

The Business Value of Health Management

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ABSTRACT. For organizational development that is future-oriented, enterprises increasingly need qualified, motivated and efficient workers who are able and willing to contribute actively to technical and organizational innovations. Furthermore, customers and consumers are increasingly interested in healthy products and services. Therefore, health has become a (potential) business value of strategic importance. In interaction with all relevant stakeholders, an approach was developed for companies that want to manage their health impact in a proactive and preventive manner. The approach was termed Integral Health Management (IHM). IHM forms a strategic approach for reducing the costs of sickness absence and working disability, while the productivity and resilience of the company and its employees are increased. This brings the company direct economic benefits. Finally, it is of prime interest for employees to remain physically and mentally healthy and employable. The IHM approach distinguishes seven lines of development: (1) health as a strategic company interest; (2) the realization of a healthy primary process; (3) a safe and sound physical (work) environment; (4) an inspiring social (work) environment; (5) vital people; (6) a sound relationship with the immediate organizational environment and local community, and (7) healthy products and/or services. The inter-relationships between the seven development lines are essential for combining an improvement of the business impact on health with a strategic interest of companies and organizations. The seven lines of IHM development can easily be linked to the European Foundation for Quality Management's European Excellence Model.

KEY WORDS: healthy organization, integral health management, quality management

ABBREVIATIONS: IHM, Integral Health Management; WHP, Workplace Health Promotion

Introduction

Organizations in Western Europe are increasingly being confronted with the financial impact of the effects of health on their business processes, and in particular with the ever rising costs of disease, (sickness) absence and disability among their personnel.

The costs of not managing health are increasing rapidly, due in particular to various economic incentives in national legislation. As a result, the focus in health policies in companies and in national policies is mainly on the output side of the process: on disease, cure and return-to-work programmes. This can be justified by the short-term financial benefits, but it does not lead to healthy companies: i.e., companies where health is regarded as an important business value, and where health management is seen as something that is fundamental to business excellence.

In the Netherlands an exploratory project was undertaken to develop, in dialogue with a wide range of stakeholders, a concept and an approach that may trigger companies to recognize health as an important business value. A set of tools was also developed; this set of tools is now being tested and evaluated in a follow-up project consisting of a range of pilot studies. This paper focuses on the first part of the project – the development of an approach for what we now call Integral Health Management (IHM). The main initial publication is by Zwetsloot et al. (2003).

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The research questions addressed in this paper are: (1) can an IHM approach be developed that may trigger companies to recognize health as an important business value, and that is broadly supported by the most important stakeholders? What are the key elements and characteristics of such an approach? What roles can companies, employees, occupational health and safety services, and other stakeholders play? What are the main differences between such an approach and the more traditional safety and health management approach?

Background

The concepts of 'healthy organizations' and 'corporate social responsibility' are closely connected. Both concepts include healthy employees (people) and a healthy environment (planet) and, in the metaphorical sense of the word, a healthy company is a financially successful one (profit). A number of trends in society and on company level support the adoption of these concepts.

The need for optimal utilization of the potential workforce

Although unemployment in Europe is currently on the increase, the labour market will be tight in the long run due to lower birth rates and the ageing workforce. The fitness of this workforce must be taken care of. More than ever before people from 'vulnerable groups' (older workers, female workers, people with disabilities) who need special attention for their health participate in the labour process. The increase in labour productivity in Europe (per employee and per hour) is slowing down and has once again become a political issue. Some branches of industry are encountering difficulties in recruiting the right number of people of the right quality because of the negative image of the branch due to relatively poor working conditions (e.g. in construction, health care, education, cleaning).

Changes in cost – benefit balance

Changes in legislation and insurance regulations have resulted in higher costs for companies in matters relating to sickness absenteeism and disablement

(insurance premiums, penalties, supplementary wages). In addition, there is a greater awareness of the costs of replacement, the disadvantages of a loss of competence and the need for a sustainable workforce that contributes to productivity and innovation. (Chapman, 2003; CLBC, 2002; VNO/NCW, 1999, 2001).

Emerging new risks

As a result of growing global competition and the increased use of ICT in the workplace, one can observe an 'intensification of work' resulting in more health complaints such as RSI and psychological stress.

National and international policies

To promote the optimal utilization of the potential workforce, national governments and the EU (Lisbon agreement) have intensified their employment policies considerably, not only by supporting the creation of 'high quality' jobs, but in particular by facilitating the employment of 'vulnerable groups', supporting back-to-work programmes, improving cooperation between public and occupational health services and between public and private employment services, by enforcing stricter regulations concerning the prevention of occupational diseases and by making it more difficult to apply for compensation from the social security system (e.g., Rutte, 2003). The European ministers of health and the environment agreed in 1999 to develop national policies to stimulate Good Practices in Health, Environment and Safety Management in Enterprises, aiming at both health improvement and economic benefits (Baranski and Zwetsloot, 2000). In some countries covenants have been agreed between employers' organizations, trade unions and the government, both on national and branch levels to reduce occupational risks and to improve back-to-work programmes.

Company and branch policies

Confronted with higher costs and more stringent regulations, most companies are paying more

attention to long-term sickness absenteeism than before. In the Netherlands a new issue that has emerged is how to solve conflicts among employees and between employees and supervisors and thereby reduce to a minimum the period of absenteeism due to conflicts. Prevention by improving the working conditions is less widespread and has been developed the best in large companies. Over the past couple of years, the concept of 'workplace health promotion' (WHP) that has been developed in the U.S.A. and Canada is gaining popularity in Europe. It is promoted by several agencies that are active in the field of public health and sometimes also by national governments. The idea is to address general health issues and health behaviour in the workplace. There was some hesitation when it came to adopting this concept in Europe mainly for two reasons. First, general health is the responsibility of the individual and the employer should not interfere. Second, WHP could detract attention from the need to improve working conditions. We know from research in the USA that individual health promotion appeared to be, at best, only minimally effective, unless there was a concomitant amelioration in stressful working conditions. Following a number of experiments in European countries, the advantages of a combined approach have become quite clear (Baart et al. 2003, see also www.enwhp.org, www.eurofound.ie and www.europe.osha.eu.int).

The necessity of optimal utilization of the potential workforce has also encouraged management to modernise HRM, and to give more attention to the individual needs of employees, self-management and competence development. Finally, human potential must be used more effectively to improve productivity. As labour productivity is a rather limited concept, there is a tendency to see it as one of the outcomes, in addition to quality etc., of what is conceptually called 'working smarter', which means a combination of organizational, technical and ergonomic innovation (Pot 2003, see also www.eanpc.org).

Materials and methods

The starting points for the research were: IHM should be a strategically important part of business, and have a positive economic impact. In other

words: it should have a clear business value and contribute to business excellence.

IHM should serve business interests, i.e., the interest of the employer/entrepreneur, but should also be in the interests of employees (both individually and collectively) and contribute to public and occupational health.

IHM should build on existing activities in companies, should form the basis for the integration of those activities and should generate synergy among existing individual activities. In other words: it should help companies to overcome sub-optimization.

In the autumn of 2002, the project started with a range of semi-structured interviews, followed-up by open discussions with 30 stakeholders: three representatives of large businesses, and two of small and medium sized companies, four representatives of ministries (Health, Social Affairs, Economic Affairs and Environment), two representatives of employers' organizations, two representatives of unions, four representatives of economic sectors, two representatives of insurance companies, two representatives of occupational health and safety services, one provider of return-to-work programmes, two municipal public health agencies, three lifestyle service-providers, two non-governmental organizations, and the chairman of the national Occupational Health and Safety Platform. Our intention was to interview high-level representatives. In almost every case this was achieved: it was recognized as a strategically important item.

During the interviews we scrutinized the existing commitment to health issues, the possible future commitment to new forms of health management closely associated with business values, possible bottlenecks and prerequisites for IHM. Both strategic aspects and the contents of IHM were discussed, and the roles and potential contributions of the various agents in the (company supporting) infrastructure were discussed.

A summary was made of each interview. General conclusions were identified from the 30 interviews. Based on the outcomes of this analysis, a first draft document was developed to define the concept of IHM, strategically in its value for organizations, and with respect to its contents. This draft definition document was presented and discussed in a half-day workshop with the interviewees; actually 15 interviewees participated in this workshop, which

took place in February 2003. The feedback from the participants was generally positive, the justification of the direction of the development was confirmed, while any critical remarks concerned a number of less crucial elements or details. The stakeholders advocated a marked positioning of the concept/approach in development, distinguishing it clearly from existing initiatives. It was emphasized that the IHM concept should be attractive for the most important target group (managers), and it should be easy to apply. Ideas on the desirable roles for agents in the infrastructure (such as the occupational health and safety services) varied widely.

In the same period, a literature review on health management was carried out, both to identify innovative approaches and associated proven tools or methodologies. A study trip to Germany was also organized to ascertain what could be learned from the German experience with health promotion and corporate health management.

Based on the outcomes of the first workshop, the aims and characteristics of the concept/approach were further specified; the critical decisions were discussed with the representative of the Netherlands Ministry of Health (who funded the project).

At the same time, an improved version of the "definition document" was developed, comprising a more to-the-point definition, a better definition of the benefits, and more transparency about the relationship with existing concepts and activities, such as Safety and Health at Work, Human Resource Management and Disability Management. Finally, a concise description of the positions taken by the various stakeholders was added to the definition document.

In a second workshop in June 2003, the adapted definition document was discussed with the stakeholders; the draft methodology and associated tools were also presented and discussed. For this workshop we had invited additional people from interested companies; in total 24 stakeholders participated. As representatives of their company, nine participants formed the core target group.

Generally the feedback from the target group and other stakeholders on the definition document was quite positive: it did not raise much discussion, and its contents were generally confirmed as positive and interesting, but nevertheless challenging.

The discussion focused on the one hand on the draft methodology and tools, and on the other hand on the question: how can this concept be communicated in a way that it really makes a change? Other issues in the discussion concerned the alignment with international developments in corporate health management (are similar developments taking place elsewhere?), and the extent to which the positive public health impact should be emphasized or not. The concern was that too much emphasis on the positive public health impact could have a counterproductive effect on the perception of the business value of IHM. It was concluded that the business value should come first, as getting a positive response from companies is of prime importance for getting management commitment. The likely positive impact on public health should be communicated to the business community as being an indirect positive by-product, not as the core of IHM.

Findings

Health as a business value

The value aspect of health is now clarified, first as a generic human value, then as a business value and finally as a value for employees.

Health as a basic human value.

Health is a personal value; a vital human value (well-being, independence) and an economic value (the capability to generate income). Every manager and employee has a personal stake in maintaining his or her health for as long as possible, and indirectly in sustaining – his or her ability to work, i.e. to remain economically independent from other people and institutions such as social security bodies.

The business value of healthy organizations.

For companies, healthy personnel is a vital prerequisite for (labour) productivity, a vital condition for continuous learning and consequently increasingly relevant in a knowledge society and essential for the company's innovative capacity. The association of healthy people with a healthy organization is therefore justified¹ (Corbett, 2003a, b). For society at large, public health is essential for keeping sufficient numbers of people productive (and at work) and for mitigating the skyrocketing costs of health care.

IHM is an approach for companies and other organizations to achieve financial benefits and to increase productivity, by conscious management of the impact of business activities on health, in a proactive and preventive manner. In this way, health is a strategic issue for organizations.

IHM contributes to the financial health of organizations.

From a business perspective, health is closely associated with the ability to work and to be productive. For companies and other organizations, IHM forms a strategic approach to reduce the costs of sickness absence and working disability, while the productivity and resilience of the company and its employees are increased.

Table I illustrates how Volkswagen has defined the business–economic aspects of health management (see, Brandenburg et al., 2000; Marschall and Brandenburg, 2000). The Dutch division of Siemens practices a similar vision, and in its health management strategy emphasizes that employees own initiatives are indispensable. Siemens also has a human centred strategy whereby every employee is regarded as “a potential”, and where individual and organizational learning is seen as the key to continuous improvement of the organization (Kuipers, 2003).

Health and work: the value for employees.

It is of prime interest for employees to have employment. It is in their interest for the employer to create conditions that allow them to remain (physically and mentally) healthy and employable (Ennals, 2002; Gründemann and de Vries, 2002). It is important that workers can be proud of the company they work for, and of the work they pursue. What is relevant for their health are the job

demands, the working conditions and their personal behaviour (which is related to work behaviour as well as to lifestyle). It is therefore important for employees that they are given the opportunity to behave in a healthy manner, and to be stimulated to take this self-responsibility seriously (no paternalism). Further important findings include:

- Health is a value for each and every individual; everybody has a say in his or her own health.
- Being employed usually makes people healthier than when they are unemployed. The positive impact of work on health is often underestimated.
- Health protection and health promotion realized by employers can be regarded as an important secondary benefit of employment, and a natural part of good working conditions.
- Health is influenced by the personal behaviour and lifestyle, at work and beyond. It is also influenced by the combination of work and private life (care and leisure activities).

The definition of IHM

IHM is the systematic management of the impact of business activities on (public) health (including occupational health), with the aim of stimulating the health of people and of the organization.

To put it more formally and scientifically: IHM involves steering and controlling policies and organizational, technological and administrative measures and agreements, but also the participation, perception, behaviour and collaboration of key players in (and sometimes outside) the organization, with the aim of stimulating the health of people and the vitality of the organization.

TABLE I
Business aspects of health management at Volkswagen (Volkswagen AG, 1999)

Business aspect of health management strategy	Strategic aims
The ability to work and be productive Commitment	Increase in working abilities of (all) individual employees Strengthening and enforcement of participation of the workforce
Health quote as standard (97% is present and able to work; and not: 3% sickness absence)	Realization of continuous improvement of health situation.
Economic efficiency	Continuous improvement of economic efficiency
Contribution to better work and higher quality products	Improvement of quality of production and optimization of customer orientation

A simpler description is: a company that manages its health integrally, takes care of its own people and their working conditions, as well as of the health of people in the company's environment, while the employees take care of themselves and their colleagues; in this way the organization makes a step towards business excellence and sustainability.

IHM focuses on activities that particularly aim at health improvement or better human resource management. But there are also issues that have an indirect impact on health. The quality of management can be just as important as the dedicated management of health activities. Examples of issues that are not usually regarded as health issues but that do have a considerable impact on health are: leadership, industrial relations, trust, communication, corporate culture, organizational (re)design and organizational development, technological innovations, choices for product/market combinations, the selection of and relationship with business partners. For managing these issues, closely related to the core business and the style of leadership, the active involvement of top managers is vital.

The contents: seven lines of development

IHM is not a product that can be procured, or that can be achieved with one supreme effort. It is a process that requires continuous attention. It can only be developed within organizations. It is likely that attention will thereby shift from a fixation on undesirable output (e.g., ill-health, sickness absence) via processes that may generate health or ill health, to the health of the organization. We distinguish seven lines of development that are easily recognizable. It is important, however, not to manage these lines of development separately. Together they have the potential to generate strong synergies. The seven lines of development are:

- health as a strategic company interest,
- the realization of a healthy primary process,
- a safe and sound physical (work) environment,
- an inspiring social (work) environment,
- vital people,
- a sound relationship with the direct organizational environment and local community,
- healthy products and/or services.

The inter-relationships between the seven development lines are essential for the combination of improvement of the business impact on health with a strategic interest of companies and organizations. These seven lines of development, their aims and main elements, as well as their interrelationships are illustrated in Figure 1.

The seven lines of IHM development can easily be linked to the European Foundation for Quality Management's European Excellence Model. Health as a strategic company interest is linked with the Policy and Strategy box in the EEM model – to recognize it, requires *Leadership*. A healthy primary process is linked to *Processes*; a safe and sound physical (work) environment is linked to the *Partnerships and Resources* box; the inspiring social (work) environment is linked with *Leadership* and also with *People*. Vital people are, of course, linked with the *People* box and with *People Results*; a sound relationship with the direct organizational environment and local community is linked with *Society Results*; healthy products and services is linked with *Customer Results*. Finally, the impact on productivity is the link with *Key Performance Results*. The close relationship with the European Excellence Model means that IHM that contributes directly to Business Excellence is credible.

The change from the dominant health and safety management paradigm towards IHM

Although there are good reasons for companies to practice IHM, and some companies are already doing so (probably with some slight variations), the step towards IHM is far from self-evident. Five major shifts are needed: to start with, positive challenges, to associate health with productivity, to develop an integral approach and strive for synergies, to create attention for all employees, and to see health as a sound investment with business added value. Note that none of these five shifts are part of Dutch legislation.

From problem solving to positive challenges

An important shift in focus involves the shift from risk reduction and solving operational problems to a

The seven lines of IHM development and their interrelationships						
<i>Strategic policy</i>	<i>Primary process</i>	<i>Physical working environment</i>	<i>Social working environment</i>	<i>Vital people</i>	<i>Sound relationship with external environment</i>	<i>Healthy products and services</i>
Aiming at healthy business Health as a core value of (the strategic management of) organizations	Aiming at healthy business processes, and on working processes with development opportunities for employees. Functions are adjusted to human qualities and capabilities	Aiming at safe and sound workplaces and reduction of hazards and risks.	Aiming at a healthy working climate sound labour relations and pleasant manners in the contact with the social environment.	Aiming at increase in human capital (physical and mental health) and a healthy and sustainable workforce	Aiming at positive impact on the local environment and a positive and healthy company image	Aiming at products that are positive for the health of customers and consumers
Overview and understanding of impacts of business activities on health	Anticipation of technological innovations and organizational development Responsibilities guaranteed in the line organization	(Re)design of workplaces and corrective actions	Good leadership. A good match between individual capacities, ambitions and job content. A corporate culture that rewards attention for health and people.	Participation, and good leadership; Potential investments in all individuals.	Co-operation within partners in the production chain and with supporting companies	Strategic choices on product/market combinations. Redesign or repositioning of products and services
<i>Direct achievements:</i> <ul style="list-style-type: none"> • Increase of presence of personnel, reduction of fluctuations in available personnel, and increase in labour productivity. • Healthy and committed personnel; employees that are willing and able to develop themselves. • Reduction of (the costs of) (sickness)absence and disability. • A healthy company with a positive image towards employees and other stakeholders. <i>Indirect impact:</i> A positive impact on public and occupational health						

Figure 1. The seven lines of IHM development and their interrelationships.

focus on the positive business value of health; that value often contributes to a positive company image (both on the labour market and in the market for their products and services).

From a medical perspective to a business perspective on health

A second important step is that health is no longer primarily associated with medical problems (i.e. clearly not a business item), but with the presence of motivated personnel and an increase in

productivity. Health is supposed to be a main condition of productivity. Several business activities (such as leadership, reorganizations or the choice for certain product/market combinations) have an implicit impact on health (e.g., Landsbergis, 2003); it is much easier to make this connection from the perspective of managing the presence of motivated personnel and productivity. In IHM, the implicit impact of activities on health is taken just as seriously as the impact of those activities that specifically aim at improving health or reducing sickness absence.

From fragmented activities to an integral approach

A third change involves the shift from fragmented activities, often associated with operational problems, to an integral approach that is closely associated with the strategic policy of the company. The focus is then no longer on risk management, or lifestyle interventions, or sickness absence policies, or product safety, but on a combination thereof, related with organizational and business development. The integral overview will easily lead to the identification of sub-optimal activities, and may trigger synergies between separate activities. Worthy of note is that the concept of health is integral by nature; the World Health Organization defines health as: a state of complete physical and mental well-being.

From attention for people with health problems, to care for all personnel.

Closely related with the integral approach is the attention to each and every employee (whether healthy, recently cured, or with problematic health, and irrespective of age or type of contract) instead of attention only for the people with health problems (which is often the case in sickness absence policies and the promotion of healthy lifestyles). The health and well-being of people is at stake, and can often be improved. In this way, there will be a strong synergy with human resource management.

From cost to a sound investment

Finally, the development of IHM, and the management of the business impact on health is seen as a sound investment in the future of the organization. That investment is mainly in doing the right things right the first time, and in learning from undesirable events (serious illnesses, accidents, etc.) to prevent a recurrence of problems. It is logical that investments are mainly triggered by the business value of health (and not primarily by legislative requirements or incentives stemming from legislation).

An overview of the paradigm shift from more traditional health and safety management towards IHM is given in Table II.

Challenges and implications for a variety of stakeholders

The paradigm shift described here is not only relevant for companies and not-for-profit organizations. The shift can also be valuable for several other stakeholders, who in their turn, can either contribute to this shift or frustrate it.

National governmental bodies (e.g., Ministries for Health and for Labour, Employment or Social Affairs) have a stake in an indirect public and occupational health impact. They can stimulate the shift by aligning relevant policies towards businesses, and by making the paradigm shift therein. They can stimulate the development of IHM in various ways, and can support the needed investments.

Vital organizations are of prime importance to employers' organizations. They can communicate the new approach to their member organizations, and stimulate the necessary mental shift. The Dutch Employers' organizations (VNO/NCW and MKB Nederland) are positive about IHM, but important conditions are the integral nature, room for tuning IHM with the business interests and adapting it to the unique situation in companies, and that the government clearly expresses the intention not to consider new legislation.

For unions, good health management is an important fringe benefit. The unions in the Netherlands are positive about the new IHM concept. The preventive and integral characteristics in particular are vital for them: they are aware of examples where employees are held accountable for their personal (unhealthy) behaviour, while the employer does not provide a sound workplace or challenging job content. This creates a feeling of annoyance among the workers. An important requirement is that the employer accepts that the individual health and lifestyle is primarily a personal stake; programmes for the employees should stimulate good health on a voluntary basis only. The Dutch unions consider their main role to stimulate awareness (and the required cultural shift) among their members and carry out the combined responsibilities of both employers and employees.

The interests for Occupational Health and Safety Services are more complex. They currently function on an expert basis, and mostly on the output side of the process (curing, back-to-work programmes,

TABLE II
The paradigm shift from traditional health and safety management towards integral health management

Traditional health and safety management	Integral health management
From problem solving to positive challenges Focus on risk reduction and on solving problems	Focus on the positive value for business Mainly triggered by the recognition of health as a business value
Mainly triggered by costs and legislative requirements From a medical to a business perspective Health is associated with problems that managers do not like to feel responsible for. No direct impact on company image	Health is associated with company benefits and productivity that clearly belong to the core responsibility of managers Positive impact on company image, and brand
From fragmented activities to an integral approach Focus on specific issues, for specific target groups and addressing specific operational risks Illness, complaints and absenteeism are closely related.	Integral approach, with a focus on the strategic business importance of health Health is recognized as a continuum. There is no one-to-one relationship between illness/symptoms and absenteeism. Focus on capabilities and employability instead of disabilities and absenteeism.
From attention for people with health problems, to caring for all personnel. Focus on employees that are “at risk”, suffer from working disabilities, or are frequently absent or ill long-term.	Focus on all employees and with personal development.
From cost to a sound investment Measures for reduction of sickness absence and control of risks are seen as costs Costs are made for corrective action, cure and post care	Investment in healthy people and healthy company is a business value Cost for proactive and preventive health activities are regarded as a sound investment

etc.). Many companies complain about these services because they are pushing and selling their expertise rather than serving the demands of companies. All stakeholders, including the representatives of Occupational Health and Safety Services, do agree that IHM will require a re-positioning of these service organizations if they want to support companies in the implementation. The re-positioning could be characterised as follows: better support for their customers to solve the really important problems, including the financial aspects; more *demand driven* service than the expert based service that is common today; demedicalisation as a natural part of their services, and more tailor-made services, tuned to the sector of industry and/or the specific company.

In the project, the potential stakes and contributions of sector organizations, municipalities, knowledge institutes, lifestyle providers, (re-)integration services, insurance companies, and some specific organizations

in the Dutch infrastructure were also discussed. These are, however, according to the majority of stakeholders, only of secondary importance for the required shift to health as a common business value.

So the IHM concept would seem to be acceptable and closely linked with societal trends. There are already a few examples of good practices. The challenge now is to disseminate the concept, and implement it in business practice.

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Notes

¹ The negative side of this relationship is emphasized in the well-known book by Kets de Vries: *Neurotic Organisation* (1984).

References

- Baart, P. et al.: 2003, *Gezondheidsbevordering op de werkplek: een vanzelfsprekend element van bedrijfsvoering (Health Promotion in the Workplace: A Natural Element of Business)*, NIGZ/GBW: Woerden.
- Baranski, B. and G. I. J. M. Zwetsloot: 2000, 'Introduction to Good Practice in Health, Environment and Safety Management in Enterprises', in *Health Management in Enterprises Publication Series from the Federal Institute for Occupational Safety and Health*, (Berlin, Tb), p. 110.
- Chapman, L. S.: 2003, 'Meta-evaluation of Worksites Health Promotion Economic return Studies', *The Art of Health Promotion* 6, (6) January 2003.
- CLBC: 2002, 'Canadian Labour and Business Center, Twelve Case Studies on Innovative Workplace Health Initiatives; Summary of Key Conclusions', See www.clbc.ca.
- Corbett, D.: 2003a, 'Building Sustainable Value and Trust: The Canadian Excellence Framework', paper presented at the European Conference 'Social Dimensions of Organisational Excellence', *Session on Healthy Organisations*, Den Haag, (2-4 June 2003).
- Corbett, D.: 2003b, 'Why Focus on a Healthy Workplace? Building the case for Healthy Workplaces', Canadian Quality Institute, via www.nqi.ca/articles.
- Ennals, R.: 2002, 'Partnership for Sustainable Healthy Workplaces, Warner Lecture, British Occupational Hygiene Society', Sheffield, (9 April 2002).
- Gründemann, R. W. M. and S. de Vries: 2002, 'Gezond en duurzaam inzetbaar! – Employability beleid in Nederland (Healthy and Sustainable Employability in the Netherlands)', TNO Arbeid, Hoofddorp.
- Kets de Vries, M. F. R.: 1984, 'Neurotic Organisation; Changing Counterproductive Styles of Management', Jois Bass Inc.
- Kuipers, H.: 2003, 'Presentation on the Health Policy of Siemens Netherlands', NIGZ/GBW Conferentie Gegarandeerd Beter Werk, Papendal, (January 2003).
- Landsbergis, P. A.: 2003, 'The Changing Organisation of Work and the Safety and Health of Working People: A Commentary', *Journal of Occup Environment Medicine* 45, 61-72.
- Marschall, B. and U. Brandenburg: 2000, *Gesundheitsmanagement bei Volkswagen*. In: U., Brandenburg, P. Nieder und B. Susen (eds.). *Gesundheitsmanagement im Unternehmen; Grundlagen, Concepten und Evaluation*. Juventa Verlag Weinheim und München 2000, pp. 257-272.
- OHSAS 18001: *Occupational Health and Safety Management Systems, Specification BSI*, (London).
- Pot, F. D.: 2003, 'Productivity and the Utilisation of the Potential Workforce', In: EPI (Europe Productivity Ideas) Issue March 2003; European Association of National Productivity Centres Brussels. pp. 41-44.
- Rutte M.: 2003, *Ziekteverzuim en arbeidsongeschiktheid – Brief van de Staatssecretaris van Sociale Zaken en Werkgelegenheid (Sickness Absence and Working Disability, Letter from the Secretary of State to the Dutch Parliament)*. Tweede Kamer, vergaderjaar 2002-2003, 22 187 nr. 140.
- VNO NCW: 1999, *Gezondheidsbeleid: dat levert werkgemers veel op – handreiking voor ondernemingen (Health Policy Pays for Employers – a Guideline for Enterprises)*, VNO NCW, Den Haag.
- Volkswagen, A.G., Corporate Health Division: 1999, *Guidelines on Health Protection and Health Promotion in the Volkswagen Group* (Volkswagen, Wolfsburg).
- Volkswagen A. G.: 2002, *Gesundheitswesen, Verbesserung der Gesundheitsquote durch integriertes Gesundheitsmanagement* (Volkswagen, Wolfsburg).
- Wynne, R. and R. W. M. Gründemann: 1999, 'New Approaches to Improve the Health of a Changing Workforce', Dublin. European Foundation for the Improvement of Working and Living Conditions.
- VNO NCW: 2001, *Renderend gezondheidsbeleid – handreiking voor ondernemingen, (corporate health policy – a paying concern – guideline for enterprises)* VNO NCW, Den Haag.
- Zwetsloot, G. I. J. M., R. Gründemann and L. Vaandrager (ed.): 2003, *Eindrapportage IGM Definitiestudie en Methodiekontwikkeling (Final report Integral Health Management – definition study and methodology development)*, TNO Report 14669, 16 September 2003, for the Dutch Ministry for Public Health, Welfare and Sport.

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