
Report of the first co-ordination meeting on ‘Employment and Health’

Brussels, 3rd June 1997

WP/97/82/EN



**EUROPEAN FOUNDATION
for the Improvement of Living and Working Conditions**

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PART ONE - INTRODUCTION

The European Foundation for the Improvement of Living and Working Conditions has initiated a new project on employment and health, the details of which are summarised in Annex I. It has as its aims:

1. To identify the relationship between employment and health in the European Union
2. To describe the impact of unemployment, atypical forms of work, job structure and skills on health
3. To assess the individual, household, company, social welfare and health care costs of the impact of different employment situations on health.

The rise of unemployment and the changes in employment practices and conditions in Europe have led to the development of this project. Many countries of the EU have high rates of unemployment which have proven consequences for ill health. In addition, there have been major changes in labour relations, contracts of employment, working hours, and types of work. Much less is known about how these changes in the structure of employment and the patterns in particular workplaces might affect the health of workers throughout the EU.

The European Foundation, therefore wishes to take forward a review in order to determine if there is a need for more research on this subject with a view to the type of research that might influence policy. If they are satisfied that there is a need for further work, then the nature of that work needs to be determined. This is the purpose of the first year's review.

To start the process a co-ordination meeting was held in the Brussels office of the European Foundation for the Improvement of Living and Working Conditions. The persons attending that meeting are listed at Annex II and the agenda for the meeting is at Annex III.

Part two of this report summarises the individual presentations with brief notes on the discussions that followed these presentations. Part three summarises the final discussion with recommendations for the future.

PART 2-SUMMARY OF PRESENTATIONS

UNEMPLOYMENT IN HEALTH: NEW QUESTIONS TO DO NEW RESEARCH

PROFESSOR FERNANDO G. BENAVIDES

“Science might almost be defined as the process of substituting unimportant questions which can be answered for important questions which cannot” Kenneth Boulding

The focus of Professor Benavides’ presentation was:

1. To present some conclusions from the literature on unemployment and health
2. To ask questions that need to be answered in doing new research.

His starting point was the unemployment figures presented in Table 1 which show that unemployment rates increased sharply in European countries between the mid 1970s and mid 1980s. Figure 1 extends this further for selected countries and shows the relative levelling off of unemployment rates throughout Europe and the particular high levels of unemployment in Spain.

A literature review, starting with Morris & Titmuss’s path breaking paper in 1944 produced nearly 800 papers on unemployment and health in the 30 years between 1966 and 1996. These illustrate Professor Benavides’ two questions; 1) what do we know of the relationship between unemployment and health; and 2) what do we now do with the information we have? A summary of studies linking unemployment and mortality are in Table 2. Prospective studies in the five countries listed all showed unemployed people to have higher mortality than employed people. At the least, the UK studies showed that this excess could not be attributed to the fact that unemployment is more likely to occur in people of lower socio-economic status, because the UK studies compared the mortality experience of the unemployed with people from the social occupational class from which they came.

A model of the potential links between unemployment and health, produced by the unemployment and health study group in 1986 is shown in Figure 2. While other models could be constructed, this illustrates that unemployment is linked both to stress and poverty and to health behaviour changes which may have independent or interlocking effects on health.

Professor Benavides quotes studies that show that there is an inverse association between relative mortality (comparing unemployed to employed) and the unemployment rate of an area. Thus, in areas with high unemployment rates the relative excess mortality of the unemployed compared with employed is smaller than the relative excess in areas with lower unemployment rates.

Spain was used as a case study for unemployment because of its high unemployment rates. The characteristics of Spain are:

1. A high unemployment rate
2. Limited female employment
3. An important underground economy
4. Large pockets of poverty and marginal populations
5. Great social and economic differences between north and south.

A cross-sectional survey in Spain showed a similar inverse association between the unemployment level of the region and the apparent adverse impact on health in individuals who are unemployed compared with individuals employed for a variety of indicators. Professor Benavides interprets this as:

1. The effect of a dramatic increase of unemployment rates which has led to great stress in the more developed areas which traditionally have had low unemployment rates.
2. That a family and social network still persists in the less developed areas to soften the impact of unemployment on health.

He concluded that new factors need to be taken into account as follows:

1. **Socio-economic Changes:**

There has been a reduction of agricultural and industrial sectors. There are new professions and more precarious jobs;

2. **Social Construction of Unemployment:**

The meaning of unemployment changes both geographically and psychologically;

3. **The Study of Buffering Factors:**

These should include the subterranean economy, families' support and social services;

His research recommendations are as follows:

1. The available evidence could be summarised following meta-analysis methodology;
2. Causation could be investigated using conceptual models;
3. The different effects of unemployment on health between Northern and Southern areas should be deeply explored;
4. The different effects of unemployment on health by gender and age should be more deeply assessed.

In the discussion that followed Professor Benavides' paper, it was pointed out that while his conclusions about the reasons for the inverse association between unemployment rates in an area and the relative health disadvantage of unemployed people compared to those employed may be correct, it is not the only possible explanation. Others have pointed to the effects of health selection. In summary, there might be three types of explanation:

1. Diminishing effects of health selection. This argument would posit that where unemployment rates are low, the unemployed were more likely to have been suffering from ill health before unemployment than those who remain in employment. This selection argument suggests that it is ill health that causes unemployment rather than the reverse. Such an argument would suggest that the reason for the inverse association is that where unemployment rates are high, unemployment affects those who are healthy as well as those that are unhealthy, hence the difference in illness rates between the unemployed and the employed would be smaller than in areas where unemployment rates are low. This is an argument put forward by Valkonen and

colleagues in explaining what they saw as a relatively low impact of the Finnish unemployment crisis during the 1990s.

2. An alternate explanation is that where rates of unemployment are high, the stigma associated with being unemployed is less than where rates are low. If many members of a peer group are similarly affected, the argument would be that the likely psychosocial effect on the unemployed individual would be less.
3. Alternatively, where unemployment rates are high, there may be mechanisms developed to deal with the effects of unemployment. These may include informal social networks, official social security, or operation of the black market.

In discussion, it was suggested that there may be parallels between the 'area-effect' finding on unemployment and an 'ethnic density' hypothesis. The latter suggests that where the proportion of the population belonging to an ethnic group is high, the health deficit of that minority group is less.

PRECARIOUS EMPLOYMENT AND HEALTH

Ms. VERONIQUE LETOURNEUX

Ms Letourneux presented data from the survey "Working Conditions in the European Union" conducted in 1996.

Across the European Union, the figures for type of employment were as follows:

Permanent basis 70%

Freelance 11%

Small employers 6%

Fixed term contract 10% Temporary employees 4%

Combining the last two categories, this suggests that across the European Union, approximately 14% of employees were in "precarious employment" i.e. fixed term contract or temporary employees.

Figure 3 shows the relation between working hours and type of employment. For those employed on a permanent basis, there is an average of 36 to 39 hours a week. By contrast nearly 50% of freelance workers and 70% of small employers work 45 or more hours a week. The position is less extreme for temporary employees but they tend to work longer hours than those employed on a permanent basis.

In the survey, approximately 30% of people responded in the affirmative to the question "Do you think your health and safety is at risk because of your work?". There appeared to be no relation between type of contract and positive answers to these questions. Within the employment categories, those working longer hours were more likely to report that their health and safety was at risk because of their work.

Among employees working more than 35 hours per week, non-permanent workers were more likely to report overall fatigue or muscular pains in arms or legs, (Figure 4).

Figure 5 shows that there was a link between exposure to certain potential stress factors and type of employment. Those with open-ended (i.e. permanent) contracts were less likely to report being exposed to repetitive tasks, repetitive movements or painful/tiring work positions. This no doubt relates to the type of work carried out by

people with different contracts. This illustrates a general research issue, namely to distinguish the effects of the type of contract from the type of work performed. It may be, for example, that people with longer term contracts have more fulfilling, interesting and varied work. This may not be a general rule, however, and it may vary from country to country. Ms Letoumeux reported, that a multiple regression model with several variables, including type of work, showed that the most important variable affecting self-reported health was temporary employment. There will be a need to examine potential variation in these relationships by country.

Her general conclusions were:

1. We must differentiate between people who have and those who are looking for jobs;
2. Among those with a job, distinguish between those with a permanent and those with a temporary contact;
3. Examine working conditions of those at work.

In examining health effects, each of these three levels may be important. She suggested that there may in fact be two labour markets; one involving those in permanent employment and the other one of temporary, part time workers.

In discussion questions were raised about the validity of linking self-reports of work with ill-health. It is difficult to disentangle the direction of causation in a cross-sectional study - are aspects of the work environment causing the ill-health or is existing ill-health affecting the way an individual perceives their work environment ?

The point was also made that even if self reports of work-related ill-health are open to question, they do indicate that approximately 30% of workers in Europe hold the opinion that work is potentially detrimental to their health. This is, in itself an important statement, even if it does not correspond to objectively determined physical or mental pathology.

LOW PAID AND LOW SKILLED JOBS AND HEALTH

PROFESSOR MICHAEL MARMOT

Professor Marmot presented findings from the Whitehall Studies. He argued that findings from these studies could be generalised to other populations.

His starting position was the existence of a social gradient in mortality stretching all the way from low risks of death in the highest civil service grades, through progressively higher rates as the employment grade hierarchy was descended. The problem for explanation therefore, is not to explain only why people in low paid jobs have higher health risks than those in better paid jobs, but why there is a gradient that extends through the whole occupational and social hierarchy (Marmot 1984). The gradient in mortality observed in the first Whitehall Study extended similarly to gradients in sickness absence rates observed the Whitehall II Study (North et al, 1993). Professor Marmot pointed out that the social gradient in short spells of absence was nearly identical to the social gradient in long spells of absence. If it were the case that short spells represent psychosocial problems or lack of commitment to work, whereas long spells represent "true illness", it was interesting that both short and long spells showed a similar social gradient. This could be taken to imply that the determinants of psychosocial problems at work and the determinants of illness rates may overlap and show a similar distribution according to the social hierarchy.

Professor Marmot presented a simplified model (Figure 6) that describes the approach he and his research team are taking to try to understand the factors that may explain the social gradient in health. They have evidence supporting many of the links shown in this diagram and are actively researching the others. The point for the present purpose is that the influence of work has to be put in the context of a wider array of social determinants of health.

In relation to work, they were pursuing both the Karasek model of demand/control and the Siegrist model of imbalance between efforts and rewards. In Whitehall II, demands increased with increasing occupational status as did control. There is no relation between high demands and incident coronary heart disease, but there was a clear connection between low control and CHD followed over a five year period (Bosma 1997). Low control measured on two occasions proved to be a better predictor of subsequent CHD than low control on only one occasion. Low control was assessed in two ways; self-reports completed by the participants and external assessment of the nature of the work task by managers. There was a low correlation between the self-assessment and the managers' assessment of control, but both predicted incident CHD (Bosma 1997). Effort reward imbalance and low control were independently related to CHD incidence (Bosma et al, in press).

Professor Marmot showed evidence that a combination of work and coronary risk factors accounted for the majority of the social gradient in CHD incidence.

In discussion, Professor Marmot was asked what proportion of the variation in CHD could be attributed to work. He avoided answering this question directly for the following reason. There is a social gradient in CHD among people who are not working e.g. housewives and retired people, as there is among people in full time employment. He suggested that work may be one way to induce feelings of low control, but there may be others. If the importance of low control is that it activates the body's stress pathways, there may be other ways to activate the same pathways. The fact that a woman may not be employed outside the home does not make her immune to the effects of subordinate status with attendant feelings of low control.

HEALTHY PUBLIC POLICIES

DR. STEPHEN PLATT

Dr Platt reviewed a number of developments relevant to the background for policy making. These included WHO's Health For All, the Ottawa Charter for Health Promotion, the development of country-based health strategies; Article 129 of the European Political Union Treaty. The common themes of these are:

- they are intersectoral
- they work towards the reduction of known inequalities in health
- they are generally understood because there has been collective participation in their development
- there are mechanisms for holding those responsible for their development and implementation to account for them
- they create opportunities for groups and individuals to feel informed and empowered to act positively upon their own health
- they are located within an holistic, ecological and social model of health

- they are clear about objectives, the means of achieving them (actions) and the measurement of progress (targets) and that they support structural change and the provision of the resources necessary to achieve policy aims.

The other crucial background for policy making are macro economic and political trends that were summarised at a meeting on job insecurity and health (Ferrie & Marmot, WHO). These issues include:

- techno-economic change (“chips for neurons revolution”)
- globalisation of economic competition
- economic recessions of late 1970s and late 1980s
- massive restructuring of industry (declining manufacturing base)
- privatisation of functions previously undertaken by government
- reduction in public expenditure
- abandonment of commitment to full employment
- political consensus that the social welfare provision and social benefit protection guaranteed by the welfare state is no longer desirable or feasible.
- reduction of the scope and strength of social security and social welfare safety nets
- threat to democratic structures as a result of key features of late 20th Century capitalism

He suggested that a new dimension needed to be added to the policy framework namely that of sustainable livelihood. He quoted the following from the UN Economic and Social Council:

- restatement of UN commitment to the goal of full employment and supporting policies and programmes
- notes “growing strand of scepticism over the feasibility of attaining that objective in both academic and policy-making circles”
- cites recent ILO report which dismisses empirical basis for scepticism and argues that “with sufficient political will and the sustained implementation of a comprehensive set of policies, full employment remains an attainable objective”.
- recalls the environmental sustainability aspects of economic growth contained in Agenda 21 and reiterated elsewhere. “Economic growth is important for employment creation and the reduction of poverty but it should not be achieved at the cost of a continued deterioration of the global environment”.

Dr Platt suggested that one ought to approach labour market insecurity at three levels as follows:

Macro-level

- level of economic activity and economic growth
- level of unemployment .
- quality and coverage of social security safety net and social welfare provision

- broader support for structures which will limit/ameliorate the human consequence of techno-economic change
- rhetoric of responsibility
- income and wealth inequalities

Meso-level

- ‘security’ of organisation/firm
- quality/vision of management
- preparedness for change/adaptation
- internal solidarity (workplace)
- range of supportive environments (‘mediating structure’)

Individual-level

- human capital (e.g. education, skills, health)
- social capital (interconnectedness, horizontal networks, involvement in socio-political process, integration/exclusion)
- economic capital (assets, wealth, resources)
- accumulated labour market experience
- lifetime exposure to inequity/inequality

He concluded that there were the following key research issues:

- understanding the impact of new work forms on the health and quality of life of workers and their families
- developing a typology of different types of labour market insecurity; and measuring impact on health and well-being
- contributing to the development of effective inter-sectoral collaboration to promote health (especially integration of employment policy with other policy arenas)
- assessing the compatibility of flexible labour market(s) and the promotion of public health
- evaluating the viability of the commitment to the goal of full employment
- rethinking research strategy: from pathogenesis to salutogenesis

His general message was a reminder that one needed to examine general socio-economic, cultural and environmental conditions, and how they might relate to living and working conditions to social community networks and only then to individual lifestyle factors in trying to understand the determinants of health.

PART 3 - SUMMARY AND DISCUSSION

In the discussion that followed the point was made that we do understand that unemployment is related to worse health, and that the link between unemployment and ill health cannot be explained simply by health selection. The research question therefore is not is there a link, but what effective strategies might there be that can help deal with the problem?

It was also emphasised that the new issues are: new patterns of working, new conditions of employment and employer-employee relations.

After much discussion, the provisional conclusions were as follows:

1 A review of changes in the labour market. To what extent was there an increase in job insecurity. This review should take into account:

- a) conceptual and measurement problems of what constitutes insecure employment;
- b) whether or not there is objective evidence of insecure employment, it may be possible that employees feel more insecure, in which case there may still be effects;
- c) if the latter, then is this increase in perception of insecurity related to unemployment levels; or else what is the relevant policy response.

The review should also take into account the impact of new technology on changing work practices, which may include tele-working, de-skilling and increasing division between those who have skills and those who do not. It was suggested that if possible, this was needed to provide a factual background to the overall problem.

2 There should then be a review of the consequences of these changes in the labour market on working conditions, focusing particularly on working conditions that are likely to be relevant to health.

3 Following directly from this, there should be a review of data that exists on possible outcomes of the changes reviewed in 1 and 2.

4. Consideration needs to be given as to how the environment might be modified to modify the links between employment and health.

5 How should this translate into policy recommendations.

This is an ambitious review programme, one that could not be accomplished in a year. Some thought needs to be given as to what the realistic accomplishments would be for a first year and how these would lead in to work in subsequent years if it was thought to be appropriate.

Professor Marmot co-ordinates a European network on psychosocial factors in the workplace and coronary heart disease entitled Socio-economic variations in cardiovascular disease in Europe: the impact of the work environment ('Heart at Work Network'). He and his colleagues have plans to prepare a review paper setting out their conceptual models of how work affects cardiovascular disease. It is possible that such a review could be included in the programme of work.

**CHANGES OF UNEMPLOYMENT RATES IN SELECTED
EUROPEAN COUNTRIES**

	1975	1986	% change
Spain	4.5	20.7	360
United Kingdom	3.2	11.6	263
Greece	2.3	7.4	222
Belgium	4.4	12.0	173
France	4.1	10.4	154
Ireland	7.3	18.0	147
Holland	5.2	11.4	119
Portugal	4.4	8.8	100
Germany FR	4.0	8.0	100
Italy	5.8	10.9	88
Denmark	4.9	6.3	29

Source: OECD. Employment outlook, September, 1987.

TABLE 1

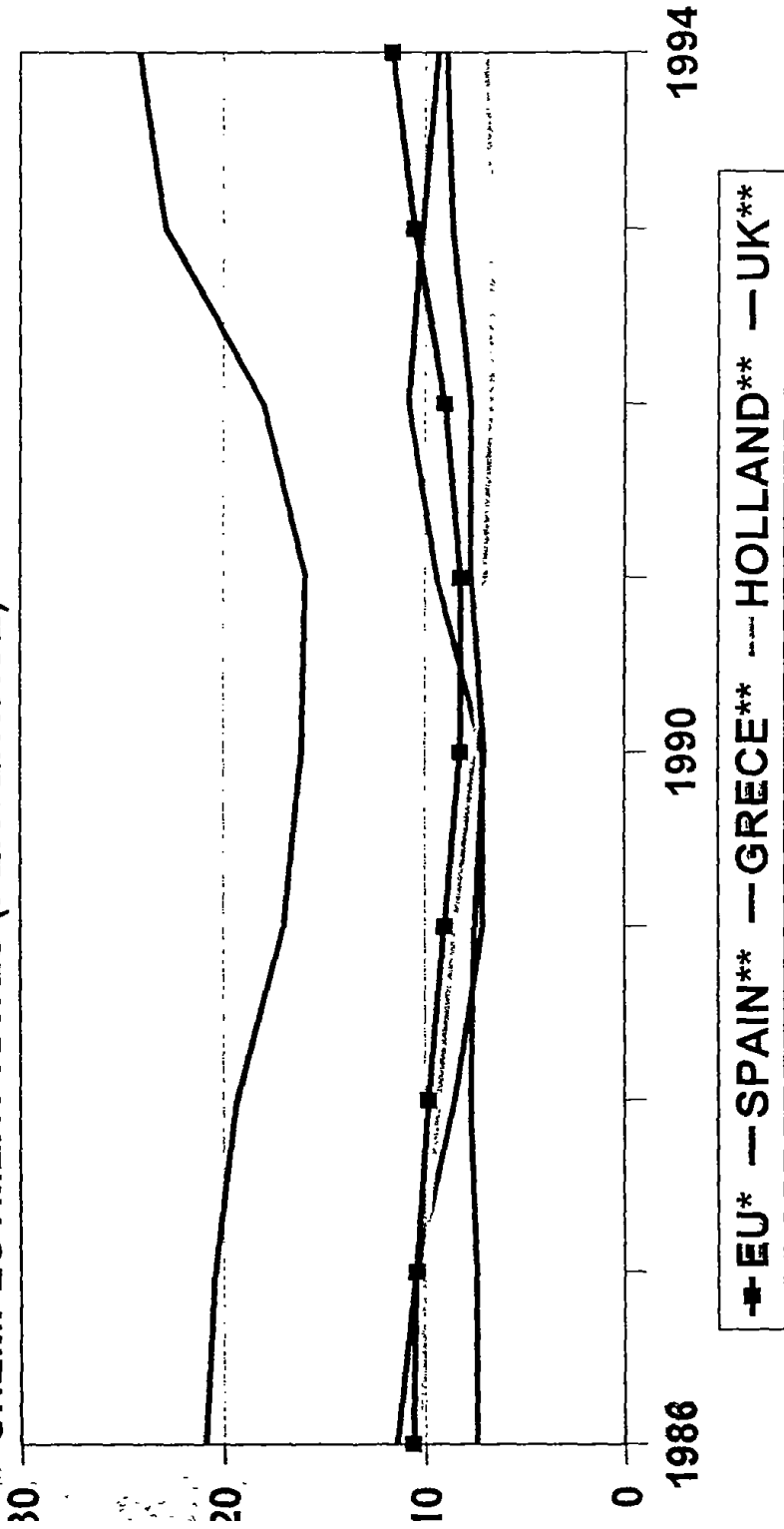
PROSPECTIVES STUDIES ON MORTALITY IN MEN

Authors	Country	Age group	Period	Findings
Moser et al	UK	15-64	1971-1981	SMR=136
Iversen et al	Dk	20-64	1970-1980	SMR=148
Costa et al	I (Turin)	15-59	1981-1985	SMR=202
Sorlie et al	USA	25-64	1979-1983	SMR=115
Stefansson et al	Sw	25-64	1980-1986	SMR=161

TABLE 2

UNEMPLOYMENT IN EUROPE AND SELECTED EUROPEAN COUNTRIES

UNEMPLOYMENT RATES (PERCENTAGE)

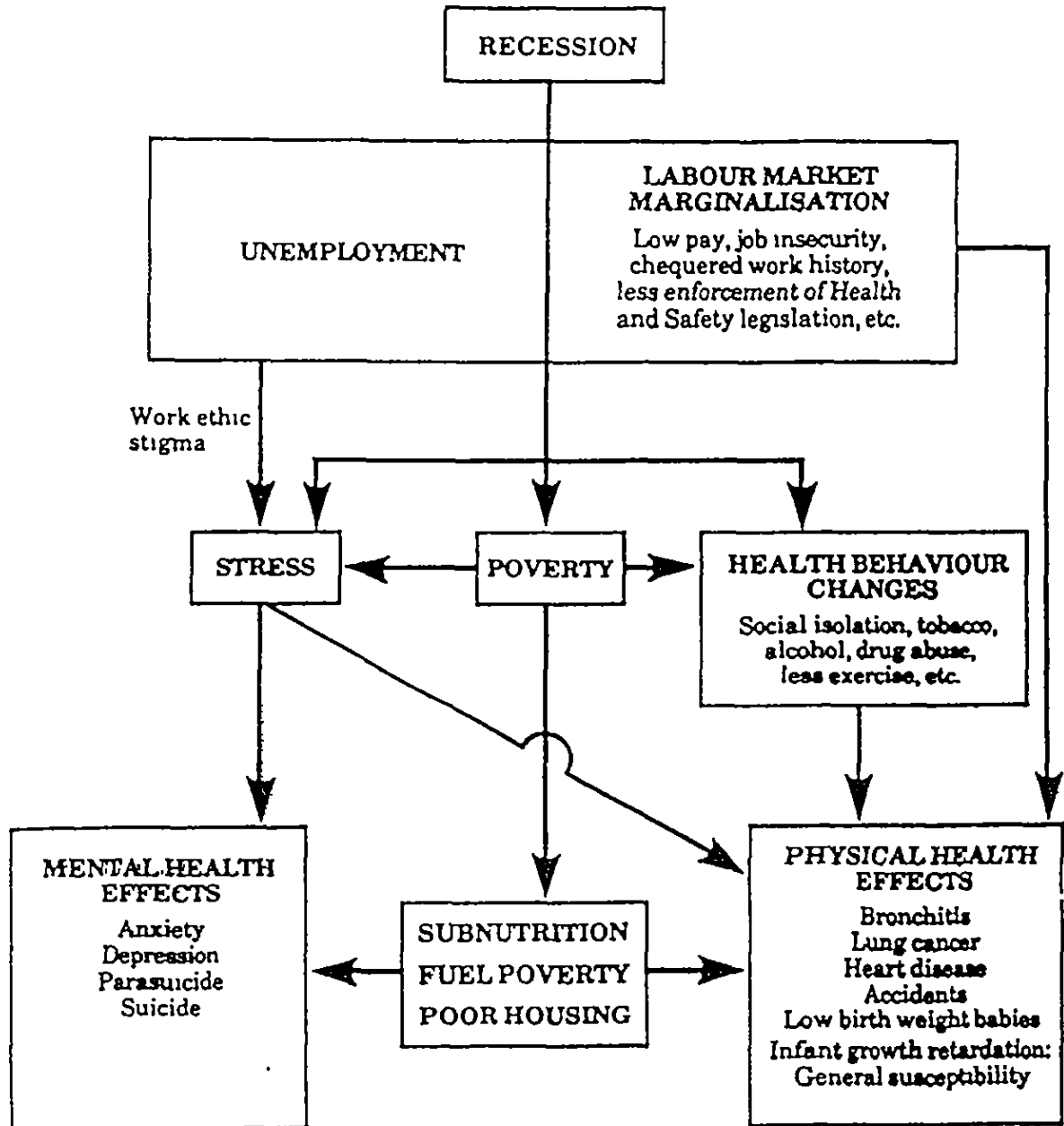


SOURCE: OECD (*) AND EUROSTAT (**)

FIGURE 1

A MODEL OF RECESSION EFFECTS ON HEALTH

Unemployment and Health Study Group
1986



Unemployment and Health Study Group, 1986

FIGURE 2

Relationship between working hours and type of employment
 (Source: 1996. Second European Survey on Working Conditions. European Foundation for the Improvement of Living and Working Conditions)

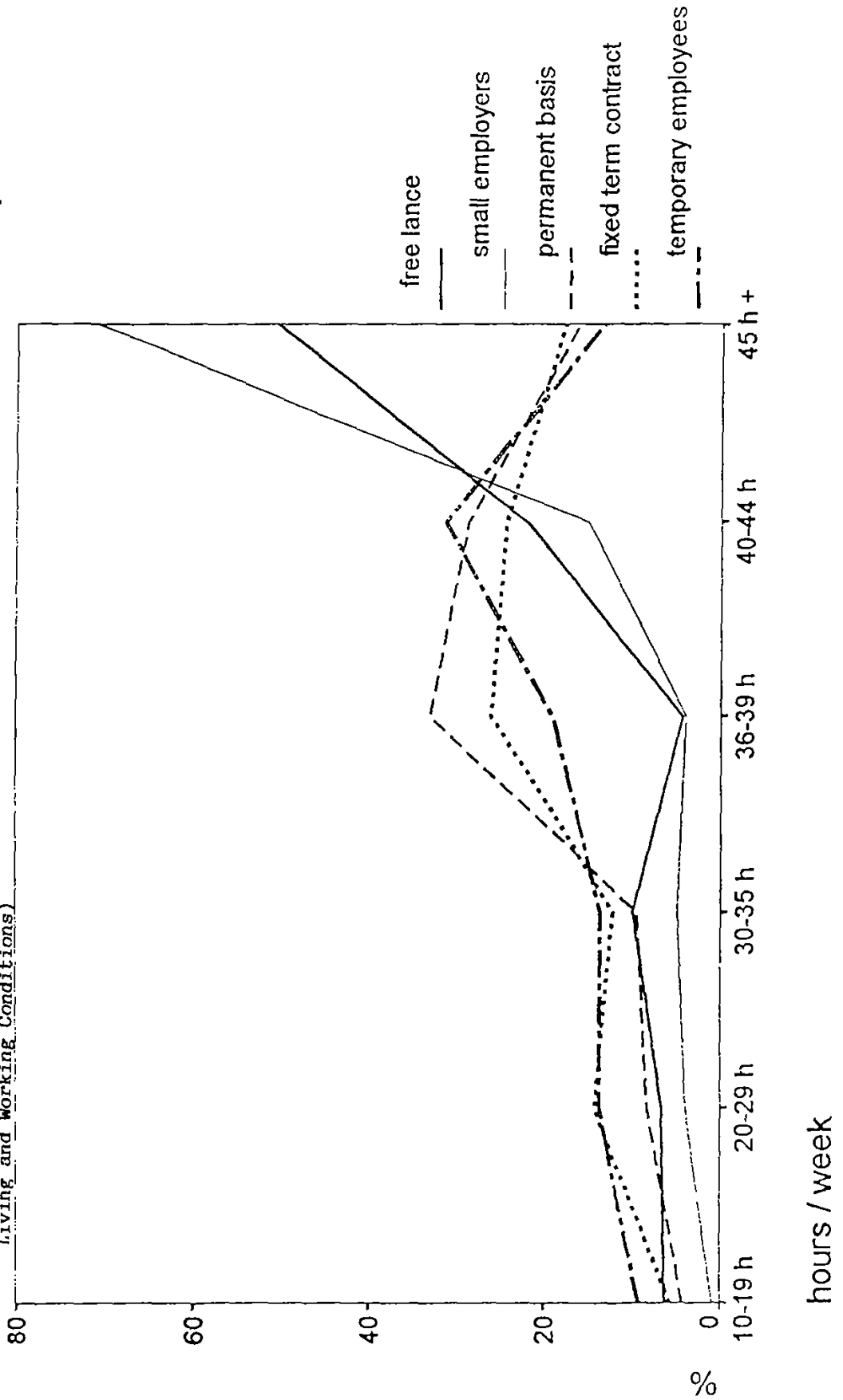


FIGURE 3

WORK-RELATED HEALTH COMPLAINTS AMONG EMPLOYEES WORKING MORE THAN 35 HOURS PER WEEK
 (Source: 1996. Second European Survey on Working Conditions. European Foundation for
 the Improvement of Living and Working Conditions)

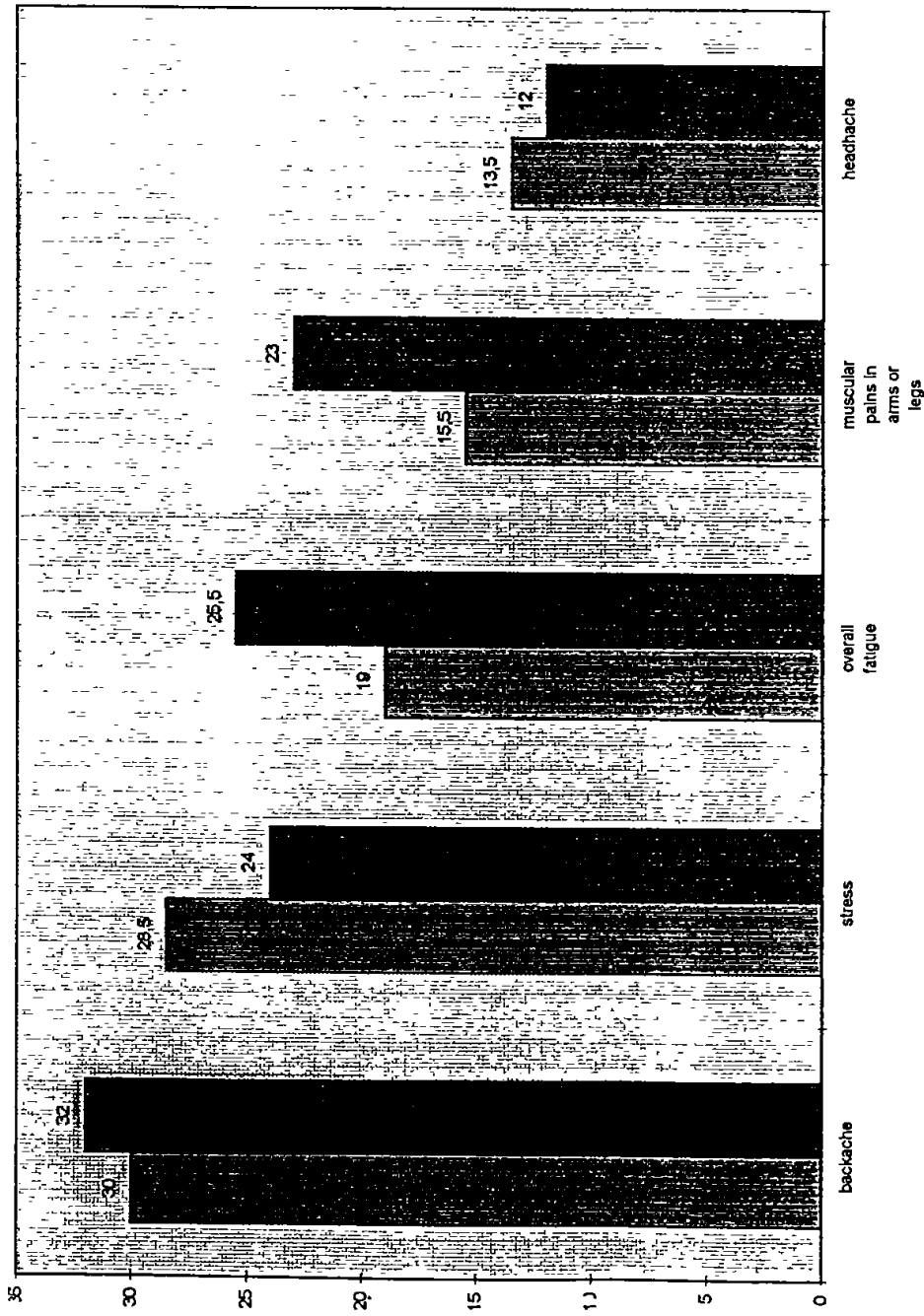
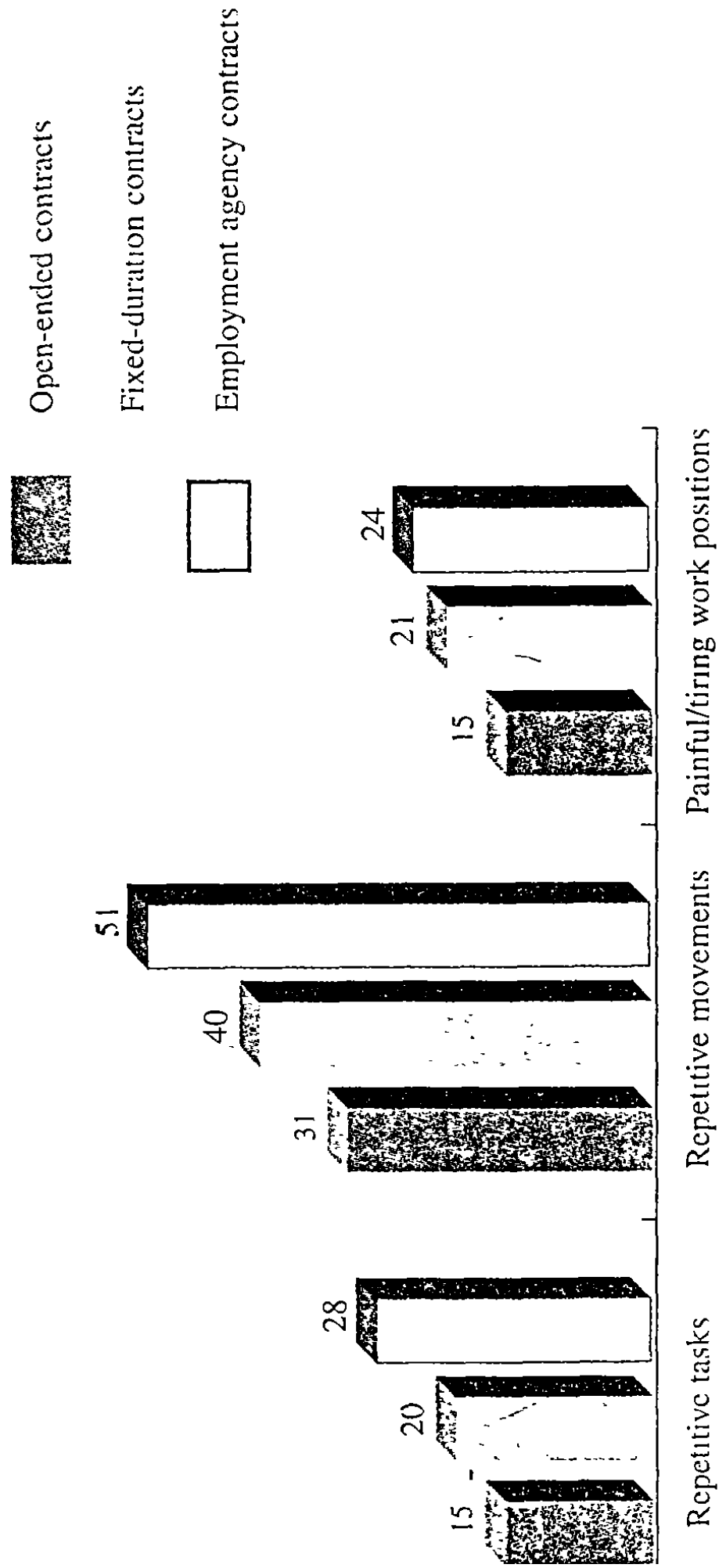


FIGURE 4

employees exposed to certain stress factors, according to their employment status



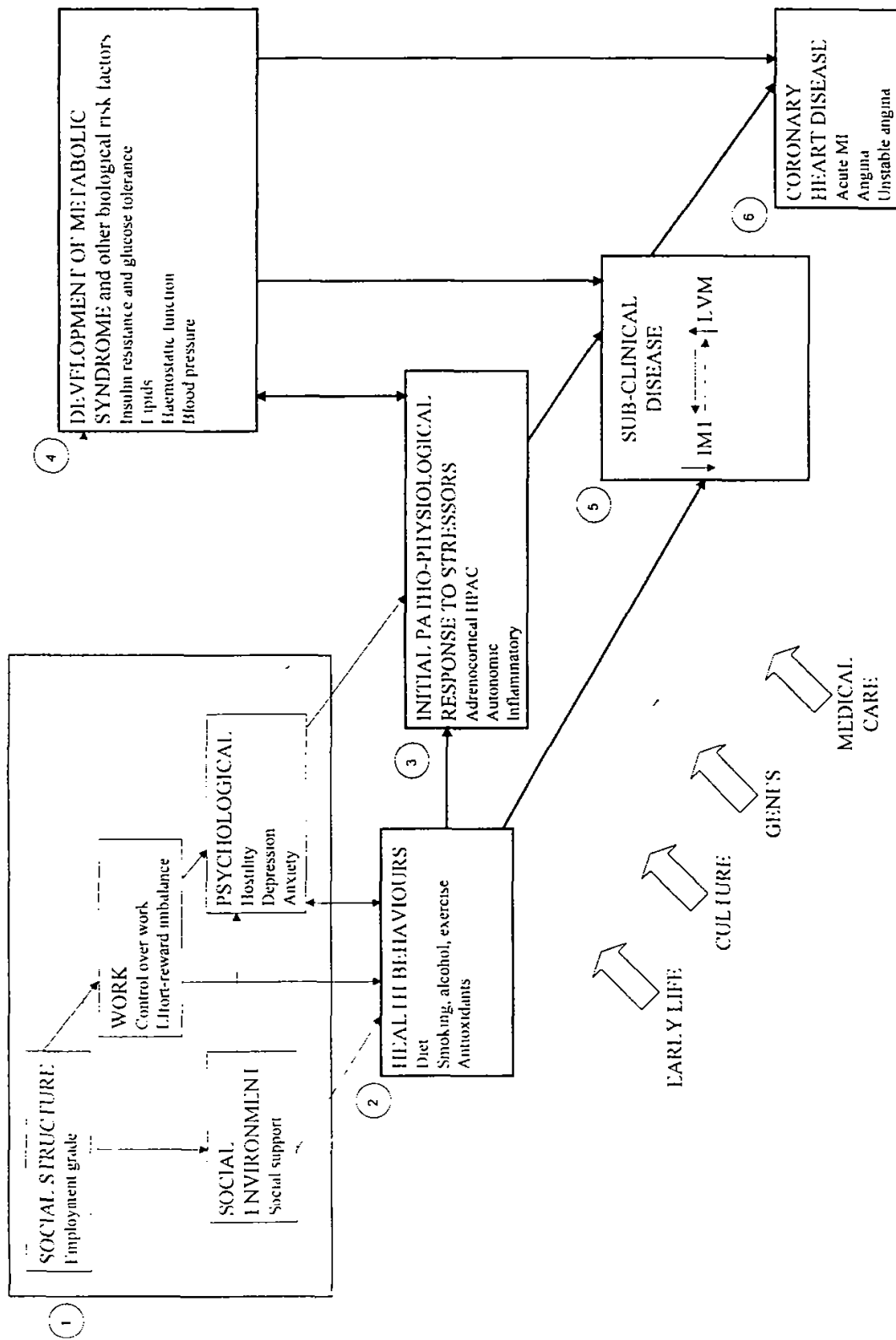


FIGURE 6 Social Position and Coronary Heart Disease : 6 levels of enquiry in the Whitehall II study

(Key: IMI = Intima-media thickness, LVM = Left ventricular mass)

ANNEX 1 SUMMARY OF PROJECT

TITLE Employment and health	PROJECT NO. 0203
THEME Living conditions and Working conditions	NATURE OF ACTIVITY Research/development
POLITICAL RELEVANCE <ul style="list-style-type: none"> Articles 2 and 129 of the Treaty on the European Union Council Resolution on Integration of Health Protection Requirements in Community Policies of 30.12.95 2nd Report from the Commission on the integration of health protection requirements in Community policies 	4-YEAR PROGRAMME 1997 - 2000 Challenges addressed: <ol style="list-style-type: none"> 1. Employment 2. Equal opportunities 3. Health and well-being 4. Social cohesion Areas of competence <ul style="list-style-type: none"> • organisation of work and the working environment • industrial relations • social environment • time
RESPONSIBILITY OF Jaume Costa Pascal Paoli	DATE OF BOARD DECISION

AIMS

- To identify the relationship between employment and health in the European Union.
- To describe the impact of unemployment, atypical forms of work, job income and skills on health.
- To assess the individual, household, company, social welfare and health care costs of the impact of different employment situations on health.

Background

The European commission in its report on the integration of health protection requirements in Community policies points out that employment and unemployment have broad repercussions on health. Research in several Member States has demonstrated the impact of unemployment on health. Unemployed workers suffer a higher proportion of depressions, suicides and psychiatric and psychosomatic conditions. They are affected by a higher risk of early mortality, higher morbidity and higher use of health care services. There is less research on atypical forms of work and health. Moreover, there is no available information at Europe level.

Employment policies are usually produced without taking into account their health implications. The results of this project could be used by the social partners, governments and European institutions to improve health through employment.

ANNEX II

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ANNEX III

AGENDA

1st Coordination Meeting on Employment and Health (Project No. 0203)

European Foundation Office, 1st Floor, 18 Avenue d'Auderghem, B-1040 Brussels
Tuesday, 3rd June 1997

- 09 30 Opening of the meeting and presentation of the project (*Dr Jaume Costa*)
- 09 45 Unemployment and health (followed by 10 minutes discussion)
(*Prof Fernando Garcia Benavides*)
- 10 15 Precarious employment and health (followed by 10 minutes discussion)
(*Ms Véronique Letourneux*)
- 10 45 *Coffee Break*
- 11 00 Low paid and low skilled jobs and health (followed by 10 minutes discussion)
(*Prof Michael Marmot*)
- 11 30 Healthy public policies (followed by 10 minutes discussion)
(*Dr Stephen Platt*)
- 12 00 General discussion What do we know and what is missing to prepare policy
recommendations? (*Dr Jaume Costa*)
- 13 00 *Lunch*
- 14 00 Continuation of discussion
- 15.15 Conclusions (*Mr Pascal Paoli*)
- 15 30 Closure (*Mr Pascal Paoli*)