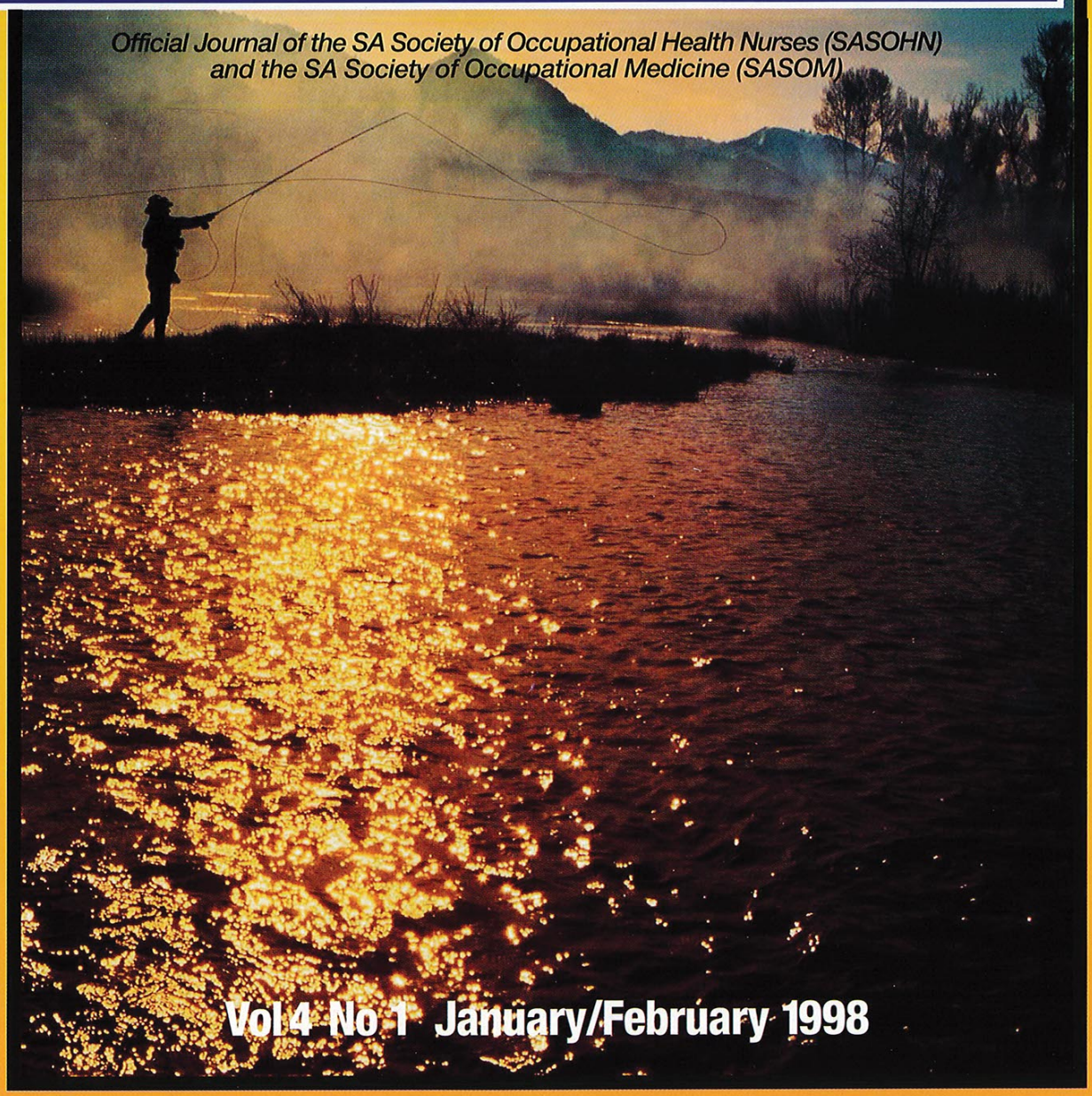
Occupational HEALTH

SOUTHERN AFRICA

Official Journal of the SA Society of Occupational Health Nurses (SASOHN) and the SA Society of Occupational Medicine (SASOM)



Vol 4 No 1 January/February 1998

ISSN 1024-6274

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The Beyond Awareness Campaign

Television Campaign

The Beyond Awareness television campaign is a groundbreaking innovation which has been developed in partnership with the SABC. The objective of the campaign is to call South Africans to action - although there are very high levels of awareness about HIV/AIDS, people have not yet translated this into action to prevent the spread of HIV/AIDS, or in caring and supporting people living with AIDS.

The campaign is unusual in that it uses three-minute and five-minute fillers as opposed to the usual 30-second public service announcements. The longer time of exposure allows for more information, and ideas about how you can take action - an important difference between a health campaign and an ordinary advertising campaign. Here we do not want just to persuade people to behave in a certain way, but we want people to have a good understanding of the issue in order to enable them to make the healthy choice.

The campaign hinges on three important days in the "AIDS" calendar - World AIDS day on 1 December, Condom week and Valentine's Day, 9-15 February and Youth day on 16 June.

Another innovation of the campaign is to use existing material to make the three and five-minute inserts. This material has been given to the Department of Health by members of the consortium for free, and adds value to the campaign of close to half a million rand.

The partnership - sponsorship agreement with the SABC has added a further half million rand worth of exposure time.

The key target audience for the campaign is young people. By capturing the large youth audience of SABC1's. *The Bold & the Beautiful*, the campaign will be broadcast immediately after it, and the power of mass media is effectively harnessed for health.

This journal focuses on Occupational Health, Medicine, Hygiene and Safety, Primary Health Care at the workplace, Environmental Health, and other employee health benefits

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Occupational HEALTH SOUTHERN AFRICA

Vol 4 No1 January/February 1998

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Pointers

One of my favourite quotes from Lewis Carroll's *Alice in Wonderland*, is the comment Alice makes to the rabbit that "... if you do not know where you have come from, how do you know where you are going?" This, in essence, helps us to determine the need to establish both the authenticity and validity of Occupational Health Auditing, together with provisions for the future. The journal has no less a function and, having started the initiative over the past three years, we certainly had to establish where we came from in order to identify where we were heading. Some of the pointers are already visible.

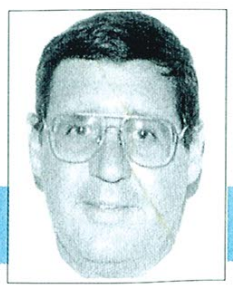
The quality of presentation in terms of printing and layout include both ease of reading and clear referencing, to facilitate enjoyment of the journal and, obviously, subject matter. The criteria have, to a large extent, been developed through strict administrative functions, as a result of regular meetings with the Editorial Board and Cannon Medical Media, who in no small measure have added enormous value to the journal's direction as well.

Content has been debated both from academic sources and by those of us who work in the industry and enjoy access to communication systems which are both effective and ongoing. Another pointer of note is that material from a number of Occupational Health workers has come from sources which were unknown, or alternatively, poorly accredited. Commitment from such authors to develop a basis from which we can move forward, has been nothing less than outstanding.

The current issue again expresses some interesting pointers. The question of (partial) privatisation of the Compensation Commissioner's Office is debated by Baker, who re-emphasises that such problems can be resolved both expeditiously and efficiently, given the enormous volume of work with which the Commissioner's Offices are coping at present, and which is reaching near-critical levels.

Again, if we look at Total Quality Management (TQM) by Van der Merwe, strategising Quality Management is an excellent opportunity for those of us in industry to direct our own objectives to impress on others the services we offer. Again another pointer, and to some extent this relates to the needs of women who are working in industry, which Sylvester has outlined so eloquently.

My term of office as Editor of the journal has, unfortunately, come to an end (perhaps this is a pointer as well) and, regrettably, this will be the last opportunity I have of expressing sincere thanks to both the Editorial Board and our publishers, and for the allegiance of the respective Occupational Health Societies who have given tremendous support both financially and administratively. Perhaps the greatest measure of thanks must go those who continue to add to what remains an exciting discipline. Occupational Health will always be challenging and we certainly have established where we have come from as well as some of the pointers indicating where we are going. The enormity of the task is a challenge to standards and norms and leads to the ultimate goal, which is the health and safety of all workers.



Chris van Selm
EDITOR

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Legislation and retention of medical records - why the differences?

Chris Snyman
Consultant Occupational Health, Cape Town

Occupational Health SA 1998; Vol 4, No 1: 4 - 6

Occupational health-related Acts and Regulations have differing requirements for the length of time for which medical surveillance and occupational exposure records must be kept. The reasons for these differences are both historic and technical.

A listing of different Acts of Parliament and Departmental Regulations which influence occupational health brings to light a range of different medical and occupational exposure record-keeping requirements. While there are reasons for the differences, a uniform record-keeping requirement would greatly simplify matters for the occupational health practitioner.

Occupational health legislation with record-keeping requirements are the following:
Mine Health and Safety Act, 29 of 1996 (MHS Act)
Occupational Health and Safety Act, 85 of 1993 (OHS Act)

Asbestos Regulations, R773, 1987 (Asbregs)
Lead Regulations, R586, 1991 (Leadregs)
Hazardous Chemical Substances Regulations, R1179, 1995 (HCSregs)

The requirements, in years, for record-keeping, are as follows:

Act/Regulation	Medical records	Exposure records
MHS Act	40 years after last exam	Until mine closes
OHS Act	Not specified	Not specified
Asbregs	No requirement	50 years after employment
Leadregs	20 years	3 years
HCSregs	30 years	30 years

The MHS Act requires medical records (medical surveillance and exit medical examinations) to be kept for forty years after the last medical examination. Occupational exposure records have to be kept until the mine closes (which could be a short or long period); thereafter these records have to be handed over to the Medical Inspector (a person appointed by the Chief Inspector for Mine Health and Safety).[4]

The OHS Act does not specify medical surveillance or exposure measurement requirement as these are dealt with in Regulations.[5]

The Asbregs do not require medical surveillance; only exposure measurement. There is a requirement that a record be kept of all persons exposed to regulated (according to dimensions) asbestos fibres. An employee's exposure record must be kept for fifty years after termination of employment.[6]

The Leadregs require that exposure records (to airborne lead) be kept for three years; and biological monitoring and medical surveillance records for twenty years (with the implication that any record older than twenty years may be removed from the individual's medical record).[7]

The HCSregs require that medical and exposure records be kept for thirty years (in the case of exposure records, a minimum of thirty years).[8]

Why the differences?

The differences between the MHS act and other legislation can presumably be ascribed, in the first instance, to the fact that the Acts are produced by different government departments (Mineral and Energy Affairs vs. Labour).

Mr Tim Curtis, Director: Occupational Health and Hygiene, of the Department of Labour, ascribes the differences to regulations having been passed under two Acts (Machinery and Occupational Safety and OHS Acts); and the opinions of persons forming the technical committees which compiled the Regulations. These regulations were published over a time span of eight years. There were, no doubt, different persons on the various committees; and one can expect opinions to change over time.

The short period of time for which lead exposure records are to be kept, is of interest; this is possibly due to the relatively short duration of stay in the body of lead, especially organic (tetra-ethyl and tetra-methyl) lead.

The forty year medical record retention requirement under the MHS Act is on the

recommendation of the Commission for Investigation of Mine Health and Safety (information supplied by Dr Lettie la Grange, Medical Adviser to the Chamber of Mines).

What of the Compensation for Occupational Injuries and Diseases (COID) Act?

Mr Jannie Koekemoer, Deputy Compensation Commissioner, supplied information on record-keeping requirements in the Commissioner's office. The Commissioner acts according to the requirements of the Director of Archives. Original documentation is kept for one year after the last entry into a file in the case of an injury or disease where there is no permanent work disability; and for four years after the last entry where there is permanent work disability. Thereafter, the paper contents of a file are destroyed. Since the early 1980s, however, all records have been microfilmed before destruction of the contents of a file.

What should be the requirements for duration of record-keeping?

The rationale for keeping medical records in industry is that of ongoing health care for the employee;[1] including early detection of, and trends pointing towards occupational disease. This includes compensable occupational disease.

Occupational exposure records help to confirm or exclude a suspected occupational disease and should therefore be kept.

Cross-sectional reading of occupational medicine literature shows the importance of keeping exposure records to trace possible occupational causes for disease. Many an article describes weakness in epidemiological studies due to inadequate or non-existent exposure records to trace possible occupational causes for disease.

There are, of course, problems in record-keeping. These include the floor and shelf space taken up by files; keeping files up to date; storage of files in such a way that both current and old files can be accessed easily; and security of files. Having said this, there are modern innovative methods of storage including microfilming and compact disk (CD) which resolve many of the space, indexing and security problems involved in archiving disks.

The greater problem undoubtedly lies in the decision as to how long records should be kept. Different duration of action of different hazards makes the decision doubly difficult. Ketones, for instance, are rapidly absorbed and excreted,[2] with a rapid onset and short duration of action, whereas adverse effects of asbestos could manifest as long as forty years after first exposure.[3]

How long to keep the records could also be modified by the reasonable life-span of a person.It does not make sense to keep records for so long that they outlive an individual by twenty years, as could be the case if an individual retires at 60 and his/her medical records are kept for fifty years - by which stage the person would be 100 years old.

Common sense would seem to dictate that a long period of onset of action of a hazardous substance should be catered for; that uniformity in record-keeping is provided for to simplify administration; and that epidemiological studies are catered for. Keeping a record for forty years after last exposure would almost certainly cover 95% of all occupational disease that is likely to occur. As 95% is approximately the second percentile as a population as calculated in statistical terms, forty years seems to me a sensible time period.

Recommendation

Exposure (occupational hygiene) records and medical (medical surveillance and biological monitoring) records should be kept for a period of forty years after an individual at risk of occupational disease (however trivial the risk may seem)leaves a company (be it in a factory or mining environment), or until the individual would have turned 85 years of age, whichever comes first.

Records may, after five years, be archived on microfilm or permanent electronic media (CD) as long as the archiving system has a good indexing system.

In this way, provision is made for all occupational diseases that could reasonably be expected; epidemiological requirements would be satisfied;, and physical space requirements are reasonable.

Retention of X-rays, especially in the mining environment, will continue to be problem until a practical solution is found for space-efficient storage; perhaps digital image transfer to compact disc?

Footnote

Professor Tony Davies has mooted central storage, possibly at the National Centre for Occupational Health Building in Johannesburg. Keeping a duplicate set of

records, grouped by industry type and sub-grouped by company name, would certainly assist the employee with an occupational disease, as well as the compensation commissioner, in case of loss of records by the company (for whatever reason). This could also assist epidemiological researchers. However indexing and maintenance of the records would be a massive task. Perhaps this storage possibility should be considered by the Health and Safety Executive which is being mooted in South Africa?

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1. *SASOM Guideline No.16, 1996. Medical Records in Industry.*
2. *William N Rom, Environmental and Occupational Medicine. Little Brown 1993; 524 .*
3. *William N Rom, Environmental and Occupational Medicine. Little Brown 1993; 160-174.*
4. *Mine Health and Safety Act No 29 of 1996.*
5. *Occupational Health and Safety Act No 85 of 1993.*
6. *Government Gazette Regulation 773, April 1987,Asbestos Regulations.*
7. *Government Gazette Regulation586, March 1991, Lead Regulations.*
8. *Government Gazette Regulation 1179, August 1995, Regulations of Hazardous Chemicals Substances.*

50th Anniversary of SASOM

The inaugural meeting was held in Pretoria on the 26th July 1948 and the new organisation was named the *South African Society of Industrial Health*.

The first elected executive was as follows:

Chairman: Dr HB van der Merwe

Vice-Chairman: Dr MG Woolff

Secretary/Treasurer: Dr RA Matthews

Committee members:
Dr JHC von Blommenstein
Dr CCP Anning
Dr F Retief
Dr WF Mondriaan
Dr JB Lurie
Dr AJ Orenstein.

The inaugural meeting was the result of a preliminary meeting held during the 35th South African Medical Congress in East London in October 1947 in which an interim steering committee was appointed to draft a constitution and to arrange the first meeting.

In its formative years, the society had a small core of members and initially was involved significantly in the mining industry, but subsequently has played a leading role in the pursuit of health and safety in industry in general. It has always had close links with the Mine Medical Officers Association, a member of whom is currently part of the executive committee by invitation. SASOM has also been affiliated to the International Commission on Occupational Health (ICOH) for many years and many SASOM members have served various ICOH Scientific Committees. More recently SASOM has developed close links with the SA Society of Occupational Health Nurses (SASOHN).

Membership of the Society is made up of Medical Practitioners who work in occupational health or who have an interest in the area of medical practice. Total membership is now well in excess of 300 doctors. There are various categories of membership which include ordinary, honorary (members who have given outstanding service to the society), associate (members outside the country), retired and sustaining. Sustaining member status is awarded to individuals or companies whose philosophy incorporates the aims and objections of SASOM and whose financial contributions have enabled the society to appoint a permanent secretariat as well as to enable it to become more professional in its approach. Sustaining members at present include Shell SA, AECI, Eskom, Anglo American Chairman Fund, Samancor, Sentrachem, Tongaat-Hulett, Proctor and Gamble and Medway Fund Managers.

SASOM entered a new phase of development at the beginning of 1995 with the opening of a permanent national office in Centurion and the appointment of a secretary, Mrs. Dehlia Müller. This has enabled it to broaden its activities considerably and not only to provide a professional service to its members, but also to Industry and Commerce in general as well as to government departments and institutions such as the Compensation Fund.

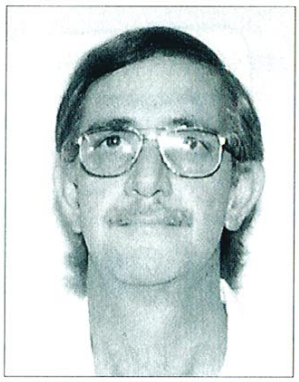
The main aims of SASOM are as follows:

- Prevention of occupational diseases for those at work
- Improvement of the quality of the work environment
- The provisional of quality workplace primary health care services
- The advancement of occupational health and occupational medicine through education, seminars and workshops nationwide. The Society is currently divided into 3 chapters to enable closer communication with its members geographically.
- The development of occupational medicine as a distinct and recognized discipline.
- Contributing to national and international occupational health strategies and policies.

As part of the 50th Anniversary celebrations, SASOM is one of the co-organizers for the international Medichem conference in Cape Town during 1998. Other functions and memorabilia will be announced in due course. For further information contact Mrs Dehlia Müller at (021) 664-1460.

Editor's comment

Perhaps some of the older generation of SASOM members would like to write to the journal and give some interesting snippets about SASOMin the early days.



Professor Daan Kocks, Chairman SASOM

WHO/ South Africa technical co-operation programme: Occupational Health

Southern African meeting on the education and training of occupational health and safety professionals, Johannesburg, South Africa, 22-24 October 1997

A meeting of occupational health and safety (OHS) professionals from Southern Africa was held in Johannesburg on the 22-24 October 1997. It involved 37 OHS professionals from thirteen countries together with representatives of the Southern African Development Community (SADC) Employment and Labour (E&L) Sector, World Health Organisation (WHO) and International Labour Organisation (ILO). The delegates discussed the current situation, needs, problems, capacities and priorities for professional occupational health and safety education and training in the SADC Region.

The countries represented were Angola, Botswana, Lesotho, Malawi, Mauritius, Mozambique, Namibia, Seychelles, South Africa, Swaziland, Tanzania, Zambia, and Zimbabwe. The only SADC country not represented was the DR Congo.

The Planning committee for the meeting consisted of representatives from the National Centre for Occupational Health (NCOH), Department of Health, South Africa; National Social Security Authority (NSSA) and Training and Research Support Centre (TARSC), Zimbabwe; Ministry of Health, Botswana; and Ministry of Labour, Malawi.

Areas to follow up were highlighted for the implementation of regional co-operation in professional OHS education and training. The planning committee for the Johannesburg meeting will be continued as a working group to promote the implementation of the recommendations of the meeting. The report and resolutions of the meeting are to be tabled with the SADC E&L Sector for distribution to its member states and for tabling at its meeting in 1998. A paper on the Johannesburg meeting's findings and resolutions will be submitted to Occupational Health Southern Africa for publication.

Course presented on accessing the Internet for OHS information

Very favourable reviews were received by Chris Moore, Canadian Centre for Occupational Health and Safety (CCOHS), on the two Internet courses he presented in

Johannesburg
5-6 November and
Durban
10-11 November 1997.

These were his one-day basic course on *Using the Internet to Access Health and Safety Resources* followed by a one-day advanced course on *Using the Internet for H&S Research and Networking*. Even experienced Internet users felt they gained from both courses. Subject areas covered included electronic mail (e-mail), e-mail-based mailing lists, Usenet newsgroups, Mailing List and Usenet Newsgroup "Netiquette", Telnet, FTP and Gopher, World Wide Web, search engines and directories. The amount of OHS information on the Internet is vast and is rapidly growing. Chris maintains a listing of some 1300 health and safety Internet resources. He impressed the delegates with his tour of "hot" OHS sites around the world, and his use of search engines and directories to search in seconds literally millions of documents on the Internet. He also designed in about thirty minutes a web site in Durban, then transferred it via the Internet to a web server at the CCOHS, Hamilton, Canada, for worldwide access. Chris has recently completed the second edition of his book *Safety and Health on the Internet* which includes a directory of over 1000 Health and Safety Internet resources and reviews of some top 50 Health and Safety Web Sites.

Function for sustaining members

A cocktail party was recently held at ESKOM Megawatt Park, not only to close off the last SASOM Executive meeting for the year, but also to celebrate the first meeting with the new committee members. SASOM's sustaining Members were also invited so that a presentation could be given to them to thank them for their years of contribution to the Society. Prof. Daan Kocks, the new Chairman of SASOM, handed out certificates, Ramazzini Statues and guidelines. A new sustaining member, Medway Fund Managers recently joined. Since they took over the premises from Johnson and Johnson Health Management in 1996, they have offered the same benefits to the SASOM Secretariat, which results in major cost savings to the Society. We say thank you to AECI, Eskom, AACF, Shell, Tongaat-Hulett, Samancor, Proctor & Gamble, and Medway Fund Managers who have all donated R15 000 over a three-year period to ensure that SASOM can continue with their mission and aims as well as its vision for 1998.

Prof Daan Kocks presenting the Honory Member Certificate to Dr Ferdie Smith

Pretoria Professional Society of Occupational Health Nurses

Proposed programme for 1998

February 4	Talking sex
Speaker	Dr B Levinson
Venue	SA Breweries 1 Galgher St, Rosslyn
March 4	Preventative health risk screening
Speaker	Dr L van Niekerk
Venue	Drs Du Buisson & Partners 614 Pretorius St, Pretoria
April 1	NOSA – SHE Programme
Speaker	L Pretorius
Venue	City Council of Pretoria Premos, 11 Staats Artillery St, Pretoria West
May 5	Assertiveness (ABC of self-control)
Speaker	Dr Susan van Niekerk
Venue	Pick 'n Pay – Wonderpark Pretoria North
June 7	Employee assistance programme
Speaker	Jenny Gilles & Associates and E Engelbrecht
Venue	SA Mint Old Johannesburg Road, Gate Way Industrial Park
July 3	Diabetic care/Education in industry
Speaker	Dr W Lourens
Venue	Nampak Tissue Research Road, Pretoria West
August 4	Man job specs
Speaker	Arthur Begley
Venue	Kentron Nelmapius Drive, Irene
September 2	AGM/Seminar
Speaker	To be announced
Venue	To be announced
October 7	Relaxation therapy/stress management
Speaker	Dr Carolyn de Klerk
Venue	Noristan 326 Mark Street, Waltloo
November 25	Christmas lunch
Venue	To be announced

For further information contact Louwna Pretorius, Tel: (012) 321-7736 (W) or (012) 98-4833 (H)

Zanelle (Connie) Adams, Tel: (011) 836-2530 (W) or (011) 318-1603 (H)

Tirsa Barnard, Tel: (012) 327-2185(W) or (012) 98-3483 (H)

SASOM Scientific Committees

SASOM has decided to expand on the number of scientific committees that it already has. The success of the formation of scientific committees to develop and enhance the knowledge base of societies is well known worldwide.

The first SASOM scientific committee was that of Biological Monitoring which was initiated three years ago and was following by the Scientific Committee on Dermatology. The Compensation Commissioner has 23 subcommittees which have been taken into consideration and the following scientific committees have now been proposed.

Scientific Committee	In operation
Audit systems	
Biological effect monitoring	
Biological monitoring	✓
Chemical industry	
Dermatology	✓
Ethics and legal	
Information technology	
Mining industry	
Noise and audiometry	
Pesticides	
Primary health care	
Transport and transport-related industries	

If any person wishes to join any of the committees, kindly contact Dehlia Müller at tel/fax: (012) 664-1460. Such interested persons do not have to be medical practioners or members of SASOM, but should have expertise or interest in the subject.

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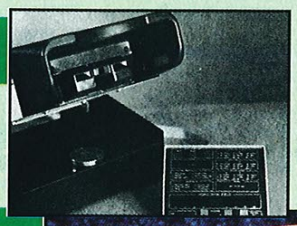
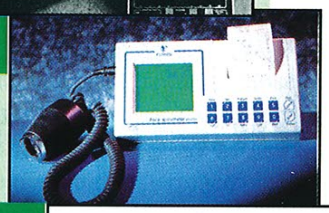


Lung Function Machines



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The relationship of blood pressure to occupationally induced stress

Mario Greyling
Medical consultant, Toyota South Africa, Durban

Occupational Health SA 1998; Vol 4, No 1: 12 - 14

Abstract

Blood pressure (BP) fluctuates with both mood and activity changes during working hours. Ambulatory monitoring provides an accurate assessment of blood pressure over the course of the day, and is a useful tool for prediction of target organ damage. In this study, workers were assessed whilst at work, and then when resting on the weekend or on holiday. It was shown that stress at work significantly increases BP compared to rest periods

Introduction

Working in an industrial clinic, one often comes across a situation when, during a routine examination, the patient is found to be borderline hypertensive. One is then left with the dilemma whether to treat or not to treat.

Referring the patient to his own GP (general practitioner), who then schedules an appointment for a Saturday morning, the patient is found to be normotensive - due to the fact that the patient is relaxed and rested.

It is due to these facts that it was decided to conduct a study into the effect of stress in and at the workplace on the blood pressure of the worker.

Ambulatory blood pressure

The most effective way of measuring a blood pressure (BP) is to make use of ambulatory blood pressure monitoring over a 24-hour period.

Blood pressure is inherently variable, fluctuating both with mood and activity changes during waking hours but also exhibits a diurnal rhythm, falling during the hours of sleep and rising on the early morning. It is difficult to follow fluctuations of this type accurately and in a simple way. It is always recommended that more than one conventional measurement of BP is made at a time. This has led to the advent of ambulatory blood pressure monitoring, a technique which takes multiple and automatic readings of the patient's BP during his normal activities and which provides a more accurate index of actual BP than is possible with single clinic readings.[1]

The significance of 24-hour BP monitoring

A recent study has examined how casual BP readings, mean 24-hour ambulatory blood pressures and measurements of blood pressure loads over 24 hours correlated with several indices of hypertension cardiac target organ involvement.

Casual systolic and diastolic BP values did not correlate with left ventricular mass index, left atrial size index or peak left ventricular filling rate. However, mean 24-hour BP and systolic and diastolic BP loads correlated with all indices of cardiac target organ involvement.

Both systolic and diastolic BP loads were better related to left ventricular mass index and left atrial size index than mean 24-hour BP values.

It has been shown that BP loads, measured over the whole 24-hour period, are predictive of target organ involvement in patients with mild to moderate hypertension, and thus ambulatory BP monitoring is a precise and reproducible technique for the diagnosis and assessment of stages I and II hypertension. Loads are calculated as a percentage from the BP measurements and are recorded automatically from the 24-hour ambulatory recording devices.

With the increased number of readings during the patient's normal activities at daily living, it permits the calculation of a more precise measure of BP over time and is a useful tool for the prediction of target organ damage Ambulatory BP monitoring has unique applications for the differentiation of true hypertension, the detection of stress- or work-related hypertension and the evaluation of BP behaviour

during sleep. Making use of the ambulatory BP values one can accurately predict the necessity for treatment.[2]

Aim

The aim of the project is to study the BP readings of workers while at work and then to compare them with the values of the same worker while on holiday or resting; thus comparing BP loads (stressed) versus BP loads (relaxed) to establish if work stress has an influence on blood pressure.

To establish if stress has an influence on BP, all other factors which have an effect on BP must be kept constant, therefore the patient should not suffer from the following:

- Diabetes Mellitus
- CAD (coronary artery disease)
- Previous MI (myocardial infarction)
- Renal dysfunction
- Cerebrovascular disease / stroke
- Gout
- Be on any form of medication

The patients (respondents) chosen for the sample have all been screened and it has been established that they are all under severe pressure at work with low stress in their home environment. All eight patients complied with these criteria.

Patient 1	Factory manager
Patient 2	Self-employed mother with children
Patient 3	Bank teller
Patient 4	Business unit manager
Patient 5	Doctor's receptionist
Patient 6	Headmaster - private school
Patient 7	Representative
Patient 8	Working mother

The following hypothesis can be tested:

Are the BP loads of white-collar workers during work (BP stressed) significantly higher than when on holiday (BP relaxed)? In short, does work stress have an influence on blood pressure?

Materials and methods

A 24-hour electronic blood pressure device was used to monitor the blood pressure of the patients (respondents) half hourly for 24 consecutive hours. The devices were operated by Zeneca Pharmaceuticals.

Readings were taken on the same patients (respondents) while working and again on holiday.

Since the population from which the sample has to be selected is limited (see criteria specified under *Aim*), it is understandable that the sample size will also be very small, namely $n = 8$.

Judgement sampling, which is a non-probability sampling method, has been used to collect the data, i.e. the respondents were deliberately chosen from the population on the basis of the experiment and judgement of an expert in the field.

Personal judgement and experience play a role in the selection of the sample and not chance - as in the case of probability sampling. The patients (respondents) selected for the experiment had to comply with the criteria specified under *Aim*.

Ethical aspects

All patients (respondents) were informed of the data being used for the trial. There was no chance of any physical harm and/or danger incurring. All patients (respondents) remained anonymous and the results were strictly confidential.

Observation/collection of data

Questionnaires were completed to obtain the relevant medical history and personal information of each respondent. Direct observations (readings) of the blood pressure of each respondent were then taken over a period of time. These readings were summarised and the loadings of the systolic and diastolic BP were used for further statistical analysis. These loadings are important because they will indicate whether the patient requires medication for high blood pressure or not.

Statistical analysis

The loadings of the systolic and diastolic BP are very important because they are used by the GP to decide whether a person needs medical treatment. These loadings are recorded and summarised in Table I for further statistical analysis.

Bar charts are used to represent these loadings so that comparisons can be made and the differences can be visualised.

The formulation of a hypothesis test is an important tool as the researcher can determine with a certain surety whether differences in the actual

Table 1: Summary of data recorded

	Systolic BP Loadings %		Diastolic BP Loadings %	
Patient	Stressed 1	Relaxed 2	Stressed 3	Relaxed 4
1	84	17	67	21
2	75	47	92	91
3	98	47	81	11
4	72	42	79	40
5	58	14	60	26
6	67	33	69	33
7	77	44	11	10
8	93	0	95	0

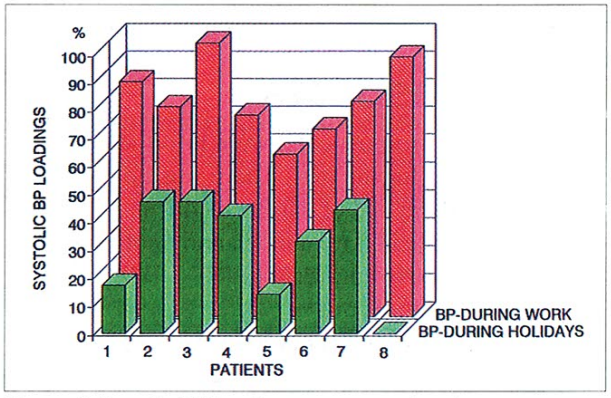

Figure 1: Systolic BP loadings stress vs relaxation

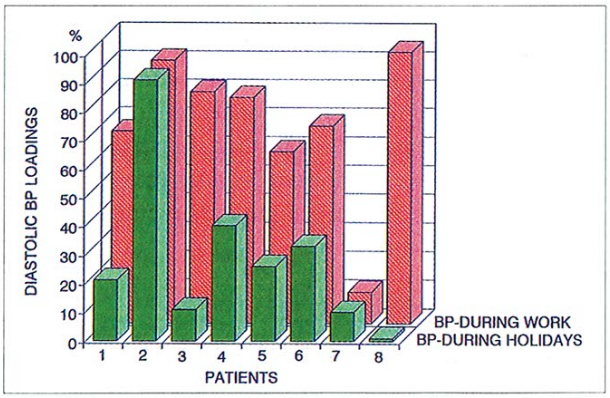

Figure 2: Diastolic BP loadings stress vs relaxation

loadings do exist. The average BP loading (stressed) is tested against the average BP loading (relaxed) to determine whether the difference in the loadings is significant. The results can be used to draw conclusions as to whether stress has an influence on blood pressure or not.

Conclusion

Statistical evaluation indicates with a 95% certainty that the mean blood pressure loading (stressed) is significantly higher than the mean blood pressure loading (relaxed) for both systolic and diastolic values.

This indicates that, when working, the patient (respondent) is under stress and the loading of his/her BP is high, while when on holiday the patients (respondents) BP loading is lower because he or she is more relaxed.

The conclusion is therefore made that stress at work has a significant influence on blood pressure.

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Is there a case to partially privatise the state compensation fund for occupational injuries and diseases?

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Abstract

There is a concern among employers, not only about the rapidly rising costs of assessments (premiums) which are in excess of the Consumer Price Index, but also the perceived inability of the Compensation Commissioner to cap medical expenses, assess occupational diseases and to efficiently manage the fund. Furthermore, legislation since 1941 has effectively prevented the establishment of further private mutual associations and this was again entrenched with the re-enactment of recent legislation. This effectively prevents further privatisation.

It is now appropriate to debate the issue of partial privatisation of the State Compensation Fund in order to reduce the massive cost spiral in premiums. A smaller state fund is also likely to be both more effective and efficient which is ultimately to the benefit of the injured worker.

Introduction

More comprehensive legislation continues to be promulgated for the compensation of workers for temporary and permanent disablement as well as for death as a result of accidents and diseases arising from employees work. The first Workmen's Compensation Act was passed in 1914 and dealt only with accidents among whites whilst some diseases were added at a later date. Black workers have been covered only since 1941 with the promulgation of an updated Workmen's Compensation Act, (Act 30 of 1941).[1] This act covered accidents comprehensively, but again only a limited list of 18 occupational diseases was included in Schedule 2 to the Act. These were added in haphazard fashion over the years. Not included on the list were many other occupational diseases such as pesticide and chemical poisoning, lung cancer in asbestos workers, tuberculosis in healthcare workers and so on. Although in theory it was still possible to claim compensation for these other occupational diseases, the process was much more difficult, as a direct cause and effect had to be proved which was not nearly so onerous if the condition was listed in Schedule 2.[2]

Then in 1993, the Compensation for Occupational Injuries and Diseases Act (Act 30 of 1993) (COIDA) was promulgated. There were several improvements to the Act such as the introduction of a compensation board with representatives from government, business, the labour movement and the professional associations. One of the most striking changes was the introduction of a comprehensive list of occupational diseases under Schedule 3. Thus, the scene was set to expect a substantial increase in reporting and compensation of workers with occupational diseases.

The above summary pertains to general industry and commerce. The mining industry, however, developed along different lines and whilst compensation for injuries falls under COIDA, occupational lung diseases and some other diseases fall under different legislation, the Occupational Diseases in Mines and Works Act (ODMWA), which is administered by the Department of Health and not the Department of Labour. The history of the development of legislation in the mining industry is complicated and has been the subject of several commissions of inquiry and is not discussed further in this paper.

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The escalation of the premiums or assessments

In terms of COIDA companies must register with the Commissioner and must then submit each year their anticipated wage and salary bill on which they are then assessed to raise premium income for the fund. Companies are grouped into subgroups which perform a similar type of business and are then assessed on the risk and past claims history of these subgroups. The assessment of the subgroup is then calculated on a rate per R100 of wages and salaries, e.g. if the rate for a particular subgroup is R1,50 and the wages and salary bill is R1,000,000 for the year, then the assessment for that year is R15,000.

However, the assessments have been rising in excess of the Consumer Price Index (CPI) and this is now a serious cause for concern for industry and commerce.

Table I shows the actual increase in assessments in a factory in the Iron and Steel Industry (category 1340) over the last ten years. This is representative of several factories in a large manufacturing group of companies. The full assessments have been stated and any reductions due to low accident rates have been excluded.

The table reflects some important trends: it shows the downsizing of this manufacturing operation which has been a general trend in South Africa to become internationally competitive, but the most important factor that it exhibits is that industry and commerce has been forced to pay substantially increased premiums. The first increase is acceptable, which is linked to the regular increases in salary and wages and which recently has been close to the CPI, but in the late eighties and early nineties was in excess of the CPI, Table II. Thus the commissioner has been receiving an increased assessment on this basis alone which has been in excess of the CPI. However, the second increase has been that the assessment rate per R100 of wages and salaries has also increased significantly over the period from R0,75 to R1,13 per R100 wages and salaries and the compound % increase per annum is 4,2. The third increase was when COIDA was introduced in 1993 and there was now no defined earnings limit and everyone was now by definition an employee. Prior to COIDA, anyone who earned in excess of the stipulated earnings

Table II: The percentage increase year on year of CPI and wages and salaries (source S.A. Reserve Bank - non-agricultural sector)

	C.P.I.	Wages & Salaries
1986	18,5	14,1
1987	16,2	15,4
1988	12,7	15,3
1989	14,7	18,0
1990	14,4	16,9
1991	15,3	15,8
1992	13,9	14,9
1993	9,7	11,0
1994	9,0	10,0
1995	8,7	11,2
1996	7,4	10,7
Compound % Increase per annum	12,7	13,9

Table I: Assessment Rates in a Factory in the Iron and Steel Industry (Category 1340)

Year	Maximum Earnings declared for Assessment (R)	Assessments rate per R100 of earnings (R)	Yearly Factory Assessments (R)	Number Employees	Rand Amount per Employee (R)
1986	15,600	0,75	119,963	2399	50,0
1987	18,000	0,75	123,656	2333	53,0
1988	18,000	0,80	172,028	2244	76,6
1989	24,000	0,80	190,254	2287	83,2
1990	24,000	0,94	216,194	2322	93,1
1991	30,000	0,94	256,112	2170	118,0
1992	36,000	0,94	277,015	2078	133,3
1993	55,068	1,03	387,799	1934	200,5
1994	55,068	1,08	725,770	1743	416,4
1995	80,028	1,10	907,334	1823	497,7
1996	88,140	1,13	1,088,898	1738	626,5
Compound % Increase per annum		4,2	24,7	n.a.	28,8

limit was not classified as an employee. Thus no premiums were raised from them and neither were they entitled to benefits. However since COIDA, assessments are still raised on a maximum declared earnings limit, e.g. in 1996 an employee who earned R200,000 per annum would be assessed only on the first R88,140 of their earnings. Thus, COIDA widened the net considerably in raising assessments. As a result the high-income management employees were now being assessed in the same way and yet as a group because of the nature of their work, there are minimal claims submitted against the fund by them.

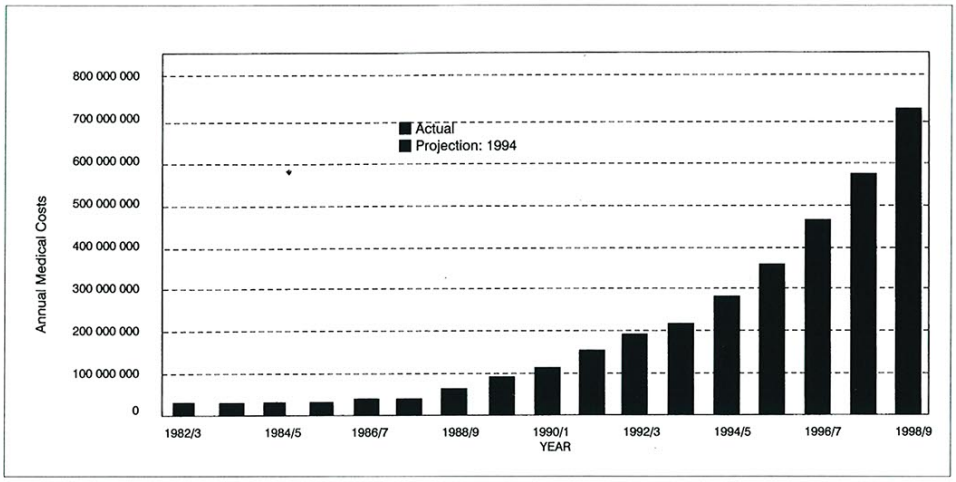

Table IV: The rate of growth of medical expenses, actual and projected, Compensation Fund[3]

At this particular factory the compound % increase per annum in yearly assessments was 24,7 vs the compound % increase in CPI which was 12,7. However, of greater significance in the compound % increase per employee per year which was 28,8 over the ten-year period. This massive cost spiral is due to the triple increase factors mentioned above.

Table III: Medical expenses as a percentage of total benefits, Compensation Fund (Source: Office of the Compensation Commissioner)

Year	Compensation R	Medical Expenses R	Medical Expenses as % of Total Benefits
1985/86	55 166 220	38 941 327	41,4
1986/87	59 507 965	41 576 490	41,1
1987/88	64 290 806	43 618 958	40,4
1988/89	74 007 746	61 977 103	45,6
1989/90	96 081 418	90 127 274	48,4
1990/91	131 935 429	111 078 250	45,7
1991/92	144 114 859	152 215 994	51,4
1992/93	199 471 481	192 707 296	49,1
1993/94	193 715 523	215 253 679	52,6
1994/95	258 618 017	268 381 465	50,9
1995/96	300 804 759	353 277 996	54,0

The causes of this massive escalation of premiums

There must be several reasons why this has occurred and an opinion is given on some of these.

Inability to cap medical expenses of providers

Medical expenses as a percentage of fund benefits when compared to disability and death benefits have continued to rise and now account for more than 50% of premium income and this is expected to escalate even further (Table III).

Research into the costs per claim for the compensation fund for ten years up to 1992 revealed an increase of 21% compounded year on year (Table IV).[3]

This scenario is not unique to the Compensation Fund and the whole medical schemes industry has suffered a similar problem. There are, however, recent indications that the high cost of medical inflation in the medical schemes industry is starting to reduce, although it is still above the CPI (Table V).

This has been achieved by improved benefit design of schemes, the introduction of some managed care programmes such as drug utilisation review and better communications between members and schemes.

This recent improving trend in the medical schemes industry has not been shown to be the case with the Compensation Fund. In fact, it is well known by many providers that the Compensation Fund is a "soft touch" and accounts are sometimes "padded" by providers. The commissioner did

Table V: Medical Schemes Inflation vs CPI (Source: Central Statistical Services and Registrar of Medical Schemes)

Year	Claims/ Beneficiary/ Month (C/B/M)	% Annual increase C/B/M	CPI
1985	67,3		
1986	84,6	25,7	18,4
1987	97,6	15,4	16,1
1988	115,1	18,0	12,9
1989	139,6	21,3	14,8
1990	186,6	33,7	14,2
1991	241,5	29,4	15,4
1992	318,4	31,8	13,9
1993	366,4	15,1	9,7
1994	408,7	11,5	8,9
Compound % Increase per Annum	22,2	22,2	13,8

employ some nursing sisters to start auditing accounts some two to three years ago in the same way as the medical schemes industry does and they have had some success in reducing costs. However, although this approach is commended; it is really only touching on the periphery of the problem.

The commissioner then engaged a private consulting firm to look at reducing the medical expenses and who produced a "Medical Aid Master Containment Plan". The report has not been made public and to date one is not sure if it has been accepted in whole or in part, what the future strategy will be and what successes have been achieved thus far.

The WCA tariff for providers

The commissioner produces his own tariff for providers which falls between the Representative Association of Medical Schemes (RAMS) scale of benefits and the private tariff of the various provider associations such as the Medical Association of South Africa (MASA). The reason this higher tariff was introduced was to ensure that the injured worker would not be denied access to medical care. However, in the medical scheme industry 91% of general practitioners, 79% of orthopaedic surgeons and 75% of general surgeons charge the lower RAMS scale of benefit tariffs in any case (personal communication with Medscheme). Those practitioners who charge the higher private tariff tend to work in high-income residential areas where there would be minimal demand for COIDA-covered treatment. Thus the logic behind the commissioner's decision to pay an added premium is not clear.

Companies not paying their assessments/premiums

It is understood that many employers have not been paying their premiums and the extent of the problem was not substantiated by the office of the Commissioner. If this is correct responsible companies are subsidising defaulters. This is clearly not sustainable in the future.

The question that also needs to be asked is how many employers are not registered with the fund. With the current workload, is the Commissioner able to ensure cover for defaulter's employees?

Investments of premium income

Under section 18 of COIDA, the Compensation Commissioner must invest funds through the Public Service Investment Commissioner, which in turn can only invest in cash and gilts. Private investment funds such as pension funds generally invest nearly two thirds of their funds in equities (the stock market) and their returns are significantly higher. The Rand Mutual Assurance Company Ltd (RMA) was given permission some five years ago also to invest in equities and as a result has enjoyed a better return, which has played a significant role in keeping their premiums down.

Administration costs of WCA

Administration costs of WCA are charged at 25% of the Rand value of all claims against the fund. This is approximately 10% of premium income. The RMA company, on the other hand, charges 5,9% of premium income, which is almost half that of the compensation fund.

Funding of occupational diseases

In the past very few occupational diseases were notified compared to other countries. In the 1990 report of the Compensation Commissioner, there were 128 industrial diseases vs 238,304 accidents from all carriers, i.e. 0,05%.[4] This can be compared to a recent figure from the United Kingdom where

approximately 9% of the workforce will develop an occupational disease each year (personal communication, Dr R McCaig, HSE). However, with the introduction of COIDA it was felt that many more would be notified and thus extra premium income was required. One of the ways of achieving this was to charge assessments on all employees with the introduction of COIDA, and not excluding those who earned in excess of a defined income as in the past.

As a result, premium income must have gone up substantially. However it is understood that there has not been a commensurate increase in the number of occupational diseases reported.

Secondly instruction 168 for noise-induced deafness was signed in January 1995. It was supposed to be backdated to March 1994. Rand Mutual, however, persuaded the Commissioner to implement it with effect from 1 June 1995 which was done without proper consultation and possibly without an in-depth actuarial valuation by the Commissioner. An outside estimate for the total liability utilising the new formula was calculated to be R560 million and it was felt this could be a conservative figure.[5] This instruction demonstrated a lack of understanding of potential liability due to noise-induced deafness and if not modified will impact significantly on increasing assessments to employers in the future.

Other factors of concern at the Compensation Fund

Some questions as to efficiency

There are concerns as to the efficiency of the Commissioner's office with payments to providers and patients taking an inordinately long period. This problem was compounded by a moratorium on the recruitment of staff imposed by the public service commissioner, but this was lifted some time ago.

Payment of providers

There have been serious delays in the payment of providers, so much so at the beginning of 1996 that some hospitals whose income was based mainly on accident patients were experiencing cash flow problems. The introduction of intermediaries is a recent innovation whose function is to effect early payout by the Fund in return for a percentage of the value of the account. There are no standards for service levels from the Commissioner's office and some medical aid administrators are prepared to enter into service-level agreements with their clients. Increasing use of Electronic Data Interchange (EDI) is now being used by medical scheme administrators and some administrator's claim payment within seven days of receiving the account. However, it must be recognised that significant delays in many cases are due to the providers not completing the forms correctly or sending in the incorrect forms, and are thus not due to the Office of the Compensation Commissioner.[6]

Payments to employees/patients

In terms of COIDA, employers are obliged to pay temporary disability payments during the first three months of disablement at the rate of 75% earnings. There are some companies, however, that do not comply and unless payments are received expeditiously some employees and their families suffer.

There seem to be long delays in awarding permanent disability payouts to patients, which cause significant hardship, especially when an employee can no longer work. This is a significant problem with accidents, e.g. loss of an arm, but is even more of a problem with occupational diseases where the patient has to pay for the investigations and is only reimbursed when the occupational disease has been accepted as a valid claim. It is not unusual, for example, for occupational lung disease claims to take 18 - 24 months to finalise.

Compilation of statistics

Previously the commissioner issued a yearly report, e.g. "Workmen's Compensation Act, 1941 Report on the 1990 Statistics"on various statistics compiled by the Fund, albeit a year or two later. However, the last report issued was the 1990 report. This is not acceptable and no company in the private sector would survive if it worked on information that was five to six years old.

The question of mutual associations

Prior to 1941, there were private organisations insuring workers who were injured in the course of their employment. Parliament discussed the issue at length at that time and was very concerned about private institutions making profits out of workers. As a result in 1941, the Workman's Compensation Act

was passed which provided for a nationalised State Accident Fund. Two exceptions were, however, made and two private Mutual Associations were allowed to continue underwriting compensation for injuries under licence to the Compensation Commissioner. These were the Rand Mutual Assurance Company Ltd (RMA) for the mining industry and the Federated Employers' Mutual Assurance Company Ltd (FEMA) which compensates workers in the building industry.

Mutual Associations, although registered as private companies, are not for profit and any surplus that is achieved is for the benefit of the members. The RMA has been in operation since 1894 and covers some 160 employers employing 500,000 employees and has clearly been successful. It operates on the basis of pre-funding the costs of lifelong medical treatment as opposed to the compensation fund which operates on a pay-as-you-go-basis and its benefits are in many respects better than those of the compensation fund. Pre-funding is becoming a vital issue, especially for occupational diseases that may only become obvious 10 - 20 years later. Current employers need to contribute for future claims, otherwise future employers become liable for past employers' lack of control of hazardous exposures. It should be noted that RMA is not responsible for claims that fall under the Occupational Diseases in Mines and Works Act. RMA is well respected and has served the mining industry well. For the purposes of this paper, comparisons have been made with the RMA.

Suggested solutions to the above criticisms

It is easy to be critical; yet criticism needs to be constructive. There is substantial evidence that premiums are increasing uncontrollably compared to RMA, where there has been no increase in assessments over the last four years.

If this can be achieved by RMA which covers a high-risk industry, then surely this is a goal the Compensation Commissioner needs to aim for in the State Fund.

New compensation commissioner

The previous compensation commissioner, Mr L van Assen, retired early in 1996. He was then replaced by Mr H Kastner from the Department of Labour who acted in a "care-taking capacity" for two days a week. Mr Kastner has also since retired and Mrs B Magojo from the fund is now acting as Commissioner.

As yet no new Compensation Commissioner has been appointed, although the post has apparently been advertised twice. The Department of Labour should be severely censured for its tardiness in appointing a new person. No organisation, whether public or private sector can operate without a Chief Executive Officer, otherwise it loses direction, morale deteriorates and few decisions, if any, are made. This is regarded as a top priority and hopefully the Department of Labour understands the importance of filling this vacancy.

Partial privatisation of the Fund

Following on the success of the RMA, there is a case to allow further mutual associations to be licensed under COIDA for certain large-industry sectors, e.g. the metal industry, the chemical industry, the food and catering industry. This could make the size of the existing fund more manageable and hopefully improve efficiencies. This trend towards privatisation has been seen elsewhere, e.g. in Canada where over the last five years there is now a campaign for privatisation. One of the arguments put forward is that private carriers can perform the business more cost-effectively.[7]

Unfortunately this cannot be realised unless changes to the legislation are made once again to allow the formation of other mutual associations under licence to the Compensation Fund. Part of the solution could be to allow the two existing mutual associations to underwrite new business outside their traditional areas of activity, i.e. the mining and building industries. Certainly RMA is willing and has the capacity to undertake new business.

Reduction of medical costs

It is not certain what the current activities and successes are of the cost containment plan. These should certainly be made known and published to the stakeholders. It is, however, assumed they revolve around principles of managed care such as drug utilisation review, signing up with preferred providers and provider profiling. It is recommended that the commissioner does not try to initiate a comprehensive managed care programme through

the fund, but should rather contract with one or more managed care companies that are rapidly developing in South Africa at present. Proper and effective managed care to reduce costs and improve quality needs to be fully integrated (not modular) and requires a significant capital investment as well as well-trained personnel to implement it. Whether the commissioner's office has the staff and/or capital to achieve proper managed care is a question open to debate.

This suggestion is in effect another privatisation measure.

Improved risk management and loading and reduction of premiums

Under COIDA Section 85 (2)and Section 85 (1) provision is made to load assessments of those companies who perform badly and reduce assessments in those who perform well. In reality, these measures are not put into practice. You need to be a very poor company in terms of claims for a prolonged period to have your premiums loaded, whilst at the same time if you as a company invest in safety and improve your accident and hence claims rate, you only get a reduction in your premiums if you actually apply for one. Many companies are unaware of this and are paying premiums that are far too high.

RMA on the other hand, actively increases or reduces its clients' premiums every year depending on the claims experience and this has proved to be successful.

As a result it is recommended that the Compensation Commissioner should be more proactive and follow the RMA approach. This would certainly "focus the minds" of employers and it is highly likely many more would invest further in risk management and safety measures which are cheaper preventive alternatives than treating for injuries and compensating for disability.

At the same time it is felt that the merit rebate system under the Compensation Fund should be discontinued. Most companies do not anticipate it or work towards it and when the cheque does finally arrive, it is usually taken to profit and not used to the benefit of health and safety. It is felt that the time and effort the commissioner spends on this merit rebate system should rather be spent on loading and reducing the yearly assessments.

Collecting unpaid premiums

It is understood that significant proportion of total premium income is not being collected by the office of the Compensation Commissioner. This is not acceptable and it is recommended that if the office is too short-staffed, this function be privatised. There are many private debt collectors who would be only too happy to assist. This again is another form of privatisation.

Levels of service

It is important that certain service targets are met. These need to be identified and monitored. For example, it is vital that when an employee is killed in an accident or when an employee is permanently and totally disabled, his claim be finalised as soon as possible, so that undue financial hardship is not created for the employee's dependants. When all documentation has been received, there should be defined target periods in which the case must be assessed and in which benefits should be paid out.

Another example is to ensure that providers of service are paid timeously. The use of EDI is appropriate and there is no reason why accounts could not be processed within ten days. Prompt payment would also eliminate the need for intermediaries mentioned previously.

Administration costs

These costs are too high at present and should be in line with what other similar agencies are charging, i.e. RMA. Reducing these costs should be seen as part of the overall cost-containment exercise to reduce this recent huge spiral in premiums to employers.

Informatics

There is a vital need to collate the correct information and to be able to use it immediately in order to plan correctly. No organisation can work on data that is five years old. Proper information, if used correctly, would make the office of the commissioner more efficient and probably more cost effective in the long run.

There is also a need to prevent duplication and considerable effort has been made by the Commissioner and the Department of Labour to combine the reporting of accidents to both Commissioner and Factory Inspector. But there is also a need to rationalise the type of data required, i.e. different agencies in South Africa report accidents differently in terms of frequency and

severity rate. The Department of Labour, in conjunction with the Commissioner, should take the lead in establishing a uniform, national reporting system between the Department of Mineral and Energy, Department of Labour and private organisations such as NOSA. The reporting system should also be similar to overseas systems so that comparisons can be made.

Communications

The communications emanating from the Commissioner's office have been very poor indeed. The communication of internal instruction 168 is a classic example in which the parameters for compensation for noise-induced deafness were changed and which the Commissioner saw no need to communicate outside the organisation at all. How Occupational Medical Practitioners, Audiologists and ENT Surgeons would know which employees to put forward for compensation remains a mystery.

There is a need to build a database of service providers and to utilise in-house journals, publications etc. to keep the relevant people and institutions informed about the fund and any new decisions that are made. This would be money well-spent because informed providers, for example, who now submit the correct forms timeously would save the commissioner's staff a great deal of time and energy. A recent initiative has been launched by the Commissioner with the South African Society of Occupational Medicine (SASOM), which has undertaken to train 2000 doctors in the correct processing of compensation claims. This initiative is to be lauded and does show a more proactive approach.

Conclusion

It is now appropriate for the Compensation Fund to make some strategic decisions in order to ensure that the fund in the future can complete its mandate efficiently and cost effectively to both injured workers as well as employers.

Part of this strategy must focus on partial privatisation, an issue which is being increasingly discussed in South Africa at the present, e.g. Sun Air, Eskom. It could even be suggested that the Commissioner's office should consist only of policymakers who contract out the implementation of the Act and who then monitor its operations. They would also implement new strategies. As a result they would retain control, but would not be burdened by the day-to-day activities of the fund.

It is hoped this opinion paper will create some discussion for change in this very important area.

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DOES flu BECOME A FINANCIAL DRAIN EVERY WINTER?

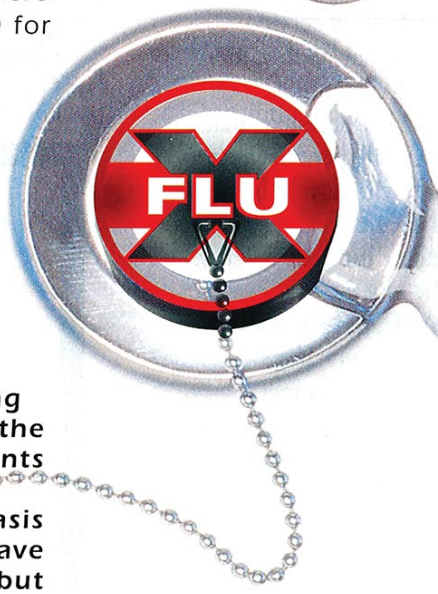
This coming winter, influenza could cost your company millions. Yet we remain complacent regarding the power of immunisation.

Based on the 1995 Eskom Study[1], influenza immunisation could not only save your company thousands or even millions (over R13 000 per 40 employees) incurred by flu-related absenteeism and medical costs, but will greatly contribute to the estimated R50 million cost saving to the medical aid industry in South Africa.

Influenza could cost your company millions

Unfortunately South Africa is well behind the developed world in its usage of influenza vaccines as discovered in a recent cost evaluation study conducted by Professors Martin & Schoub[2]. This study showed that out of 1000 South Africans, only 12.5 were vaccinated, compared with 81 per 1000 for the UK and 175 per 1000 in Spain. The possible reasons are as follows:

South Africa is well behind the developed world in its usage of influenza vaccines



- **In South Africa the concept of routine infant/childhood immunisation is well supported by both the medical community and the public at large, whereas the same does not hold true for adult immunisation**
- **There are misconceptions regarding the vaccine efficacy amongst both the medical profession and their patients**
- **There is often unreasonable emphasis on vaccine side-effects which may have held true for the earlier vaccines, but the current highly purified vaccines are much less reactogenic**
- **Many patients, nursing and medical staff trivialise the impact of influenza and believe that vaccination is unnecessary. Morbidity and mortality statistics, both in epidemic and non-epidemic years, attest to the potential seriousness of influenza, let alone the costs incurred.**
- **There are uncertainties as to the indications for influenza vaccination**

Perhaps its time to consider an immunisation strategy?

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Anyone wishing to protect themselves from an uncomfortable and debilitating illness which results in absence from work and a possible loss of income for 3-7 days should be immunised.

Side-effects of the vaccination include mild local reactions (swelling, redness, tenderness and/or pain) at the site of injection. A mild fever of short duration can occasionally occur. Contra-indications include any acute severe febrile illness and known hypersensitivity to egg protein. Although the safety of FLU vaccines in pregnancy has not been established and is a relative contra-indication, the risk of not being vaccinated would outweigh the theoretical fear of damage to the infant if the mother falls into a high risk category[3].

When one considers a vaccination strategy, the specific "at risk" groups are not the only individuals who should be vaccinated. Anyone wishing to protect themselves from an uncomfortable and debilitating illness which results in absence from work and a possible loss of income for 3-7 days should be immunised, especially those in key employment positions, those who are self employed and those in the industrial setting, where large scale absenteeism could result in economic losses.

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How Total Quality Management ensures excellence in occupational health care

Jane S van der Merwe
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Occupational Health SA 1998; Vol 4, No 1: 26 - 28

Introduction

Total Quality Management or TQM as it is known internationally, originated in the USA in the 1940s and was developed from the teaching of the "quality gurus" Deming, Juran and Crosby.[1] After the war, these principles were embraced by the Japanese during the rebuilding of their industries and many of the quality techniques used today were developed by Ishikawa[1] and Taguchi.[1] One definition for TQM is *A system of activities for ensuring the production of a defined service, of an agreed standard, within given resources*. Until the 1980s, quality management was mainly used in production industries following Crosby's[2] quality philosophies of getting it *right first time* and *quality is everybody's business*. However, during the 1980s, service industries, including health care in the USA[3] and the UK started integrating quality assurance and customer care into their services. During the 1990s in the UK, health services started becoming accredited through ISO 9002[4] and through the Kings Fund Organisational Audit.[5] The approach to health and safety in the workplace, interestingly, is very similar to that of TQM, as both have the same principles. TQM aims to *manage quality* rather than *inspect defects out*, and many organisations have applied the same approach successfully to their health and safety management. These organisations have recognised that ill health and accidents have cost complications and effective systems reduce the cost of *non-conformance*.[6] TQM philosophy emphasises employee involvement and this applies equally to encouraging compliance in health and safety issues, e.g. the wearing of personal protective equipment.

How do occupational health clinicians know the service they provide is of high quality?

The majority of clinicians feel strongly that the service they provide is of high quality; the reasons being that the clinician has a qualification in occupational health, he or she adheres to agreed medical practices and protocols, and the company and their employees appear happy with the service. However, very few clinicians can actually demonstrate the quality of their service, and many companies have limited knowledge and expectations as to the standard of service to expect, as occupational health is not their core business. Also, in many industries, the recipients of the service have no choice in the health care they receive due to limited income or availability of services.

Demonstrating and measuring quality in occupational health

TQM is based on management principles,[7] therefore management systems must be put in place, e.g. for appointments, annual occupational health programme, stock control, patient records, data capture, reporting and follow up. All the clinic's processes, although flexible to suit individual patient needs, must be repeatable to ensure that there are specific activities and a defined minimum standard of service provided to patients at each stage of the process, e.g. at assessment, diagnosis, treatment and follow up. All activities should comply with relevant legislation and current medical practice. The results of each activity must be accurate the first time and the information analysed and utilised promptly in order to ensure there is effective action and follow

up. A recall system must also be in place to follow up abnormal results or for trend analysis. Implementation of these activities will visibly demonstrate an efficient, effective service. To measure whether a quality service is being provided, the service must be monitored regularly and audited at least annually and the key performance indicators checked. Corrective actions can then be undertaken and re-audits carried out as necessary. Quality is part of a cycle, with continual evaluation of the service, audit and service developments and changes to meet evolving demands.

Setting up a TQM programme

The customer **must** be the focus and in occupational health this means the employee and the management personnel within the company. The clinical staff must meet the management representatives and assess occupational health requirements and also understand any internal company policies and practices which must be adhered to by health providers. All external regulations and protocols relevant to the industry and the patient group must also be identified and incorporated into the systems and practices. The process of providing the service should be charted as identified previously, and the optimum time scales set for each activity in the process, e.g. results of monitoring, must be reported to management within seven days. The key activities which must take place at each stage must also be identified, e.g. full case history taken and documented on standard form for all annual medicals, or all diabetics will receive a blood glucose check and health education at each consultation. However, although the clinical staff are in control of the activities within the clinic, there are other inputs essential for a quality service which are outside the control of the clinic staff, but are essential to run a quality service. These include communications, purchase and delivery of medicines, receiving information from first aiders on minor injuries, release of employees to undergo biological monitoring and many other aspects. If all these aspects are not available or provided timeously, this will impact on the quality of the clinical service, as medicines may not be available, or the Sister may waste time waiting for employees for testing who are not released from their work.

Once information is available on all of the above, the clinicians should compile relevant policies, standards, protocols and procedures covering **all** aspects of the occupational health service, all of which should be achievable within available resources and the outcomes of each should be measurable through regular monitoring and clinical audit.[8] The occupational health service should be evaluated at least annually and necessary changes and improvements integrated into the service.

There are therefore many aspects which must be in place to ensure a total quality service and these are identified in Figure 1.

Benefits of TQM in occupational health care

There are, therefore, many benefits to the patient/employee and to the company if the provider of the occupational health service has a total quality management system in place. These include the following:

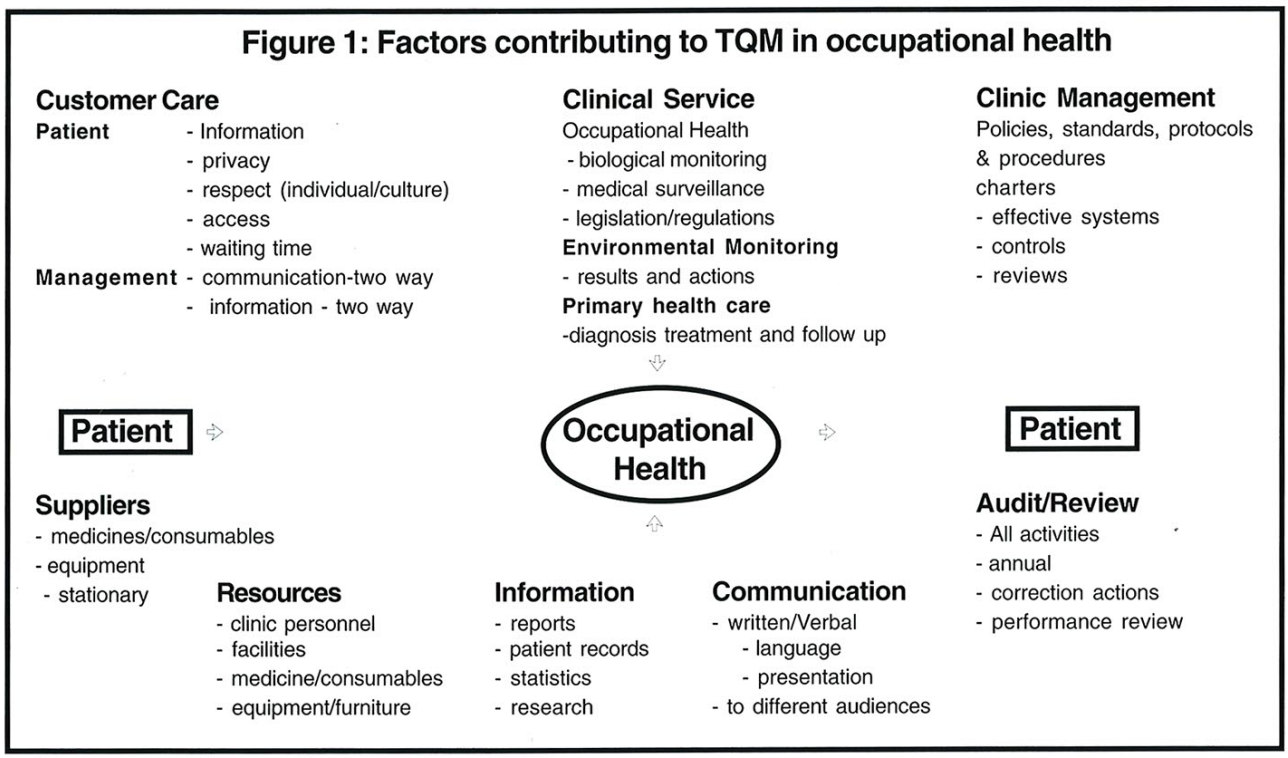
- A uniform quality of service is provided to all employees.
- The health of the workforce is monitored and maintained, and action taken promptly.
- The quality of service can be measured and health outcomes can be demonstrated to company management through getting it *right first time*, effective reporting and actions.
- The company can then focus on their core business and use relevant information from the clinic to address health issues and be assured they are complying with legislation
- The management systems, policies, standards and procedures in place are useful to direct new and existing staff.
- A baseline is provided for continuous improvement of the occupational health service.

Finally as indicated, total quality management is part of a cycle which requires ongoing monitoring, evaluation and review. Therefore, at least annually, the occupational health service must be reviewed in its entirety, and changes made to ensure legislative compliance, to keep up with medical practices and to ensure that the systems run efficiently allow continuous improvement of the service to employees within the company.

In conclusion, TQM is essential in the management of any service and for health services such as occupational health where it is crucial that it be *right first time*. Setting up a TQM programme is essential for effective, efficient provision of services in the future.

Continued

Figure 1: Factors contributing to TQM in occupational health



References continued on page 35

How well do you assess occupational health and hygiene control in your business?

Dr Arthur Begley
Manager: Occupational Health Rand Mutual Assurance Company Limited, Johannesburg

Occupational Health SA 1998; Vol 4, No 1: 29 - 30

A successful occupational health programme ensures that all potential health hazards in the work environment are recognised, evaluated and controlled. This can be a costly and time-consuming process but the process is essential if industry is serious about managing health risks in the workplace. There is a legal requirement in South Africa to recognise, evaluate and control health hazards in all fields of human endeavour. The Occupational Health and Safety Act (Act 85 of 1993) requires that employers provide a working environment that is safe and without risk to the health of employees. This is catered for in the section entitled *General duties of employers to their employees.*

The Mine Health and Safety Act (Act 29 of 1996) came into force early in 1997 and requires the owner of every mine to ensure that ... *employees can perform their work without endangering the health and safety of themselves or any other person.* In the spirit of the new democracy prevailing in South Africa, slow but steady pressure is being applied to the employers to provide a *safe and healthy work environment.* This pressure is coming from trade unions, health and safety representatives and, in particular, international employers who realise the marketing benefits of products which are produced observing international standards for health and safety.

Implementing the above requirements in a practical way in South Africa involves understanding the risk management cycle.

Risk management cycle
- Baseline occupational health assessment
- Trend analysis and intervention
- Policy making
- Interpretation of policy
- Implementation of action plan

The first step in embarking on this cycle is to do a **baseline occupational health assessment**. It has been said that one cannot manage what one does not measure. This applies to managing occupational health as much as any other parameter in business.

Once the Baseline Occupational Health Assessment has been done, stage two consists of **analysing trends and making appropriate interventions**. In effect this means prioritising and controlling the hazards. It is best to use a well-defined hierarchical method, i.e. elimination, engineering methods, reducing the time exposure and number of workers exposed with personal protective equipment being the last resort measure. External influences such as legislation, stakeholder pressures, public concern, company image and best available technology at affordable cost will influence the control of health hazards.

Stage three of the risk management cycle is **policy making**. Quite frequently in South Africa policy making has been done right at the beginning without having done a baseline occupational health assessment. The policies made are often not addressing the key needs of the business and are either ineffective, inappropriate or so general as be clumsily wasteful of scarce financial resources.

Stage four of the risk management cycle consists of **interpretation of policy**. This means having a detailed action plan which defines responsibility for the control of the hazards matched to a commitment of the necessary resources. The detailed action plan must include reviewing or writing work instructions for each

task carried out in the business. The work instructions or procedures must be communicated to the relevant workers in an understandable and clear way.

This leads to the fifth component of the risk management cycle which is **implementation of the action plan**. Implementation will occur through training, supervision, selection and staffing practices.

How often do we see employees who are inadequately trained and supervised falling foul of occupational health hazards? A practical verification of the percentage of the workforce with a 15% loss of binaural hearing in the speech range due to exposure to noise at work reveals this to be between 5% and 20%, depending on the industry.

A protocol to assess the control of occupational health and hygiene has been developed and is available in South Africa. The protocol is simply entitled *Occupational Health and Hygiene Control.*

It assesses health and hygiene control using best practice international standards.

How often do we see employees who are inadequately trained and supervised falling foul of occupational health hazards?

This methodology has been used in over 30 South African companies in a wide spectrum of industry ranging from the mining to the small industrial sectors. What has been alarming and discouraging for a number of South African industries to realise is that companies who obtain a 90% score in a local "5 Star standard" are achieving only 40% using international standards.

However, they should not be discouraged by the relatively low achievement in the occupational health and hygiene assessment, particularly if it is a first or baseline assessment. Rather they must focus on their opportunity for improvement in a structured way which the assessment highlights for them.

The occupational health and hygiene assessment examines and scores practice and compliance using an internationally accepted norm of weighting. This weighting scale is very important as it focuses attention on the key elements of any occupational health programme in a way which makes priority ranking easy. The deficiencies in the elements which have the highest points assigned to the element are probably those areas which should be fixed or improved as a priority. In a company with a fixed budget, this simplifies the allocation of limited resources by logically targeting resources at the areas most in need.

The elements examined in the occupational health and hygiene assessment, with their appropriate weighting, are given in Table I.

Table I: Occupational health and hygiene assessment

1. Administration/management commitment	30 Points
2. Health hazards identification and evaluation	160 Points
3. Health hazard control	210 Points
4. Occupational health and industrial hygiene monitoring	80 Points
5. Information and training	50 Points
6. Medical surveillance/healthcare system	50 Points
7. Professional assistance	50 Points
8. Communication and records	70 Points

The total number of points that can be achieved is 700 and the relative importance of **Health hazard control** and **health hazard identification and evaluation** can be seen at a glance.

A simple software program can be utilised to write the report once the assessment has been completed. This means that the written report can be generated quite quickly and the recipient can get a document which contains the results in a graphical form as well as in a narrative form.

Using a colour printer, one can give an impressive graphical assessment and highlight areas of potential action in red ink. The report has been further customised by the addition of columns for client use allowing for allocation of a responsible person, target date and review. In this way the report can become a living, useful document which can be used to track the progress of health hazard control in a systematic way.

The occupational health and hygiene assessment is only a tool which industry can use as a means of achieving improvement. It is not a panacea or cure-all, and the hard work and pain begins with the actual implementation of the recommended improvements. If the suggested improvements are not implemented, it stands to reason that no major difference occurs to the status of occupational health control at the establishment in question.

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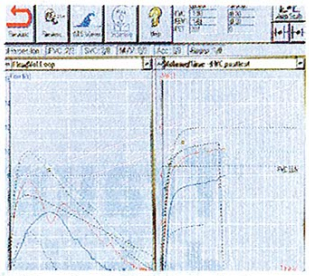
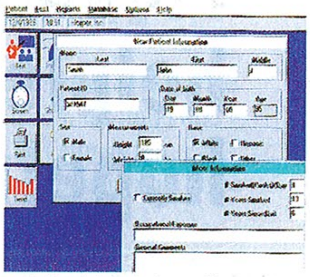
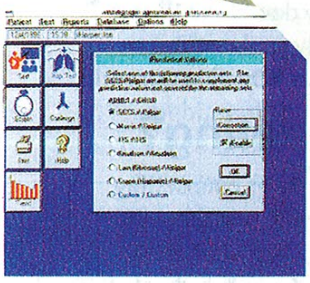


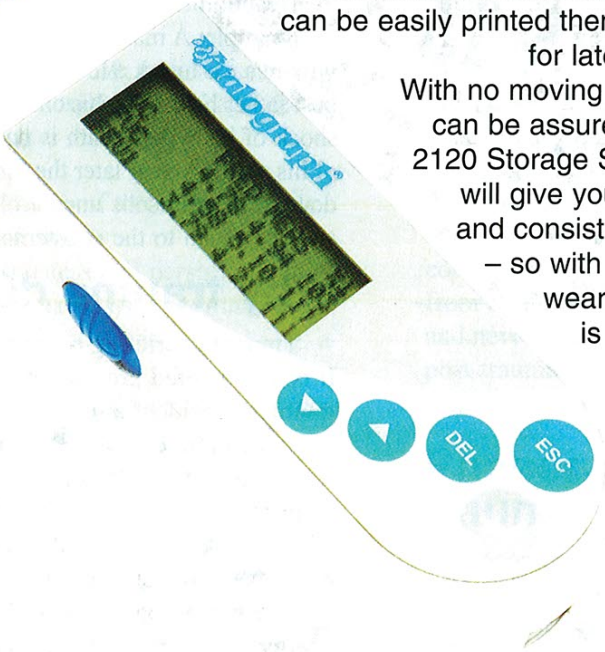
■ Easy to view tests, including full flow-volume loop

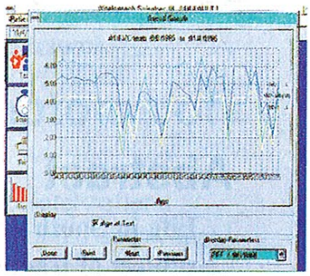


■ Patient data information including fast search facility

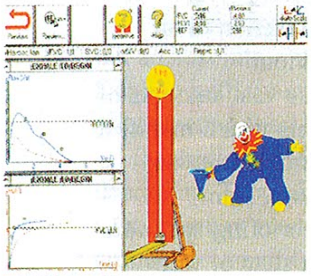


■ Choice of six sets of predicted values, or request a custom set





■ Fast patient trend facility



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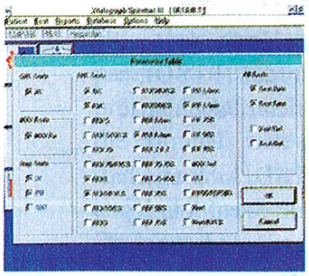
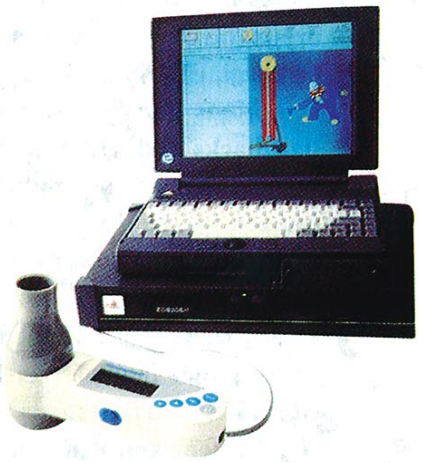


■ Choose from 35 parameters – either select at test or later



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Trauma debriefing - Moving from helplessness to hopefulness

Ursula Keel, Shameen Naidu
The Centre for Occupational Social Work Services
Occupational Health SA 1998; Vol 4, No 1: 32 - 35

Abstract

Life in South Africa at present sees the subject of trauma as a commonplace topic of conversation. Traumatic events (like murder, hijacking and robbery) affect all those who are involved in them and they leads to physical, emotional and psychological symptoms like helplessness, disorganisation, flashbacks and hypertension. The phases of trauma that people go through are the impact, resistance and reorganisation phases. Throughout the experience of this, survivors need to be contained. This is ideally carried out by the trauma debrief process that involves retelling the trauma story, normalising the symptoms, rephrasing the incident and experiences and leading towards mastery.

Every resident of South Africa has been touched by some form of trauma, whether through personal experience or vicariously. Traumatic experiences have always affected mankind, but in South Africa the nature of trauma has changed from natural disasters (e.g. earthquakes, accidents and war), to hijacking, robbery, murder and sexual assault, mostly by armed criminals, which exacerbates the level of trauma.

A simple law governs emotions: "Either we deal with them now or they will deal with us later."[1] We repress that which is shocking, horrifying, overwhelming, only to have it pop up some time later when we may not associate an apparent overreaction with the initial trauma.

Example: A man with two small children loses his wife in a car hijack. He stoically gets on with being the best father he can for his children. Dealing with the shock of his wife's death is pushed into the recesses of his mind. A year later the family dog has to be put down. The man sobs uncontrollably in the vet's surgery, much to the consternation of the doctor.

Why trauma debriefing?

Trauma debriefing is not therapy or counselling. It is a structured process that aims to put the traumatic incident into perspective and contain the overwhelming effects of the trauma on the client. It should be remembered that a traumatic event is an abnormal situation and Victor Frankl (a Nazi camp survivor) states that an abnormal reaction to an abnormal situation is normal behaviour.

The human body appears to use vast amounts of energy to suppress traumatic events which manifest later as physical symptoms, e.g. a compromised immune system, high blood pressure, skin problems, ulcers, even cancer. Debriefing survivors gives them a chance to return to a state of well-being, productivity and to engage successfully in relationships again. If this debriefing was inadequate or absent, there is a high risk that the individual will develop Post-traumatic Stress Disorder (PTSD), a syndrome recognised by the American Psychiatric Association since 1980.

In this article we will define PTSD, look at what happens to a survivor of a traumatic event, clarify the structure of the debriefing process and conclude with information on the extent of traumatic incidents in South Africa.

What is PTSD?

Wilson perceived the wording of the disorder as pertinent.[2] Post-traumatic means *after injury* and indicates a change in the state of well-being associated with various reaction patterns and symptoms formations. The essential features of

PTSD, according to the DSM-IV,[3] is the development of characteristic symptoms following exposure to an extreme traumatic stressor involving

direct personal contact with an event that involves actual or threatened death or serious injury or other threat to one's physical integrity;

witnessing such an event;

learning about unexpected or violent death, serious harm or threat of death of a family member or close person.

The person's response involve intense fear, helplessness, horror (or disorganised and agitated behaviour in children).

Symptoms involve

persistent re-experiencing of the event (it feels like a movie in slow motion);

numbing of responsiveness and persistent avoidance of stimuli associated with the trauma; and

persistent symptoms of increased arousal (e.g. a strong startle response).

The full symptom picture must be present for more than one month, and the disturbance must cause clinically significant distress or impairment in social, occupational or other important areas of functioning.

This description highlights the fact that trauma is not an absolute - it is a relative and unique event. Dealing with trauma is a more complicated phenomenon than it first appears.

Example: Three bank officials present for trauma debriefing. They had been overpowered and robbed of a large sum of money by a mob of five gun-toting criminals. One of the men was to be engaged that evening and saw his future life flashing before his eyes, getting married, having a child - but all going down the barrel of a gun. Another kept seeing the faces of his parents who struggled to bring him up. The third had previously been in a similar situation. He noticed that the criminals were sweating profusely, their eyes darting around. He took the initiative, speaking softly and calmly and offering assurance to everyone. After the event he looked exhausted, but contained, whereas his two companions were completely overwhelmed with emotion.

Was it necessary to send all three men for debriefing? Without a doubt.

The session would:

emphasise the genuine care of the company to all of its employees within the work environment;

offer a safe place and "timeout" as trauma involves intense fear and stress;

emphasise the need for an assessment and a place to affirm behaviour by bringing to consciousness all successful, life-enhancing strategies used by the survivors so they may regain a sense of mastery;

emphasise the need to "let off stream", vent fears and frustration so that this is not inappropriately vented at a later time, e.g. arguing with a spouse;

ascertain whether follow-up debriefing or counselling sessions are required; and

educate and allow for the distribution of accurate information - both to the traumatised individual and the management in an organisational situation.

Ultimately the need for trauma debriefing involves a subjective evaluation. Individuals respond differently, therefore, as Herman (1992) suggests, trauma is best understood as a spectrum of conditions rather than a single disorder.[4] They range from a brief stress reaction that gets better by itself and never qualifies for a diagnosis, to classic/simple post-traumatic stress disorder, to the complex syndrome of prolonged, repeated trauma.

Phases and symptoms of trauma

According to Horowitz, immediately after a traumatic incident there is an emotional outcry that results in fear, sadness, rage, or survivors may be completely overwhelmed by their emotions.[5] Although responses are individual, specific phases and symptoms have been identified, as follows:

Phase 1 - impact phase

Alarm reaction: The survivor is stunned and shocked.

Possible symptoms

Emotional: numbness, disorganisation / initial coping with subsequent disorganisation, helplessness, intense fear or anger, inability to deal with the stress.

Physical: rapid heartbeat, difficulty breathing, adrenalin rush, nausea, panic.

Phase 2 - recoil or resistance phase

This phase begins with denial, culminating with the start of adaptation.

Possible symptoms

Extreme avoidance of people or situations reminiscent of the incident.

Substance abuse to deny the pain/ignoring the

persistent memories or thoughts intruding into consciousness as flashbacks.

Anger, apathy, sadness, guilt, confusion and withdrawal from others and sleeping disturbances.

Phase 3 - reorganisation or exhaustion stage

The person regains the capacity to cope. The survivor re-establishes his/her former patterns of life. Healing is enhanced by contact with family and loved ones. A sense of mastery is restored.

Symptoms

Exhaustion, limited energy, renewed enthusiasm and signs of engagement as energy level returns.

The trauma debriefing process

The model used by the Family Life Centre is based on the Critical Incident Model (Mitchell and Bray) as well as experience and exposure. A literature review suggests that most models, from Janet's classic work on hysteria to recent descriptions of work with combat trauma and dissociative disorders, advocate similar stages of recovery.[6]

They include

establishing a safe environment;

re-living the event;

releasing;

reorganisation and restoring the connection between survivors and their community.[7,8]

The debriefing process consists of three sessions, approximately 1-1˚ hours each. Ideally the first session should take place between 24 and 72 hours after the incident, preferably in a quiet room with no interruptions. Where several people have been affected, the group should not consist of more than ten people per debriefer.

The debriefing model - 4 stages

Retelling the story

Herman mentions that "remembering and telling the truth about terrible events are prerequisites both for the restoration of the social order and for the healing of individual victims".

Objectives

Provide a safe space to release feelings, thoughts and reactions about the incident.

Develop a clear understanding of the event and the person's reaction to it.

The retelling of the story is guided through the following four phases:

- Reviewing the facts - what happened when?
- Thoughts during and about the event.
- Feelings during and since the event.
- Physical symptoms during and since the event.

Telling the story allows the client to transform from victim to survivor, helps to reduce fear, anxiety, pre-occupation with the event and the feeling of isolation. Because the worker is able to tolerate the worst images the client feels less afraid, alone and overwhelmed.

Normalising the symptoms

The primary objective is to help the client accept that overwhelming feelings and reactions are normal in traumatic situations. They are not going crazy. It is essential to normalise at the client's pace, and not to minimise the client's experience leaving them feeling negated or dismissed.

Reframing

This stage presents the client with the knowledge that they responded in the best way they knew under the circumstances. To regain a feeling of control the survivor needs to take ownership of all positive actions he or she made during and after the event.

Encouraging mastery

If the debriefing process is successful, the survivor will be able to cope again, as he or she will have regained a sense of empowerment and reconnection to the environment. Dysfunctional responses will diminish as they see themselves once again as their best resource. Various new coping mechanisms and resources may be explored to enhance their repertoire of life skills.

Conclusions

Although trauma is inflicted on a person as an event, it may result in a process of emotional, physical and behavioural disorganisation within a person or group. The destructive effect is not limited to the event itself, but may have lifelong implications. The current extent and violent nature of traumatic occurrences in South Africa require well-trained trauma workers and adequate facilities to absorb and contain the damaging and disruptive effects of traumatic incidents so that our society does not become totally overwhelmed by a small percentage

of the population inflicting untold harm either directly or vicariously on the entire fabric of this land. The process of trauma debriefing has proved to be a valuable resource in containing this long-term damage.

Where to get help

Family Life Centre and FAMSA National have fully trained trauma debriefers who are available for trauma debriefing, as well as for training debriefers.

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The needs of the female employee in industry

Sister VH Sylvester
Occupational Health Nurse, Lascon Lighting, Johannesburg

Occupational Health SA 1998; Vol 4, No 1: 36 - 37

I have been employed as an Occupational Health Nurse (OHN) for seventeen years at a company that employs approximately 200 female employees who do duty on the factory floor, operating machines such as assembling machines, assembling products, etc.

The majority of the female employees are single parents with at least two children who frequently have different fathers - hence maintenance for the children is an uphill battle. The mother becomes the sole provider. The single parent female employee's needs are therefore a combination of a provider's needs and the needs as a female.

The following are the needs of the female employee in industry, as identified by the employees themselves:

1. Extra paid leave to accompany children to hospital/clinic
2. Female-oriented protective clothing
3. Crèches sponsored by central government/ employer
4. Mobile welfare officer
5. Rest-room facilities in change-room areas
6. Recognition of the female skills from which promotion and higher rates of pay will naturally follow.

Extra paid leave to accompany children to hospital clinic

Through the ages it has been the woman's responsibility to attend to the child's needs - whether these be an illness, purchasing clothes or being present at schools when necessary.

The working mother who is hourly/weekly paid has to take a day's unpaid leave to fulfil these needs. The male worker and female worker are afforded the same amount of sick leave per annum. The female worker feels she needs extra paid leave to accompany her children to the doctor, clinic or school. Abuse of this could be prevented by an official letter being presented to the employer.

Female-oriented protective clothing

Although working in a factory environment, the female employee would like to retain her femininity with overalls/uniforms made in female sizing and fabrics and lighter, more comfortable safety shoes. Manufacturers' eyes light up when these two items are suggested; the cost becomes exorbitant and employers therefore revert back to male sizing as bulk buying is far cheaper. Slacks and a zip-up jacket instead of the male-size boiler suit would be more comfortable and the female employee would feel much more feminine.

Crèches sponsored by central government/ employer

- Utilise schools closing down in close proximity to industrial sites.
- Instead of sponsoring sports events, beauty pageants, etc., the employer could sponsor a crèche.
- Employee to pay an affordable fee.
- Prompt medical attention can be provided for ill children.
- Mental stimulation for the children, possibly not provided at home.
- A balanced diet for the children.
- The children will be learning to coexist and share with other children, thus giving them confidence and preparing them for later life.
- The employee can spend quality time with her children.
- The employee can give her undivided attention for her job knowing that her children are safe.

The female worker has to provide safe care for the children while the family is at work during the day. Being an industrial employee precludes her from paying for services of a crèche and she therefore has to look for the cheapest way of supervising her children, which is sometimes not of the best. The

mother, after a hard day's work, has to provide food, supervise homework, clean house, etc.

Knowing that her children are being cared for properly during the day would assist the well-being of the female worker whilst at work. Her peace of mind would then assist in production improving.

Mobile welfare officer

The female employee often needs to consult welfare officers on a number of occasions:

- Children abuse matters
- Child behaviour disorders
- Drug or alcohol abuse - herself or children.
- Maintenance and assistance.

This again entails a day's unpaid leave. The shortage of available welfare workers precludes timely attention to problems. The mother needs to be at work to earn money to provide for the family. The problems of the child who does not go to school, is taking drugs or drinking - to name a few - are allowed to continue as time is not available for the mother to attend to these problems.

The majority of companies belong to a group of companies. A welfare officer employed by the group could travel to the various companies and assist the female worker directly, on site, with her problems - without her having to take time off to attend to these matters. The female employee then has peace of mind and she is once again, a productive worker.

Rest-room facilities in change-room area

As we are all aware, male and female physical attributes differ in many ways. The female employee needs a rest room to rest for 15 minutes after taking medication, e.g. for dysmenorrhoea or headache, etc. She needs a small amount of time alone, not in a busy medical centre, or a day off sick, to overcome most female ailments.

Recognition of the female skills from which promotion and higher rates of pay will naturally follow

The female employee is usually a diligent worker with years of experience in her field. Although usually a member of a union, the female employee does not enjoy demonstrating and having this time deducted from her weekly salary. Paid overtime is gladly undertaken to increase her take-home pay packet.

The female employee must be more assertive in her endeavours to receive recognition for her industrial skills.

Although legislation has stated that there must be no gender equality discrimination in the workplace, it is going to take the efforts of all female employees to enforce the change. The fear of being labelled a troublemaker or of being targeted by a male counterpart must not dissuade the female employee from seeking advancement in her field. To help overcome this, the female employee should receive additional training on how best to approach management in order to satisfy her desire for advancement. Only then will she has the courage to act on her own behalf and climb out of the submissive role she has always occupied in a male-oriented environment.

Conclusion

Most of the needs described above read as 'pie in the sky' but demonstrate the real needs of the female worker.

The female employee must climb out of the hole dug for her over the years and in her feminine way start making employers aware that she is a willing, diligent employee who has special needs which, if they are addressed, would not only assist the company but also the country by increased productivity and profitability. She needs to have her skills recognised and be rewarded adequately for them, not only in monetary terms but also by way of advancement in the company.

Her advice is not usually heeded, be it on improving production, conditions of work, etc., since she is seen as only a *female employee*.

Only the female employee can stop this discrimination. Her male counterpart cannot help her; why should he? It would not be in his best interests to do so. She needs to have training to know how to change the age-old attitudes and have her needs realised. Companies who employ the female in industry must be made to realise that she is a major contributor to productivity in our country.

THE NATIONAL CENTRE FOR OCCUPATIONAL HEALTH (NCOH), DEPARTMENT OF HEALTH

History

Following a Committee of Inquiry into Pneumoconiosis and Tuberculosis in 1955 the Pneumoconiosis Research Unit (PRU) was formed in 1956 under the Council for Scientific and Industrial Research (CSIR). The NCOH has its origins in the PRU which was established to investigate mine workers' lung disease. The first Director of the PRU was Dr. A.J. Orenstein who in 1956 had a staff of some 25 persons.

With the formation of the Medical Research Council (MRC) and the need to investigate a broad range of occupational diseases, the PRU was expanded in 1971 to become the National Research Institute for Occupational Diseases (NRIOD) under the MRC. Further expansion of occupational health activities occurred in 1979 with the formation of the National Centre for Occupational Health (NCOH) under the then Department of Health and Welfare. The research work continued but the NCOH was given an additional task of assisting industry in defining and combatting their occupational health problems.

The NCOH Today

To better serve the nation in combatting occupational health problems the NCOH was restructured in 1996/97 following extensive consultation with numerous individuals, agencies and organisations. The Report of the Committee on Occupational Health (Abdullah Report 1996) formed the basis for the restructuring. Two consultants assisted in the process, Dr. J. Takala, Chief: Occupational Safety and Health, International Labour Organisation (ILO), Geneva, and Professor J. Myers, Head: Community Health, University of Cape Town.

The NCOH, Department of Health, now consists of three Directorates:

- Occupational Medicine and Epidemiology (Epidemiology and Surveillance; Occupational Medicine; and Immunology and Microbiology). Besides the research programmes and immunological laboratory services this Directorate provides clinical occupational medicine and contact dermatitis services and manages the programme Surveillance of Work-related and Occupational Respiratory Diseases in South Africa (SORDSA).

- Pathology (Pathology Examinations and Histopathology; Electron Microscopy; and Post Mortem Services). For the purposes of compensation under the Occupational Diseases in Mines and Works Act the Directorate performs autopsy examinations of the cardiorespiratory organs of deceased persons who have worked at controlled mines or works. It serves as a national centre of expertise in occupational pulmonary pathology.

- Occupational Hygiene and Toxicology (Technical Advisory Services; Analytical Services; Occupational Hygiene; and Toxicology and Biochemistry Research). The Sub-Directorate Technical Advisory Services includes the AJ Orenstein Library, ILO-CIS National Health and Safety Information Centre, and the NCOH Scientific Computer Network.

Key areas that have been strengthened and expanded in the restructuring of the NCOH are the Technical Advisory Services, Occupational Hygiene, and Epidemiology. The Analytical Services will be expanded in 1998 to strengthen the occupational hygiene and occupational medicine analytical capability. Three subsections are to be developed, dealing with Inorganic Analysis, Organic Analysis and Quality Assurance.

The NCOH has close links with a number of educational establishments. The first Diploma in Occupational Health (DOH) course for doctors was established by the NRIOD and has been run in conjunction with the University of the Witwatersrand since 1974. A course in occupational health for registered nurses was established in 1976. The NCOH has developed extensive international links to further its expertise. Close links were developed with the Union Internationale Contre le Cancer (UICC) in 1964 and later with the International Agency for Research on Cancer (IARC). In 1995 the NCOH was appointed by the ILO as the CIS-ILO National Health and Safety Information Centre for South Africa. In 1996 the NCOH signed a collaboration agreement with the National Institute for Occupational Safety and Health (NIOSH) in the USA. A collaboration agreement with the UK Health and Safety Laboratories (HSL) is also under preparation. The NCOH currently manages the WHO/South Africa Technical Cooperation Programme 1996-2003: Occupational Health and plans to become a WHO Collaborating Centre in the near future.

DEPARTMENT OF HEALTH

WHO/SA TECHNICAL COOPERATION PROGRAMME 1996-2003: OCCUPATIONAL HEALTH

This programme was authorised by the WHO and the Department of Health in the third quarter of 1996 to strengthen the capacity of the Government to develop and implement occupational health programmes at all levels. While the budget is modest (US$ 830,700 for 1998 - 1999) it is a very important programme for the country, funding a wide variety of activities to promote occupational health and safety (OHS). Under the OHS education and training component in just fifteen months over 1000 persons from around the country have been sponsored on short courses dealing with OHS. In July 1997 the programme sponsored the start up of a one year distance learning course in Industrial Ergonomics at Pretoria University. Support for courses leading to professional qualifications in occupational hygiene have been sponsored and also committee work to develop a four year speciality in occupational medicine.

The programme for 1998-1999 will provide support for the following:

- ❑ OHS education and training for OHS practitioners
- ❑ OHS exchange programmes and study tours for national and provincial OHS staff
- ❑ Work to develop a computerised national OHS information network
- ❑ Surveillance of work-related and occupational respiratory diseases (SORDSA)
- ❑ Occupational health research
- ❑ Development of OHS training materials for district primary level practitioners
- ❑ Occupational health service delivery programmes at the district level
- ❑ Monitoring and evaluation of OHS programmes
- ❑ National workshop on OHS for inspectorate and trade union personnel
- ❑ National workshops on OHS policy and strategy
- ❑ Stakeholders workshop on ex-miners health
- ❑ Promotion of OHS programmes
- ❑ Support for work-site HIV/AIDS programmes
- ❑ Southern African cooperation on OHS

Under the OHS training programme, a wide variety of courses are being funded including specialised OHS training for National Government and Provincial staff. The most extensive occupational health library in the country, the A.J. Orenstein Library at the NCOH is being computerised. Its library holdings, in particular electronic data are being updated and expanded to aid technical information dissemination. Access to the NCOH electronic information resources will be provided to the provincial occupational health units when established and to other key Departments dealing with OHS.

A series of articles on useful contact details is being presented in the Journal "Occupational Health Southern Africa". The first article featured NGOs and Occupational Health Clinics, the second was on societies and associations involved in OHS and the third provided information on OHS and related courses available from Universities and Technikons. Further articles are planned to provide further information on other OHS course providers and on relevant national government and provincial offices dealing with OHS. This series of articles has been particularly fruitful in not only providing useful information but also in developing the NCOH links with important role players across the country.

For further information on the NCOH or the WHO/SA Technical Cooperation Programme 1996-2003: Occupational Health contact the NCOH Communication Officers - Nelson Sesoko or Teresa Whitford at NCOH, Department of Health, PO Box 4788, Johannesburg 2000
Tel: (011) 720 5734
Fax: (011) 720 6608
E-mail: info@ncoh.pwv.gov.za

Sponsored by WHO/SA Technical Cooperation programme

David William Stanton

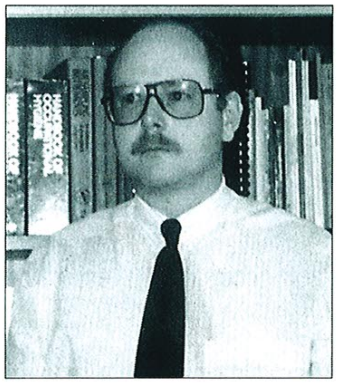
Dr Stanton heads the Occupational Hygiene and Toxicology Directorate at the National Centre for Occupational Health (NCOH), Department of Health, Johannesburg. The Directorate consists of the following components: Occupational Hygiene; Analytical Services; Technical Advisory Services; and Toxicology and Biochemistry Research. Within the Information component is the CIS-ILO National Health and Safety Information Centre for South Africa, the AJ Orenstein Library and the NCOH Scientific Computer Network. Dr Stanton is the principal author and Programme Manager for the WHO/South Africa Technical Cooperation Programme 1996-2003: Occupational Health (budget approximately 1.7 million US$ for 1996-1999). He is the South African Coordinator for the British Examining Board in Occupational Hygiene (BEBOH), a BEBOH Oral Examiner for South Africa, a Council member of the Occupational Hygiene Association of Southern Africa (OHASA), a member of the Examination Board for the Institute of Occupational Hygienists of Southern Africa (IOHSA), an Honorary Lecturer/Examiner on the University of the Witwatersrand/NCOH Diploma in Occupational Health (DOH) course for doctors and nurses and a lecturer on the University of Cape Town DOH course. Dr Stanton is the OHASA representative on the Council of the Association of Societies for Occupational, Safety and Health (ASOSH).

Dr Stanton was born in 1947 in the city of Chester, UK (the same year that SASOM was formed). He started full-time work at the age of sixteen when he joined a large steelworks in North Wales as a laboratory trainee. His early experience in EHS was obtained at the steelworks. Through part-time study he became a Graduate of the Royal Institute of Chemistry and a Chartered Chemist. He left the steelworks to study for an MSc in occupational hygiene at London University, having been awarded a Gallaher Scholarship by Professor RSF Schilling. Dr Stanton then obtained his PhD on airborne particulate sampling at the Environmental Engineering Department, University of Strathclyde, Glasgow. While at the University he established an occupational hygiene consultancy that served the west of Scotland. He left Scotland to become the Industrial Hygiene Engineer at the industrial city of Madinat Al-Jubail Al-Sinaiyah, Saudi Arabia. This was the largest industrial complex of its kind ever built and provided excellent experience in multi-site responsibility. Following this contract Dr Stanton worked at the NCOH where he was responsible for all the occupational hygiene field work. Dr Stanton left the NCOH to establish and coordinate occupational hygiene activities in Western Europe for Texaco, a major multinational oil and chemical company. This job involved work in most European countries and the USA. In 1990 the Texaco European EHS group was given Middle East and West African responsibility which led to OHS audit work in West Africa. He served for several years in Den Haag and Brussels on the CONCAWE (European oil companies environment, health and safety group) Health Management Group, Industrial Hygiene Subgroup, and on several special task forces. He also represented Texaco at the Exploration and Production Forum (E&P Forum), London and the American Chamber of Commerce, Brussels.

Dr Stanton returned to South Africa at the request of Professor JCA Davies, to head Occupational Hygiene and Toxicology at the NCOH. Dr Stanton first served a one-year contract as a Senior Consultant for Arthur D. Little in Saudi Arabia where he was responsible for establishing the occupational health component for the downstream arm of the Saudi oil industry. He recruited the occupational medicine and occupational hygiene staff for the project in Houston, London and the Middle East.

Dr Stanton is a UK Registered Professional Occupational Hygienist, a Fellow of the Institute of Occupational Hygienists (FIOH), a Fellow of the Institution of Occupational Safety and Health (FIOSH) and a Fellow of the Royal Society of Chemistry (FRSC). He holds the BEBOH Diploma of Professional Competence in Comprehensive Practice (Dip Occ Hyg); is a member of occupational hygiene societies in RSA, UK, and USA; and is a founder and former Board member of the Belgian Society of Occupational Hygiene (BSOH).

Dr Stanton is particularly keen to see occupational hygiene flourish in South Africa to address the poor working conditions that are prevalent in the country. In two years working with colleagues he has helped to establish in South Africa the BEBOH professional qualifications in occupational hygiene, has contributed to the restructuring and enhancement of the NCOH, has initiated a major OHS programme for the country, and has hosted in Johannesburg a meeting on OHS education and training for the Southern African Development Community (SADC) Region. In 1997 he was awarded the 1996 OHASA Certificate of Outstanding Achievement for his contribution to the occupational health discipline in Southern Africa.



University of Michigan / Fogarty International Centre Grant

To support training and research in Environmental and Occupational Health in South Africa

Applications are hereby invited for bursary supported post-graduate study in Environment or Occupational Health at the University of Michigan USA.

The University of Michigan offers Masters of Science (MS), Master of Public Health (MPH), and Doctorates (PhD or Dr PH) in Environmental Health Sciences (including Air Pollution, Water Quality, Management of Hazardous Wastes, Risk Assessment), Occupational Medicine, Industrial Hygiene, Occupational Health Nursing Occupational Safety Engineering, Toxicology, and Environmental and Occupational Epidemiology. Masters Degrees are usually completed in 3 to 4 terms of study over a 1½ to 2 year period. Persons pursuing a PhD typically complete at least 2 years of course-work before turning to dissertation work requiring 2 to 3 additional years of research. Master theses and PhD dissertations are expected to be based on research conducted in South Africa. Supervision of students conducting research projects will be shared between US and South African advisors.

This grant will provide 1½ to 2 years of support per student, including a stipend, health insurance, tuition and transatlantic airfare. Funding is from grant in the second year of a 5 year period. A minimum of 1 additional doctoral student and 2 masters students will be trained. Also, 3 additional South African citizen applicants will be selected for focused research training over 3-month periods.

Eligibility

Applicants must be South African citizens and must hold a bachelors degree.

Closing dates

Applications must be submitted to the University of Michigan and to the National Centre for Occupational Health (NCOH). Strong preference will be given to complete applications received no later than 17 April 1998. However, applications after this date will be considered. If awarded, the earliest possible date for commencing studies will be September 1998. Applicants can expect notification of status no later than 30 June 1998.

Application forms and additional information about the programme are available from Megan McMaster at the NCOH.

Tel: (011) 720-5734 ext 2048 or fax: 720-6608. E-mail: mmcmastr@ncoh.pww.gov.za Address: NCOH, PO Box 4788, Johannesburg 2000.

To the editor

For many years, there has been much discussion and controversy regarding the merits of Occupational Health and Primary Health care in an Occupational Health Service.

Having been involved in Occupational Health from diverse perspectives for more than twenty years, it has been both frustrating and rewarding.

Many companies feel that once the biological monitoring has been completed for the year, e.g. spirometry, audiograms, chest X-rays, blood and urine samples – that is the end of the commitment. The records reflect that the screening is complete, but so often we find that the follow-up on results is inadequate – neglecting the human factor.

It is well and good to have a controlled environment, but people need to be fit and well to work in this environment – neither of which applies in many industries.

If you have a healthy worker employed in a situation which can be hazardous to health, he will perform and resist exposure better than an ailing, sickly employee.

From the experience of starting new clinics where no occupational health or primary health of any kind has been practised, our primary function has always been to improve the general health of the employees by medical surveillance and follow-up treatments of ailments – from hypertension and diabetes mellitus control to daily sick parade and tuberculosis treatment.

The above enables us to follow up on ill health by checking for an environmental exposure and through good hygiene standards prevent the recurrence.

Occupational health and primary health present a holistic concept and concern all players in the occupational health field

Shirley Hall

Occupational Health Services cc, Johannesburg

Guidelines for authors

Contributions

Contributions are always welcome. Opinions, short reports, letters and articles should be sent to: The Production Editor, Occupational Health Southern Africa, PO Box 2433, Randburg, 2125.

Authors are requested to inform the Editor about submissions to other journals and are required to transfer copyright of their articles to the Journal when accepted for publication.

Instructions for Authors

Articles may be submitted in the following categories:

Original and Review Articles: Should follow the format of : introduction, methodology, results, discussion and references. Less than 2 500 words.

Original and review articles must include a short abstract of less than 150 words and will be refereed. Manuscripts will be submitted to referees as confidential without naming the author, and referees shall remain anonymous.

Opinions or short reports: These are short reports, less than 1000 words.

Case Studies: Less than 1000 words

Letters to the Editor: Less than 400 words.

Authors are solely responsible for the factual accuracy of their work and for ensuring their work does not infringe copyright.

Preparation of Manuscripts

Manuscripts should be typed double spaced, using only one side of the paper. Number pages consecutively and leave wide margins. A separate title page should contain the title, the author's full names, and details relevant to correspondence. References should also be listed on a separate page. If possible, a word count should be included and diskettes are welcomed and will be returned.

Authors should submit one original article and two copies of each manuscript. Scientific measurements should be expressed in S.I. units. Abbreviations and acronyms should only be used if absolutely necessary and must be defined on first use.

Illustrations, tables and graphs should be submitted on separate sheets as black and white prints. They should be clearly identified, tables should carry Roman numerals, I, II, III etc. and illustrations Arabic numerals 1, 2, 3 etc. X-ray films should not be forwarded, but glossy prints submitted.

References should be set out in the Vancouver style and only approved abbreviations of journal titles should be used.

Journal references, e.g.

1. Zwarenstein M, Barron P, Tollman S, *et al.* Primary Health Care Depends on the District Health System. S Afr Med J 1993; 83:558.

Book references, e.g.

1. Thompson L.A history of South Africa. Newhaven and London: Yale University Press, 1990.

They should be inserted in the text as superscript numbers and listed at the end of the article in numerical order (not alphabetically). The accuracy of references is the author's responsibility. 'Personal communication' and 'unpublished observations' may be cited in the text, but not in the reference list.

Alterations to proofs must be limited to misprints or factual errors. Major alterations or new material cannot be accepted. Proofs not returned within two weeks will be regarded as approved.

Reprints are available on request from the publisher for a nominal fee. Any queries should be sent to the Production Editor.

Calendar of Congresses and Conferences

Date	Congress	Venue	Contact
1998			
April			
22 - 24	6th International Symposium Epidemiology and occupational risks	Österreich, Austria	The Secretariat, Allgemeine Unfallversicherungsansalt (AUVA), Büro Für internationale Beziehungen und Kongresswesen, Adalbert-Sifter-Strasse 65, A-1200 Wien Tel:+43-1-33111-537, +43-1-33111-527 Fax: +43-316-8049-54
24 - 1 May	American Occupational Health Conference	Boston, MA, USA	Kitty Pijanowski, MSEd, Assistant Director of Education, ACOEM, 55 West Seegers Road, Arlington Heights, IL 60005, USA
May			
13 - 15	International convention in health, safety and environmental control	World Trade Centre, Kempton Park, Johannesburg	NOSA, PO Box 26434, Arcadia, 0007 Tel: (012) 21-7736 Fax: (012) 323-2436
14 - 16	International Conference on Women's Health: Occupation, Cancer and Reproduction. New Perspectives in Occupational Epidemiology	Reykjavik, Iceland	Travel and Congress Bureau, Feroaskrifstofa Iceland Tourist Bureau, ITB-Congrex, Skógarhlio 18, 101 Reykjavik, Iceland. Tel: 354 365 3300 Fax: 354 562 5895 email: congrex@itb.is
22 23	MMOA First Congress and 76th Annual General Meeting	Sun City, South Africa	Dr EW Louw, President MMOA, Selbypark Medical Centre, PO Box 62171, Marshalltown, 2107 Tel:(011) 493-4300 (W), (011) 888-5683 (H) Fax: (011) 493-2320
23 - 25	Occupational Health in the third millennium	Moscow, Russia	The Secretariat, RAMS Institute of Occupational Health, 31, Prospect Budennogo, 105275, Moscow, Russia Tel: +7 095 365 02 09 Fax: + 7 095 366 05 83 e-mail: Izemerov@orc.ru.
28 - 3 July	12th World AIDS Conference	Geneva, Switzerland	Anette Lifors, Conference Manager, Congrex (Sweden) AB, PO Box 5619 11486 Stockholm, Sweden Tel: +46 8 612 6900 Fax: 46 8 612 6292 e-mail: anette@congrex.se
August			
24 - 26	First International ICOH Conference on Psychosocial Factors at Work	Copenhagen, Denmark	Ole Teller, The Danish Working Environment Fund, Vermundsgade 38, DK-2100 Copenhagen, Denmark Tel: +45 39 16 05 00 Fax: +45 39 16 05 80 e-mail: AMFUDD@inet.uni-c.DK
September			
8 - 11	Medichem 1998: New Horizons - Old concerns	Cape Town, South Africa	Medichem 1998, Occupational & Environmental Health in the Chemical Industry, PO Box 781811, 2146, Sandton, South Africa. Tel: 27 11 780 3600 Fax: 27 11 884 6932 email: Medichem@Sandton.Senchem.co.za
9 - 11	Global Ergonomics Conference	Cape Town, South Africa	Deborah McTeer, Postgraduate Conference Division, University of Cape Town Medical School, Observatory 7925, South Africa Tel: +27 21 406 6348 Fax: +27 21 448-6263 email: deborah@medicine.uct.ac.za
23 - 25	The 4th International Symposium on Biological Monitoring in Occupational Health	Seoul, Korea	Se-Hoon Lee, MD, Secretary General, Biological Monitoring, c/o Dept. of Preventive Medicine College of Medicine, Catholic University of Korea 505 Banpodong, Sochoku, Seoul 137-701, Korea Tel: +82 2 590 1236 Fax: +82 2 532 3820
October			
6 - 8	The 2nd Emergency Services Exhibition	Kyalami, Johannesburg	Debbie Tunnicliff Tel: (011) 466-2299 Fax: (011) 466-1318

Mobile Health

The Mobile Health concept was initiated in April 1995, with an explicit purpose of providing dental/oral health to people not having access to this essential service.

In a typical case the clinic visits a site for a full day. Because it is self-contained, the mobile unit does not have to be linked to a power source or a water supply. The Mobile Health mobile dental clinic can provide the whole spectrum of dental treatment on site. The clinic's equipment matches the best found in stationary surgeries and ranges from panellipse X-ray machines, to amalgamators and autoclave sterilisers.

Mobile Health has acquired the services of Mobile Eye Clinics. The type and range of treatment provided within the clinics are extensive and can be handled to suit each individual company's needs. Treatment provided includes eye tests (glaucoma tests and cataract detection tests), contact lenses, safety glasses, spectacles, (with a wide range of modern frames from which to choose) and repairs. The optometrists offer an emergency service to all.

The Mobile Eye Clinics are totally self-sufficient and contain all the equipment and instruments found in a stationary practice (e.g. keratometor, phoropter and slit lamp, to mention a few). Our Mobile Eye Clinics have their own laboratory, which speeds up the process from test to finished product.

Employees benefit from the convenience of having Mobile Health's dental and eye clinics "on their doorstep", and employers save on lost man hours and usually see an improvement in worker morale.

For further information tel (011) 818-5474/5 or 083 252-0870.

Innovative surgical supplies

Medsurg offers a wide range of innovative equipment to the Occupational Health sector, with efficiency and ease of use being the primary consideration. The "VIVALINK" AED provides any trained First Responder to administer defibrillation confidently as the machine takes over the responsibility of analysing the patient's condition and administering a series of shocks only when necessary.

The simple-to-use "OXYLATOR" EM-100 takes the variable element out of manual resuscitation. Delivering 40 L/m of 100% oxygen at an airway pressure pre-determined by the rescuer. This is resuscitation at its most efficient.

CPR is only as effective as the person applying it. Imagine having a single box tell you the rate and depth of compression while treating a patient and not only during training! This is what the unique "CPR-PLUS" does, giving you maximum efficiency during the actual rescue. In fact the "CPR-PLUS" can turn anyone into an effective CPR rescuer with the minimum of training.

Try the "Q-TECK" rolling tourniquet when you need to insert a needle into a collapsed vein. Within seconds the vein fills with blood and makes its appearance. Another life-saving product from MEDSURG.

"Move to mobility" programme donates its 17th guide dog !

The 3M™ Tegaderm "Move to mobility" programme has been providing wheelchair and guide dogs to the less fortunate for years now, mostly due to the dedicated efforts of healthcare professionals. One of the most asked questions is how shoving used Tegaderm envelopes into a collection bag actually helps to achieve the goal. Well, here's the answer: 3M donates towards the "Move to Mobility" programme for each envelope collected so it's important not to throw these envelopes away.

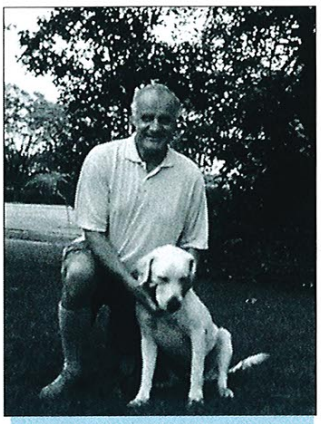
Not only do 3M put their money where their mouth is, they put themselves on the line too. In December 1995, 3M's Harry Thibedi and Kobie van Niekerk, a blind lady, walked from Port Elizabeth to Cape Town in 15 days to raise money for the disabled - that's 750 kilometres! Fortunately there were plenty of 3M products to help them with aching muscles and stinging blisters.

Though their brave efforts, Kobie and Harry raised sufficient funds to donate two wheelchairs to the physically disabled and make a substantial donation to SA Guide Dogs. Way to go, Kobie and Harry!~

3M's " Move to Mobility" campaign has not only come a long way but with this kind of inspiration to draw from, it seems destined to just keep on rolling.

A new chapter in the ongoing success story of the 3M "Move to Mobility" programme was completed recently at premises of the SA Guide Dog Association for the Blind in Bryanston. That was when Mr Andries Greyling from Bloemfontein proudly took transfer of his new best friend, "Bomber".

Andries may have been blind since birth, but that hasn't stopped him from putting his other senses to work most effectively! His heightened sense of hearing comes in extremely useful in his job at the SABC, where he has worked for six and a half years in the multiple capacity of clerical worker, switchboard operator and studio engineer. His trained ear has not only helped to qualify him as a piano tuner but Andries is also actively involved in a partnership running a music shop in Bloemfontein. This achiever still has time for hobbies such as rowing and windsurfing, in addition to being a qualified radio ham.



A thrilled Mr Andries Greyling with his new guide dog "Bomber".

Such a demanding lifestyle demands a lot from a guide dog, and "Bomber", a two-year-old Labrador, has a lot to offer. Each dog costs R7500 to train, but it is impossible to put a price on the breeding, selection and love that goes into preparing these "seeing eyes" for their working lives. "Bomber" is Andries Greyling's second guide dog.

The 3M Tegaderm "Move to Mobility" programme would not be possible without the nurses and others in the nursing profession who regularly place Tegaderm wrappers in the collection bags provided. Thanks once again for helping to make a difference, and keep on collecting those wrappers! In the meantime watch out for our new and exciting Tegaderm competition to be launched soon!

For further information please contact Adeline Sokolich, 3M Health Care, P O Box 926, Isando, 1600, tel (011) 922-2086.

You and Urinalysis

David Broomfield, Product Manager for Boehringer Mannheim's Point of Care Diagnostic Division, congratulates Sister Penny Orton for being the winner of the Combur "You and Urinalysis" Education Series competition. Sr Orton has generously donated her prize, a 51 cm colour TV, to the clinic at the SA Breweries Krugersdorp branch, where she works as an Occupational Health Sister. Congratulations!

Littmann stethoscopes - routine care and maintenance

Because Littmann stethoscopes are renowned for their quality and performance the purchase of one should be considered a wise investment. Healthcare workers who routinely use a stethoscope in their practice will find it to be one of the most frequently used pieces of equipment in their daily routines. With this in mind, here are some useful cleaning and maintenance suggestions from 3M™ for the Littmann stethoscope owner.

Cleaning

Never submerse the stethoscope in any solution. All components can be wiped down using a soft cloth dampened with a solution of mild soapy water. Between patients, the chestpiece and diaphragm may be cleaned with a soapy solution. Wipe eartips as well, especially when there is more than one user.

The stethoscope can be gas sterilised when required when using the cold cycle in a 3M Steri-Vac™ Gas steriliser followed by aeration for 36 hours in a 3M Steri-Vac Aeration Cabinet.

Maintenance

Skin contact will cause the stethoscope tubing to stiffen eventually into its regularly worn shape due to fatty acids in body oils. This can be prevented by wearing the stethoscope under a collar and routine treatment with vinyl protectant. Exposing the stethoscope to extremes in temperature is not recommended.

If often carried in a pocket, the stethoscope should be regularly checked for lint accumulation or any other objects that could affect sound transmission. Check tubing regularly for any holes or cracks that may have developed.

For further information please contact Adeline Sokolich, 3M Health Care, P O Box 926, Isando, 1600, tel (011) 922-2086.

Mobile Occupational Health

IndustroMed has experienced phenomenal growth in 1997, not only in those areas where our advertising has been pitched like mobile audiometry and total on-site occupational health services, but also in the field of consulting.

Particular interest has come from the long-distance transport industry as well as the heavy lifting services. Open cast mining from both within and outside the country has made excessive use the service.

The degree of earnestness with which worker-health is regarded differs vastly from group to group, organisation to organisation and from company to company and even within various sectors of the same company. Generally however, the importance attached to occupational health is on the wax and the degree of window-dressing is decreasing.

The bugbear of mobile audiometry remains the inhospitable hours of work in order to comply with legal restrictions, while the vast distances covered by the mobile units is another variable with which to contend.

Mainly because of the above-mentioned factors, franchising the service has become a distinct opinion, and the first franchise units will be operational in 1998.

Enquiries regarding this matter will be attended to by Neill Hattingh, (011) 432-3578.

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How to get your company into this directory?

This directory will appear on the last page of every issue of Occupational Health Southern Africa.
To have your entry included call Pru Baker at Cannon Medical Media (Pty) Ltd.
Tel: (011) 455-3498 or (011) 791-2615/6/7.

Shake Hands With One Of Your Workers

Stockhausen Skin Protection Programme. Safeguards workers skin in the workplace.

In industry and in many workplaces the human skin particularly the hands are subject to contact with various kinds of harmful substances and hazards.

This has led to a continual increase in occupational skin disease – in fact industrial dermatitis constitutes over 50% of all reported occupational accidents in South Africa.

At a time when there is a shortage of skilled people, every employer should be automatically involved in safeguarding workers from skin disease.

Unfortunately there is no universal skin protection cream which works against all harmful substances – that's where Stockhausen comes in.

Stockhausen are specialists in industrial skin protection and non aggressive skin cleaning – and their 3 Point Programme is designed to prevent skin disease at work.

The programme which complies with and meets the protection requirements of the OHSA act includes:

- **Special Skin Protection**
- **Non Aggressive Skin Cleaning**
- **General Skin Care**

For more information on how Stockhausen's 3 Point Programme can be put to practice at your company contact a skin protection advisor at:

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