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OCCUPATIONAL STRESS STATISTICS
INFORMATION SHEET

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INTRODUCTION

There are considerable difficulties in measuring stress and also the occupational contribution to stress. Interpretation of various data sources on occupational stress is reliant on understanding a study's methodology and the problems inherent with this type of epidemiology. To aid understanding of the data presented here and other data sources readers may wish to look at some of the many texts in this area^{1,2}.

DATA SOURCES

Much of the information for this fact sheet derives from surveys of work-related illness (SWI) conducted in 1990³, 1995^{4,5}, 1998/99⁶ and 2001/02⁷. There are methodological differences between SWI surveys conducted in different years and in consequence the results are not directly comparable. Other sources of information used include an HSE commissioned survey of work-stress undertaken by Bristol University in 1998^{8,9} and HSE surveillance schemes SOSMI and OPRA. The SOSMI and OPRA schemes represent reports from participant psychiatrists and occupational physicians respectively on new cases of mental ill health they believe are work-related. Fuller details of these schemes plus an overview of all sources is available from the latest Health and Safety Highlights publication¹⁰ and via HSE statistics webpages¹⁰.

It is strongly recommended that those interested in the data presented below read the publications relating to these sources. This will provide further information of relevance and put the data in context.

STATISTICAL INFORMATION

Prevalence

Data from SWI01/02 estimated that 563,000 (95% CI 530,000 to 596,000) individuals in Britain were suffering from work-related stress, depression or anxiety. A further estimated 80,000 people reported work-related heart disease. Evidence from SWI95 suggests that the majority of these ascribe their condition to stress. Data from the Stress and Health at Work survey^{8,9} (SHAW) indicated that almost 20% of working individuals rated their work into the top two work stress categories of very and extremely stressful when asked to consider how stressful their job was on a 5-point scale. SHAW study authors considered that these individuals represented those exposed to work-stress and estimate on this basis that 5 million British workers believe they are exposed to work stress. The almost ten-fold difference in SHAW and SWI estimates arises because they are measuring different things. SWI estimates represent more serious cases where individuals reported unprompted that work stress was making them ill, i.e. had some significant physical or psychological impact on their health, whereas SHAW survey estimates represent individuals' assessments of the stress levels in their job. In this context SHAW survey data may best be considered as an estimate of the numbers who believe they are exposed to significant amounts of work stress and SWI estimates as an estimate of the number that believe they suffered some significant effects as a result of such exposure.

Incidence

SOSMI and OPRA surveillance schemes together indicate an estimated 6946 new cases of work-related mental ill health reported by psychiatrists and occupational physicians in Britain in 2002. Over 85% of these cases were categorised as work-related anxiety and depression or other work-related stress that probably together represent cases of work-stress related psychological ill health. Incidence estimates from

these surveillance schemes represent more severe cases and almost certainly underestimate the incidence of work-related stress in Britain. Data from SWI01/02⁷ indicates an estimated 265,000 people (95% CI 242,000 to 288,000) first became aware of their self-reported work-related stress condition within the previous 12 months, suggesting a much higher incidence estimate based on self-reported work related ill health.

Trends

Unfortunately as yet the data available to assess trends in work-related stress is limited. The surveys of work-related illness that measure work-related stress prevalence are not directly comparable for technical reasons^{6,7}. Notably the way illnesses were described and classified varied, as did the geographical coverage and design of surveys. However, approximate comparisons limiting analyses to England and Wales and attempting to align stress figures to a similar basis suggests an approximate doubling of the prevalence rate of self-reported stress from 1990 to 1999 and no significant change between 1999 and 2001. Surveillance scheme data as yet are also inadequate for the assessment of trend given the main scheme, SOSMI, has only been in operation for a relatively short time. However, for the four years of available data, 1999 to 2002, cases of work-related mental ill health reported by psychiatrists fell from 3996 to 2410 whereas similar cases reported by occupational physicians rose from 2113 to 4536. In total these schemes show an increase over the years 1999 to 2001 with a fall in 2002.

As stated these data are extremely limited for assessing trends in work-related stress. Furthermore, factors such as awareness and knowledge of stress, and social stigma attached to stress or mental illness can change markedly with time and these may strongly influence the reporting of work stress. With work on going to assess the influence of such factors and the contribution of additional years of data from surveillance schemes, trends in work stress should become clearer in future years.

Age & Sex Distribution

SWI01/02 indicate the highest estimated prevalence rates of self-reported work-related stress, depression or anxiety were among the age groups 35-44 and 45-54. This is similar to SOSMI and OPRA data that indicate the highest proportion of new cases of work-related mental ill health occur in these two age groups. However, examination of the estimated incident rates for work-related stress depression or anxiety from SWI01/02 indicates rates were highest among the 16-34 year and 35-44 year age groups, with the estimated incidence rate for females being highest among this 16-34 year age group. Taking both surveillance schemes together, approximately equal numbers of male and female new cases of work-related mental ill-health were reported. However, in recent years psychiatrists tended to report more male cases whereas occupational physicians tended to report more female cases. SWI01/02 data indicates similar estimates of incidence and prevalence rates between genders with higher incidence rates among females who had worked in the previous 12 months

Occupational Distribution

The most recent survey of work-related illness SWI01/02⁷ indicates occupational groups from 2000 standard occupational classification with significantly higher rates of self-reported stress, depression or anxiety were teaching professionals, protective service occupations, financial institution and office managers, public service and associate professionals, health associate professionals and in particular nurses, administrative occupations: government and related organisations and functional managers. This is broadly similar to the other self-reported surveys that indicated higher rates among, teachers, nurses, groups in the public sector and those within associate professional managerial and technical occupations.

Data from surveillance schemes SOSMI and OPRA broadly supports this type of occupational distribution for new cases of work-related mental ill-health.

Days off Work

Figures from the SWI01/02 survey provided an estimate of 13.4 million working days lost in Britain in 2001 due to either stress, depression or anxiety¹⁰. On average this survey estimated that each sufferer took 29 days off work in 2001 because of their complaint. This compares with 6.5 million working days lost and average days lost of 16 per affected person estimated from SWI95¹¹.

Cost

Calculations based on an HSE report¹² that used data from SWI95 estimated that for work-related stress the cost to employers was about £353 million to £381 million (1995/96 prices) and to society about £3.7 to £3.8 billion. These estimates are based on a number of assumptions and they are intended only to be broadly indicative of the cost. It should be noted that since these calculations were done, the estimated number of days lost due to stress has more than doubled.

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3. Self-reported work-related illness, Hodgson *et al.* HSE Books (1993), ISBN 0717606074.
4. Self-reported work-related illness in 1995, Jones *et al.* HSE Books (1998), ISBN 071761509X. Available at <http://www.hse.gov.uk/statistics/2002/swi95.pdf>
5. Information sheet 4/00/EMSU Secondary analysis of the 1995 work-related illness survey (SWI95). Available at <http://www.hse.gov.uk/statistics/2002/secan95.pdf>
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11. HSE information sheet 2/99/EMSU. Economic impact: Revised data from the self-reported work-related illness survey in 1995 (SWI95). Available at <http://www.hse.gov.uk/statistics/2002/ecimpact.pdf>
12. The costs to Britain of workplace accidents and work-related ill health in 1995/96. HSE Books, ISBN 0717617092

FURTHER INFORMATION

Some other HSE publications on stress-related issues.

Tackling work-related stress: A guide for employees. INDG341, HSE Books, 2001 single copies free from HSE Books. Also available at: <http://www.hse.gov.uk/pubns/indg341.pdf>

Tackling work-related stress: A managers' guide to improving and maintaining employee health and well being. HSG218, HSE Books, 2001, ISBN 0717620506.

Help on work-related stress: a short guide, INDG281, 1998, single copies free from HSE Books. Also available at: <http://www.hse.gov.uk/pubns/indg281.pdf>

Managing work-related stress: A guide for managers and teachers in schools. ESAC, HSE Books:, 1998, ISBN 0717612929.

Mental well being in the workplace: A resource pack for management training and development. HSE Books, 1998, ISBN 0717615243.

Stress research and stress management: putting theory to work. T.Cox. HSE CRR 61/1993. HSE Books:, 1993, ISBN 0717606848. Available also at: http://www.hse.gov.uk/research/crr_pdf/1993/crr93061.pdf

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A Critical review of Psychosocial hazard measures. J Rick, R Briner, K Daniels, S Perryman, and A Guppy The Institute for Employment Studies for the Health and Safety Executive. CRR 356/2001. HSE Books 2001, ISBN 071762064. Available also at: http://www.hse.gov.uk/research/crr_pdf/2001/crr01356.pdf

Effective Teamworking: reducing the psychosocial risks. S K Parker, H M Willikams. CRR393/2001. HSE Books 2001, ISBN 0717621499. Available also at: http://www.hse.gov.uk/research/crr_pdf/2001/crr01393.pdf

Work Environment, Alcohol Consumption and Ill-Health. The Whitehall Study. J Head, P Martikainen, M Kumari, H Kuper and M Marmot, CRR422/2002, HSE Books 2002, ISBN 0717623149 Available at: http://www.hse.gov.uk/research/crr_pdf/2002/crr02422.pdf

Understanding the Risks of Stress: A Cognitive Approach. K Daniels, Charris and R Briner, CRR427/2002, HSE Books 2002, ISBN 0717623432 Available at: http://www.hse.gov.uk/research/crr_pdf/2002/crr02427.pdf

Interventions to Control Stress at Work in Hospital Staff: Institute of Work, Health and Organisations. T Randall and A Griffiths, CRR435/2002, HSE Books 2002, ISBN 0717623602. Available at: http://www.hse.gov.uk/research/crr_pdf/2002/crr02435.pdf

Review of Existing supporting Scientific Knowledge to Underpin Standards of Good Practice for Key Work-related Stressors- Phase 1: The Institute for Employment Studies. J Rick, L Thomson, R Briner, S O'Regan and K Daniels. Research Report 024/2002, HSE Books 2002, ISBN 0717625680 Available at: <http://www.hse.gov.uk/research/rrpdf/rr024.pdf>

Some other ad hoc surveys and epidemiology

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People and Productivity – Final Report. NOP World United Business Media.

Prospective study of Whitehall civil servants (Whitehall I and Whitehall II studies). Several publications authored by Professor Sir Michael Marmot and/or Professor Stephen Stansfeld and colleagues providing information from a large prospective study of civil servants in London.

Sources of information

All HSE publications are available through HSE Books, PO Box 1999, Sudbury, Suffolk, CO10 6FS. Tel: 01787 881165, Fax: 01787 313995. Also the HSE website (<http://www.hse.gov.uk/>) provides links to full text HSE research reports (<http://www.hse.gov.uk/research/dissemination.htm>), statistical information (<http://www.hse.gov.uk/statistics/index.htm>) and general information on work stress (<http://www.hse.gov.uk/stress/index.htm>).

Many reports other than those listed above on working conditions in Europe are available from the European Foundation (<http://www.eurofound.ie/>)

Useful publications on stress are also available from the European Agency for Safety and Health (<http://agency.osha.eu.int/>)

The TUC (<http://www.tuc.org.uk/>) and the Charter Institute of Personnel and Development (<http://www.cipd.co.uk/Infosource/Listofseries/CIPDSurveyReports.asp>) and the Samaritans (<http://www.samaritans.org.uk/>), among others also produce reports and surveys on stress at work and related issues.

Details of any additional sector specific surveys may be identified by approaching the appropriate trade association and/or trade union.