

Labour market flexibility in Europe:

Informal employment, employment policies and their impact on health equity

Equity Action project: external experts.

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INTRODUCTION

Work is an important social determinant in people's lives. The particular conditions or circumstances under which a person performs his or her work or occupation have been defined as "employment conditions", implying the existence of an agreement or relationship between an employer and an employee.¹ Working conditions involve exposures in the workplace (physical, chemical, biological and ergonomic), and the way work is organised (including the psychosocial environment, power relations and worker's participation, among other factors). Employment conditions together with working conditions are among the intermediary social determinants which play a key role in producing and reproducing health inequalities.²⁻⁴ The WHO Employment Conditions Network (EMCONET) identifies six main employment conditions: stable full-time work, unemployment, precarious employment, child labour, slavery and bonded labour, and informal employment.^{2,5}

Most occupational health research focuses on working conditions and how they affect health. There is considerably less information on the health inequalities caused by unequal employment conditions. In the particular case of informal employment, most studies on its effects are based on static approaches, which assume that individuals do not change employment status and that the employed, unemployed and inactive remain "locked" in a single labour market.¹ This assumption is quite different from reality, as the labour market is remarkably dynamic.⁶ Therefore, the various types of employment conditions cannot be considered in isolation from one other, and the different combinations of relationships of informal employment, self-employment, unemployment, precarious employment and formal employment throughout a worker's life cycle should be considered.⁷

Most studies on the labour market and different employment conditions are based on static approaches in which only analyzes the behaviour and evolution of the employment or unemployment rate, implicitly assuming that individuals do not change employment status and, in particular, that the employed, unemployed and inactive are the always the same. However, this assumption is quite different from reality. The labour market shows remarkable labour mobility, it is dynamic and in constantly changing. Therefore, we can not consider the different conditions of employment isolated from each other but there are different combinations of relationships between informal-precarious-unemployment and formal employment throughout the life cycle of a worker.

Taking into account these relations and their implications for labour market mobility is important to understand the functioning of the labour market. Moreover, in the current economic crisis, this labour dynamics may be more relevant and sharp. At the same time, due

to this labour mobility and dynamism and the interrelationship between the different conditions of employment, employment policies aimed at a particular employment condition may also have an impact on other conditions indirectly. For this reason, knowing the dynamism of the labour market will help us understand how they can affect policy in all employment conditions.

To better understand this labour market dynamism and to address the employment related policies, it is important to understand what is meant when we are talking about these employment conditions. In this case, the unemployment definition, although not free of shortcomings and theoretical limitations -especially when related to health and health inequalities- is the most widely accepted and cross-country comparable, at least in the context of rich countries. Notwithstanding that, the unemployment definition changes over time to suit the political and technical purposes of governments. Precarious employment is also well studied. It relates to a number of specific characteristics of the general quality of work experience. Aimed to overcome important conceptual limitations, precarious employment has been conceptualized as a multidimensional construct encompassing employment instability, individual-level bargaining over employment conditions, low wages and economic deprivation, limited workplace rights and social protection, vulnerability and unbalanced workplace power relations, and powerlessness to exercise workplace rights. Yet there is a lack of indicators for precarious employment surveillance beyond standard indicators such as the percentage of temporary contracts, which can be highly misleading.

Regarding informal employment conceptualization, the situation is even worse. When some kind of measuring for informal employment is applied, countries can differ in their definitions, but also geographical areas covered, branches of economic activity assessed, informal enterprise cut-off size, registration criteria, criteria for inclusion or exclusion of secondary jobs in the informal sector, age limits, and whether or not to include professional or technical activities, among other criteria. There is, therefore, a lack of reliable prevalence estimations concerning informal employment and its impact on health and health inequalities.

For this reason, we conducted an initial study to find out what is meant by informal employment in high-income countries (according to the World Bank, high-income countries are those with a 2011 GNI over US\$12,476)⁹, how it is measured and what is the state-of-the-art in the EU to better understand which policies affect it and the other employment conditions.

We divided this literature review into two steps:

- I. Definition, measurement and state-of-the-art of informal employment in high-income countries.
 - a. How is informal employment defined and measured in high-income countries?
 - b. What is the informal employment prevalence in high-income countries?
- II. Employment related policies implemented in the European Union and how and why impact on health inequalities.
 - a. Which employment-related policies (unemployment, precarious and informal employment) have been implemented in the European Union?
 - b. How and why these policies impact on health inequalities?

PART I: INFORMAL EMPLOYMENT

Introduction

Informal employment is one of the less studied employment conditions in public health research, mainly due to the difficulty of its conceptualization, its measurement, the lack of existing data (even in high-income regions such as the European Union) and its illegal nature in many jurisdictions⁸ (according to the World Bank, high-income countries are those with a 2011 GNI over US\$12,476).⁹

Informal employment is a very complex and multidimensional phenomenon. Not only are there different types of informal jobs and difficulties in defining levels of “informality” operationally (e.g., informality in the main job, the secondary job or only some hours), there is also a wide range of direct and indirect social and health-related consequences of working under informal employment conditions.^{1,10,11} In many countries, concepts such as “informal sector”, “informal economy” or “informal employment” are often used interchangeably.¹²⁻¹⁴ Further complicating matters, “informal economy” or “informal employment” often have different meanings in low-, middle- and high-income countries, where informal employment may be defined differently depending on the occupation, location, employment contract or size of business in each zone.^{9,15,16}

As in the case of studying the informal economy, there are also differences in the definitions of informal employment and in the availability of data.¹⁷⁻²⁰ Moreover, comparison of informal employment between high-income countries is also difficult due to the lack of a unique concept and a common method of measurement, which leads to a lack of official data.²¹⁻²³ This lack of official data in the European Union makes it seem as if the problem is not present in this region, while the economic data suggest otherwise. Several studies show that the informal economy in the OECD countries has been growing during the last decades, with a slight decrease in the early 2000 and increasing at the end of that decade, possibly due to the economic crisis that began in 2007 -2008.²⁴⁻²⁶ The enormous differences in the national labour markets and the differences in social protection systems should also be taken into account, as labour market and employment policies are differential aspects of welfare regimes that have been shown to be related to health and health equity.²⁷⁻²⁹ Employment contracts also reflect the labour market policies and interventions made by those countries.

In times of economic crisis the informal economy is usually affected in similar ways as the formal economy, and both formal wage workers and informal wage workers face the loss of jobs and greater informalization of their employment contracts.³⁰ On the other hand, households may resort to informal employment to ensure subsistence in situations of hardship

or poverty. During downturns, informal wage workers are often the first to lose their jobs. In the context of the current economic crisis, it is thus crucially important to analyse the dynamics of informal employment and how the crisis is affecting these patterns. Having good measures of this employment condition would help us to monitor it and obtain a registry with which to analyze and interpret behaviour related to informal employment in different situations, including economic crises. This in turn would enable us to design policies and policy evaluations.

Informal employment conditions in high-income countries and public health-related research

The relationship between informal employment conditions and public-related health outcomes which may result in health inequalities are insufficiently studied, perhaps due to such impediments as the lack of official statistics, methodological problems such as the lack of accepted standard definitions, and the large heterogeneity of occupations, trades, employment arrangements, and health and safety hazards. Until now, most studies are case studies conducted in middle and low-income countries³¹⁻³⁴ or surveys,¹⁰ which compare the health formal and informal workers. Despite being the most prevalent method of understanding the situation of informal workers, it is a limited approach that prevents generalization of results.

A number of studies show that informal workers have worse health than formal workers;³⁵ some find that formal workers showed significantly better mental health when compared to informal workers^{10,32} and that gender differences exist as well.³² A relationship was also found between poor self-reported health and informal work.³⁶ Yet until now, few studies have studied the relationship between informal employment and health inequalities based on the general health effects of informality.¹

Aim

We conducted a scoping review with the follow aims:

1. Identify existing literature related to informal employment in high-income countries.
2. Conceptually map the literature according to country or geographical zone, year of publication and type of literature, as well as their definition of informal employment and their methods of measurement.
3. Identify gaps in the literature in order to improve the definition and methods of measurement of informal employment, with the hope of contributing to a reduction in the impact of informal employment on health inequalities within and between countries around the world, especially in high-income countries.

Research questions

1. How is informal employment defined and measured in high-income countries?
2. What is the informal employment prevalence in high-income countries?

Methods

To complete our objectives, we conducted a scoping review. Scoping reviews are exploratory projects that systematically map the literature available on a topic, identifying the key concepts, theories, sources of evidence, and gaps in the research.^{37,38} We divided our scoping review in four stages: searching, screening, scoping and summarising. Figure 1 summarises the flow of study selection.

Stage 1. Searching: Firstly, a scholarly literature review was conducted using the relevant social science and economics databases: ProQuest, Scopus, Web of knowledge and JSTOR. Search terms included combinations of the terms “informal employment”, “informal labour”, “informal sector”, “informal economy” and “shadow economy” with “definition”, “concept”, “theories” and “measurement”. No year limits were included in the search criteria. A grey literature review was also conducted using the same terms, including an examination of reports by Public and International Organizations (i.e.: OIT, WIEGO (Women in Informal Employment: Globalizing and Organizing, and the World Bank), non-governmental organisation, books, working papers or other documents that are associated with informal employment. Finally, we also read articles and reviews related to the literature from a list of references of relevant key articles.

Stage 2. Screening: all titles and abstracts were reviewed and the following selection criteria were applied: (1) concern with informal employment, (2) focus on informal employment in high-income countries, especially in the EU and US, (3) written in Spanish or English, and (4) no limitation on period of publication.

Stage 3. Scoping: of the articles finally selected, information on the definition and methods of measurement of informal employment and informal economy was extracted (Table 1).

Stage 4. Summarizing: a summary of scoping categories in all selected articles was realized (Table 2).

Apart from the scoping review, we also conducted a review of the European Working Condition Survey (EWCS) and the European Social Survey (ESS) in order to see which of the three elements (measurement of informal employment, health and social stratification)³⁹ are included in these surveys and which are not, and make recommendations for future inquiry into the impact of informal employment on health inequalities.

Data come from the fourth (2005) and fifth (2010) European Working Conditions Survey (EWCS) was used to study the informal employment prevalences in the EU and in the countries mentioned before. A subsample of employed working age people (15-64 years) was analysed.

An informal employment variable was created using our proposed definition regarding employment status (Figure 2) in order to know the prevalence of informal employment in each employment status in the EU-27 and in the different studied countries.

Results

Our searches yielded a total of 2,461 articles, which included 2,427 scholarly articles and 34 in the grey literature. It was reduced to 1,832 after duplicates were removed. Upon reviewing the titles and abstracts from the search results and applying the inclusion criteria, we finally read 86 full-text articles and their scope information as well as we summarized the scoping categories of this 86 articles (Figure 1).

We found that the publication range was between 1976-2013, yet the majority of articles were published between 2000 and 2009 (n=50, 58.1%) (Table 2) and 21% were published between 2010 and 2013. Although all articles analyzed data from high-income countries, a third of them (n=27, 31.4%) were also focused on other types of countries like low- and middle-income countries to show the situation; a 17.4% were focused in different countries in the EU and a 19.8% in one specific country of the EU. Most of them were articles (n=52, 60.5%) or reports (n=30, 34.9%), and the approach/methods of the articles varied, the most common being discussion (n=33, 38.4%) or review papers (n=21, 24.4%).

Regarding the definition of informal employment, 42 articles (48.4%) explained the evolution of the concept over time, while a high percentage (23.3%) did not define the term and simply measured without definition (they were measurement articles) and 14% used a self-definition. Since the first conceptualization of the informal sector by Hart,¹⁷ the different schools and

theories of the informal economy, and the definitions of the informal economy and informal employment developed by the International Labour Organization (ILO)⁴⁰ all highlight the lack of a unique concept and that informal employment is a complex phenomenon.³⁹ Furthermore, all of these are focused primarily on low- and middle-income countries. According to the ILO, the informal economy refers to “all economic activities by workers and economic units that are – in law or in practice – not covered or insufficiently covered by formal arrangements”.⁴⁰ The ILO defines informal employment (9% of the articles used it) as “all informal jobs, whether these are carried out in formal sector enterprises, informal sector enterprises or households”.⁴⁰ The theoretical framework of informal employment accepted by the ILO⁴¹ (annex 1) explains it in two dimensions: one, the type of production unit, which is defined in terms of legal organization and other enterprise-related characteristics, consists of three categories referring to the informal sector; and another, the type of job, which is defined in terms of status in employment and other job-related characteristics, and is divided into five categories according to their formal and informal nature. The table (annex 1) summarizes the type of jobs that are considered informal work. The five statuses in the employment categories used in this framework (own-account workers, employers, contributing family workers, employees and members of producers' cooperatives) do not have the same meanings in high-income countries when compared to low- and middle-income countries. Thus, the lines between these categories were ambiguous. This makes it difficult to apply the same framework in the high-income countries than in low- or middle-income countries.

The articles presented a wide spectrum of terms for describing informal employment. The most common terms used were “informal employment” (n=21, 24.4%), “informal economy” (n=18, 20.9%) and “informal sector” (n=17, 19.8%). The concept of informal employment is different in each country, depending mainly on the type of income in the country, how they understand it, and the organization of the labour market.⁴² Thus, in high-income countries the use of the term “non-standard employment” (8%) is used interchangeably or as a proxy for informal employment, although these two concepts are not identical.^{43,44} Informal employment is considered work that is not subject to legal, social or economic protection or regulation; however, non-standard employment refers to changes in employment relations over the “standard” full-time or permanent employment⁴³ due to labour market flexibility. Another term commonly used to refer to non-standard employment is precarious employment,⁷ due to their similarities. Other categories used with the concept of non-standard employment in high-income countries are “atypical forms of work” (i.e. part-time employment, temporary employment and self-employment) and “very atypical forms of work” (1%) (i.e. short fixed term, short part-time, zero hour/on call and no contract).⁴⁵ Some

of these categories are in alignment when defining precarious employment: temporality, disempowerment, vulnerability, wages, rights and exercise rights.⁴⁶ Non-standard employment may be associated in certain countries with reduced levels of social protection and regulation; therefore, while informal employment could be included in the category of non-standard employment, we cannot assume that most non-standard employment is in the informal economy or is informal employment. Most of the conceptualization of these terms is carried out from the point of view of the economy and how informalization affects it. It is much less often carried out from a public health perspective. Thus, it is important to seek a common definition that can be used by public health researchers. Based on the Employment Conditions Network definition,¹ and with the intention of measuring it through a survey in high-income countries, we define informal employment as a non-regulated labour market situation which usually involves an informal agreement between the employee and the employer (that is, all employees without contracts or those who do not know if they have one), self-employed who are not registered as professionals and work alone, employers who have 5 or fewer employees and family workers working in a family business without a contract (Figure 2). In order to classify the size of enterprises but we do not have information about registration, the cut-off of 5 or fewer employees is one of the most used criteria. On the other hand, professionals are more likely to work legally with some kind of authorization and pay taxes from at least some part of their income⁴⁷ so, we consider them as formal employed.

With respect to methods of measurement, one third of the articles (n=29, 33.7%) explained the different methods of measurement available, but another third (n= 28, 32.6%) did not measure it, but explained the concept. To date, relatively little empirical public health literature has operationalized measures of informal employment premised upon the conceptualisation of informalization as an employment condition and not as a part of the economy. In carrying out a scoping review, and to the best of our knowledge, we have found that studies that measure the informal economy or employment do not measure health or health inequalities, and studies that focus on health do not quantify informal employment. In addition, the vast majority of studies that focus on health in informal workers are not conducted in high-income countries, but in regions with different characteristics, usually low- and middle-income countries. The methods for measuring the informal economy and informal employment can be divided into indirect and direct methods. On the one hand, indirect methods (23.2%) are macroeconomic approximations used to estimate the size of the informal economy, based on assumptions and using macroeconomic indicators in addition to statistical models.⁴⁸⁻⁵⁰ These methods measure the percentage of the informal economy relative to the total economy or GDP. They do not provide any details on the type of informal employment

or on the characteristics of the workers. These kinds of methods are more widely used in high-income countries, particularly the MIMIC (Multiple Indicators Multiple Causes) method.²⁴ Looking at the results of different studies that used these indirect methods, we found different percentages of the informal economy for the same countries.^{20,24,51} Indirect methods always estimate the size of the informal economy by grouping all employment statuses together, such that we cannot know which employment status has more impact on informality or on other forms of employment.⁸ On the other hand, direct methods include voluntary surveys (22.1%) and tax auditing-based methods. There are different methods of data collection with different types of samples: household-based surveys with a labour force component, most notably labour force surveys (LFS); establishment-based surveys and censuses of production, and mixed surveys including modular and stand-alone approaches. The most useful method is the LFS. For the low- and middle-income countries, the ILO has developed a typology of surveys and records to measure informal employment, but this has not been done for high-income countries.⁵² Few studies in these countries use surveys to estimate only informal employment^{53,54} or use official European surveys for this purpose.⁵⁵ In sum, one can basically assume that indirect methods measure the size of the informal economy and direct methods measure informal employment. In public health, with the aim of reducing health inequalities, the most useful methods for knowing different characteristics of employment and working conditions are surveys, along with qualitative research to complement the some information.

The majority of the articles (n=78, 79.1%) focused exclusively on informal employment, 10% also focused in other employment conditions and other 10% focused on informal employment policies. It is important to note that, with the addition of the categories “methods of measurement”, “definition” and “how it refers”, the percentage was higher than 100%, since one article could refer to more than one category.

After reviewing the two European Surveys (EWCS and ESS) and using the same methodology as Unanue,³⁹ we found that there was a lack of information with which to measure informal employment at different levels because there was only information about the main job and no information about the companies or self-employed registration. Health outcome indicators were only partially covered because there are very few questions about health. With regards to social stratification (age, gender, ethnicity, income, occupation or level of studies), two surveys measured these variables completely because they have all these information.

Informal employment prevalences

Using EWCS data and our proposed definition to measure informal employment we found that we really measured informal employed instead of informal employment because EWCS measure workers and not jobs. We found that in 2010 there was an average of 13.3% of total informal employed in the main job, of which 3.7% was informal employees, 8.6% informal self-employed and 0.9% informal family workers. Looking at different countries, one country of each welfare state present in the EU, we found the lower percentage of informal employed in Sweden (5.2%) and the higher in Spain (15.8%) (table 3). Comparing 2010 with 2005, all selected countries except Sweden (5.1% in 2005 vs. 5.2% in 2010) have decreased in total informal employed, but in this country informal employees has decreased and self-employed has increased (table 3). On the other hand, the rest of the countries have decreased in total informal employed but with different behaviours. Different behaviours have been found across countries: countries where informal employees decrease and informal self-employed increase (Belgium and UK), countries where informal employees remain and informal self-employed decrease (Slovakia), countries where informal employees decrease and informal self-employed remain (EU27) and countries where both employees and self-employed decrease (Spain).

Discussion

There are different definitions and theories that describe and explain informal employment. When defining informal employment, it is important to identify whether it occurs in low-, middle- or high-income countries, because the realities in these countries are too different to share a common definition or a common explanation. To the best of our knowledge, registers about informal employment using direct methods do not exist in high-income countries. Although they are not intended to measure informal employment, the European surveys might be used for this purpose. Yet informal employment is often under-reported because the European surveys only take the main job into account, and informal employment may be used as a secondary source of income. In this section we present some recommendations to improve surveys in order to measure informal employment and its impact on health and health inequalities.

Definition of the informal economy and informal employment: Analytic implications

We note that informal employment can be conceptualised and measured with reference to the level of informality, that is, whether informal employment is the main or secondary job, or if it is only partially informal. Examples of the latter include those who charge part of a wage

or overtime "in black" or those who are insured for certain hours while the actual working hours are longer. These multiple levels are important because the scope of work informality is large in high-income countries and there is a common assumption in most studies that a job is either formal or informal, but cannot be both. However, one study that evaluated the prevalence of hybrid "under-declared" employment in south-eastern Europe found that 16% of formal employees received on average 60% of their gross salary as an envelope wage.⁵⁶ Consequently, these categories could have different implications for health and it could be critical to study them separately.

In addition, analyzes should also consider social stratification variables such as age, gender, social class, ethnicity/race and migration status as possible axes of health inequalities within informal workers. For instance, some studies found that women are over-represented in informal employment relative to men,⁵³⁻⁵⁵ yet gender segmentation exists when we consider the different employment statuses.¹³ Around the world, men tend to be over-represented in the employer or self-employed status with higher earnings and women tend to be over-represented in the domestic workers status with lower earnings. The shares of men and women in unpaid domestic work and employees in informal enterprises tend to vary across sectors and countries. As for migration status, there are different findings: some studies found that immigrants are over-represented in informal employment⁵⁵ while other studies find that they are under-represented.^{53,54} It is also known that the most deprived social classes and unskilled jobs are more represented in informality, especially among those whose main job is informal.⁵⁵ The different employment statuses (employee, self-employed, employer or family worker) should also be considered, because it is possible to have different behaviours and experience different levels of vulnerability according to these.

Measurement of informal economy and informal employment: direct and indirect methods

The main methods for measuring informal employment are direct and indirect methods. On the one hand, it is impossible to measure the definition of informal employment that we have proposed using indirect methods. However, with indirect methods, one can also capture other forms of informal employment, such as secondary jobs and under-declared work (envelope wages), yet they cannot be identified separately for methodological reasons. On the other hand, direct methods such as surveys can capture more information about workers and firms in order to estimate informal employment and know employee characteristics including the economic status of the individual (employee, self-employment, employer or family worker), whether or not a contract is in place (in the case of employees and family workers), or socioeconomic characteristics, as well as the impact of informal employment on health inequalities, assuming the survey has a variety of questions about health. Beyond surveys, on

certain occasions it would be necessary to complement them with qualitative methods due to the nature of informal employment. Unfortunately, survey methods also have limitations and have been criticized. First, surveys are generally not created to analyse informal employment and usually only ask about the respondent's main job. In many countries, especially in high-income countries, informal employment primarily occurs in secondary jobs or in partially irregular jobs (those that do not fully contribute to social security or do so incorrectly), so the scope of informal employment is underestimated.⁵⁶ Thus, it would also prove beneficial for surveys to introduce questions about secondary jobs (e.g. if the respondent has any other job besides the main, the type of contract for the secondary job, the number of hours worked, etc.) and investigate the main task in greater detail, if you qualify for benefits (paid vacation, sick leave), hours of employment and hours worked). Second, participants' responses are sensitive to how the questionnaire is designed and worded, and whether or not respondents want to collaborate.^{50,57}

Informal employment prevalence

Using EWCS we found that informal employment exists in the EU-27 and in the countries studied even though it was decreased in 2010 compared to 2005.

Although public registers and surveys for informal employment do not exist in high-income countries, it not means that not exist. However, it is lower than in low- or middle-income countries. One study in which informal employment was calculated using the European Social Survey found results similar to us.⁵⁵ Even so, a survey created to study informal employment could generate a register to study the variations along the years and comparisons between and within countries. In addition, an evidence to study how informal employment affect health inequalities in these workers could be generated.

Conclusion

The current labour market circumstances are such that labour force transitions are frequent and workers pass, for example, from precarious employment to unemployment and informal employment. Informal employment is an employment condition that is also present in high-income countries. Therefore, public health research must improve monitoring and analysis of informal employment in order to know the impacts of this employment condition on health inequalities. A unification of informal employment definitions to be used in high-income countries, distinct from the concept of non-standard employment, is necessary in order to make comparisons between countries or over time, for example. In addition, developing consistent and broadly comparable measures of informal employment and the health of informally employed workers stratified by important social indicators into data sets is

essential to protecting these workers. Development and surveillance of these measures could generate evidence that shows how the health of informal employed is being affected by their employment conditions. Precise definitions, measures and registers make prioritizing and making policy decisions to improve their health and reduce health inequalities easier and more effective.

Figure 1. Flow of study selection across the three stages of the scoping review process.

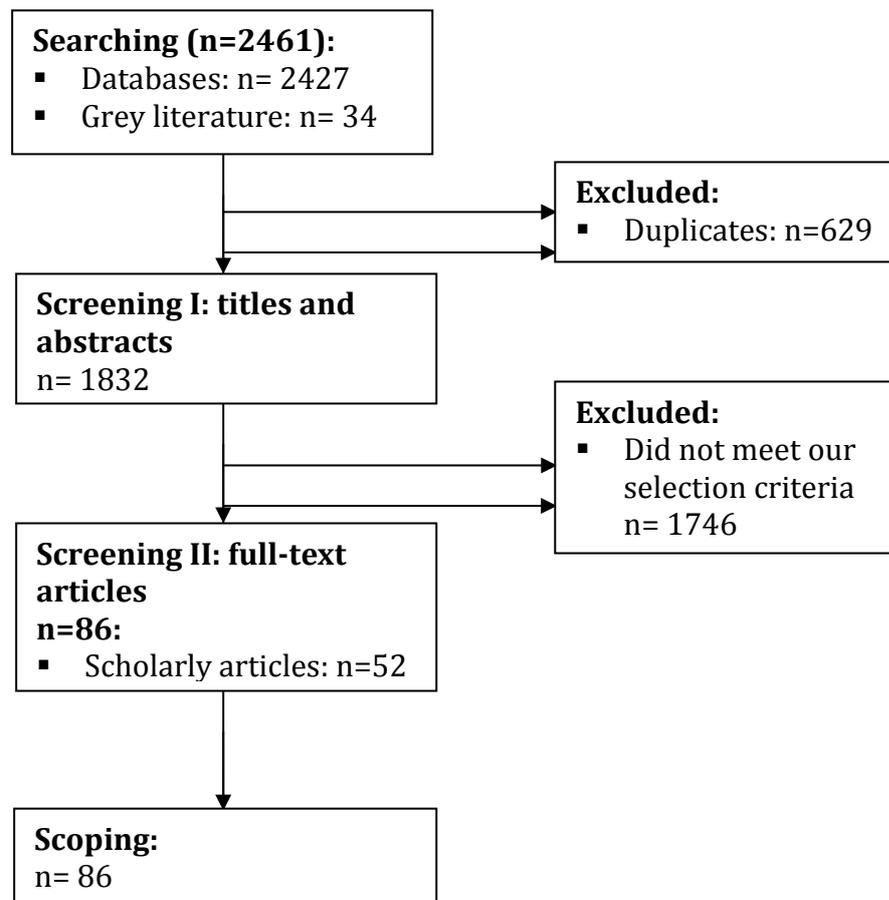


Table 1. Information extracted from articles during the scoping stage

Description of scoping categories

Publication year

The year of publication for journals or reports and year of last update for other electronic materials

Country Focus

In which country or geographical zones were focused

Source of literature

Which kind of source of literature is: journal, book, report, grey literature, other

Type of literature

What type of literature is: review, quantitative, qualitative, discussion paper, other

IE definition

What definition were mentioned: ILOs definition, self-definition, country definition, evolution of definition along time

Terminology used to refer to IE

What terminology is used to refer to IE: informal employment, informal economy, non-standard employment, very atypical employment, other

Methods of measurement

What methods of measurement were mentioned: indirect methods, direct methods, explain different methods

IE focus

Publication is focused on IE mainly or is focused on different employment conditions

Table 2. Results of information extracted of included references.

Coding categories	N	%
Years		
1970-1979	4	4.6
1980-1989	5	5.8
1990-1999	9	10.5
2000-2009	50	58.1
2010-2013	18	20.9
Countries Focus		
Advanced economies	7	8.1
All world	27	31.4
European Union	15	17.4
Specific countries of EU *	17	19.8
Regions of Spain	5	5.8
United States	2	2.3
Not mentioned	13	15.1
Source of literature		
Journal	52	60.5
Book	3	3.5
Report	30	34.9
Others	1	1.2
Type of literature		
Book	3	3.5
Discussion paper	33	38.4
Quantitative	16	18.6
Review	21	24.4
Working paper	11	12.8
Others	2	2.3
IE definition**		
ILO definition	8	9.3
Self-definition	12	13.9
Evolution of definition	42	48.8
European Commission definition	5	5.8
Others definitions	5	5.8
Not define	20	23.3
How it say**		
Informal sector	17	19.8
Informal economy	18	20.9
Shadow economy	12	13.9
Underground economy	7	8.1
Hidden economy	3	3.5
Black economy	2	2.3
Informal employment	21	24.4
Non-standard employment	7	8.1
Very atypical employment	1	1.2
Undeclared employment	2	2.3

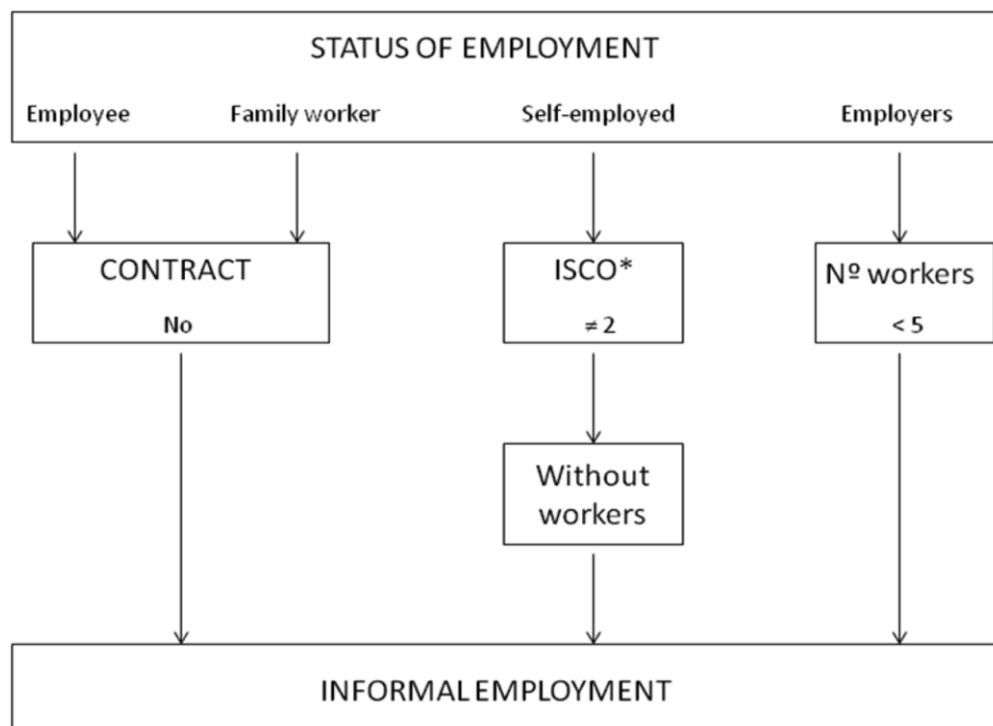
Undeclared work	10	11.6
Methods of measurement**		
Calculate energetic consume (IM)	2	2.3
Calculate MIMIC meth (IM)	8	9.3
Calculate monetary meth (IM)	5	5.8
Indirect methods (IM)	5	5.8
Survey methods	19	22.1
Explain different methods	29	33.7
Not measure	28	32.6
IE focus		
Only in IE	68	79.1
Other employment conditions	9	10.5
IE policy	9	10.5
Total	86	100

* Countries included: Spain, Italy, United Kingdom, Romania, Bosnia, France, Greece, Germany, Scandinavian, Czech and Slovak Republics.

** One article could refer more than one.

IM= Indirect methods

Figure 2. Scheme to identify informal employment, based on our definition.



* ISCO (International Standard Classification of Occupations) 2 = Professionals.

Table 3. Percentage of informal employees, self-employed, family workers and total informal employed in the main job in different countries in the European Union and EU-27. EWCS 2005 and 2010.

Country	2005 Informal employed (%)				2010 Informal employed (%)			
	Employees	Self-employed	Family	Total	Employees	Self-employed	Family	Total
Belgium	3	7,9	--	10,9	0,7	8,4	0,6	9,7
Spain	6,9	11	0	17,9	5,5	9,8	0,6	15,8
Slovakia	1,5	8,4	0,3	10,2	1,5	7,1	--	8,6
Sweden	1,6	3,4	0,1	5,1	0,3	4,7	0,1	5,2
UK	14,5	7,2	0,1	21,9	7,3	7,3	0,3	14,9
EU27	8,8	6,2	0,6	15,6	3,7	8,6	0,9	13,3

PART II: EMPLOYMENT RELATED POLICIES

Introduction

The WHO Commission on Social Determinants of Health Report ⁵⁸ concluded that health inequalities arise from social and economic inequalities in the conditions of daily life, that is, the circumstances in which people are born, grow, live, work, and age. In order to tackle those inequalities it is crucial to change the distribution of the key drivers of those conditions, on a local, national and global level. Policy interventions to improve health equity therefore need to be planned based on comprehensive macro-to-micro theoretical frameworks which address why, how and where particular interventions would make a difference in reducing health inequalities.

The conceptual model proposed by the WHO Commission Final Report helped to understand the causal mechanisms between social determinants and the production of health inequalities. This framework emphasized the importance of structural determinants (mainly related to socioeconomic and political context and inequality axes such as class or gender) and intermediate determinants (mainly related to material resources, psychosocial factors, behavioural and biological factors), in addition to health care services. One crucial intermediate social determinant is employment and working conditions, which play a key role in explaining how health inequalities develop. Employment conditions can be understood as the conditions or circumstances in which a person performs works, and often this implies the existence of an agreement or relationship between an employer and an employee. In its report for the WHO Commission, the Employment Conditions Knowledge Network (EMCONET) identified six main employment conditions: formal stable employment, unemployment, precarious employment, informal employment, child labour, and slavery ^{1,35} all of which are driven by labour market conditions and social policies.

Labour market policies are intertwined with social policies, constituting complementary areas of modern market economies that have important consequences for health and well-being. Increasingly, in times of economic downturn and subsequent attempts at jumpstarting the economy, governments and civil society organizations experience the necessity to understand the health equity consequences of policies designed to foster economic growth. In this way, employment conditions are global determinants of population's health, being at the foundation of efforts to promote growth and inclusive labour markets. Employment conditions are unequally distributed in the European Union and have a different impact on health according to social factors such as country, socio-economic position, gender, ethnicity, or migration status.

As part of the process of the so-called “globalization”, the shift from statutory to market regulation of labour markets has led to greater employment flexibility. Under increased global competition, a flexible workforce allows firms to rapidly adapt their size or composition to ever-changing economic conditions and demands. One of the most visible consequences of labour market flexibility has been the proliferation of flexible employment forms (e.g., part time, temporary or self-employed) and the decline of “standard” full-time permanent employment. Flexible employment conditions are thus becoming increasingly common worldwide, including in the European Union region. Labour market flexibility has also expanded through reductions in employment protection provisions, benefits and entitlements. Accordingly, there is rising concern about the expansion and consequences of precarious and informal employment and how this may affect workers’ health and well-being through multiple pathways within both the productive and reproductive spheres of life. To date, precarious forms of employment have been associated with poor working conditions, workplace injuries, poor general health, and particularly poor mental health.⁵⁹ Related to other employment conditions, there is also evidence that unemployment has a greater adverse effect on the mental health,⁶⁰ and that informal workers have worse general health and poorer health outcomes than formal workers.

Research on the health-equity impacts of those employment conditions is currently limited. Most studies are based on “static” approaches in which typically only one employment condition is analysed. This makes the assumption that individuals do not change employment status and that the employed, unemployed and inactive population are always the same. However, this assumption is not realistic, and in most countries the labour market shows a remarkable level of labour mobility, being in a dynamic and constant change. Therefore, it does not seem very appropriate to analyse different employment conditions isolated one from each other, but as part of different combinations of complex dynamic relationships between unemployment, precarious, and informal employment throughout the life cycle of each worker. Taking into account these relations and their implications for labour market dynamism, it is also important to understand the functioning of the labour market. Today, under the current economic crisis in the EU, these labour dynamics may be more relevant than ever. At the same time, due to this labour mobility, dynamism, and the interrelationship between the different employment conditions, employment policies aimed at tackling a particular employment condition may also have an indirect impact on other conditions. For this reason, the combined review of the three aforementioned employment conditions (i.e., unemployment, precarious employment and informal employment) and their related policies may help us to understand the potential impacts of employment-related policies on health inequities in the European Union.

Not only regulations on employment and policies, but also reforms in benefit schemes such as unemployment or disability may be related to the health of the active population (i.e., all persons of working age who either work in paid employment and are employed, or are looking for a job, and are unemployed). The labour market and employment policies are aspects that are constitutive parts of different welfare regimes, and it has been shown that they are related to equity in health and the overall health of the population.

Aim

The main aim is identify and evaluate employment policies that affect three key employment conditions (i.e., precariousness, unemployment and informal employment) and their potential impacts on health inequities in active population in the European Union.

Research questions

1. Which employment-related policies (unemployment, precarious and informal employment) have been implemented in the European Union?
2. What is the impact of these policies on health inequalities?

Methods

In order to realize the aim of this literature review and know what employment policies had been held between 2000 and 2013, an initial scan of employment and labour market related policies was performed in electronic data bases and grey literature of five countries in the European Union with different welfare state (Belgium, Spain, Slovakia, Sweden and United Kingdom).

After this first review, we held several meetings with experts in different disciplines (see annex 2) in order to know what of the policies we found were more relevant for our study related to the impact in health inequalities or if others important policies exist.

With the conclusions of these meetings and using the selected criteria to prioritise the most relevant employment and labour market related policies (see annex 3) we selected some important policies related to the impact in health inequalities. An initial review was conducted in order to know if a realist review of the selected policies could be possible. The realist review is a model of research synthesis designed to work with complex social interventions or policies. It provides an explanatory analysis aimed at discerning what works for whom, in

what circumstances, in what respects and how. This methodology has five main steps: ⁶¹ identifying the review questions, searching for primary studies, quality appraisal, extracting the data and synthesis.

After this initial review, an specific policy to start with our realist review was selected: changes in contracts and new contracts due to the labour market reforms and how it affects precariousness and workers' health indirectly.

Results

We summarized our findings for employment related policies in Spain (Table 4) and in the selected countries in the EU (Table 5). These tables were presented in the meetings with experts in order to discuss them.

Following meetings with experts, a list of important policies was created (Table 6). This list include: *labour market reforms* including changes in wages, working hours, kinds of contracts and introducing news contracts or dismissal that increase flexibility of labour market and increasing workers precariousness and insecurity; *collective bargaining*, various labour reforms or legislative changes in recent years, have increased decentralization and fragmentation (less coordination) of collective bargaining, focusing on a reduction of the duration and coverage of collective bargaining and giving more power to employers and individualize labour relations; *equality and conciliation policies*; *active labour market policies*; *public surveillance and control of labour market*.

Table 4. Preliminary list of labour market and employment related policies in Spain.

<i>Macroeconomic policies</i>	<i>Labour market policies</i>	<i>Welfare and social policies</i>
Fiscal policies: - Taxation policies - Public spending policies - Borrowing policies	Labour market regulations: - <i>Flexibilisation policies</i> <ul style="list-style-type: none"> - Labour market laws or reforms: <ul style="list-style-type: none"> • Industrial relations, collective bargaining systems and worker participation • Atypical employment (fixed-term, part-time, informal and temporary agency work) and the introduction of new types of contracts • Working time (part-time, long working hours, working time flexibility,) • Wages • Redundancy rules • Reconciliation policies - Public monitoring mechanisms of labour market (including issues relating to worker health and safety) <ul style="list-style-type: none"> • Labour Inspectorate • Voice and control arrangements of workers' collective action 	Educational policies: - Occupational training - Recognition
Monetary policies	Labour market policies and programmes - <i>Security policies</i> Active <ul style="list-style-type: none"> • Job placement services • Training • Job creation • Entering and re-entering the labour market (aimed at women and vulnerable collectives such as youth, aged, and disabled people) • Changes to contractual arrangements and work sharing Passive <ul style="list-style-type: none"> • Unemployment benefits • Retirement pensions • Other benefits (workers' compensation systems, temporary leave due to family care, formation, dependency...) 	Social protection policies - Unemployment benefits - Retirement pensions
	Equal opportunities and anti-discrimination policies	Migratory policies
	Lifelong learning in the workplace and professional recognition	Family policies

Table 5. Labour market and employment related policies in the five countries with different welfare state at the European Union. All countries have similar policies but the difference is how they implement.

Spain	Belgium	Slovakia	Sweden	UK
<p>Labour market regulations:</p> <ul style="list-style-type: none"> - Labour market laws or reforms: <ul style="list-style-type: none"> • Working time • Atypical contracts (fixed-term, part-time and temporary agency work) and the introduction of new types of contracts • Redundancy rules • Industrial relations, collective bargaining systems and worker participation - Public monitoring mechanisms of labour market 	<p>Labour market regulations:</p> <ul style="list-style-type: none"> - Labour market laws or reforms: <ul style="list-style-type: none"> • Working time (adaptations) • Atypical contracts (fixed-term, part-time and temporary agency work) and the introduction of new types of contracts • Redundancy rules (collective dismissal) • Industrial relations, collective bargaining systems and worker participation - Public monitoring mechanisms of labour market 	<p>Labour market regulations:</p> <ul style="list-style-type: none"> - Labour market laws or reforms: <ul style="list-style-type: none"> • Working time • Atypical contracts (fixed-term, part-time and temporary agency work) and the introduction of new types of contracts • Redundancy rules • Industrial relations, collective bargaining systems and worker participation - Public monitoring mechanisms of labour market 	<p>Labour market regulations:</p> <ul style="list-style-type: none"> - Labour market laws or reforms: <ul style="list-style-type: none"> • Working time • Atypical contracts (fixed-term, part-time and temporary agency work) and the introduction of new types of contracts • Redundancy rules • Industrial relations, collective bargaining systems and worker participation - Public monitoring mechanisms of labour market 	<p>Labour market regulations:</p> <ul style="list-style-type: none"> - Labour market laws or reforms: <ul style="list-style-type: none"> • Working time • Atypical contracts (fixed-term, part-time and temporary agency work) and the introduction of new types of contracts • Redundancy rules • Industrial relations, collective bargaining systems and worker participation - Public monitoring mechanisms of labour market
<p>Labour market policies and programmes</p> <ul style="list-style-type: none"> - Active <ul style="list-style-type: none"> • Job placement services • Training • Job creation • Entering and re-entering the labour market (aimed at vulnerable collectives such as youth, women and disabled people) 	<p>Labour market policies and programmes</p> <ul style="list-style-type: none"> - Active <ul style="list-style-type: none"> • Job placement services • Training • Job creation • Entering and re-entering the labour market (aimed at vulnerable collectives such as youth, women and disabled people) 	<p>Labour market policies and programmes</p> <ul style="list-style-type: none"> - Active <ul style="list-style-type: none"> • Job placement services • Training • Job creation • Entering and re-entering the labour market (aimed at vulnerable collectives such as youth, women and disabled people) 	<p>Labour market policies and programmes</p> <ul style="list-style-type: none"> - Active <ul style="list-style-type: none"> • Occupation (pro-market employment orientation, job creation...) • Incentive reinforcement • Employment assistance (placement services, job subsidies, job search programs...) 	<p>Labour market policies and programmes</p> <ul style="list-style-type: none"> - Active <ul style="list-style-type: none"> • Job placement services • Training • Job creation • Entering and re-entering the labour market (aimed at vulnerable collectives such as youth, women and disabled people)

<ul style="list-style-type: none"> • Changes to contractual arrangements - Passive <ul style="list-style-type: none"> • Unemployment benefits • Retirement pensions 	<ul style="list-style-type: none"> • Changes to contractual arrangements - Passive <ul style="list-style-type: none"> • Unemployment benefits • Retirement pensions (age, bridging pensions) 	<ul style="list-style-type: none"> • Changes to contractual arrangements - Passive <ul style="list-style-type: none"> • Unemployment benefits • Retirement pensions 	<ul style="list-style-type: none"> • Upskilling (training) - Passive <ul style="list-style-type: none"> • Unemployment benefits • Retirement pensions 	<ul style="list-style-type: none"> • Changes to contractual arrangements - Passive <ul style="list-style-type: none"> • Unemployment benefits • Retirement pensions
Equal opportunities Equality and anti-discrimination policies	Equal opportunities Equality and anti-discrimination policies	Equal opportunities Equality and anti-discrimination policies	Policy against discrimination (Ministry of Integration and Gender Equality) Non discrimination of part-time and fixed-term workers.	Equal opportunities Equality and anti-discrimination policies
Lifelong learning in the workplace and professional recognition	Lifelong learning in the workplace and professional recognition	Lifelong learning in the workplace and professional recognition	Lifelong learning in the workplace and professional recognition	Lifelong learning in the workplace and professional recognition

Table 6. Selected policies after the meeting with experts and selection criteria.

1. Labour market reforms
2. Collective bargaining
3. Equality and conciliation policies
4. Active labour market policies
5. Public surveillance and control of labour market

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Annex 1: Informal employment conceptual Framework of Hussmanns.

Products on units by type	Jobs by status in employment								
	Own-account workers		Employers		Contributing family workers	Employees		Members of producers' cooperatives	
	Informal	Formal	Informal	Formal	Informal	Informal	Formal	Informal	Formal
Formal sectors enterprises					1	2			
Informal sector enterprises (a)	3		4		5	6	7	8	
Households (b)	9					10			

[a] As defined by the 15th International Conference of Labour Statisticians (excluding households employing paid domestic workers) / [b] Households producing goods exclusively for their own final use and households employing paid domestic workers.

Note: Cells shaded in dark blue refer to jobs, which, by definition, do not exist in the type of production unit in question. Cells shaded in light blue refer to formal jobs. Un-shaded cells represent the various types of informal jobs.

Informal employment: Cells 1 to 6 and 8 to 10.

Employment in the informal sector: Cells 3 to 8.

Annex 2: The experts that participated in the meetings were:

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- Christophe Vanroelen. Professor, PhD in Social Health Sciences. [Vrije Universiteit Brussel](#).
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- Albert Recio. Department of Applied Economics. Universitat Autònoma de Barcelona.

Annex 3: The most important criteria included in order to choose an employment related policy

- (a) Employment policies. Policies related to labour market and employment, not macroeconomic policies or welfare policies.
- (b) Comparability. The possibility to conduct cross-country comparisons (i.e., policies implemented in all the countries composing our selected EU country typology)
- (c) Political continuity. Policies have stability and duration, not punctual.
- (d) Related with health. Policies have direct or indirect links with health. based on expectations or literature/
- (e) Data availability.
- (f) Impact. Policies affected maximum number of countries, workforce.