yet others would reject any form of generalisation at all. Postmodernists would argue that the language games of evidence-based medicine and qualitative research are incommensurable.²¹ Our position is that the full contribution of qualitative research will not be realised if individual studies merely accumulate and some kind of synthesis is not carried out. The method of synthesis should be appropriate to the research being synthesised, hence our choice of an interpretive method such as meta ethnography. We think that there are generalisations to be made across qualitative research studies that do not supplant the detailed findings of individual studies, but add to them. To claim that generalisation is not possible is to deny the

transferability of any shared meanings or generative mechanisms.

The assumptions on which the synthesis is based may be tested by inviting authors of synthesised studies to consider the applicability of the third-order interpretations to their own work. In our example, the inclusion of the paper by Rogers et al,¹⁷ which was based in a different setting from the other three papers, was essential to achieving the higher level of abstraction aimed for in the meta ethnography. Any attempt to separate medicine-taking for mental and physical health problems would have led to the exclusion of this paper. The results of this worked example suggest that it may be important deliberately to include studies conducted in disparate settings. Given that all the included studies were conducted in the UK, it would clearly be important in a full synthesis to include studies carried out in other countries and other systems of health care.

In this paper we are concerned solely with the question of synthesis, and do not consider the related issues of literature searching or appraisal of qualitative research. Any assessment of the quality of included studies has to be carried out before the start of the synthesis in order to decide which studies to include. However, it is also possible that further judgements about quality and suitability for inclusion will need to be made during the process of synthesis. Noblit and Hare¹³ argue that the worth of studies is determined in the process of achieving a synthesis. Methodological details are relevant for synthesis in relation not only to quality but also to context. In the worked example, the context of the paper by Rogers et al¹⁶ was significantly different from the context of the other papers. The fear of coercion was a particular feature of the mental health context and a knowledge of this context was necessary for understanding the interpretations of this study. The issue of coercion is not, however, unique to the mental health context.²²

By choosing studies with comparable theoretical assumptions, we did not have to address the issue of commensurability. Although the technique of meta ethnography was developed by ethnographers, we have applied it to other kinds of study. The four papers included in this synthesis were all based on a similar interpretive framework, aiming to analyse participants' accounts on the basis of semi-structured interviews. It is possible that papers located within different theoretical traditions could not be included in the same synthesis, although we have not tested this. This might be assessed by including studies of communication about medicines that use conversation or discourse analysis for example.

This worked example has raised a number of issues that require further consideration. It shows that it is possible to synthesise papers in a way that is different from a narrative review and which, we believe, produces new insights. Meta ethnography offers a method for combining studies that is akin to the methods of analysing primary qualitative data. It is impossible to conduct this kind of synthesis, or to develop third-order constructs more generally, without some kind of

explanation or theory, generated either by the author or the synthesiser. This underlines the need for qualitative research to produce such second-order interpretations and explanations and to move beyond description.

In meta analysis, it is often necessary to go back to the original data in order to check the analysis. In this worked example, we deliberately included our own papers in order to be able to consider this issue. This allowed us to consider whether concepts not mentioned in the papers chosen for synthesis had in fact been mentioned in other papers about the same research. In a comprehensive synthesis, all the relevant papers are likely to be included. We think that it is very likely that others using this method will want to consult original authors in order to test the validity of the third-order interpretations and the extent to which they are supported by the primary data. Such an exercise resembles member validation in primary research. Although this technique has been criticised by Bloor,²³ he also concluded that such techniques could be potent agents for reflexive awareness. Certainly discussions with original authors could lead to constructive dialogue about the interpretation of findings.

Further research will also need to be done in terms of including greater numbers and more divergent studies. This worked example, albeit small and conducted with the original authors, offers evidence that qualitative synthesis is possible and may be able to provide clearer and more succinct findings for practitioners and policy-makers than individual studies or narrative reviews.

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References

1. Cook DJ, Sackett DL, Spitzer NO. Methodologic guidelines for systematic reviews of RCTs in health care from the Potsdam consultation on meta analysis. *Journal of Clinical Epidemiology* 1995; 48: 167–171
2. Pope C, Mays N. *Qualitative research in health care*, 2nd edn. London: BMJ Books, 1999
3. Murphy E, Dingwall R, Greatbach D, Parker S, Watson P. *Qualitative research methods in health technology assessment: a review of the literature*. *Health Technology Assessment* 1998; 2: 167–198
4. <http://www.york.ac.uk/inst/crd/report4.htm>
5. Strike K, Posner G. Types of syntheses and their criteria. In: Ward S, Reed L, eds. *Knowledge structure and use*. Philadelphia: Temple University Press, 1983
6. Blaxter M, Britten N. Lay beliefs about drugs and medicines and the implications for community pharmacy. Manchester: Pharmacy Practice Research Resource Centre, 1996
7. Miles MB, Huberman AM. *Qualitative data analysis: an expanded source book*. Thousand Oaks, CA: Sage, 1994
8. Yin RK. *Case study research: design and methods*. Newbury Park: Sage, 1989
9. Denzin NK. *Interpretive interactionism*. Applied social research methods series, vol 16. Newbury Park: Sage, 1989
10. Jensen LA, Allen MN. A synthesis of qualitative research on wellness–illness. *Qualitative Health Research* 1994; 4: 349–369
11. Paterson BL, Thorne S, Dewis M. Adapting to and managing diabetes. *Image: Journal of Nursing Scholarship* 1998; 30: 57–62
12. Pielstick CD. The transforming leader: a meta-ethnographic analysis (http://www.findarticles.com/cf_0/m0HCZ/3_26/63323086/print.jhtml)
13. Noblit GW, Hare RD. *Meta-ethnography: synthesizing qualitative studies*. Newbury Park: Sage, 1988
14. Donovan JL, Blake DR. Patient non-compliance: deviance or reasoned decision-making? *Social Science and Medicine* 1992; 34: 507–513
15. Britten N. Lay views of drugs and medicines: orthodox and unorthodox accounts. In: Williams SJ, Calnan M, eds. *Modern medicine: lay perspectives and experiences*. London: UCL Press, 1996: 48–73
16. Morgan M. Perceptions and use of anti-hypertensive drugs among cultural groups. In: Williams SJ, Calnan M, eds. *Modern medicine: lay perspectives and experiences*. London: UCL Press, 1996: 95–116
17. Rogers A, Day JC, Williams B, Randall F, Wood P, Healy D et al. The meaning and management of neuroleptic medication: a study of patients with a diagnosis of schizophrenia. *Social Science and Medicine* 1998; 47: 1313–1323
18. Stimson GV. Obeying doctor's orders: a view from the other side. *Social Science and Medicine* 1974; 8: 97–104
19. Schutz A. *Collected papers*, vol 1. The Hague: Martinus Nijhoff, 1962
20. Morgan M. The significance of ethnicity for health promotion: the use of anti-hypertensive drugs in inner London. *International Journal of Epidemiology* 1995; 24: S79–S84
21. Lyotard J-F. *The postmodern condition: a report on knowledge*. Manchester: Manchester University Press, 1984
22. Rogers A, Pilgrim D. The risk of resistance: perspectives on the mass childhood immunisation programme. In: Giabe J, ed. *Medicine, health and risk: sociological approaches*. *Sociology of health and illness monograph*, vol 1, 1995: 73–90
23. Bloor M. Techniques of validation in qualitative research: a critical commentary. In: Miller G, Dingwall R, eds. *Context and method in qualitative research*. London: Sage Publications, 1997: 37–50