



WHO

REGIONAL OFFICE FOR EUROPE

SCHERFIGSVEJ 8
DK-2100 COPENHAGEN Ø
DENMARK

TEL.: (45) 39 17 17 17
TELEFAX: (45) 39 17 18 18
TELEX: 15348 AND 12000

e 54617
EUR/ICP/INFO 02 03 05
ENGLISH ONLY
UNEDITED
E54617

COMMON METHODS AND INSTRUMENTS FOR HEALTH INTERVIEW SURVEYS IN EUROPE

Report on the 4th WHO Consultation

Copenhagen
26–28 February 1997

1997

EUR/HFA target 35

TARGET 35

HEALTH INFORMATION SUPPORT

By the year 2000, health information systems in all Member States should actively support the formulation, implementation, monitoring and evaluation of health for all policies.

ABSTRACT

Health interview surveys (HIS) comprise a unique method of collecting specific types of data that are indispensable for health monitoring. To improve the availability and comparability of HIS data internationally, the WHO Regional Office for Europe initiated the HIS project. The specific objectives of the project are:

- to develop common methods and instruments for HIS;
- to use these as a reference for collecting and adjusting data already existing in countries to improve their comparability; and
- to promote the use of common instruments in the surveys conducted by countries.

The meeting was the fourth in a series of consultations organized under the aegis of the project. The meeting reviewed progress to date, discussed the possibilities of developing common instruments for additional indicators, and agreed on a plan of work for the future.

Keywords

HEALTH STATUS INDICATORS
HEALTH SURVEYS
INTERVIEWS – methods
EUROPE

CONTENTS

	<i>Page</i>
Opening of the Meeting	1
The importance of population surveys for monitoring health policies	1
Achievements in working together – basis for the future	3
The future of the project	3
Working group sessions – developing common methods and instruments	5
Chronic physical conditions	5
Mental disorders and social disability	6
Alcohol consumption	7
Physical activity	8
Use of curative medical services	9
Use of medicines	10
Use of preventive health care	10
Healthy nutrition	11
Adjusting readily available survey data for international comparisons	12
General conclusions from the results of the working groups	13
The way ahead	14
Responsibilities	14
Making use of the meeting materials	14
The next steps	14
Other business	15
Annex 1. General structure of papers and subgroup discussions on specific proposed common instruments and for reporting back to plenary	16
Annex 2. Participants	18
Annex 3. Working papers and background documents	21



Opening of the Meeting

The meeting was opened by Dr Serguei K. Litvinov, Director, Programme Management, who highlighted the importance of health interview survey (HIS) data for monitoring and evaluating the health for all (HFA) strategy. Routine statistical channels were insufficient for obtaining information on all the desired HFA indicators and therefore this project was especially important. He also mentioned the challenge for countries that were beginning new surveys, and that recommended common instruments could be considered at the design stage of those surveys.

Dr Anatoly Nossikov outlined the history of the HIS project, including previous consultations, and the scope and purpose of the fourth consultation: to review experiences and developments so far and learn from them, to pave the way for the development of more common instruments, and to plan for the immediate future of the project (particularly in view of the application to the BIOMED 2 programme of the European Commission (EC) and the creation of an inventory of those interested to continue co-operating actively in the project).

The importance of population surveys for monitoring health policies

Mr Anup Nanda elaborated on the monitoring and evaluation of the WHO European strategy for HFA and on related information needs and products. In terms of the HFA targets, HIS data were especially important for monitoring the achievement of the main HFA goals dealing with "Health to Life" and "Life to years", and of the necessary changes in, for example, lifestyles. He specifically highlighted the functions and main activities of the Epidemiology, Statistics and Health Information (ESI) unit of the Regional Office. He gave some examples of how the HFA monitoring reports could be used to identify trends in, for example, life expectancy or smoking prevalence in one country compared to another and gave specific examples of how HIS data had already been used in these reports. Such comparisons were important for action in the field of health policy, as they could provide an important international mirror and the opportunity to learn from one another's successes and failures. He also touched on the various other products and projects of ESI at the European and country levels, and on networking with other international organizations. With respect to the latter, the development of international telecommunication networks was particularly interesting.

Lastly, Mr Nanda summarized the background of the HIS project and its specific objectives, these being:

- to develop common methods and instruments for HIS;
- to use these as a reference for collecting and adjusting data already existing in countries in order to improve their comparability; and
- to promote the use of common instruments in the surveys conducted by countries.

With regard to the third objective, he did not expect the "blue book"¹ to play a role by itself, although in effect it had already functioned in this way (several countries had started using the common instruments). A number of participants felt that this was indeed an important function of this recent publication.

Dr Anne Johansen then gave an introduction on the views of the EC on health monitoring. The involvement of the EC had started with the Maastricht Treaty, which had provided the EC with a mandate to ensure a high level of health protection. Disease prevention and health promotion formed the framework for EC activity in the health field. The EC could not dictate health policy, but could provide incentives and information to support current policies and programmes.

A programme to monitor health developments had been drafted, and was likely to be adopted in a few months. Aspects of the programme were the establishment of the types of indicators desired, the instruments for collating and exchanging data, e.g. by means of an electronic network, and analysis of data. The EC particularly wanted to avoid duplication with other efforts and was therefore aiming at subsidiarity, i.e. to complement the areas that were not covered by its member states and to work together with other organizations such as WHO and OECD.

For a number of indicators, a community-wide survey would be the best approach to health monitoring, but the EC did not have sufficient financial resources for that. The aim was therefore to complement existing community-wide surveys, in particular the ECHP and the Eurobarometer Survey, and to tap existing national surveys. For the latter, harmonization of instruments was felt to be important, and this was reflected in the interest shown by the EC in the present consultation.

Mr Jean-Marie Robine gave an overview of the usefulness of surveys for monitoring inequalities in different populations, particularly from the experience of the REVES Network on Health Expectancy. Direct comparison of health expectancy data between countries was hampered because of differences in the health concepts used and in calculation methods. However, health expectancies could be used to show inequalities between the sexes, social groups and geographical areas within a country, and the nature of these inequalities could be compared between countries. For direct comparison of health expectancy indices and monitoring of health differentials between countries, however, the input data for the calculations should be harmonized. Therefore, the development of common instruments for health status and socioeconomic variables and a common methodology for HIS were essential.

Dr Björn Holstein gave an interesting presentation on the use of the international study on the health behaviour of schoolchildren for monitoring trends in adolescent health. This study had already been conducted four times and had gained importance with respect to the number of participating countries, developing and complying with a common research protocol. Challenges for the immediate future were to improve the sampling procedure (standardization was very difficult) and to be more careful in ensuring compliance with the study protocol. Furthermore, Dr Holstein felt it important to collect contextual data regarding the social and cultural setting of the surveys.

Dr Holstein illustrated the level of comparability of the data from the schoolchildren study with some examples: smoking data appeared to compare well, whereas those on alcohol consumption and perceived health, for example, were not sufficiently comparable. Comparability was predominantly judged from the consistency of patterns between countries.

¹ DE BRUIN, A., PICAUVET, H.S.J. & NOSSIKOV, A. *Health interview surveys. Towards international harmonization of methods and instruments*. Copenhagen, WHO Regional Office for Europe, 1996 (WHO Regional Publications, European Series, No. 58).

Achievements in working together – basis for the future

Dr Nossikov gave an overview of the achievements of the HIS project and outlined the results of the previous three consultations. After the third consultation a need had been felt for a review of the objectives and plan of work in the harmonization of methods and instruments. This had resulted in the first place in an updated review of the achievements so far in the form of the "blue book". Furthermore, an inventory of surveys had been carried out to determine the opinions of the participants with regard to future priorities. The results of this inventory had been used in the drafting of a project plan for the HIS project. Initially this project was used to seek additional partners for the HIS project so that its base was strengthened and more Member States directly contributed in addition to the longstanding support of CBS Netherlands. Subsequently the project plan was also used for the drafting of the BIOMED 2 proposal.

Mr Jaap van den Berg gave an evaluation of the usefulness of available survey data for international comparisons. With respect to the more factual indicators, such as smoking and body mass index, the outlook for direct international comparisons was positive. However, it was difficult to compare data on perceptions of health states or capacities. Even when careful attention was paid to the translation of wording, or when answer categories were combined for better comparison, there was still the unresolved problem of differences in the cultural meaning of the question and the answers to it. To evaluate this better, it was felt necessary to use data on such indicators in combination with data on other, related indicators.

Lastly Dr Jiri Holub and Dr Jean Tafforeau gave an overview of the experiences in their respective countries in using the recommended instruments of the previous consultations (i.e. from the "blue book"). In the Czech Republic it was felt very useful to include the recommended instruments in the survey. Some problems had been encountered with respect to personal questions on sensitive matters, and with the variety of reference periods used in the different questions. On the whole, however, the experiences had been positive and there was a need to have more recommended instruments on the areas not yet covered.

The recommendations of the consultations had also been useful in the design of the Belgian survey, though there was a felt need to further develop the instruments for socioeconomic classification, chronic conditions, nutrition, etc. For the future, Dr Tafforeau stressed that it was important to use more rigorous criteria and better argumentation for common instruments, and to extend the instruments to non-HFA indicators as well. In addition, more attention should be paid to methodological issues. To intensify the contacts between those responsible for HIS, the need was felt for a newsletter, clearing house or reference centre.

The future of the project

Dr Anne Johansen gave an account of the background to the work of EUROSTAT. The EC had several working groups in the field of health. The working group on public health and statistics, established in 1996, included three task forces, on mortality statistics, on health care statistics and on health and health-related survey data. Some participants raised the issue that there was some overlap in the activities of EUROSTAT and WHO in this field and that these problems needed to be resolved.

Dr Esko Kalimo reviewed the overall methodology of the project and the agenda for the future. The principal objective was to develop and promote the use of common instruments in HIS in European countries. Its two sub-objectives aimed at:

- developing recommended common instruments for HIS; and
- adjusting national data for international comparison.

The latter involved developing analytical methods to enhance comparability and adjusting national HIS data for cross-national comparison.

The project would be divided into stages reflecting the tasks under the two sub-objectives. The stages in the selection of common instruments would comprise:

- selection of the main partner;
- selection of the active participants and establishment of a network, indicator by indicator;
- review of instruments currently used in the content areas (indicators) in countries by means of a written consultation, indicator by indicator;
- selection of instruments and preparation of protocols for field testing by means of an international meeting, indicator by indicator;
- field testing of the selected questions;
- adoption of recommended common HIS instruments and preparation of a protocol for data adjustment by means of an international consultation; and
- publication of the recommended common instruments.

The stages in the adjustment of national data would comprise:

- finalization of instructions for data collection and adjustment, indicator by indicator;
- collection of data from countries by mail;
- processing and adjustment of data for international data sets, indicator by indicator;
- reviewing the results by means of a written consultation; and
- publication of the comparable results.

Project activities would take in all three years, with two years for the first phase and one year for the second. Each of the two phases would culminate in a publication.

Dr Nossikov gave an account of the scientific requirements and practical constraints for developing common indicators. He described the HIS management structure, comprising the project's management board and its partners and active participants. He then introduced some important concepts regarding the requirements and criteria for cross-cultural measurement equivalence, involving the four main requirements of conceptual, scale, metric and operational equivalence. These were then described in terms of the strategies for developing cross-cultural measures.

Finally, he dealt with the "survey of surveys" carried out in 1995, which was being used to plan future activities. Replies were received from 25 of the 31 countries approached. All respondents had indicated interest in the project, and all but one had agreed to supply data for international comparison.

Ms Emmanuelle Cambois addressed the question of what we needed to know about available survey data in order to adjust them for international comparison. A study had been carried out by the REVES network, based on its "European database on health surveys, reports and indicators" that had been set up several years before. The database gathered documentation that attempted to measure or describe the state of health in a country, and covered most western European countries, some of those in eastern Europe, and certain non-European OECD countries such as Australia, Canada, New Zealand and the United States.

The study had been confined to the EU countries, and had concentrated on instruments for the measurement of general health status and disability. She described the Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (IADL) scales, as well as the OECD Indicator of Disability. The main conclusions of the study were that:

- there should be a recommended instrument for restriction of activity due to health impairment;
- there should be a minimum set of questions;
- the comparative analysis of study designs should be part of data analysis and adjustment; and
- the demographic and social heterogeneity of populations compared should be studied separately from the health data as such, in order to improve assessment of comparability.

Working group sessions – developing common methods and instruments

According to the programme, the meeting continued with subgroups sessions on developing common instruments for selected indicators. The working groups were asked to structure their discussions on proposed common instruments, and in reporting back to the plenary, according to a proposed schedule (see Annex 1). It should be noted that not all items on the proposed schedule were necessarily relevant to all groups.

Chronic physical conditions

1. The group first considered the issue of defining chronic physical conditions (CPC). There were two proposals: (a) the current definition stemming from 1957 and (b) a provisional definition calling for all CPC to be included in the measurements and that individual conditions, such as diabetes or myocardial infarction, should be defined. No formal decision was made, although the new definition gained some support. It was agreed, however, that any definition had to be placed in the overall concept of health.
2. The relevance of the indicator was not discussed, but it was agreed that only point or 12-month prevalence should be measured; it was not reasonable to measure incidence or lifetime prevalence.
3. The instruments used in the countries were (a) direct questions (open-ended or disease lists) and (b) indirect methods (questions on, for example, symptoms, medication or surgery).
4. Concept and method equivalence had probably been achieved for many conditions. Item equivalence, however, depended on such factors as culture and the organization of medical care. Three issues were of particular importance:

- the time frame (whether it eliminated seasonal fluctuations);
 - the sampling frame (certain population groups may be excluded); and
 - participation/response rates.
5. Suitable instruments could belong to both groups mentioned above as being those currently in use in countries.
 6. Steps for adaptation corresponded to those set out in point 6 of the Annex, with the addition of careful literature review.
 7. Development of a completely new instrument was not considered relevant and was therefore not discussed.
 8. The working group concluded that:
 - there was no agreement on common instruments at present; and
 - the main partner would be Italy, with active participation by the Czech Republic, Finland, Israel, the Netherlands, Romania, the Russian Federation, Switzerland and Ukraine.

The agreed plan of action would comprise the proposed steps for adaptation, with additional emphasis placed on reviewing the procedures for field testing.

Mental disorders and social disability

1. There was a clear concept of mental disorder, but no consensus within the scientific community of a definition of social disability.
2. There was considerable consensus on the typical features and course of most mental disorders, and psychiatric diagnostic systems were in use world-wide. There was much less consensus, however, of the nature of social disability and how to measure it. All instruments used to measure it were lengthy and time consuming. None of the current instruments could be used in HIS, and any development of such instruments would have to be begun from scratch.
3. There were some elaborate instruments designed for psychiatric epidemiological research, such as the Composite International Diagnostic Interview (CIDI) and the Diagnostic Interview Schedule (DIS) but these were too lengthy and laborious for HIS. The well known self-rating scales, such as the General Health Questionnaire (GHQ) or the Beck Depression Inventory (BDI) would require at least 12 items to be added to the current protocols.
4. The scientific requirements typically included concept, method and item equivalence. The GHQ and BDI scales and the CIDI instrument had been translated into many languages and tested in many countries. They were all structured, and were likely to be administered in the same way in different countries and have the same meaning to different cultures. All three could be administered by lay interviewers. The problem was that there was little experience of their use in HIS, and that the current protocols would require considerable modification.
5. The GHQ and BDI, and parts of the CIDI, were likely to function reasonably well in European countries. Whether it was appropriate to adapt them would depend on whether researchers felt it necessary to measure mental health in HIS.

6. All three instruments had been translated into the major European languages, and it was possible that these or parts of them could be used without modification, although this should be tested. Pilot studies might be necessary, which normally involved translation, exploration of concepts, pooling of results, back translation and correction, review by lay people and experts, psychometric testing, and field testing for validity.
7. It was doubtful whether social disability could be measured with a limited number of questions. The development of such instruments, if considered necessary, would have to be started from scratch.
8. The current instruments for measuring social disability had been developed for clinical populations, were lengthy and time consuming, and were not relevant to HIS in general populations. It was questionable whether this indicator could be measured by a limited number of questions. The development of any such instrument should be started from the beginning, and it might be fruitful to ask experts in the field whether it was possible to measure social disability with a small number of questions.
9. There was some interest in establishing a network of partners in Europe in the mental health field. These included Estonia, France, Latvia, Norway and Poland.

Alcohol consumption

- 1,2. Reference was made to the continuing relevance of a document prepared for the Regional Office in 1988 entitled *Questionnaire on drinking patterns for determining the proportion and level of alcohol consumption in various communities*.

There were at least four related activities in progress that were pertinent to the subject:

- a soon to be published overview by Alanko & Duffy of the statistical properties of individual drinking behaviour;
 - a Swedish research project on survey measurement of alcohol consumption;
 - an international expert meeting on survey methods of alcohol consumption, in May 1997; and
 - a report on 30 years of Finnish experience on the accuracy of survey methods, which would be available in summer 1997.
3. The main aims of alcohol consumption surveys were to determine an overall indicator of the quantity of alcohol consumed, the distribution of alcohol consumption, and the link between consumption and the risk to health.
 4. Surveys should address the prevalence of drinking, the frequency of drinking, the frequency of heavy drinking and the volume of alcohol consumed. Frequency and volume were the main targets, and would require a minimum of three questions.
 5. Differences in the units used for measuring alcohol caused problems of comparability. Sizes of glasses and bottles varied enormously, as could the alcohol content of a typical beverage. Further problems were caused by domestic alcohol production and cultural/religious pressures. Each country should address these issues by means of additional questions as required.

6. Face-to-face interviews, postal questionnaires and telephone interviews all had drawbacks that varied between countries. A combination of the first two had advantages over any single method.
7. There was considerable general interest in active participation, but no country could make a specific commitment at the meeting. Experts who were potential participants would be sought by the participants in their respective countries. Under the circumstances, the working group was unable to suggest a concrete plan of action.
8. It was concluded that it was possible that common instruments might be achieved in a reasonable time, though probably only for frequency and volume of alcohol consumption. Other aspects would require consideration of specific cultural factors in addition to the common core instrument. However, the network of current participants needed to be extended.
9. The immediate tasks were to make the forthcoming review by Alanko & Duffy available to all interested parties, to extend the number of experts and others involved, and to organize a further meeting on survey methods.

Physical activity

1. It was agreed that the concept of what was important to measure should be changed. The main aim was to measure health-enhancing physical activity (HEPA), which placed emphasis on a high frequency and moderate intensity of physical activity.
2. Such a change would lead to health benefits from greater but moderate physical activity.
3. There was a great variety of instruments currently in use, many of which had not been tested. Three types of measurement were used in HIS:
 - self-assessment
 - graded overall classification
 - frequency of health-related physical activity.Several methods that were considered standard, such as diaries, recall questionnaires and quantitative histories, were not usable in general HIS.
4. There was a problem with item equivalence, particularly for intensity of physical activity (for example, some languages might not have equivalent terms for "sweating" or "brisk walking"). It was also important to measure the actual quantity of exercise and, since daily work could provide up to 70% of physical activity, leisure time alone was not a sufficient reference period.
5. As far as suitable instruments were concerned, only global classifications seemed suitable. The instrument should reflect the requirement for HEPA, the concept of which should be adapted to different cultures, especially the aspect of "intensity". Frequency of exercise and the total time per week spent exercising were probably more important factors than total energy expenditure.
6. The steps needed for adaptation were as outlined above, the first step being collaboration on adaptation of the concept of HEPA.

7. There was no discussion on the development of a new instrument.
8. The conclusion was that a new instrument should be developed along the lines of the new concept, taking into account existing experience. Interest in active participation in the project was expressed by Estonia, Finland, Germany, Portugal and Switzerland. The plan of action should concentrate on exploring existing instruments with a view to their adaptation to the HEPA concept.

Use of curative medical services

1. It was agreed that the main area to be considered was a broad instrument for medical consumption, adapted to national circumstances as necessary. This would cover the numbers of consultations and types of medical provider (general practitioners, specialists, dentists, etc.). Hospitalization would be covered only where no satisfactory registers existed. Of lower priority were access to health services, reasons for consulting the doctor and satisfaction with medical care.
2. The indicator was relevant in terms of health status, determinants, trends, socioeconomic differences, etc.
3. Review was considered very necessary, both in terms of an inventory of instruments and a review of the organization of health care delivery and the types of care that exist in countries.
4. The length of the reference period should be investigated and tested through validation studies.
5. This item could not be addressed, and was considered a task for the future.
6. The results obtained with HIS instruments would have to be compared with registration data at the macro level. Field testing the instruments would need the collaboration of over 100 people. The linking of HIS data with registration data might be useful for validation of field test data, but was illegal in some countries. Test-retest reliability was not important for this instrument, since only questions relating to the last three to four months were asked, and use of services might be quite different from one such period to another.
7. This item was not covered by the group.
8. As expected, it did not prove possible to develop common indicators at the meeting, and one alternative would be to carry out tasks set out in the BIOMED 2 proposal. Active participants in the project would be Belgium, Italy, Romania, the Russian Federation, Switzerland and Turkey.

In the discussion, it was pointed out that HIS could provide added value to registration data by integrating consumption data with that on sociodemographic characteristics and health status, for example to measure social differences in use and underutilization. Also, HIS provided a unique opportunity to link events and episodes with individuals. Satisfaction with care was considered complicated to measure and interpret but should nevertheless be regarded as an objective.

Use of medicines

- 1,2. The topic was considered an important one owing to the financial and political interests involved. There were also issues of power because of the tight government regulation of pharmaceuticals.

HIS might be valuable to measure use of medicines at the population level, and to provide information on the characteristics of consumers that was not available from registration systems. Spending on medicines could also be measured, with HIS forming part of a larger information system.

3. The use of medicines was frequently measured in surveys, but cross-cultural comparison appeared to be poor.
4. There were several measurement problems that required specific consideration in cross-cultural comparisons:
- different recall periods produced different results;
 - there were seasonal variations, for example summer holidays were linked to lower consumption in some countries, and national seasonal patterns needed to be better understood;
 - changes in the legislation process took different directions in different countries; and
 - drug names were not easy to remember, making telephone surveys difficult to conduct.
- 5,6. These items were not covered by the group.
7. The group considered developing an entirely new instrument with four to five questions, but decided that it was too early for such a recommendation.
8. The next steps would be :
- to collect existing information and questionnaires
 - to review the current literature
 - to compile a synthesis of the results.

Use of preventive health care

1. The working group concentrated mainly on defining the subjects areas to be covered by a future common instrument, and discussed the following items.
- 1.1 Population screening programmes: cervical and breast cancer (breast self-examination).
- 1.2 Vaccination: influenza, tetanus and other vaccinations.
- 1.3 Other preventive measures:
- dental check-ups
 - general medical check-ups
 - antenatal care
 - preventive care for children 0-4 years of age
 - vitamin A, D and K supplements for children
 - lifestyle (physical activity, nonsmoking, moderate alcohol intake, healthy diet, etc.)
 - careful sunbathing

- use of seat belts and child seats in cars
- safety measures for children around the house
- testing for blood pressure and blood lipids.

1.4 Attitudes towards preventive care and behavioural aspects.

2. The group did not differentiate between the more and the less important subject areas in the above list. This was a relatively new area of measurement for HIS compared with, for example, alcohol consumption or smoking, and there was consequently little previous work to be reviewed or built on. The priority areas would be decided later.
3. A review should be carried out of what had already been measured in European countries, and how, with a view to compiling an inventory of instruments. A review should also be made of national legislation and other regulations of the means of implementing preventive care, such as population screening programmes.
4. As is the case in measuring the consumption of medical services, larger samples than the proposed 100 people might be needed to test the instrument. In some cases, such as influenza, survey results could be compared with information from other sources in order to validate measurements.
- 5,6. These items could not be addressed in view of the early stage of development of this instrument.
7. The working group agreed that no common instrument could be suggested at present. The above measurements, however, were likely to be a feasible aim of development work.
8. The main partner, Netherlands, would be supported by active participants from (at least) Belgium, Estonia, France, Italy, Romania, Turkey and Ukraine. This group would be expected to suggest, discuss, define and test the possible components of common instruments and the course of future work.

Healthy nutrition

1. The working group agreed that any common instruments developed in this area would not be simple to administer. It recommended that an important distinction be drawn between food or nutrients, which was concerned with the measurement of nutrition, and food intake, which was the main issue and concerned actual behaviour.
2. The relevance of the indicator lay in the relationship between food intake and general wellbeing and the occurrence of certain non-communicable diseases.
3. The main instruments used nowadays fell into two categories:
 - those at population level (food balance sheets)
 - those at individual level (recall methods and recording methods).
4. The overall conclusion of the discussion was that only food frequency methods were suitable for comparisons of large population surveys.

5. Food frequency methods were intended to measure actual food intake. Because of the multiplicity of so-called "right" and "wrong" eating habits, however, the usual number of questions would not be sufficient. Some 10–20 questions would have to be asked, including several alternative questions.
- 6,7. These items were not covered by the working group.
8. The working group considered it possible to develop a common instrument. Active participants would have to be recruited from other existing networks, since none could be identified at the meeting. The tasks to be undertaken comprised:
 - an immediate review of current survey practices;
 - a review of current national guidelines on food intake (this will be particularly important in view of the enormous variation in food products available in the Region); and
 - a comparison of people's views on healthy food intake with guidelines, to determine how actual behaviour deviates from the recommendations.

Adjusting readily available survey data for international comparisons

Because of a common interest among the participants in this topic, the session was held in plenary.

The group reviewed current problems of international comparison and identified four categories related to differences in:

- concepts in different cultures;
- the behaviour of respondents, for example how much people in different cultures or populations are prepared to disclose, and how their behaviour or feelings can be assessed;
- methods of administering interviews; and
- the format of data presentation.

The group then discussed what could be done to overcome these problems. The most important task was conceptual development and adaptation. The first step was to identify those components of the concepts to be measured that were common to different cultures, i.e. the common ground for international comparisons. The next steps would logically be harmonization of interview administration (as appropriate) and of data presentation.

Whatever the level of harmonization, however, it was the overall picture of comparability that had to be judged by the experts presenting survey data and analysing their comparability. Those experts should therefore be able to make such judgements, i.e. to understand and assess what the data actually mean. This required information of a contextual nature and details of the survey data compared. It might include:

- the possibility of comparing specific age/sex/professional subgroups of the population, and of assessing consistency with known patterns, trends or other sources of data;
- developing an integrated scale of various dimensions of a concept, or of a summary score of several different but related indicators;
- validity comparisons of HIS data with that from other information systems such as registration;

- reducing (collapsing) the number of response categories to less detailed but common subcategories;
- specific validation studies in addition to the main survey (which, however, are rarely feasible or justified);
- data reduction to an agreed common denominator at the stage of data presentation; and
- calculating correlational coefficients between indicators or data subsets expected to be correlated.

In assessing comparability, question-specific non-response rates need to be taken into account, bearing in mind that acceptable non-response rates are different for different types of subject and question; in some cases, for example, a non-response rate of 20% or even less may be a critical threshold.

In the discussion, the point was made that at least some countries do research in this area regularly, and on a long-term basis. Therefore, a network should be created to collect and summarize existing knowledge and experience on how these adjustments, assessments and validations could be done.

On the one hand, however, only experts intimately familiar with a subject area could judge what was relevant and possible to consider by adjusting the data for cross-cultural comparison. On the other hand, this work should be done in the most consistent and methodologically best possible manner. Therefore, the group agreed that this cross-sectional network should consist of the main partners or representatives of each indicator-specific network, under the overall co-ordination of REVES/INSERM, which had accumulated great experience in this type of international networking.

General conclusions from the results of the working groups

It was concluded that the project and the methodology proposed were valuable, and should be pursued by all means available. As expected, no common instruments could be recommended on the basis of this meeting alone. There was a need to review the instruments currently in use and to determine and possibly select certain "common" instruments (core questions) already being used. Top-level expertise was crucial in evaluating the instruments. Experts in several specific areas should therefore be asked to assess the efficiency of existing or formulated instruments.

In terms of the harmonization and comparability of measurement, for each indicator there was a need to:

- build a common conceptual framework by establishing equivalent concepts in different languages and cultures;
- review problems of culturally specific response behaviour and of interpreting collected data, and to propose other sources of data for validation purposes and means of improving comparability;
- explore the comparability of technical aspects (sampling methods, wording, etc.) and compilation methods (coding, etc.); and
- adjust for demographic factors, cultural differences and reporting behaviour according to the use to be made of the instrument.

Some topics should be temporarily or permanently excluded from a programme of comparison, either because they relate to a particular national situation or because they are insufficiently developed even at national level.

Experts should be consulted indicator by indicator in order to build up a knowledge base. This could then be used to make decisions on which instruments to use and how to solve problems of harmonization. Those involved in constructing surveys should also be consulted with a view to introducing new items or modifying existing ones, and on the possibility of harmonizing study design. Users of data were also very conscious of the problems of comparing information.

The tasks for the active participants would be to review the indicators used in surveys, examine survey design and select indicators from surveys or suggest adaptation of indicators.

The way ahead

Responsibilities

All participants expressed interest in taking part in the project, either personally or through another individual or institution in their respective countries. Mr Nanda noted that, according to WHO's principles, the project was not a closed network; all interested parties were invited and could participate at different levels. It was also noted that the project covered all 50 member States of the WHO European Region.

In order to recruit new participants and researchers who could provide specific expert advice, it was agreed that the Regional Office would draft a letter of invitation and prepare the background material. This would be sent to the five main partners for comment, following which it would be distributed to all participants. After potential new participants had been identified, the main partners, together with the Regional Office, would assume the responsibility for further co-ordination.

Making use of the meeting materials

The meeting materials included the general background papers, the introductory papers relating to indicators and the reports of the working groups. Different options for developing and disseminating these materials and issues of authorship were discussed. It was felt that the task should be accomplished with the minimum effort so that all available resources could be devoted to the development of the project. It was therefore agreed that a Regional Office report would be issued.

The next steps

BIOMED2 proposal

The Regional Office had submitted a funding application on behalf of the HIS project to the EC's BIOMED2 programme amounting to ECU 590 000 over a 36-month period. The costs included those for administration, management and co-ordination, but no direct research costs. Mr Nanda noted that, since many participants had already worked on the project for many years, the question was not one of whether to continue but at what level the work would continue. WHO was committed to seeking other sources of funding if the EC application was unsuccessful.

It was agreed that the project should continue regardless of the outcome of the BIOMED2 proposal, and that efforts be adapted to the level of resources available. Some support for the work of the main partners was felt to be especially important. It was considered reasonable that the main partners make their final commitment after the EC's decision was known.

The first board meeting

It was agreed that the first meeting of the proposed scientific and management board of the project, comprising the project coordinator and the main partners, should be convened soonest possible, preferably already in April 1997, the exact date to be decided by consultation among the board members.

The board meeting should address at least the following issues:

- the call for additional partners
- the protocol of the project
- the plan of work.

Since the BIOMED2 proposal did not completely cover the protocol, the Regional Office would undertake to prepare a draft of a working protocol, possibly with external assistance. The first step in the plan of work would be the evaluation of the existing instruments, indicator by indicator, followed by the development of a specific working protocol for each instrument as necessary, based on the overall project protocol. It was important to consider the work of other international organizations in this field.

Other business

Mr Nanda reminded the meeting that the project needed a logo and possibly a newsletter and a flyer, and invited the participants to present ideas and proposals.

Annex 1

GENERAL STRUCTURE OF PAPERS AND SUBGROUP DISCUSSIONS ON SPECIFIC PROPOSED COMMON INSTRUMENTS² AND FOR REPORTING BACK TO PLENARY³

1. Definition of the indicator (subject area).
2. Why is the work on common instruments for the indicator relevant.
3. What are the instruments in the Member States to measure it – review of current practice.
4. What are the scientific requirements to a common instrument to measure the indicator across-countries equivalently and what are the specific problems. The scientific requirements typically include:
 - 4.1 *Concept equivalence*

The instrument must measure the same concept/thing/indicator. Frequently the concept and/or the instrument encompasses several domains, e.g. access to health services, utilization of services, compliance, satisfaction, etc. may be all included in “use of medical services”.
 - 4.2 *Method equivalence*

The instrument must be administered in the same way; the concepts must be measured in the same way; and the categories of information derived from the responses must be the same.
 - 4.3 *Item equivalence*

The items of the instrument must have the same meaning in different populations (whether or not they are literally equivalent, e.g. “soft drink” may mean different things in different cultures, even if the translation is the same).

With reference to each of the above and other relevant requirements, what are the advantages, disadvantages, similarities and differences of the instruments used – analysis of current practice in countries.
5. What are the instruments that are most likely to:
 - (a) best satisfy the above requirements across countries; and
 - (b) be liable for adaptation in different countries/cultures.

² Instrument stands for one or more items (questions) used to measure one or more variables/domains belonging together, and the guiding notes that accompany the items.

³ Not all points may be relevant or possible to cover in the papers and/or the discussions.

6. What are the steps to adapt the instruments and field test the adaptations in countries. Normally these are:

- translation (by two specialized translators)
- exploration of concepts (focus group discussion with experts and lay people)
- pooling of results
- back-translation and correction
- review of the instruments by a lay panel and experts
- psychometric testing (internal consistency, test-retest reliability)
- field testing for validity (construction, criterion, discriminant validity).

What are the specific practical recommendation as per above for adapting the instrument in question in the different countries/population groups.

7. What can be done to collaboratively develop a new instrument for cross-national use, if appropriate.

8. Report back to plenary, indicator by indicator, on:

- 8.1. whether it is possible at present to agree on a common instrument and, if not, what the alternative is;
- 8.2. who will be the active participants of each main partner network, indicator by indicator;
- 8.3. what are the tasks ahead; and
- 8.4. a plan of action.

Annex 2

PARTICIPANTS

Temporary advisers

- Dr A. Aromaa
Research Professor, National Public Health Institute, Helsinki, Finland
- Mr G. Badéyan
Service des Statistiques, des études et des systèmes d'information, Ministère du travail et des affaires sociales, Paris, France
- Mr S. Baev
Head, Social Statistics Division, National Statistical Institute of Bulgaria, Sofia, Bulgaria
- Ms Maranda Behmane
Unit of Education, Health Care, Culture and Science, Central Statistical Bureau of Latvia, Riga, Latvia
- Ms Agnes de Bruin
Department of Sociocultural Statistics, Statistics Netherlands, Voorburg, Netherlands
- Dr Vittoria Buratta
Istituto Nazionale di Statistica (ISTAT)/Servizio Sanita, Rome, Italy
- Mr J.M. Cabecinha Vintém
Sociologist and Senior Technician, Office of Studies and Planning for Health, Ministry of Health, Lisbon, Portugal
- Ms Emmanuelle Cambois
Equipe INSERM Démographie et Santé, REVES network on Health Expectancy, Centre Val d'Aurelle, Montpellier, France
- Ms Maria de Jesus Charrua Graça
Office of Studies and Planning for Health, Ministry of Health, Lisbon, Portugal
- Dr Viviana Egidi
Director, Demographic and Social Statistics, Istituto nazionale di Statistica (ISTAT), Rome, Italy
- Dr D. Farcas
Director-General, Ministry of Health of Romania, National Center for Health Statistics, Romania
- Dr M. S. Green
Director, ICDC Central Office, Schneider Children's Medical Center of Israel, Petach-Tikva, Israel
- Ms Marina Grintshak
Scientific Researcher, Institute of Preventive Medicine, Tallinn, Estonia
- Dr M. Heikkinen
Associate Professor in Social Psychiatry, University of Tampere, c/o Department of Mental Health and Alcohol Research, National Public Health Institute, Helsinki, Finland
- Dr B.E. Holstein
Institute of Social Medicine, University of Copenhagen, Panum Institute, Copenhagen, Denmark

- Dr J. Holub
Vice-Director, Institute of Health Information and Statistics of the Czech Republic, Prague, Czech Republic
- Ms Anna Iwanek
Main Specialist, Demographic Statistics Division, Central Statistical Office, Warsaw, Poland
- Dr E. Kalimo
Director, The Social Insurance Institution, Research and Development Centre, Helsinki, Finland
- Dr T. Klaukka
The Social Insurance Institution, Research and Development Centre, Helsinki, Finland
- Dr Tamara M. Maximova
Head, Division of Complex Studies of Population Morbidity, Russian Academy of Medical Sciences, N.A. Semashko Research Institute for Social Hygiene, Moscow, Russian Federation
- Mr Á. Mészáros
Deputy Head, Division of Population and, Health Statistics, Hungarian Central Statistical Office, Budapest, Hungary
- Dr Antonia Maximova Nagornaja
Deputy Director, Ukrainian Institute of Public Health, Kiev, Ukraine
- Dr P. Oja
The UKK Institute, Tampere, Finland
- Ms Jorun Ramm,
Senior Executive Officer, Statistics Norway, Division of Health and Social Welfare, Oslo, Norway
- Mr N.K. Rasmussen
Deputy Director, The Danish Institute for Clinical Epidemiology (DICE), Copenhagen, Denmark
- Mr J.-M. Robine
Equipe INSERM Démographie et Santé, REVES network on Health Expectancy, Centre Val d'Aurelle, Montpellier, France
- Dr Ritva Seppänen
Senior Nutrition Scientist, The Social Insurance Institution, Research and Development Centre, Turku, Finland
- Dr J. Simpura
Research Professor, STAKES-National Research and Development Centre for Welfare and Health, Helsinki, Finland
- Dr T. Spuhler
Sektionchef, Bundesamt für Statistik, Berne, Switzerland
- Dr J. Tafforeau
Scientific Institute for Public Health, Brussels, Belgium
- Professor W. Thefeld
Director, Bundesinstitut für Infektionskrankheiten und übertragbare Krankheiten, Berlin, Germany
- Dr S. Üner
Director, Hacettepe University, Institute of Population Studies, Turkey
- Mr J. van den Berg
Department of Health Statistics, Statistics Netherlands (CBS), Heerlen, Netherlands

Other Organizations

European Commission

Ms Anne Johansen
DGV/F/1, Bâtiment Alcide Euroforum, Luxembourg

WHO Regional Office for Europe

Dr S.K. Litvinov
Director, Programme Management

Dr G.-B. Forte
Short-term Professional, Quality of Care and Pharmaceuticals

Mr A. Nanda
Regional Adviser, Epidemiology, Statistics and Health Information

Dr A. Nossikov
Epidemiologist, Epidemiology, Statistics and Health Information

Dr R. Prokhorskas
Statistician, Epidemiology, Statistics and Health Information

Dr Aileen Robertson
Acting Regional Adviser, Nutrition

Mr F. Stobbelaar
Short-term Professional, Quality of Care and Pharmaceuticals

Annex 3

WORKING PAPERS AND BACKGROUND DOCUMENTS

Working Papers

- INFO 02 03 05/1 Provisional list of working papers and background documents
INFO 02 03 05/2 Scope and Purpose
INFO 02 03 05/3 Provisional Agenda
INFO 02 03 05/4 Provisional Programme
INFO 02 03 05/5 Provisional list of Participants

Background documents

- INFO 02 03 05/6 Common instruments for health interview surveys: project proposal to EC/DGXII/BIOMED2 programme
INFO 02 03 05/7 Monitoring and evaluation of the HFA European strategy: information needs and products,
by Mr A. Nanda
INFO 02 03 05/8 Monitoring health inequalities in Europe: the need for health surveys
by Mr J.-M. Robine and Ms Isabelle Romieu
INFO 02 03 05/9 The Use of the Health Behaviour of School Children International Collaborative Study for Monitoring International Trends in Adolescent Health,
by Dr B. Holstein
INFO 02 03 05/10 Overview of the achievements of the HIS project,
by Dr A. Nossikov
INFO 02 03 05/11 The first three Consultations: experience and results, including adjusting of available data for international comparisons for WHO
by Mr J. van den Berg (oral presentation only)
INFO 02 03 05/12 Experience of the Czech Republic in using the common instruments,
by Mr J. Holub
INFO 02 03 05/13 Experience of Belgium in using the common instruments,
by Dr J. Tafforeau
INFO 02 03 05/14 The EC task force on "Health and health-related survey data",
by Dr Anne Johansen, EC/EUROSTAT
INFO 02 03 05/15 A review of the overall methodology and agenda for the future,
by Dr E. Kalimo
INFO 02 03 05/16 Scientific requirements and practical constraints for developing common indicators, including results from the "survey of surveys" in Europe,
by Dr A. Nossikov
INFO 02 03 05/17 What do we need to know about available survey data to adjust them for international comparisons?
by Ms Emmanuelle Cambois and Dr J.-M. Robine
INFO 02 03 05/18 Chronic physical conditions: an introduction to discussion on common instruments
by Dr Vittoria Buratta, and complementary contribution by Dr A. Aromaa (oral presentation only)
INFO 02 03 05/19 Mental and social disability: an introduction to discussion on common instruments,
by Dr M. Heikkinen and Dr J. Lönnqvist
INFO 02 03 05/20 Alcohol consumption: an introduction to discussion on common instruments,
by Dr J. Simpura

- INFO 02 03 05/21 Physical activity: an introduction to discussion on common instruments,
by Dr P. Oja
- INFO 02 03 05/22 Use of curative medical services: an introduction to discussion on common
instruments,
by Dr H. Swinkels and Mr J. van den Berg
- INFO 02 03 05/23 Use of medicines: an introduction to discussion on common instruments,
by Dr T. Klaukka
- INFO 02 03 05/24 Use of preventive medical services: an introduction to discussion on common
instruments,
by Ms Agnes de Bruin
- INFO 02 03 05/25 Healthy nutrition: an introduction to discussion on common instruments,
by Dr Ritva Seppänen
- INFO 02 03 05/26 Health Interview Survey Project - Inventory of Health Interview Surveys in
Europe, 1996
- INFO 02 03 05/27 Harmonizing Health Interview Survey Data - Results of the 1993/1994 Exercise