TUTB NEWSLETTER • APRIL 2004 • N°22-23

Occupational health policies in Spain: problems, actions and priorities

Joan Benach
Dept. of Experimental Sciences and Health, Occupational Health Research Unit, Universitat Pompeu Fabra, Barcelona, Spain

Marcelo Amable
Dept. of Experimental Sciences and Health, Occupational Health Research Unit, Universitat Pompeu Fabra, Barcelona, Spain

Dept. of Occupational Health, Ministry of Public Health, Argentina

María Menéndez
Dept. of Occupational Health, The Workers' Commissions of Catalonia (CONC), Spain

Carles Muntaner
Dept. of Behavioral and Community Health and Department of Epidemiology and Preventive Medicine, University of Maryland-Baltimore, US

Introduction

After four decades of fascist dictatorship, the Franco regime in Spain came to an end in 1977, starting off a political transition which culminated in a democratic constitution in 1978. Spain has undergone intense political decentralization over the last twenty years, creating 17 regions enjoying high degrees of legislative and political autonomy, including responsibility for health issues, but with a potential for generating inter-regional differences in public policies. In the 1980s, the Spanish economy became more closely linked into the European and international economies, and stable welfare policies increased social spending, establishing universal access to educational and health services, and expanding social security, employment and social protection benefits (1). In spite of these remarkable changes, Spain's socio-economic indicators are still below those of more developed EU-15 countries. Since 1996, there has been a modest economic upturn, a freeze on public sector wages, and the government has met the Maastricht low inflation, low debt criteria by swingeing cuts in social welfare spending (2).

The main trends in the sweeping changes that have shaped the labour market over the past two decades include employment growth in the service sector, relative shrinkage in the industrial sector (shedding half a million jobs between 1977 and 1992), and a steady contraction in agricultural employment. Increased female labour force participation, high unemployment, and steady decline in the quality of employment are other salient features of the Spanish labour market. Although women's labour force participation has significantly increased, there is still a clear gender divide of women and men into two separate workforces, as well as clear segregation in male-dominated management and administration posts. Time use is also still ruled by traditional gender divisions. The available evidence leaves no doubt about the unequal gender division : 85% of women but only 25% of men assume domestic responsibilities. Women spend an average 4 hours 12 minutes more a day on housework, while men spend 1 hour 36 minutes more on paid work and 42 minutes more on leisure (3).

Unemployment was one of Spain's biggest social problems in the 1980s (21.5% in 1985) and 1990s (22.7% in 1995), with figures consistently about double the European Union average. Unemployment rates have decreased significantly in recent years, but the country is still plagued by unemployment (11.1% in 2003) with high levels of female (15.8% in 2003) and youth unemployment (19% male and 26.7% female under-25s respectively in 2003). One of the most significant labour market changes of recent decades has been the spread of new forms of work organisation and flexible job markets, with the emergence of new forms of non-standard employment, contingent work and various types of underemployment, including involuntary part-time employment and insecure employment (4). Additionally, the underground economy accounts for about 21% of Gross Domestic Product (GDP) (5) with a large share of the active population working in precarious conditions. Spain has the highest temporary employment rates, with a much higher proportion than the EU-15 (31.3% versus 13.4% in 2002). In 2001, 91% of the 14 million new contracts were temporary contracts, with more than two thirds of workers on contracts shorter than six months (6). These levels of short-term employment - double or triple the EU-15 average - are very unevenly distributed by occupation, gender and age (7).

This paper sets out to review Spanish occupational health policies and their ability to respond to new occupational health challenges. First, we identify the major occupational health problems both in terms of traditional occupational diseases and injuries as well as in terms of emerging workplace hazards like precarious arrangements and workplace inequalities. We also review some occupational health policy successes, but also emphasize big issues that have yet to be addressed, presenting the main legislative and research interventions, and the main actions and initiatives of key players in this process, namely, labour unions, employers and government. Finally, we point out key occupational health policy priorities that might help to overcome problems and improve health at work among Spanish workers.

Problems

Working conditions and occupational risk factors

At the beginning of the 21st century, the workplace is still a dangerous place for the majority of Spanish workers. Many traditional working conditions and occupational risk factors are still in place, especially in those economic sectors that face the burden of

hazardous industrial work. Thus, many physical, chemical, and ergonomic hazards still form a huge threat to workers. For example, the overall percentage of Spanish workers probably exposed to carcinogens has been estimated at 25%, and this figure rises to 52% in the most dangerous sectors of activity (8). However, major occupational health problems not only include such traditional concerns as unemployment and physical, chemical and biological hazards, but also modern risk factors due to new types of flexible employment, working time deregulation (variability, unpredictability), work pressure, increase in shift and night work, and job insecurity that are likely to increase work-related illness and mental health problems among other issues.

In Spain, information with which to analyse working conditions, occupational risk factors and work inequalities is fairly scant, and the main sources of information have important limitations. In this review, most analyses rely on data from the last two Spanish National Working Conditions Surveys (1997 and 1999). Comparisons with other European countries have been drawn from the European Surveys on Working Conditions. Additionally, information from the last Barcelona Health Survey (2000) makes it possible to analyse other specific risks and work-related health inequalities by gender and social class.

Work organization-related psychosocial risk factors, such as work that places high attention demands, working at high speed, or lack of participation are the most threatening risk factors. Other important factors are related to ergonomic considerations, like protracted position-holding or repetitive hand or arm movements. By and large, occupational risk factors increase in larger companies, but are independent of economic sector. When compared with average data from the EU-15, it is clear that self-perceived working conditions are worse in Spain. Differences are markedly higher in terms of monotonous work (63% in Spain versus 39% in the EU-15) and repetitive tasks (58% and 47%, respectively) (Table 1). According to the 2000 *European Survey of Working Conditions*, work-related dissatisfaction in Spain is above the EU average (23.6% vs 14.3%), and temporary employees are more dissatisfied than permanent staff (20.3% and 13.6% in EU-15, and 32.8% and 19.9% in Spain respectively).

Work-related health problems

Injuries from occupational accidents have an enormous impact on the health of workers and the economy in general, which is reflected in the death, disability and personal suffering of workers (approximately one in eight workers suffers some kind of accident every year, and three workers die every day), as well as time off and loss of productivity (over 2,700 work absence injuries a day). The trend in non-fatal injuries has levelled-off in recent years after a steady rise between 1993 and 1999. For the period 2000-2002, very high non-fatal incident rates have been reported in a number of economic sectors, like the extractive and construction industries, as well as in high-risk occupations like both un-skilled and skilled building trades. Although fatal injuries declined from 1989 to 2002, Spain has the highest incidence in the European Union of occupational injuries resulting in more than three days sick leave, and one of the highest incidences for fatalities. Compared to the EU-15 average, for example, Spain had a 71% excess of injuries with more than 3 days of leave and 35% excess of fatal injuries (Figure 1, p. 34) in 1999 (7). As will be seen later, these data bear out a lack of enforcement of the Prevention of Occupational Hazards Act.

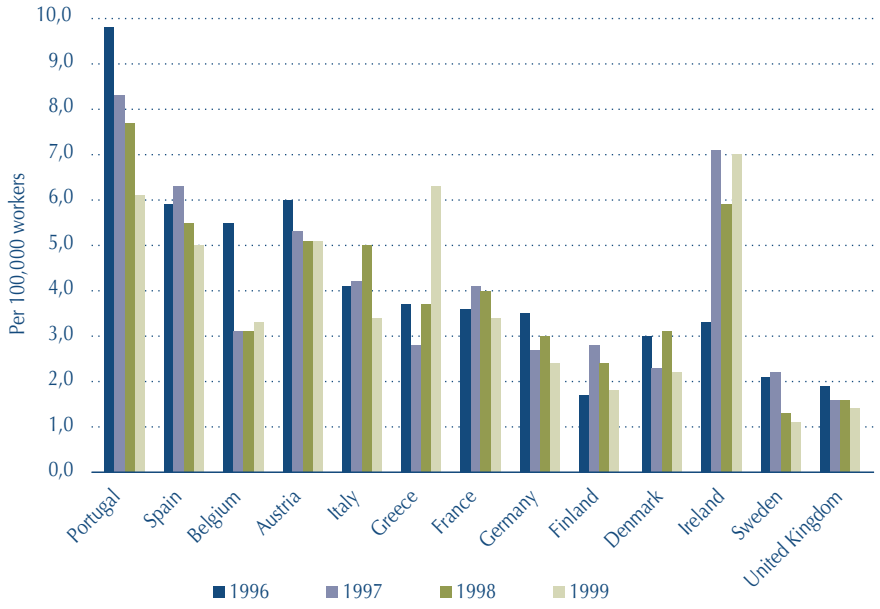
The distribution of injuries by occupation reveals wide differences. For fatal injuries caused by occupational accidents on a working day, for example, the occupations with the highest incidences were unskilled and skilled construction workers and iron / steelworkers. Type of employment contract is a key factor associated with the incidence of occupational injuries. Temporary employees are three times more likely than those with permanent contracts to suffer non-fatal injuries, especially in the construction industry, and twice as likely as permanent employees to suffer a fatal accident (7). A more fine-tuned recent analysis by gender and occupation confirms these findings (9).

Table 1 : Self-perceived working risk factors (percentage of respondents) in Spain and the EU-15

Working conditions risk factors	Spain (n=1,500)	EU-15 average (n=16,052)
Environment		
Loud noise	30.7	28.9
Exposure to fumes, dust and fibres	26.9	21.1
Vibrations	27.6	20.5
Handling noxious or toxic substances	15.6	13.6
Uncomfortable temperature	16.6	10.0
Radiations	6.1	5.7
Physical activity		
Repetitive hand or arm movements*	67.5	58.7
Long periods in awkward or unmoving postures*	48.0	44.6
Heavy lifting*	36.5	34.5
Organization		
Maintaining a sustained fast pace*	44.7	59.5
Repetitive tasks of short duration	57.9	47.0
Monotonous work	62.8	38.9
No control over (job) breaks	47.9	43.9
Unable to vary the order of tasks	44.8	36.3
No control over the pace of work	38.5	32.8
No control over methods of work	44.4	32.7
No control over work organization	31.7	21.0

* More than 1/4 of the working day.
Source : European Working Conditions Survey (2000)

Figure 1 : Incidence of fatal injuries caused by occupational accidents per 100,000 workers in the European Union countries, 1996-1999



Source : Eurostat, European Social Statistics, Accidents at work and work-related health problems, Data 1994-2000

Reported occupational diseases have risen steadily from 1998 (32.2 per 100,000 workers) to 2002 (171.3 per 100,000 workers) (7). This exponential growth is likely to be due to improvements in the occupational health registry system. But, it is important to realize that occupational diseases are heavily underreported. Medical doctors lack the knowledge to diagnose work-related diseases, the registry system is very inefficient and there is an absence of epidemiologic studies.

Work-related inequalities

In Spain, the probability of reporting occupational diseases, injuries and other health outcomes is not equally distributed across social groups, occupations, genders, and firms. Studies have evidenced higher mortality in males between 30-64 years of age among the more disadvantaged occupational social classes for most causes of death, and the gaps have widened over the period from 1980-82 to 1988-90 (10). A study on trends in socio-economic differences in the economically active male population grouped in four categories (professional / managerial, clerical / sales / service workers, farmers, and manual workers) aged 25-64 years in Spain has shown mortality differences from ischaemic heart and cerebrovascular diseases (11). On the other hand, the more deprived social classes present poorer self-perceived health status. It has been found that 40% of those in manual classes and 27% in professional classes in 1995 reported deficient self-perceived health status and those differences increased in the period 1987-95 (12). Additionally, another study showed that poor self-perceived health status increased in the low-income regions in the period 1987-93 (13). In the last national health survey conducted in 2001, in both men and women the percentage of people reporting poor self-perceived health increases gradually by social class (14), with a steeper gradient among women. It is a fact that the occupational and social conditions of working class women in Spain are very poor : they have less access to employment, are more often unemployed, and have demanding family responsibilities - child- and elder-care - with little public welfare support. For example, a study in the Catalonia region has shown that working class cleaning women have between two and three times worse health than non-manual women (15).

Many wide occupational inequalities can be found among workers (manual vs non-manual) and type of employment relationship (permanent vs temporary) with regard to exposures to unhealthy and damaging working conditions. Examples include physical, chemical, ergonomic and psychosocial risk factors. Results from the 1999 *Spanish National Survey on Working Conditions* show that physical risks are in most cases higher among male manual workers (Table 2). For example, almost 52% of male manual workers are exposed to noise (30.5% for females) as compared to 32% of non-manual workers (20.5% of females). Where psychosocial or organisational working conditions are concerned, job demands are higher among manual workers, while gender differences are small (Table 2). In the city of Barcelona, a sharp social class gradient on physical risk factors was found for both men and women. For both genders, manual workers (Classes IV and V) show a higher prevalence of physical and chemical risks. In particular, working class men are more exposed to physical hazards than their non-working class counterparts (16). Results also show a higher rate of exposure to musculoskeletal disorders among working classes (classes IV and V) and women. Psychosocial risk factors increase in the lower occupational social classes especially for classes IV and V, and particularly among women.

Comparing 1997 and 1999, there is an overall increase in risk factors among both permanent and temporary workers, especially for the latter. Prevalence rates for all risk factors are higher in temporary workers. In 1999, for example, 5.8% of permanent workers worked on unstable surfaces whereas that figure doubled for temporary workers (11.6%). Differences between contracts are more evident in work organization exposures. For example, having no control over task schedule or schedule was reported by 18.4% of permanent employees but 31.6% of temporary employees (7). It is important to consider the vulnerable conditions of many workers, that are often little discussed, unrecognized or unstudied. For example, although workers have legal protection from hazardous conditions, temporary workers may be particularly reluctant to assert their rights for fear of losing their jobs (17). With regard to illegal immigrants, unions and immigrant rights groups have reported that they often work for

meagre wages in sub-standard working conditions, subcontracted mainly in agriculture and construction. Finally, women tend to be more exposed to less-recognized risks than men. Women work in different sectors to men and are given less responsibility, with contracts which offer them less job security. Greater exposure to repetitive tasks, more front-line contact with the public (e.g., customers), and higher risks of workplace violence are just three examples of risk stressors. An analysis of gendered workplace health inequalities between married and co-habiting couples in the Catalonia region shows that any study of gender health differentials should consider not only paid work and household work but also the interaction between gender and social class (18). Thus, among women manual workers, family demands are linked to reported ill-health, long-term restrictive illnesses, and chronic disorders.

Occupational Health Prevention Services

Since the approval of Preventive services Regulations (Act 39/1997), Spain has predominantly had two-track provision comprising company preventive services and external preventive services. So, companies that do not set up an in-house preventive service most frequently sign up to an external preventive service set up by an insurance company (*Mutua*) responsible for compensating work accidents and diseases. This results in large-scale outsourcing of preventive services.

Although data on the situation of occupational health prevention services in Spain is scant, the poor coverage of workers is revealed by different sources. According to the most recent *National Working Conditions Survey* (1999), only 7% of firms had an in-house preventive service, whereas an external service was reported by 39% of firms. The employer assumed responsibility in 27.6% of firms, covering about 13% of workers. This is particularly significant where small- and medium-size companies are concerned. It is important to note that about 15%

Table 2 : Selected physical, chemical, ergonomic and psychosocial risk factors by manual and non-manual workers and gender in the Spanish working population (25-64 years) (%)

	Non manual			Manual		
	Male (N=831)	Female (N=695)	P	Male N=1241	Female N=468	P
Physical risks						
Uncomfortable temperature in summer	21.7	19.1	NS	36.6	24.3	< 0.0001
Uncomfortable temperature in winter	20.9	18.3	NS	27.0	16.3	< 0.0001
Uncomfortable humidity	18.4	14.2	0.03	17.2	10.0	< 0.0001
Noise	32.2	20.5	< 0.0001	51.8	30.5	< 0.0001
Vibrations	5.4	2.5	0.003	12.1	5.2	< 0.0001
Toxic products	11.4	9.4	NS	25.4	17.8	< 0.005
Musculoskeletal risks						
Painful or tiring positions more than half of the day	6.9	7.2	NS	9.7	11.5	NS
Staying in the same position more than half of the day	29.8	36.1	0.02	25.1	36.0	< 0.0001
Carrying heavy loads more than half of the day	3.2	0.9	0.001	7.3	4.3	0.02
Making an important effort more than half of the day	2.2	0.7	0.02	4.8	2.6	0.01
Repetitive hand or arm movements more than half of the day	29.2	28.2	NS	34.4	46.3	0.0001
Psychosocial risks						
Working with high demand of attention more than half of the day	66.2	64.7	NS	57.5	42.9	< 0.0001
Working with high speed more than half of the day	43.7	40.1	NS	31.3	28.8	NS
Repetitive tasks more than half of the day	28.8	27.9	NS	32.2	43.2	< 0.0001
Excessive workload	19.4	19.3	NS	10.5	15.8	0.02
Unpaid overtime on normal working day	32.2	29.2	NS	18.1	23.5	0.007
Poor relations with superiors	7.5	5.1	0.03	8.8	8.0	NS
Poor relations with colleagues	2.4	2.6	NS	2.4	2.0	NS
Unable to vary task order	9.2	8.8	NS	28.9	30.0	NS
Unable to vary methods of work	16.9	21.3	0.03	39.5	39.9	NS
Unable to vary pace of work	15.7	20.1	0.02	35.4	35.9	NS
Unable to vary order of breaks	17.7	17.5	NS	36.7	36.7	NS
Lack of opportunity to develop own skills	3.6	5.8	0.05	13.7	22.8	< 0.0001
No promotion since working in the company	41.4	51.8	< 0.0001	42.7	65.7	< 0.0001

Source : IV Spanish National Survey on Working Conditions, 1999

of medium-size companies (between 6 and 249 employees) that reported only the employer assuming the preventive responsibilities are breaking the law. Finally, 26% companies reported that they did not have a preventive service (16% of workers). A more recent nationwide survey that looked at the situation in workplaces with the highest reported work accident rates (19), (i.e., mid-size companies that must have preventive services under Spanish law), found that 31% of them had not set up a preventive service and that in 3% of them, the employer performed its functions (20). A conservative estimate has recently been made of the number of preventive services that should be operating in Spain under present legislation. Available information suggests that one in four companies has no occupational health service (7). This means not only that many companies are breaking the law, but also that the government is not policing and enforcing compliance with the legislation. On the other hand, even where preventive activities are organized, they are often of dubious quality and mainly concerned with simply achieving paper compliance. In the Navarre region, for example, only 17.5% of workplaces inspected had done a satisfactory assessment, nearly 40% had an inadequate one or none, in 13.5% it had not been updated, and in 18% of cases it did not cover all jobs (21).

Actions

Among the many actions that may play a significant role in improving the work environment and tackling work-related health inequalities, some of the most relevant include the production and dissemination of knowledge, the development of legislation, and the political initiatives and actions taken by key social players. We particularly consider here the key issues of information, training and research, recent legislative changes and political agreements reached by the most important political actors, as well as some initiatives and specific policy interventions developed by public administrations, companies, and trade unions.

Information, training, research

Although knowledge on a number of traditional occupational health problems is already available in Spain, and data on occupational injuries and sickness absence are fairly comparable with other EU-15 countries (22), the lack of comprehensive and reliable data is still a major limitation. Thus, in spite of the valuable information generated in the last decade in Spain, there is a lack of high-quality data on many workplace risk factors and health outcomes. For example, one of the most important sources of information for understanding the work environment and occupational health in Spain is the *National Surveys on Working Conditions* (1983, 1993, 1997, 1999). Given their significant limitations, however (e.g., small sample sizes, questions not always standardised, and a design that does not guarantee that respondents were randomly selected), their data and findings should be interpreted with caution (23). Indeed, many occupational problems in Spain remain "invisible" or unknown because they are overlooked, undiagnosed or unreported by current information systems. For example, available data on psychosocial, ergonomic and chemical risk factors do not provide sufficient knowledge to implement evidence-based policy interventions.

A second big issue to consider regarding knowledge is that in Spain, a lack of proper education and training for most occupational health professionals (i.e., occupational physicians, occupational hygienists, safety engineers, ergonomics and psychosociology specialists) is an important limitation on improving surveillance and implementing effective preventive activities at the workplace. A simple example is that the official approval at the national level of studies for hygienists, ergonomists, psychosociologists, health and safety technicians and occupational nurses has yet to be implemented.

The situation as regards occupational health research is very poor. For one thing, there are very few occupational health research groups or scientific studies. In the period 1998-2002, only 91 papers on occupational health were published where the lead author was Spanish (62% were published in international journals). PhD dissertations are very scarce, and more concentrated in such fields as occupational medicine, occupational law, and social and industrial psychology. Only in 2003 did the National OSH Institute (INSHT) begin to promote its own research projects (7). On the other hand, Spain exemplifies a country that has moved rapidly from having no monitoring of social inequalities in health in the 1980s to one with a small but active programme in a handful of research centres in the 1990s. Overall research on social inequalities in health can be said at present to be in a "denial / indifference phase (1), while research on work-related inequalities is in a "need for measurement" phase (24). Indeed, it is only recently that the very first study on occupational health inequalities has been published in the Catalonia region (15) as part of a Catalonian Black Report (25), and that the first review on work-related inequalities in Spain has been done (16).

Legislation and political agreements

Because the country lived under a dictatorship for 40 years of the 20th century, a system of labour legislation took shape in Spain much later than in other western European countries. The basic modern rules governing health and safety at work containing an extensive list of regulations and requirements were laid down only in 1971, later supplemented by other regulations directed specifically at certain industries, occupations or types of work, many of them implementing European Directives and Regu-

lations. The Prevention of Occupational Hazards Act (Law 31/1995) of November 1995 established a modern, general framework for health and safety at work that regulated, among other things, the general obligations or duties of employers, employees and the manufacturers and suppliers of machinery, toxic substances and equipment in regard to the prevention of risks, and the consultation and participation rights of workers and employee representatives. This law on the prevention of occupational risks and its corresponding regulations theoretically ushered in a near-universal legal protection of health at work and the integration of prevention into company management structures.

The implementation of this legislation, however, was accompanied by two negative circumstances. First, the Spanish Occupational Hazards Act was basically approved as a result of the need to transpose European Framework Directive 89/391/EEC on health and safety rather than as a consequence of social demand or political pressure to change the work environment and improve workers' health (26). Second, and even more importantly, the law came in as labour market flexibility was gaining ground, bringing a social climate adverse to workers with firms seeking more flexible forms of organization and casualization. Moreover, the Spanish government was unable to enforce legislation properly and to ensure that market deregulation did not push health into second place. Thus, a far-reaching reform of labour legislation took place in 1994. This extensive reform, which saw the amendment of many of the precepts of the major labour laws (e.g., the Workers' Statute, the Labour Procedure Act or the Labour Offences and Sanctions Act), included the adoption of a number of new laws, such as an Act on temporary employment agencies, and the revision of regulations on temporary / fixed term contracts, training contracts and redundancy procedures that established the foundations for a revised regulation of the collective bargaining system. As a result, an increasing number of often previously illegal situations were brought into the fold of legality. By and large, these changes led to the progressive segmentation of the labour force, with a core of permanent workers and a group of precarious workers with greater job insecurity (16).

Mainly in response to trade union pressure, recent years have seen a spate of initiatives brought forward by government, employer's organizations and the main trade union confederations for joint agreements to improve occupational health and address major problems. A first failed attempt at so-called "Social Dialogue" was made in November 1998 after a steady rise in work-related injury totals. While a number of occupational health needs and insufficiencies were detected and several agreements reached, the proposals did not deliver effective solutions. New agreements reached in the "Social Dialogue Forum on Occupational Health Risk Prevention" in December 2002 paved the way for wide-ranging reforms to the Prevention of Occupational Hazards Act in December 2003 (Law 54/2003). Among the main changes are : integrating prevention into corporate lines of responsibility, with the need to frame a detailed prevention plan with appropriate internal resources for preventing risk situations ; a package of measures to implement inspection, policing and enforcement mechanisms ; to adapt legislative changes to the new forms of work organization, improving the employer's coordination ; and ensuring compliance and enforcement of legislation on infringements and penalties.

Interventions and perspectives of key players

■ Government agencies

Government health and occupational safety agencies have responsibilities for ensuring the health and safety of workers at the national and regional levels. Health agencies have focused their main activities on setting the minimum level of resources needed to implement the health activities of preventive services, working out the occupational health information system and drawing up health surveillance protocols. But, public agencies have failed to address a number of crucial issues. Two examples are the lack of governmental compliance activities and enforcement of regulations and penalties, and the very weak linkages established between occupational health and other social and public health policies. The occupational health inspectorate is clearly under-resourced to deal with the many occupational health problems (traditional and emergent) in an increasingly segmented labour market. In fact, the number of workplace inspections has fallen in recent years (7). This is particularly important in small- and medium-sized companies, where implementation of occupational health preventive actions is difficult to monitor. The National OSH Institute (INSHT) is the biggest national institution specialized in occupational health. Although its main functions are promotion, technical support and research, it has only very partially delivered these objectives.

■ Employers, companies and insurance companies *(Mutuas)*

Since the Prevention of Occupational Hazards Act (Law 31/1995) was passed, laying the ultimate responsibility for occupational health risk prevention on the employer, employers' organisations have become more open to discussion and change on a range of occupational health issues. Mostly, however, employers have tended to oppose the proposals made by government agencies and pressure brought to bear by trade unions. This defensive approach can be seen, for example, in their participation in the "Social Dialogue Forum", where employers have seldom initiated new proposals for risk prevention, or their common tendency simply to go through the motions. The preventive services market is clearly developing along oligopolistic lines, where a small number of

external services enjoy a dominant position. In 2002, just six insurance companies (*mutuas*) covered about 71% of workers against work-related harm (7).

The externalization of preventive services in general reflects an abdication of company responsibilities (19). Thus, the outsourcing of prevention activity often leads to prevention being seen as a product and an activity divorced from the company, requiring neither commitment nor involvement from the employer, where worker participation is lacking and prevention is an officialistic activity that disregards emerging risk factors (27). On the other hand, Spanish regulations refer to a range of disciplines, from which employers can choose just two to comprise a preventive service. Several issues need to be considered in relation to the role of *mutuas* in prevention. First, it is the employer's choice which *mutua* to use, so that *mutuas* are under the "control" of employers. Second, in financial terms, it is estimated that workplace prevention is little more than a marginal activity for mutual insurance organisations (i.e., most of the budget goes to compensating incapacity and only a very small percentage goes to prevention). In short, prevention is not a priority. Third, in recent years, *mutuas* have been trying to move into new markets in the public health system. Privatization of certain social security activities, therefore, has recently led to growing *mutua* involvement in the management of incapacity for work due to non-work related diseases.

■ Trade unions

In Spain, the two main labour federations are the Workers' Commissions (*Comisiones Obreras*, CC.OO) and the General Workers Union (*Union General de Trabajadores*, UGT), which tend to describe themselves as class trade unions. As in other southern European countries, trade unions in Spain are weaker than in many northern European countries. Although no official figures are available, estimates from several sources suggest that between 18 and 20% of the Spanish employed labour force is unionized (about 2.6 million people out of 13.1 million) (28). The highest rates of unionized workers are found in the industrial sector (21%), where the lowest percentages are found in construction (11.2%). Traditionally, Spanish trade unions have been mainly concerned with wages, earnings and employment issues ; working conditions, welfare policies and occupational health issues have only more recently come onto their agenda. Even so, a number of valuable actions and interventions in recent years have helped to improve the work environment for the majority of workers, which may also have benefitted the most vulnerable workers. First, the new Prevention of Occupational Hazards Act and its implementing regulations have increased worker participation through the action of trade union representatives and delegates who can play a specific role in the implementation of occupational health prevention plans. Second, given the high incidence of occupational accidents and hazardous working conditions, trade unions have heavily criticized the government for devoting insufficient resources to inspection and enforcement. In particular, trade unions have underlined the poor application of prevention legislation, the extent of subcontracting and temporary employment, and the increasing instability of the labor market as the main factors behind occupational accidents. Third, given the lack of trade union representatives in many small and medium-sized firms, and in sectors like construction, with a largely contingent workforce, trade unions have called for the creation of "regional safety delegates" to operate as a prevention delegates (29). Finally, in Spain, collective bargaining agreements are widespread in both the public and private sectors ; in the latter they covered some 83 percent of workers in 2003, notwithstanding the relatively low private sector union penetration. Collective bargaining is a key means of regulating and improving working conditions that help promote workers' rights, gender equality and occupational health for all workers.

Work-related inequalities in health have not been specifically addressed by any of the Spanish trade unions. In fact, specific references or discussions on this subject are rarely found in trade union publications. However, it is important to note the efforts made by the Trade Union Institute for Work, Environment and Health (ISTAS), an independent non-profit technical foundation set up by the Workers' Commissions (CC.OO), to promote occupational health and environmental protection serving the interests and needs of all workers. In addition, development of regional trade union occupational health activities may play an important role in spreading a new culture of risk prevention. For example, the Workers' Commissions' strategy on work-life balance has been successful in framing demands and achieving actions focused on gender equality in the workplace and work-related health, which is regrettably far from common in trade union practice (3). However, it is not yet possible to give an overall assessment of the degree to which these processes may have had an impact on reducing such health inequalities.

Priorities

Today, work-related health problems in Spain place an enormous health and economic cost burden on workers, companies and society as a whole. The high level of occupational injuries, for example, reflects major failings in the prevention systems that a developed country cannot afford to have. Rules and regulations on prevention of occupational hazards have been only partially applied, occupational health interventions are limited and no appropriate policies and budgets have so far been implemented (7). The economic cost of occupational accidents has been estimated at € 12,000 million in 2002, a year in which the penalties handed out totalled only € 103 million (30). Simply assessing occupational

health hazards does not imply that proper strategies will be developed. Similarly, technical reports with exhaustive lists of strategies and actions do not necessarily signify effective prevention, and the implementation of occupational health legislation, although necessary, is not sufficient to increase prevention at the workplace.

Occupational needs like those described in this study call for a radical change in occupational health prevention, policies and services. In Spain, as in many other European countries (31), legislative changes have not produced much improvement in small and medium-sized enterprises, many workers, like the self-employed, are not covered, there are significant shortcomings in the extent and functions of occupational preventive services, major limitations on current data collection, and an effective occupational health agency is still needed to provide the specialized research background required to support evidence-based policy. Some improvements in legislation, knowledge, education and research have produced an as-yet very limited reaction in terms of effective health policies and interventions. Moreover, many interventions implemented for white male permanent workers in medium-to-large firms, and targeting traditional occupational hazards, are unlikely to meet the demands of the new flexible work environment. Indeed, the spread of unequal precarious working conditions is one of the main obstacles to improving the work environment and closing work-related health gaps (16). Thus far, occupational health needs and the health of the working population has yet to move to the top of the Spanish policy agenda.

Policies or interventions to improve the work environment have not been formulated as a main goal of national and regional health strategies. Moreover, no specific national or regional policies or interventions seeking to reduce social and work-related health inequalities have been conducted (16-31). Main reasons for the lack of official reaction include both the weakness of public health groups, trade unions, and other social groups, as well as the lack of political will of the national conservative government and many regional governments. If work-related inequalities in health are to be reduced, it is essential both to increase our knowledge and to carry out a wide range of interventions and policies implemented and evaluated at all levels. The labour movement, labour-based political organizations, social organizations, and, especially, governments at the national, regional and local levels, have the responsibility to frame and be accountable for occupational health policies that enforce legislation and compliance that leads to occupational health for all. Indeed, one of the biggest policy issues today is to put the need to understand and reduce work-related health inequalities on the agenda of governments, unions and other social institutions. The main general challenges lying ahead are to establish the priority of occupational health over economics, to improve knowledge of all occupational health problems, to implement more efficient forms of intervention, to increase worker participation and to properly enforce and assess policy interventions (7-31).

The most important specific priorities are :

1. In an increasingly deregulated labour market, a key challenge is *to develop social policies that help to improve the conditions of the labour market structure and labour participation*. Policies to tackle the high level of unemployment, underemployment and precarious employment (in particular among youth, women and migrants), some of whom work in the black market, should be the highest priority.

2. *To expand and improve occupational health information and data systems* as a means to implement action on evidence-based knowledge. Current sources of information do not provide high-quality registries and indicators on which to base a proper assessment of occupational health risks and problems.

3. There is an essential need to *increase research on poorly-known occupational hazards and new occupational risk factors*. Most occupational health research resources should be oriented toward the most important risk factors and neglected health problems. Special attention should be given to the interactions of social class and gender-based work-related health inequalities, and especially to the most vulnerable workers. Workers suffering from a range of social risk factors and health problems will not be fully understood if studied separately or if risk factors are isolated from the work organization.

4. It is necessary *to develop integrated occupational policies that improve work environment and strengthen workers' participation, opportunities and rights*. A high priority is to focus on risk-factor oriented policies (rather than just health problems) that address the situation of high-risk companies, small companies, self-employed workers and domestic staff. Workers have the right to organize a work-life balance that does not depend on the employer's good will.

5. *Reform of occupational preventive services is urgently needed*. The number of company occupational prevention health services must be expanded until universal coverage is achieved. Small firms and self-employed workers must not be left out. Occupational health services should have more disciplines to make them genuinely multidisciplinary, and must be more integrated and of higher standards. Company preventive services should be expanded, leaving external expertise for specific issues. There is a big need

for an open social debate on the need to modernize national insurance companies (*mutuas*). Finally, public agencies should carry out regular monitoring of occupational health services to see whether they are delivering proper health protection for workers in practice.

6. The *implementation and proper enforcement of interventions that go beyond current legislation in protecting workers' health* is crucial. While the development of the current legislative framework is an important step, the enforcement of effective interventions that go beyond a tick-box exercise is crucial. For example, far-reaching reforms to inspection services, including better resourcing, the coordination of national and regional activities, more enforcement and imposition of penalties, are sorely needed. Incentives should be given to those companies that meet regulatory requirements and have better outcomes.

7. *High priority should be given to interventions that address the needs of the most vulnerable workers.* The problems of women (i.e., balancing family and job demands), migrants, insecure and manual workers, as well as those of small enterprises, deserve special attention. More resources should be provided to help poorer families, and for the integration of people with disabilities into the workplace.

Concluding remarks

The working conditions endured by many workers in Spain are taking a massive toll on their health, and are a major source of health inequalities. Hundreds of thousands of workers each year suffer work-related injuries and illnesses, and more than 1,000 workers die annually from work-related events. But, the paucity of available data masks the real scale of the occupational health problems. Today, we are just seeing the tip of the iceberg of the many risk factors and health problems Spanish workers are facing. Together with "traditional" unresolved problems like physical risks, there is a rise of "emerging" risks like work intensification and job insecurity, which often are invisible or little discussed, that lead to musculoskeletal disorders, mental health problems and job dissatisfaction. Moreover, working conditions are getting worse for many groups of workers and work-related inequalities are widening. The low de facto priority given to occupational health problems is even more remarkable in view of the fact that occupational health hazards are massive and preventable, that workers have the legal right to work in a healthy and safe workplace, and that poor occupational health and worker disability may cause large economic losses. To address the emerging health problems created by the spread of contingent and precarious employment, integrated policies which account for technical, economic, cultural and political factors are needed. Formidable obstacles remain to improving the occupational health of Spanish workers. Action on the most important occupational health hazards, however, should not be addressed as "technical" or "economic" value-free problems. The implementation of a new occupational health agenda will inevitably get to grips with the issue of power and conflict of interests. Differences in the distribution of political and economic power have a profound influence on the work environment and health- determining key issues, like which health regulations will be approved, what kind of work conditions will be considered acceptable, who will be exposed to risks, what is considered an acceptable risk, and what priorities will be set. Occupational health policy in Spain is at a critical stage. Although deaths, diseases, injuries and suffering caused by occupational exposure to dangerous working conditions are today major problems, occupational health remains very low on the policy agenda. Most of the national and regional authorities are not providing the right scientific knowledge or occupational health interventions needed to protect the health of Spanish workers. The challenge of achieving an efficient and equitable occupational health policy will depend very much on the effective implementation of the priorities outlined above. ■

References

(1) Benach J, Borrell C, Daponte A, Social and economic policies in Spain with potential impact on reducing health inequalities, *in* Mackenbach JP, Bakker M (eds), *Reducing inequalities in health: A European perspective*, Routledge, 2002:262-273.

(2) Navarro V, Quiroga A, Políticas de estado de bienestar para la equidad [Welfare State policies to reach equity], *in* Borrell C, García Calvente Mª del Mar, Vicente J (eds), Informe de la Sociedad Española de Salud Pública y Administración sanitaria (SESPAS) 2004, *La salud pública desde la perspectiva de género y clase social. Gac Sanit* (in press).

(3) Munar Suard L, Spain: achieving the work-life balance, *in* Vogel L, *The gender workplace health gap in Europe*, European Trade Union Technical Bureau for Health and Safety, 2003:277-289.

(4) Muntaner C, Benach J, Hadden W, Gimeno D, Benavides FG, *A Glossary for the social epidemiology of work organization*, (submitted).

(5) Alañón A, Gómez de Antonio M, *Una evaluación del grado de incumplimiento fiscal para las provincias españolas*, Instituto Estudios Fiscales. http://www.minhac.es/ief/principal.htm [Page visited 19-11-03].

(6) Ministerio de Trabajo y Asuntos Sociales (MTAS), *Anuario de estadísticas laborales y de asuntos sociales 2002*, [page visited: 08-01-04]. Accessible in: http: www.mtas.es/Estadisticas/anuario00.

(7) Durán F, Benavides FG, coords., *Informe de salud laboral. Los riesgos laborales y su prevención. España, 2003* [Occupational risks and prevention in Spain, 2003], Barcelona: Zurich (2004).

(8) Kogevinas M, Maqueda J, De la Orden V, Fernández F, Kauppinen T, Benavides FG, Exposición a carcinógenos laborales en España: aplicación de la base de datos CAREX, *Archivos Prevención Riesgos Laborales* 2000; 3:153-159.

(9) Benavides FG, Benach J, DelClos G *et al.*, *Temporary employment and risk of traumatic occupational injuries* (submitted).

(10) Regidor E, Gutiérrez-Fisac JL, Rodríguez C, Increased socioeconomic differences in mortality in eight spanish provinces, *Soc Sci Med,* 1995;41:801-7.
(11) Lostao L, Regidor E, Aiach P, Dominguez V, Social inequalities in isquemic heart and cerebrovascular disease mortality in men: Spain and France, 1980-1982 and 1988-1990, *Soc Sci Med* 2001;52:1879-87.
(12) Urbanos RM, *Análisis y evaluación de la equidad horizontal interpersonal en la prestación pública de servicios sanitarios. El caso español, 1987-1995* [Analysis and evaluation of horizontal equity in public provision of health services. A case study of Spain, 1987-1995], Madrid: Universidad Complutense, PhD Dissertation, 1999.
(13) Navarro V, Benach J and the Scientific Commission for the study of health inequalities in Spain, *Desigualdades sociales en salud en España* [Social Inequalities in health in Spain], Madrid: Ministerio de Sanidad y Consumo, 1996.
(14) Daponte A, *Socioeconomic environment and trends in inequalities in health in Spain (1987-2001),* PhD Dissertation (in press).
(15) Artazcoz L, Cortes I, Benach J, Benavides FG, Les desigualtats en la salut laboral [Occupational health inequalities], *in* Borrell C, Benach J (coords), *Desigualtats en salut a Catalunya* [Health inequalities in Catalonia], Barcelona: Mediterránea, 2003:251-282.
(16) Benach J, Amable M, Muntaner C, Artazcoz L, Cortés I, Menéndez M, Benavides FG, *Work-related health inequalities in Spain* (in press).
(17) Amable M, Benach J, González S, La precariedad laboral y su impacto sobre la salud: conceptos y resultados preliminares de un estudio multi-métodos, *Arch Prev Riesgos Laboral,* 2001;4:169-184.
(18) Artazcoz L, Borrell C, Benach J, Gender inequalities in health among workers: the relation with family demands, *J Epidem Community Health,* 2001; 55: 639-647.
(19) Vogel L, Spain: preventive services well below par, *TUTB Newsletter*, No. 21, June 2003: 32.
(20) Instituto Nacional de Seguridad e Higiene en el Trabajo (INSHT), *Plan nacional de seguimiento de empresas con alta siniestralidad*, Madrid, 2001.
(21) Boletín Oficial del Parlamento de Navarra, Declaración política sobre siniestralidad laboral en Navara, No. 36, 31 March 2001:9-16.
(22) Benavides FG, Delclos GL, Cooper SP, Benach J, Comparison of Fatal Occupational Injury Surveillance Systems between the European Union and the United States, *Am J Industrial Medicine*, 2003;44:385-391.
(23) Artazcoz L, Encuesta sobre condiciones de trabajo: reflexiones y sugerencias [Working Conditions Survey: reflections and suggestions], *Arch Prev Lab,* 2003;6:1-3.
(24) Whitehead M, Diffusion of ideas on social inequalities in health: A European Perspective, *The Milbank Quarterly,* 1998;76:469-92.
(25) Borrell C, Benach J (eds), *Desigualtats en salut a Catalunya* [Health inequalities in Catalonia], Barcelona: Mediterránea, 2003.
(26) Boix P, Sprint o carrera de fondo. Reflexiones para un balance de situación acerca de la prevención de riesgos laborales, *Cuadernos de Relaciones Laborales,* 1999;14:17-32.
(27) García Jiménez J, Report presented in a conference organized by the Greek general confederation of labour, Piraeus, april 2003.
(28) Bonet X, Centre d'Estudis i Recerca Sindicals (CERES) [Trade Union Research and Studies Centre], Personal communication, January 2004.
(29) Miguélez F, Strike over accidents and subcontracting in construction sector, 2000. Accessible in: http:www.eiro.eurofound.eu.int/2000/04/word/es0004282fes.doc. [page visited: 08-01-04].
(30) García J, ¿Quién paga la no prevención? [Who pays the lack of prevention], *Por experiencia,* No. 23, January 2004:8.
(31) Benach J, Muntaner C, Benavides FG, Amable M, Jódar P, A new occupational health agenda for a new work environ-