

CLINICAL COMMENTARY

The Australian RSI debate: stereotyping and medicine

J. L. QUINTNER

Accepted for publication: June 1994

Keywords women, chronic pain, repetition strain injury, compensation

Summary

The vehement scientific debate which took place in Australia in the 1980s over the epidemic of the chronic cervicobrachial pain syndrome known as repetition strain injury (RSI) was remarkable for the accompanying social commentary offered by many of the medical participants. This commentary was to have a profound effect on relationships between individual doctors and their patients with RSI. It reflected and reinforced the prevailing stereotypes within Australian society, not only of working women, but also of recipients of workers' compensation payments. On the other hand, some of the medical responses to the epidemic were severely criticized by social scientists who analysed the epidemic. In the process of such criticism, a number of stereotypes of doctors were also reinforced.

Introduction

WOMEN IN THE WORKFORCE

Until the advent of the First World War, the fact that women formed part of the industrial workforce, in competition with men, was tacitly ignored by the upper and middle classes of Western society.¹ This attitude probably stemmed from the widely held belief in the 19th century that women possessed 'only a finite amount of mental and physical energy, and that most of this was required for fulfilling their primary social functions as mother and housekeeper'.²

At the turn of the century, Australian women who worked in industry, by choice or necessity, were there only because they represented cheap labour and an economical alternative to machinery.³⁻⁵ However, for many women such employment was a means of becoming independent of their families, even though it meant undertaking work that was boring, repetitive and underpaid. It was also vastly preferable to working as a domestic servant for a living.⁶

The percentage of women in the Australian workforce increased steadily between 1901 (20.5%) and 1972 (32%).

Correspondence to: Dr John Quintner, St John of God Medical Centre, 175 Cambridge St, Wembley WA 6014, Australia.

The proportion of those who were married rose from 15% to 60%.⁷ By 1988 over half of all married women were in the Australian workforce, including 40% of married women with children under 5 (though two-thirds of these had part-time jobs). The same trends were followed in all Western industrial societies.⁸ The vast majority of women were employed in poorly paid clerical or factory assembly-line jobs, over which they have had little or no control.⁹

After the Second World War a much larger proportion of immigrant women entered the unskilled segment of the labour force than did women in Australia generally.¹⁰ These women, particularly those who were non-English-speaking, were a vital source of labour for Australian manufacturing industry as it expanded rapidly during the 1950s and 1960s.¹¹ The principal reason for them having to occupy the least desirable jobs appears to have been that large numbers of English-speaking women had taken up better-paid positions with higher status, in commercial offices and in the service industries (e.g. health, education and retailing).¹¹

OCCUPATIONAL HEALTH OF WOMEN

Gandevia¹² suspected that any reforms to the working conditions of Australian women in the 19th century had been mainly motivated by 'an awareness of the economic implications of an unhealthy and physically sub-standard work force' in the next generation. This attitude appears to have been carried over into the 20th century. Owen and Shaw were of the opinion that 'The health of the woman worker has never been a high priority - either by industry or government - except in relation to reproduction'.¹³

The massive rise in female employment in England during the First World War made industrial hygienists more aware of the special health problems and needs of working women.^{14,15} This awareness was also evident in Australia. A survey of female labour in Victorian industry, undertaken at the request of the Commonwealth Department of Health by Ireland,¹⁶ highlighted the need for more intensive action to safeguard the health of these women:

The employment of women has now become inevitable, and it is agreed that their contribution to the work of the country cannot be dispensed with when there is so great

a demand for increased production ... working conditions must be so arranged and adjusted that no undue harm to health ensues. The adolescent girl is the object of special anxiety, as she is particularly susceptible to such influences as bad habits of posture, excessive strain and unhygienic working environment... workers of today must be considered as the actual or potential mothers of the next generation.

Ireland¹⁶ also recommended, as a matter of some urgency, that an investigation into working conditions of the then large number of female office workers be undertaken. Her plea went unheeded, and was to be echoed 50 years later.⁹

OCCUPATIONAL MEDICINE

When Dr Donald Hunter, Physician Director of the Department of Research in Industrial Medicine and Curator of the Museum, London, visited Australia in 1950, occupational medicine was a neglected specialty. Undergraduate medical teaching in occupational health was virtually non-existent, except in Queensland and New South Wales, and postgraduate courses were both infrequent and of short duration. In addition, Australia's private industries had been slow both to provide any medical supervision for their workforce and to initiate any research into occupational health.¹⁷

Little had changed by the early 1970s, a situation which Cumpston¹⁸ found both surprising and intolerable, but attributable to a lack of social awareness of the need for such a service. Occupational health facilities appeared to be somewhat better organized in Japan,¹⁹ but the British²⁰ and American²¹ scenes differed little from that in Australia.

Anticipating the growing importance of occupational medicine, Ferguson²² made the prediction that in the 1970s:

occupational medicine will need to keep pace with changes in work and in society. Some old hazards will remain, but may appear also in new guises, and new hazards will arise. There will be new types of industry, and automation will extend its personal and social effects on the worker.

A decade later, Ferguson²³ lamented the fact that the general standards of care in industry in Australia lagged several decades behind northern Europe, and this was reflected in an 'abysmal disease and injury and health status record'. He anticipated rapid improvement in the situation under the influence of the newly formed National Occupational Health and Safety Commission (NOHSC).

WORK-RELATED NECK AND UPPER LIMB PAIN

During the 1970s, complaints of diffuse upper limb and neck pain became increasingly prevalent among female

factory process workers and clerical workers, both in Australia^{13,24-27} and in Japan.²⁸ Similar health problems were being increasingly recognized amongst female office workers in America^{29,30} and Scandinavia.³¹ The unique nomenclature adopted in Australia to embrace work-related neck and upper limb pain syndromes was repetition strain injury (RSI).³²

What has been termed 'one of the most vehement debates over medical knowledge' took place over RSI in Australia during the greater part of the 1980s.³³ The Australian RSI debate has now been extensively analysed both from the standpoints of medical epistemology,³⁴ and the social sciences.^{33,35-39} This material contains a lucid commentary on many of the human dimensions of the RSI epidemic, and provides a window through which the transactions between doctors and RSI sufferers can be viewed.

When the medical debate did not quickly resolve the fundamental issues of diagnosis and pathophysiology of RSI, many primary-care physicians did not possess the scientific knowledge necessary for them confidently to prescribe appropriate and effective treatment for their patients. In addition, uncertainty over treatment outcome made it impossible for them to give an accurate prognosis to their patients and to other interested parties (usually employers and compensation insurers).

This paper argues that both the vehemence and uncertainty of the scientific debate were carried over into the consulting room and profoundly affected relationships between doctors and RSI sufferers. While many doctors saw women with RSI in terms of stereotypes, it will be shown that the reverse process was also taking place. Some of the consequences of this stereotyping for both sufferers and doctors will be discussed.

Perceptions of RSI sufferers in the medical literature

Through the 1960s and 1970s Australian medicine, by and large, studiously avoided recognizing the growing occupational health and social problem which RSI represented.⁹ The scientific contributions to the RSI debate from mainstream medicine have been the subject of a number of reviews. Recently Cohen *et al.*³⁴ confirmed the suspicions of other commentators^{35,36,40-42} that there had been an overall failure to apply rigorously to the problem of RSI those essential components of scientific medicine, proper clinical method and diagnostic logic. In their place had appeared the 'frank interpolation by many medical authors of highly subjective social commentary, even in reputable professional journals'.⁴² The tone of the social commentary on RSI by doctors ranged from the extremely sympathetic to the critical

and, at times, pejorative. A number of stereotypes of women workers can be identified from this commentary.

THE NOBLE WORKER

In his study of 'repetition injuries' affecting 77 women process workers, Ferguson⁴³ observed that the 'great majority of the women with repetition injuries were genuine about their symptoms' and that 'most subjects needed the extra money and appeared keen to return to or stay at work'. Walker,²⁴ a doctor working in occupational medicine, also saw the plight of women with RSI through sympathetic eyes. He drew attention to various discriminatory practices of management directed against migrant workers, and the tactics used by management to rid their companies of severely disabled workers.

When attempting to explain why many women had failed to report their symptoms to an employer at an early stage, Browne *et al.*⁴⁴ included strong work ethics, economic pressures and the fear of losing a job among the possible reasons. They also saw that the negative attitudes of supervisors, health personnel and fellow-workers to RSI were other reasons for this reluctance of women to draw attention to their predicament. The twin stigmas of malingering and mental illness were recognized as being very real dangers for those who reported their symptoms.^{45,46}

The plight of many of those with RSI who entered the compensation arena was vividly described by Farrelly:⁴⁷

The patients whom I see are best described as demoralized and dejected. They are also, to some extent, rejected, by their employers or by insurance companies, and many of them have had to abandon sports and other social activities and their lives have become gradually more restricted and reclusive.

'MIGRANT ARM'

The stereotype of the malingering migrant woman, often acting in collusion with her husband to obtain compensation, was referred to as 'migrant arm'.⁴⁸ Although there is an historical precedent in Australia for negative racial overtones to be attached to those with industrial spinal injuries,⁴⁹ in the case of RSI this stereotype did not gain support in the medical literature. In any event it quickly became apparent that many RSI sufferers were native-born Australians.^{25,50}

'KANGAROO PAW'

To emphasize the point that he could find no evidence of a disease process in those with the diagnosis of RSI whom he had examined, Awerbuch⁵¹ coined the term 'kangaroo

paw', thus connoting RSI as a unique Australian (non-) disease. Sharrod⁵² and Bell⁵³ disagreed, in so far as they saw RSI as the re-emergence of an entity known in the 19th century as 'craft neurosis' (but now with a predilection for young females rather than middle-aged males). In any case, both claimed, without providing evidence, that no pathological basis existed for either condition. Having lost its unique status 'kangaroo paw' tended not to be used by other medical writers, even by some who continued to believe that RSI was an Australian disease.⁵⁴

THE FEATHERBEDDED WORKER

Sharrod⁵² entered the area of industrial relations when he drew attention to what he saw as management pandering to 'a neurotic Australian workforce'. He instanced the negotiation by trade unions of agreements with management 'for key-stroke rates down to less than half those of the less sophisticated equipment of latter years; lengthy rest breaks every hour; even the employment of occupational therapists to conduct daily exercise programmes – all in the bosses' time and at his expense, of course'. Bemoaning the fact that many Australians were leading lives free of stress and pain, Brooks⁵⁵ opined that 'if there was a little more pain around (fatigue) one might feel more confident in the economic future of our country'.

THE UNFULFILLED WORKER

Those who lacked fulfilment in their work were seen as potential RSI sufferers.⁵⁶⁻⁵⁸ It was suggested by Ireland⁵⁸ that they were thus rendered open to autosuggestion. When those about them developed the condition, these unfulfilled workers could quickly convince themselves that they too were affected. Ireland⁵⁸ saw a parallel between this form of 'infection' and the mass hysteria which surrounded the Salem witch trials of the 17th century. Although the aptness of this parallel may be questioned in the context of RSI, it is evidence that the stereotype of the woman as 'witch' has proven to be a remarkably durable one.⁵⁹

Cleland⁵⁷ saw the loss of autonomy and scope for using individual initiative, as the inevitable consequences of working for large modern organizations in industry and commerce. He argued that this situation had in turn created the particular 'mind-set' whereby the distress and discomfort from activities perceived by the individual worker to be unhealthy could easily be equated with compensable injury. Acquiring the label of RSI was therefore seen as a legitimate way out of an intolerable situation.

In a retrospective, uncontrolled, study of 25 consecutive women referred to him for psychiatric assessment, Black⁶⁰

noted that although just under half of them perceived themselves to have been hard-working and conscientious workers, they had been unhappy at work before, or at the time of, the onset of their pain. Many told him of their difficulties in interpersonal relationships, both with their employers and their fellow-workers. A plea was made by Black⁶⁰ for early psychiatric assessment of other such cases as these.

THE AMBIVALENT HOMEMAKER

Any personal conflicts of working women were seen by Lucire^{56,61,62} as important vulnerability factors for RSI. She claimed that these conflicts could manifest as workplace illness, and that they needed to be identified and remedied so as to prevent what she saw as an almost inevitable advance to 'chronic psychological and physical invalidism'. Stressors of domestic origin included 'family and maturational difficulties, wishes to have and care for children, anger at working conditions, at having to work longer or indeed at all'.⁵⁶ Under these circumstances, Lucire⁶¹ thought it appropriate that they did not come under the workers' compensation legislation to prevent them from 'dipping into the same honey pot' as those with 'genuine' work-related injuries.

THE DISENFRANCHIZED WORKER

The pain and incapacity of RSI were seen by Lucire⁵⁶ as a form of symbolic communication used by 'the powerless and dependent, and those who cannot otherwise express their righteous rage at their supervisors, employers and spouses'. The woman with RSI then becomes 'emotionally paralysed, sometimes unable to do her housework; like a Victorian cripple having the vapours she demands and gets support if possible'.⁶¹ Management was advised that the correct procedure for dealing with this situation was to avoid treating the employee as the victim she sees herself to be, and to foster the belief in her that the means for recovery resided solely within herself.⁶¹

Some perceptions of medicine by RSI sufferers

The complex personal interactions between doctors and women with RSI have been analysed by social scientists, invariably from the viewpoint of the sufferers.^{39,63-65} They have recorded the experiences reported by many women with their own doctors, and also with doctors examining them in the context of the adversarial medicolegal process. A number of stereotypes of doctors are apparent.

THE CARING DOCTOR

At the outset it must be emphasized that for many women their general practitioner was a great source of comfort and support.³⁹ From a study of the consumers' perspective of vocational rehabilitation in RSI cases, general practitioners were seen to be playing an important and positive role in the rehabilitation of their patients.⁶⁶ Women gained most solace when they were listened to, believed, and offered some compassion by doctors whom they knew had no conflicting interests.³⁹

THE 'JEREMIAH' DOCTOR

One of the reasons why women with RSI tended to utilize a great number of health professionals was the bleak prognosis given them by some medical practitioners.³⁹ Some were told that their muscles were permanently damaged and would recover only with complete rest. Others were given the opposite advice, and told to discard their splints, or their muscles would never recover. These contrasting opinions nicely reflect the gap which existed in medical knowledge over the pathogenesis and pathophysiology of RSI.³⁴

THE 'INSURANCE DOCTOR'

Many women expressed their displeasure over consultations with doctors employed by insurance companies to examine them. The stereotype of the 'insurance doctor' was quick to emerge during the epidemic.⁶³ These doctors (usually specialists) were seen by RSI sufferers as 'medical police' whose aim was to force them back to work, despite their pain.³⁹ Women often felt that the sole intent of these doctors was to obtain evidence which would exonerate their employer from any blame or responsibility for their condition. The re-emergence of the age-old ideology of 'blaming the victim' was noted by Meekosha and Jacobowicz.⁶³

The ordeal of sufferers was likened to a criminal trial or inquisition, where women felt that they had been judged and found guilty of suffering from RSI by doctors, and then sentenced by them to endure the disapproval of society.^{39,63}

THE PREJUDICED DOCTOR

Disturbing allegations were also made of gender and class bias, as well as of racial discrimination.^{39,63,64} Reports of doctors disbelieving that they were suffering pain, compounded by rough techniques of medical examination, and even of sexual harassment, engendered such fear among some women that one RSI support group arranged for chaperones to accompany members to medical examinations

arranged by compensation insurers.⁶⁴ Some doctors were accused of working out their negative feelings towards these women by 'causing as much emotional and physical discomfort as possible'.⁶³

Women were offended by the advice given them by some doctors that they should resume their 'proper' functions as homemakers and bearers of children. To Reid *et al.*³⁹ this attitude reflected the 'medical ideology of female frailty' evidenced by the attempts to construct the sufferers' pain as 'the outcome of thwarted urges or neglected duties of the particular female kind'.

THE DISBELIEVING DOCTOR

Encountering outright scepticism from doctors regarding the reality of their pain experience was a frequent complaint of many women with RSI. The phrase 'all in the mind' implied to them the non-existence of their pain and/or a denial of their sanity.³⁹ Women with RSI were particularly anxious to avoid being unfairly given a psychiatric label as the primary reason for their pain and inability to work. When, however, such a label was given them, most refused to accept it and sought help elsewhere.³⁹

Discussion

The report of the Working Party of the NOHSC expressed concern both 'at the high degree of emotional and anecdotal debate on RSI' and at the attitudinal barriers of racial origin and gender which could prevent sufferers from receiving appropriate and early attention.³² The report was severely criticized by Meekosha and Jacobowicz on the grounds that it failed to properly address these issues, and that its authors appeared oblivious to the medicolegal conflicts which were proving so distressing to RSI sufferers.⁶³ These authors revealed how such conflicts often resulted in great economic hardship for sufferers, as well as interruption, or curtailment, of their working careers. For many with RSI the not-infrequent consequences of having this diagnosis applied to them were: harassment and victimization; family relationship problems; social isolation; loss of their former self-image; and depressive illness. Other complaints included denial of access to correct medical management, to rehabilitation and to psychological support.

For reasons which it never made clear, the NOHSC did not implement the recommendations of its own Working Party regarding improvement in community attitudes to RSI. This left an information gap which was in part filled by other peak bodies. Pronouncements by the Royal Australasian College of Physicians,⁶⁷ the Australian Hand Club,⁶⁸ and the Australian Hand Therapy Association,⁶⁹ effectively contradicted the opinion of the NOHSC that RSI was a work-related

injury and not a psychiatric condition (conversion disorder). The Australian Government Solicitor's Office decision to ignore the considered opinion of the NOHSC in a disputed RSI 'test case' has been seen as the Government's 'ultimate humiliation' of its own peak occupational health body.⁷⁰ However, the Commonwealth Government's tactics in this case had wider ramifications. Its successful denial of the existence of RSI as a genuine work-related injury was a severe blow to the credibility of all RSI sufferers in the medicolegal arena.⁴²

When the epidemic was finally 'put to rest' by Ferguson,⁷¹ the previous emphasis on 'injury', as implied by the term RSI, was subtly replaced by references to fatigue, discomfort and ill-health. The importance of various psychosocial stressors (social iatrogenesis⁵⁷) in the epidemic was emphasized, even though their relative importance was still hotly disputed.³³⁻³⁵ Many RSI sufferers were then left without credible support from mainstream medicine. Their treating medical practitioners were also deprived of scientific credibility, a situation which was made even worse by accusations of (clinical) iatrogenesis directed at them by their colleagues.^{51,53,62}

Conclusion

Ellard⁷² explained that stereotypes persist because we cannot do without them. He warned doctors of the dangers of uncritical labelling to the person so labelled: 'once prejudice is summoned into being, facts will not dispel it. Worse, the person stereotyped may give up the struggle and conform to what is expected of him or her'. On the other hand, Ellard pointed out that the individual responsible for stereotyping others is also diminished, and that the harm done transcends the individual. The examples which he gave related to the performance of doctors in the medicolegal arena. In the case of RSI the powerful stereotypes of working women, which already existed in the community, were reinforced by the ostensibly scientific writings of many of the major proponents in the debate.⁷³ The social and medical stigmatization of RSI sufferers then became inevitable.

A warning which is still appropriate for modern physicians is contained in aphorism 59 of the 25th Treatise ('The Holy War for Independent Scientific Investigation against Galen') written by the great 12th-century Jewish physician, Moses Maimonides.⁷⁴ Maimonides herein describes a very common human failing, one which he views as an illness of the soul:

The illness to which I refer here consists of the fact that every individual person considers himself more perfect than he really is, and desires and lusts that all that enters his mind should possess perfection, without effort and fatigue. [Among sufferers] of this common illness one

finds people who are otherwise clever and wise, who have already learned one of the philosophical or theoretical sciences or one of the traditional sciences, and have become proficient in that science. Such a person then gives opinions not only in the science he has mastered, but also in other sciences concerning which he knows nothing at all, or in which [his knowledge] is deficient. He speaks [with the same authority] in these sciences as his discourses in the sciences in which he is proficient.

Lee⁷⁵ gave a similar warning to doctors who practise in industry. He pointed out that they are in a privileged position to make a two-fold contribution to society. When they contribute their knowledge and expertise in matters of science, the community accepts that they are fulfilling their special role as 'experts'. On the other hand, when they also offer solutions to problems which are sociopolitical rather than medical, they relinquish their role as experts and become like other politically active citizens. As exemplified by some of the contributions to the RSI debate in Australia, an attempt to mix the two roles may harm not only patients but also doctors themselves, as well as their profession.

References

- 1 Wells HG. *The Work, Wealth and Happiness of Mankind*. London: William Heinmann, 1932: 523–562.
- 2 Vertinsky P. 'Of no use without health': late nineteenth century medical prescriptions for female exercise through the life span. *Women and Health* 1988; **14**: 89–115.
- 3 Tracy B. The woman in industry. *The Lone Hand* 1908 (October 1): 705–709.
- 4 Ackermann J. *Australia from a Woman's Point of View*. London: Cassell, 1913: 194–205.
- 5 Mercer J. The sexist society: an introduction. In: Mercer J (ed.) *The Other Half, Women in Australian Society*. Ringwood, Victoria: Penguin Books Australia, 1975; 23–31.
- 6 Kingston B. *My Wife, my Daughter and Poor Mary Ann*. West Melbourne: Thomas Nelson Australia, 1975; 56–73.
- 7 Gordon D. *Health and Sickness in Society*. St Lucia: University of Queensland Press, 1976; 84–129.
- 8 Bauer FL. The woman at work. *Journal of Occupational Medicine* 1968; **10**: 109–113.
- 9 McKenzie L, Shaw S. Occupational health and women. *New Doctor* 1979; **13**: 38–43.
- 10 de Lepervanche M. Working for the man. Migrant women and multiculturalism. In: Saunders K & Evans R (eds) *Gender Relations in Australia. Domination and Negotiation*. Sydney: Harcourt Brace Jovanovich, 1992: 82–96.
- 11 Probert B. *Working Life*. Melbourne: McPhee Gribble, 1989: 109–124.
- 12 Gandevia B. *Occupation and Disease in Australia since 1788*. Sydney: Australasian Medical Publishing Company, 1971; 182–189.
- 13 Owen M, Shaw S. *Working Women. Discussion Papers from the Working Women's Centre, Melbourne*. Melbourne: Sisters, 1979; 53–58.
- 14 Hope EW, Hanna W, Stallybrass CO. *Industrial Hygiene and Medicine*. London: Baillière, Tindall and Cox, 1923; 596–658.
- 15 Vernon H. *The Health and Efficiency of Munitions Workers*. London: Oxford University Press, 1940; 78–96.
- 16 Ireland ML. *A Survey of Women in Industry, Victoria, 1928. Service Publication (Number 9)*. The Division of Industrial Hygiene, Commonwealth Department of Health. Canberra: Government Printer, 1928.
- 17 Anonymous. Occupational health in Australia. *Medical Journal of Australia* 1956; **ii**: 649–651.
- 18 Cumpston AG. Occupational medicine and the community. *Medical Journal of Australia* 1971; **ii**: 1140–1143.
- 19 Cumpston AG. Occupational health in Japan. *Medical Journal of Australia* 1970; **i**: 815–817.
- 20 Rogan JM. Occupational medicine for the 1970's, the British scene. *Medical Journal of Australia* 1970; **i**: 811.
- 21 Kehoe RA. Occupational medicine for the seventies, the American outlook. *Medical Journal of Australia* 1970; **i**: 812–814.
- 22 Ferguson D. Occupational medicine for the 1970's in Australia. *Medical Journal of Australia* 1970; **i**: 807–810.
- 23 Ferguson D. Historical perspective. In: Douglas D, Ferguson D, Harrison J, Stevenson M (eds) *Occupational Health and Safety*. Canberra: Australian Medical Association, 1986: 1–4.
- 24 Walker J. A crippling new epidemic in industry. *New Doctor* 1979; **13**: 19–21.
- 25 Taylor R, Gow C, Gorbett S. Repetition injury in process workers. *Community Health Studies* 1982; **6**: 7–13.
- 26 Ferguson D. The 'new' industrial epidemic. *Medical Journal of Australia* 1984; **140**: 318–319.
- 27 Gun RT. The incidence and distribution of RSI in South Australia 1980–81 to 1986–87. *Medical Journal of Australia* 1990; **153**: 376–380.
- 28 Maeda K, Horiguchi S, Hosokawa M. History of the studies on occupational cervicobrachial disorder in Japan and remaining problems. *Journal of Human Ergology* 1982; **11**: 17–29.
- 29 Brunt M, Hricko A. Problems faced by women workers. In: Levy BS & Wegman DH (eds) *Occupational Health: Recognizing and Preventing Work-related Disease*. Boston: Little Brown, 1983; 403–416.
- 30 Lewin E, Olesen V. Occupational health and women: the case of clerical work. In: Lewin E & Olesen V (eds) *Women, Health and Healing*. New York: Tavistock, 1985: 53–85.
- 31 Östberg O. Office computerization: research then and now. In: Marschall D & Gregory J (eds) *Office Automation: Jekyll or Hyde?* Cleveland: Working Women Education Fund, 1983: 127–142.
- 32 National Occupational Health and Safety Commission (Worksafe Australia). *Repetition Strain Injury (RSI). A Report and Model Code of Practice*. Canberra: Australian Government Publishing Service, 1986.
- 33 Bammer G, Martin B. Repetition strain injury in Australia: medical knowledge, social movement, and de facto partisanship. *Social Problems* 1992; **39**: 219–237.
- 34 Cohen ML, Arroyo JF, Champion GD, Browne CD. In search of the pathogenesis of refractory cervicobrachial pain syndrome. *Medical Journal of Australia* 1992; **156**: 432–436.
- 35 Mullaly J, Grigg L. RSI: integrating the major theories. *Australian Journal of Psychology* 1988; **40**: 19–33.
- 36 Hall W, Morrow L. 'Repetition strain injury': an Australian epidemic of upper limb pain. *Social Science and Medicine* 1988; **27**: 646–649.
- 37 Hopkins A. The social recognition of repetition strain injuries: an Australian/American comparison. *Social Science and Medicine* 1990; **30**: 365–372.
- 38 Acutt B. Repetition strain injury (RSI): legacy of technology in changing times or human resource management found wanting? *Asia Pacific Human Resource Management* 1990; **28**: 6–13.
- 39 Reid J, Ewan C, Lowy E. Pilgrimage of pain: the illness experiences of women with repetition strain injury and the search for credibility. *Social Science and Medicine* 1991; **32**: 601–612.
- 40 Wright GD. The failure of the 'RSI' concept. *Medical Journal of Australia* 1987; **147**: 233–236.
- 41 Bammer G, Martin B. *Repetition Strain Injury in Australia: Medical Knowledge and Social Movement*. Working paper number 19. Canberra: National Centre for Epidemiology and Population Health, Australian National University, 1990.
- 42 Reid J, Reynolds L. Requiem for RSI: the explanation and control of an occupational epidemic. *Medical Anthropology Quarterly* 1990; **4**: 162–190.

- 43 Ferguson D. Repetition injuries in process workers. *Medical Journal of Australia* 1971; **2**: 408–412.
- 44 Browne CD, Nolan BM, Faithfull DK. Occupational repetition strain injuries. *Medical Journal of Australia* 1984; **140**: 329–332.
- 45 Sandow M, Yellowlees PM, Maddern G, Hayes MG. Research into the regional pain syndrome [letter]. *Medical Journal of Australia* 1987; **146**: 389–390.
- 46 Faithfull DK, Job RFS, Brecht C, Fleming EJ. 'Repetition strain injury' [letter]. *Medical Journal of Australia* 1988; **148**: 107.
- 47 Farrelly F. RSI [letter]. *Medical Journal of Australia* 1986; **144**: 501.
- 48 Pillemer R. Tenosynovitis [letter]. *AMA Gazette* 1979; 2 August: 4.
- 49 Mendelson G. 'Compensation neurosis': an invalid diagnosis. *Medical Journal of Australia* 1985; **142**: 561–564.
- 50 Miller MH, Topliss DJ. Chronic upper limb pain syndrome (repetitive strain injury) in the Australian workforce: a systematic cross sectional rheumatological study of 229 patients. *Journal of Rheumatology* 1988; **15**: 1005–1012.
- 51 Awerbuch M. RSI or 'Kangaroo paw' [letter]. *Medical Journal of Australia* 1985; **142**: 237–238.
- 52 Sharrod F. RSI, 'Kangaroo paw', or what [letter]. *Medical Journal of Australia* 1985; **142**: 376.
- 53 Bell DS. 'Repetition strain injury': an iatrogenic epidemic of simulated injury. *Medical Journal of Australia* 1989; **151**: 280–284.
- 54 Dodd P. RSI [letter]. *Medical Journal of Australia* 1986; **144**: 501.
- 55 Brooks PM. Regional pain syndrome – the disease of the '80s. *Bulletin of the Postgraduate Committee in Medicine University of Sydney* 1986; **42**: 55–59.
- 56 Lucire Y. Neurosis in the workplace. *Medical Journal of Australia* 1986; **145**: 323–327.
- 57 Cleland LG. 'RSI': a model of social iatrogenesis. *Medical Journal of Australia* 1987; **147**: 236–239.
- 58 Ireland DCR. Psychological and physical aspects of occupational arm pain. *Journal of Hand Surgery* 1988; **13B**: 5–10.
- 59 Trevor-Roper HR. *The European Witch-craze of the Sixteenth and Seventeenth Centuries*. London: Penguin Books, 1984: 112–122.
- 60 Black P. Psychiatric aspects of regional pain syndrome [letter]. *Medical Journal of Australia* 1987; **147**: 257.
- 61 Lucire Y. What the community can do about epidemic conversion. Paper presented at the RSI: Medical Mythology seminar. Organized by Social Impacts Pty Ltd, Sydney, 1985, 21 November.
- 62 Lucire Y. Social iatrogenesis of the Australian disease 'RSI'. *Community Health Studies* 1988; **12**: 146–150.
- 63 Meekosha H, Jakubowicz A. Women suffering RSI: the hidden relations of gender, the labour process and medicine. *Journal of Occupational Health and Safety – Australia/New Zealand* 1986; **2**: 390–401.
- 64 Alcorso C. *Migrant Workers and Workers' Compensation in New South Wales*. Social Welfare Research Centre Proceedings, No. 71. Kensington (NSW): Social Welfare Research Centre, University of New South Wales, March 1988: 103–127.
- 65 Bammer G. *Occupational Disease and Social Struggle: the Case of Work-related Neck and Upper Limb Disorders*. Working paper No. 20. Canberra: National Centre for Epidemiology and Population Health, Australian National University, 1990.
- 66 Chadwick-Masters J. *Consumers' Perspective of Rehabilitation in RSI Cases*. Stage 2 report. Canberra: ACT RSI Support Group Inc., 1992: 12–13.
- 67 Royal Australasian College of Physicians. *Repetitive Strain Injury/Occupational Overuse Syndrome*. Sydney: RACP, 1988.
- 68 Morgan RG. RSI [letter]. *Medical Journal of Australia* 1986; **144**: 56.
- 69 Chapman J. RSI [letter]. *Medical Journal of Australia* 1986; **144**: 501.
- 70 Gun RT. Worksafe Australia: to the McKay report and beyond. *Community Health Studies* 1990; **14**: 65–72.
- 71 Ferguson D. 'RSI': putting the epidemic to rest. *Medical Journal of Australia* 1987; **147**: 213–214.
- 72 Ellard J. Compensation neurosis [leading article]. *Medical Journal of Australia* 1985; **142**: 535.
- 73 Horin A. Doctors added insult to repetitive strain injury. *Sydney Morning Herald* 1992 21 July: 14 (col. 6).
- 74 Maimonides M. The twenty-fifth treatise. In: Rosner F & Muntner S (eds) *Studies in Judaica. The Medical Aphorisms of Moses Maimonides*, vol 2. New York: Yeshiva University Press, 1971: 171–222.
- 75 Lee WR. Medical ethics in industry. In: Howard JK & Tyrer FH (eds) *Textbook of Occupational Medicine*. Edinburgh: Churchill Livingstone, 1987: 82–89.