

**SIX EMPLOYMENT CONDITIONS AND HEALTH
INEQUALITIES: A DESCRIPTIVE OVERVIEW**

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Standard full-time permanent employment—providing a minimal degree of stability, income sustainability, workers’ empowerment, and social protection—has declined in the high-income countries, while it was never the norm in the rest of the world. Consequently, work is increasingly affecting population health and health inequalities, not only as a consequence of harmful working conditions, but also because of employment conditions. Nevertheless, the health consequences of employment conditions are largely neglected in research. The authors describe five types of employment conditions that deviate from standard full-time permanent employment—precarious employment, unemployment, informal employment, forced employment or slavery, and child labor—and their health consequences, from a worldwide perspective. Despite obvious problems of measurement and international comparability, the findings show that, certainly in the low-income countries, these conditions are largely situated in informality, denying any possible standard of safety, protection, sustainability, and workers’ rights. Considerable numbers of the world’s working people are affected in geographically and socioeconomically unequal ways. This clearly relates nonstandard employment conditions to health equity consequences. In the future, governments and health agencies should establish more adequate surveillance systems, research programs, and policy awareness regarding the health effects of these nonstandard employment conditions.

When work is considered in its broadest sense, the majority of the world’s population is involved in work of some kind. Work has an important influence on

population health and health inequalities, because work environments involve exposure to many factors that may potentially affect health. The health impact of a specific job is thus determined by the nature of the work task and the related working conditions, the conditions of employment, and the prevailing employment relations (1). “Work task” refers to the intrinsic quality of the tasks and the autonomy of workers. “Working conditions” refer to the general physical and psychosocial conditions of work. “Employment conditions”—the central subject of this article—concern the organization of employment in terms of contract, rewards, and other mutual expectations between workers and employers. In high-income countries, most employment conditions are regulated by employment legislation and formally specified in a labor contract. In low-income countries, employment agreements are often informal. Finally, “employment relations” refer to the mutual relations between employees and employers, inter-individual and collective, as well as formal and informal. An important factor here is the degree of workers’ participation. Employment relations are important determinants of the other three aspects: work task, working conditions, and employment conditions.

Labor markets and social policies determine employment conditions, such as precarious or informal jobs, child labor or slavery, the existence of highly insecure or low-paying jobs, or working in hazardous conditions, which heavily influence individual and population health status and thus inequalities. These types of employment conditions have different implications for health across social classes, gender, and racial/ethnic groups. Factors related to working conditions have received a great deal of attention, being recognized as key social determinants of health and health inequalities. This has not often been the case for employment conditions. An important problem in analyzing the effects of employment conditions is the lack of a clear conceptual framework. To propose such a framework is the first aim of this article. We describe the components of the framework, and end with some remarks on our findings and some recommendations.

CONCEPTUALIZING EMPLOYMENT CONDITIONS

Viewed historically, full-time permanent employment, providing regular pay for work performed in a fixed organization during daytime hours, is a rather marginal phenomenon (2). From the 1980s onward, in high-income countries, the standard employment contract gradually started to erode in terms of employment security, work schedule organization, remuneration systems, legal protections, workers’ rights, workers’ participation, and so forth (3). In the rest of the world, however, this type of employment contract has always been an exception. Underlying the changes are important global socioeconomic, demographic, and political transformations, including the rise of economic globalization and related

international competition, a more diversified system of production, and a more heterogeneous workforce (4).

Arrangements deviating from the standard employment contract can be qualified in terms of several dimensions (5), such as the lack of employment stability, the unsustainability of wages, the lack of enforceable workers' rights, arbitrary sanctioning, or the impossibility of workers' participation. All these aspects are potential causes of precarious conditions of employment (5–7). We discuss six types of employment conditions, in terms of their prevalence, geographic and social distribution, and associations with health outcomes. These six types are full-time permanent employment, precarious employment, unemployment, informal employment, forced employment or slavery, and child labor. The latter five conditions are deviations from standard employment and are consequently related to adverse health outcomes. Precarious employment arrangements imply vulnerability in terms of future employment prospects, income sustainability, and workers' participation and rights. Unemployment can be seen as a source of insecurity and material deprivation—and as the most extreme case of contractual precariousness. Informal employment implies, first, a high vulnerability in terms of eligibility to workers' rights, but also often involves other aspects such as low rewards and insecurity. Finally, there are the “extreme” cases of forced employment (including slavery and bonded employment) and child labor. We show that although these forms are largely pushed back to “informality” and are predominantly situated in low-income countries, they still affect considerable numbers of the world's working population.

EMPIRICAL EVIDENCE ON EMPLOYMENT CONDITIONS AND HEALTH INEQUALITIES

Full-Time Permanent Employment

Standard full-time permanent employment is difficult to define because of the great variability in its meaning across organizational and national contexts. In general, according to the definition of the European Union's Labour Force Survey, standard employment is characterized by contracts of undetermined duration covering at least 35 hours a week. However, in low- and medium-income countries, even this general description is hardly workable. In these contexts, formal work, defined as any job in which the employee has a formal contractual relationship with the employer, is a better indicator.

For every 100 workers worldwide, only 6 are fully employed, and another 16 are unable to earn enough to remain out of poverty (8). During the past decade, the number of people in standard full-time permanent employment in the world's working-age population declined, especially among young people and to the ever-lasting disadvantage of women (9).

When considering “formal employment,” the Latin American data point toward the destruction of formal employment and an increasing share of informal employment. In the 12 countries investigated (10), formal hiring fell by 4 percent between 1990 and 2005, and during the 2002–2005 economic upturn, only 4 percent of all formal contracts created were permanent. Overall, in 2005 in these 12 countries, 49 percent of wage-earners had a formal contract. Formal hiring amounted to 25 percent in low-productivity sectors and about 54 percent in medium- and high-productivity sectors; men were more likely to have a formal contract (10).

The E.U. data on permanent full-time employment show that, on average, more stable and full-time contracts exist in Northern Continental Europe and the Nordic countries, while more “unstable” employment exists in the United Kingdom, Ireland, Southern Europe, and the new or candidate member-states. Standard employment is distributed to the disadvantage of lower-skilled, female, and immigrant workers. Moreover, workers having a permanent contract are shown to have more information on workplace hazards, to experience less hazardous work conditions, and to have better health outcomes than those without such contracts (11). These generally more advantageous working conditions are reflected in various work-related outcomes, such as levels of job dissatisfaction, mental health, and various physical health outcomes (12, 13).

Precarious Employment

Worldwide, there are different forms of nonstandard work in terms of duration and contractual relations with the employer, such as temporary, contingent, underground, or home-based work (14). Moreover, these types of employment are often also internally very heterogeneous. Underlying all of these forms, however, are common traits of high precariousness in terms of instability, income unsustainability, high worker flexibility, and fewer workers’ rights (15). In high-income countries, temporary contracts are often used as a key indicator of precarious employment, while the number of working poor can fulfill the same function for low- and medium-income countries.

The number of working poor, as a proxy for employment instability and unsustainability, is highest in Africa, Latin America, and Asia (16). In general, this amounts to about 25 percent of the employed labor force in all low-income countries; in absolute numbers, 1.37 billion workers could be qualified as working poor in 2006 (17). A majority of the working poor are female and of younger age.

In high-income countries, temporary employment appears to be a consistent indicator of instability. Temporary workers constitute a diverse group, but they are disproportionately represented among younger workers, women, lower-skilled workers, and workers engaged in agriculture or in small firms (15). In addition, Amable and colleagues (5) have constructed a more general indicator of precarious employment, which comprises dimensions of employment instability,

workers' participation, vulnerability to sanctioning, low wages, entitlement, and enforceability of workers' rights. Spanish data based on this measure show that 42.9 percent of the respondents in a general sample of wage-earners are exposed to moderate and 7.2 percent to high employment precariousness (18). Women and younger workers are more often in precarious employment than men and older workers, while employment precariousness also follows an occupational class gradient, with unskilled manual occupations being the most exposed (18).

In terms of health consequences, situations of precarious, unstable, or unsustainable employment are related to situations of unemployment—and often the same persons are affected by both kinds of situation (19, 20). Apart from the direct constraints attached to instability and unsustainability, the working conditions in precarious jobs tend to be more adverse as well (11, 12, 21). The latter adds to the well-known socially graded distribution of hazardous physical and psychosocial working conditions (22–24). Moreover, the effects may also be devastating for family members and dependents who rely on the workers' income (19, 20).

Unemployment

According to its formal definition, “unemployment” concerns working-age people who are without paid employment during a reference period in which they are available for work and are seeking work. Because this description excludes a high number of other non-employed workers (25), unemployment figures should be treated with caution. Most likely they are underestimations.

In 2007, worldwide, 190 million people were unemployed (26), although large differences exist. In low- and middle-income countries, estimates of unemployment are around 30 percent, with the highest rates in Central and Eastern European non-E.U. countries, countries of the former USSR, and in Latin America (16). In most high-income countries, unemployment is around or below 10 percent (16, 26). Female, younger, lower-skilled, migrant, and minority workers are overrepresented among the unemployed (16, 27). The growth of the world economy since the beginning of the 21st century has failed to significantly reduce global levels of unemployment. At the time of writing, the global economic crisis is contributing to a growth of unemployment and other forms of non-employment. Global unemployment in 2009 could increase over that of 2007 by a range of 18 million to 30 million workers, and more than 50 million if the economic situation continues to deteriorate (28). As a result, especially in low-income economies, a lot of workers could be pushed into extreme poverty. Moreover, the number of working poor is also expected to rise as a consequence of the crisis, reaching a level of 53 percent of the employed population (28).

The health consequences of unemployment have been studied extensively, although predominantly in high-income countries (29). High levels of unemployment are correlated with poor health, increased mortality, and manifestations of social anomy, such as child abuse, suicide, or alcoholism (30). The harshest

individual consequences are to be expected in low-income countries, as a consequence of the lack of (adequate) social protection. In such contexts, malnutrition and extreme poverty are a reality. Although tempered by social security provisions, unemployment also remains an important health problem in the high-income countries. In the (at that time) 15 E.U. member-states, unemployment was defined as one of the 10 most important contributors to the total burden of disease of the 1990s (31).

Informal Employment

Informal employment can be described as “all economic activities by workers and economic units that are—in law or in practice—not covered or insufficiently covered by formal arrangements” (32). The informality can apply to the status of employment as well as to the units of production (32). The informally employed may be own-account workers, employers, contributing family workers, employees, or members of producers’ cooperatives. The units of production may be formal sector enterprises, informal enterprises, or households. Furthermore, informal employment needs to be distinguished from illegal production (of illegal products) and underground production (illegal production of legal products). Because informal employment strongly relies on trust, social norms, and the strength of social ties, it entails the risk of lacking the rights and entitlements that are legally attributed to formal employment.

The informal economy is estimated to represent 41 percent of gross domestic product in low-income countries, 38 percent in medium-income countries, and 18 percent in high-income countries (33). Over the past two decades, the informal economy has grown worldwide. The share of the workforce involved in informal, non-agricultural work is 55 percent in Latin America, 45 to 85 percent in Asia, and nearly 80 percent in Africa (34). In rural areas, most informal economic production is concentrated in subsistence farming, while in urban settings it is mainly carried out on the streets and by small, home-based, and family-owned firms (35). Also, in informal employment, lower-skilled, female, and migrant workers are generally overrepresented. In some parts of the world, the growth of a “migration industry,” comprising private recruitment agents, overseas employment promoters, human resource suppliers, and so forth, has caused a spike in informal, predominantly female, labor migration (36, 37).

Vulnerable employment is an alternative, recently constructed International Labour Organization indicator, comprising own-account workers and contributing family workers. These two groups of workers are less likely to have formal work arrangements; globally, it is estimated that in 2007, 5 out of 10 people could be categorized as vulnerable workers—less than half of working people enjoying the security often provided to formal wage-earners.

The most important health-affecting factor for informally employed workers is poverty, as a consequence of the often low wages and lack of social protection.

Moreover, because the informal sector falls outside government control, working conditions are often not in line with health and safety laws. Formal enterprises may keep a portion of their workers unregistered, in order to short-cut costly regulations or to keep payments under the legal minima. Overall, as a result of informal employment, occupational hazards are more common, and less health and safety training and access to protective equipment is available (38). This results in a higher prevalence of injuries, occupational diseases, work-related health problems, and adverse consequences for the relatives of informal workers. As a result, a high proportion of occupational injuries and diseases among informal workers has been reported in several studies (38–46).

Informal employment also affects families, as the children of women working as street vendors, who accompany their mothers, have an increased prevalence of acute diseases (38.0% vs. 27.3%) and injuries (5.8% vs. 3.6%) when compared with the general population.

Child Labor

Child labor is a persistent problem in low- and middle-income countries (47). According to current definitions, child labor can be described as all types of labor by children below the age of 12 or as heavier work performed by children between 12 and 14 years of age, as well as all other kinds of work that harm the health, safety, or moral well-being of children (48–50).

Global estimates suggest that 218 million children can be qualified as child laborers, of which approximately 126 million are engaged in hazardous work (49). A high level of economically active children is evident in poor nations—a trend originating at the end of the 19th century (47). In many sub-Saharan African countries, 50 to 60 percent of children are engaged in child labor; the majority are males (48).

Child labor adversely affects children's mental and physical health and development. On the one hand, the health effects are similar to "adult" workplace-related diseases and injuries. On the other hand, children are especially vulnerable because of interference with their growth and development. Increased vulnerability to biological or toxic agents due to immature immune systems, ergonomic risks resulting from inadequate equipment, and physical or psychological impairment as a consequence of restricted time for resting, playing, schooling, and so forth—among other health and developmental problems—all have been documented and studied (50–57).

Slavery and Bonded Labor

Older forms of slavery, based on legal ownership over people, seem to have disappeared, but new forms have emerged. These new forms tend to be grounded in entrapping people into forced labor with legal instruments or various forms of

threat (58). Practices that impose forced labor on individuals include capturing, the use of force, various forms of threat, or the application of laws and court orders (59). A specific variant is bonded labor, a type of debt bondage, mainly found in South Asia, in which the debtor enters into an agreement with the creditor to provide work under forced conditions (60). A major factor behind the high numbers of forced laborers is the practice of human trafficking (61). Such practices are related to rapid population growth and the corresponding devaluation of human life, especially in Asian and African countries (62). Also, neoliberal globalization, involving increased pressure toward cost reduction, has been an incentive for the increases in forced labor—often involving immigrant workers (62). Finally, tradition and political unrest also play a role (60, 63).

The International Labour Organization's estimates indicate there are 12.3 million victims of forced labor worldwide. A majority reside in the Asian and Pacific regions (77%), followed by Latin America and the Caribbean (11%), sub-Saharan Africa (5%), and the industrialized economies (3%) (61). Unfortunately, forced labor ensnares those who are the least able to work their way out of it: women, children, and migrants. Children and women become involved in trafficking, warfare, prostitution, pornography, and other (illicit) activities. On average, 56 percent of the victims are women and girls. They also constitute the overwhelming majority in forced commercial sexual exploitation (98%) (49, 64). Migrants are sometimes more vulnerable because of a precarious legal resident status (64).

Forced labor often includes gross violations of human rights, a problem that belies the immediate, observable health effects. At the most basic level, the employee-employer relationship itself has health consequences in terms of physical and mental trauma resulting from coercive conditions, including restriction of movement, violence, and generally adverse working conditions. Outside the workplace, economic disparity, malnutrition, food insecurity, and a lack of access to health care and compensation schemes are also likely causes of health problems. These consequences apply not only to the workers themselves but also to their dependents (53).

CONCLUSION

The health consequences of nonstandard employment conditions constitute a neglected public health and occupational health issue. Many employment- and work-related health inequalities are socially “invisible” or neglected. Comparisons across countries are difficult, given the diversity of forms of employment and working conditions and the ensuing barriers to creating worldwide, standardized definitions. Empirical evidence concerning the impact of employment relations on health inequalities is particularly scarce for workers in poor countries, small firms, and rural settings. International and national health information systems lack data on employment relations and health, a problem that is most acute

in low- and middle-income countries. Two examples of this are the lack of comparable data on informal employment and on the health-related consequences of forced labor. Governments and health agencies should establish adequate surveillance information systems and research programs to gather public health data associated with fundamental employment conditions, and all forms of precarious employment and work. These systems and programs should give special attention to the particularities of each context, such as focusing on production chains to reveal the role of international corporations, the relationships between the formal and informal economy, the role of the state, and health and social protection coverage.

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REFERENCES

1. Grint, K. *The Sociology of Work*, Ed. 2. Polity Press, Cambridge, 2006.
2. Edgell, S. *The Sociology of Work: Continuity and Change in Paid and Unpaid Work*. Sage, London, 2006.
3. Bielski, H. New patterns of employment in Europe. In *Labour Market Change and Job Insecurity: A Challenge for Social Welfare and Health Promotion*, ed. J. E. Ferrie et al., pp. 11–30. WHO Regional Publications, European Series. World Health Organization, Regional Office for Europe, Copenhagen, 1999.
4. Jessop, B. The transition to post-Fordism and the Schumpeterian workfare state. In *Towards a Post-Fordist Welfare State?* ed. R. Burrows and B. Loader, pp. 15–37. Routledge, London, 1994.
5. Amable, M., et al. Psychosocial dimensions of precarious employment: Developing an epidemiological measure of work precariousness. In *La precariedad laboral y su impacto en la salud: Un estudio en trabajadores asalariados en España*, ed. M. Amable, pp. 111–131. Universitat Pompeu Fabra, Barcelona, 2006.
6. Clarke, M., et al. “This just isn’t sustainable”: Precarious employment, stress and workers’ health. *Int. J. Law Psychiatry* 30(4–5):311–326, 2007.
7. Vosko, L. F. Regulating precariousness? The temporary employment relationship under the NAFTA and the EC treaty. *Relations Industrielles–Industrial Relations* 53(1):123–153, 1998.
8. International Labour Organization. *Global Employment Trends for Women*. International Labour Office, Geneva, 2001.
9. International Labour Organization. *Global Employment Trends for Women*. International Labour Office, Geneva, 2008.
10. Economic Commission for Latin America and the Caribbean. *Social Panorama of Latin America 2006*. Social Development Division and Statistics and Economic Projections Division of ECLAC, United Nations, Santiago de Chile, 2007.
11. Parent-Thirion, A., et al. *Fourth European Working Conditions Survey*. European Foundation for the Improvement of Living and Working Conditions, Dublin, 2007.

12. Benavides, F. G., et al. How do types of employment relate to health indicators? Findings from the Second European Survey on Working Conditions. *J. Epidemiol. Community Health* 54(7):494–501, 2000.
13. Benach, J., Gimeno, D., and Benavides, F. G. *Types of Employment and Health in the European Union*. European Foundation for the Improvement of Living and Working Conditions, Office for Official Publications of the European Communities, Luxembourg, 2002.
14. Louie, A. M., et al. Empirical study of employment arrangements and precariousness in Australia. *Ind. Relat.* 61(3):465–489, 2006.
15. Organization for Economic Cooperation and Development. *Taking the Measure of Temporary Employment*, pp. 128–184. OECD Employment Outlook. Paris, 2002.
16. International Labour Organization. *Global Employment Trends: Brief*. International Labour Office, Geneva, January 2007.
17. International Labour Organization. *Global Employment Trends for Youth: Brief*. International Labour Office, Geneva, January 2006.
18. Vives, A., et al. The Employment Precariousness Scale (EPRES): Psychometric properties of a new tool for epidemiological studies among waged and salaried workers. *Occup. Environ. Med.*, in press.
19. Benach, J., et al. The health-damaging potential of new types of flexible employment: A challenge for public health researchers. *Am. J. Public Health* 90(8):1316–1317, 2000.
20. Benach, J., and Muntaner C. Precarious employment and health: Developing a research agenda. *J. Epidemiol. Community Health* 61(4):276–277, 2007.
21. Benach, J., et al. Types of employment and health in the European Union: Changes from 1995 to 2000. *Eur. J. Public Health* 14(3):314–321, 2004.
22. Vahtera, J., et al. Workplace as an origin of health inequalities. *J. Epidemiol. Community Health* 53(7):399–407, 1999.
23. Schrijvers, C. T. M., et al. Socioeconomic inequalities in health in the working population: The contribution of working conditions. *Int. J. Epidemiol.* 27:1011–1018, 1998.
24. Siegrist, J., and Marmot M. Health inequalities and the psychosocial environment: Two scientific challenges. *Soc. Sci. Med.* 58(8):1463–1473, 2004.
25. International Labour Organization. *Thirteenth International Conference of Labour Statisticians: Key Indicators Labor Market (KILM)*, Ed. 4. International Labour Office, Geneva, 1982.
26. International Labour Organization. *The Key Indicators of the Labour Market (KILM)*, Ed. 5. International Labour Office, Geneva, 2008.
27. Hammarstrom, A., and Janlert, U. An agenda for unemployment research: A challenge for public health. *Int. J. Health Serv.* 35(4):765–777, 2005.
28. International Labour Organization. *Global Employment Trends: January 2009*. International Labour Office, Geneva, 2009.
29. Ferrie, J. E. Health consequences of job insecurity. *WHO Reg. Publ. Eur. Ser.* 81:59–99, 1999.
30. Inoue, K., et al. The correlation between unemployment and suicide rates in Japan between 1978 and 2004. *Leg. Med. (Tokyo)* 9(3):139–142, 2007.
31. Diderichsen, F., Dahlgren, G., and Vagero, D. *Analysis of the Proportion of the Total Disease Burden Caused by Specific Risk Factors*. National Institute for Public Health, Stockholm, 1997.

32. International Labour Organization. *Defining Informal Employment and Methodologies for Its Measurement—Statistical Definition of Informal Employment: Guidelines Endorsed by the Seventeenth International Conference of Labour Statisticians*. International Labour Office, New Delhi, 2004.
33. Schneider, F. *Size and Measurement of the Informal Economy in 110 Countries around the World*. Rapid Response Unit, World Bank, Washington, DC, 2002.
34. Charmes, J. *Informal Sector, Poverty, and Gender: A Review of Empirical Evidence*. World Bank, Washington, DC, 1998.
35. Portes, A., Castells, M., and Benton, L. A. *The Informal Economy: Studies in Advanced and Less Developed Countries*. Johns Hopkins University Press, Baltimore, 1989.
36. International Labour Organization. *Preventing Discrimination, Exploitation, and Abuse of Women Migrant Workers*. International Labour Office, Geneva, 2003.
37. International Labour Organization. *Working out of Poverty International Labour Conference, 91st Session*. International Labour Office, Geneva, 2003.
38. Iriart, J. A. B., et al. Representações do trabalho informal e dos riscos à saúde entre trabalhadoras domésticas e trabalhadores da construção civil. *Ciência e Saúde Coletiva* 3(1):1–21, 2006.
39. Gutberlet, J., and Baeder, A. M. Informal recycling and occupational health in Santo André, Brazil. *Int. J. Environ. Health Res.* 18(1):1–15, 2008.
40. Santana, V., and Loomis, D. Informal jobs and nonfatal occupational injuries. *Ann. Occup. Hyg.* 48(2):147–157, 2004.
41. Rongo, L. M., et al. Occupational exposure and health problems in small-scale industry workers in Dar es Salaam, Tanzania: A situation analysis. *Occup. Med.* 54:42–46, 2004.
42. Lowenson, R. H. Health impact of occupational risk in the informal sector in Zimbabwe. *Int. J. Occup. Environ. Health* 4:264–274, 1998.
43. Nilvarangkul, K., et al. Strengthening the self-care of women working in the informal sector: Local fabric weaving in Khon Kaen, Thailand (Phase I). *Ind. Health* 44(1): 101–107, 2006.
44. Hernandez, P., et al. Childcare needs of female street vendors in México City. *Health Policy Plann.* 11(2):169–178, 1996.
45. Fonchigong, C. C. Negotiating livelihoods beyond Beijing: The burden of women food vendors in the informal economy in Cameroon. *Int. Soc. Sci. J.* 57(184):243–253, 2005.
46. Da Silva, M. G., Fassa, A. G., and Kriebel, D. Minor psychological disorders among ragpickers workers: A cross-sectional study. *Environ. Health* 30(5):1–10, 2006.
47. Basu, K., and Tzannatos, Z. The global child labour program: What do we know and what can we do? *World Bank Econ. Rev.* 17(2):147–173, 2003.
48. United Nation's Emergency Fund. *Country Data*. United Nations, New York, 2006.
49. International Labour Organization. *The End of Child Labour: Within Reach*. Global Report under the Follow-up ILO Declaration Fundamental Principles and Rights at Work, 95th ILO Conference, Report I. International Labour Office, Geneva, 2006.
50. Hawamdeh, H., and Orazem, P. F. Growth of working boys in Jordan: A cross-sectional survey using non-working male siblings as comparisons. *Child Care Health Dev.* 28(1):47–49, 2002.

51. Fogel, R. W. Secular trends in physiological capital: Implications for equity in health care. *Perspect. Biol. Med.* 46(S3):S24–38, 2003.
52. Yamanaka, M., and Ashworth, A. Differential workloads of boys and girls in rural Nepal and their association with growth. *Am. J. Hum. Biol.* 14:356–363, 2002.
53. Fassa, A. G. *Health Benefits of Eliminating Child Labour*. International Labour Office, Geneva, 2003
54. Duyar, I., and Ozener, B. Growth and nutritional status of male adolescent laborers in Ankara, Turkey. *Am. J. Phys. Anthropol.* 128:693–698, 2005.
55. Dantas, R. História de trabalho na infância e adolescência e a saúde do trabalhador adulto. Ph. D. dissertation, Federal University of Bahia, Bahia, Brazil. 2005.
56. Gunnarsson, V., Orazem, P. F., and Sánchez, M. A. Child labor and school achievement in Latin America. *World Bank Econ. Rev.* 20(1):31–54, 2006.
57. Eijkemans, G., Fassa, A. C. G., and Facchini, L. A. Child labour and adolescent workers. *GOHNET Newsletter* 9, 2005.
58. Bales, K. *Disposable People: New Slavery in the Global Economy*. University of California Press, Berkeley, 2000.
59. Anti-Slavery International. *What Is Modern Slavery?* London, 2006.
60. Srivastava, R. S. *Bonded Labour in India: Its Incidence and Pattern*. International Labour Office, Geneva, 2005.
61. Belser, P., De Cock, M., and Mehranl, F. *Minimum Estimate of Forced Labour in the World*. International Labour Office, Geneva, 2005.
62. Lahiri-Dutt, K. *Gendered Livelihoods in Small Mines and Quarries in India: Living on the Edge*. Rajiv Gandhi Institute for Contemporary Studies, New Delhi, 2006.
63. Fitzgibbon, K. Modern-day slavery? The scope of trafficking in persons in Africa. *Afr. Secur. Rev.* 12(1):81–89, 2003.
64. International Labour Organization. *A Global Alliance against Forced Labour*. Global Report under the Follow-up to the ILO Declaration on Fundamental Principles and Rights at Work. International Labour Office, Geneva, 2005.

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