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Occupational HEALTH
SOUTHERN AFRICA

Vol 6 No 6 November/December 2000

ISSN 1024-6274

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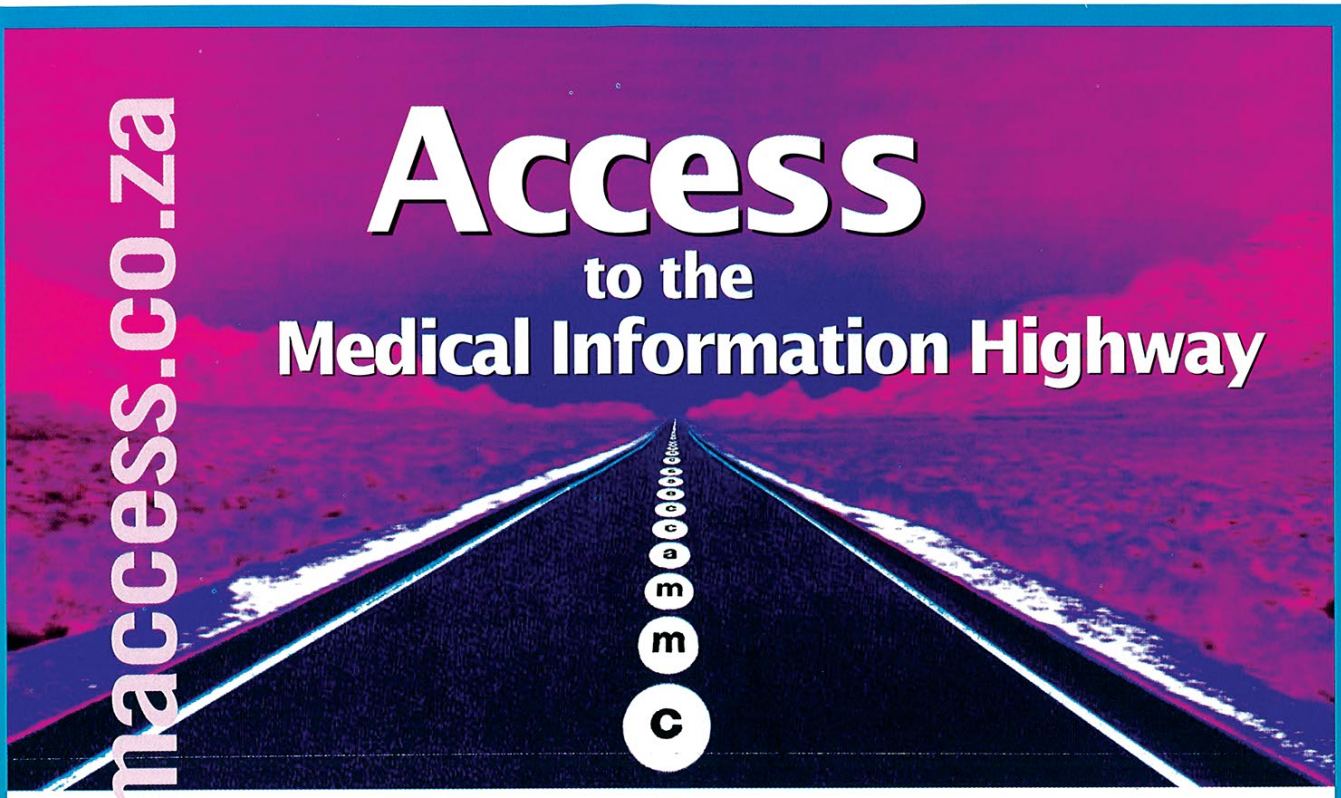

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November/December 2000
Volume 6 No 6

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

Published by
Cannon Medical Media (Pty) Ltd
185 Smit Street, Fairland
PO Box 1307, Ferndale 2160 South Africa
Tel (011) 476-5215
Fax (011) 476-5294
e-mail: jeni@cmmaccess.co.za
Website: www.cmmaccess.co.za

CPD Answer form
Printed and scanned by MINDS

Subscriptions
Enquiries: Louise Noble
R90.00 per annum (incl VAT)
R100.00 per annum (Africa)
$36.00 per annum (overseas subscriptions)
Tel (011) 476-5215

A CANNON MEDICAL MEDIA PUBLICATION

ISSN 1024-6274

Occupational HEALTH SOUTHERN AFRICA

CPD accreditation number: A016/87/6/99

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Auditing, targets and benchmarking

There is a great deal being discussed and written internationally about auditing, targets and benchmarking. This is now also seeing the light of day in SA and especially in the multinational companies. A new SASOM scientific committee "Benchmarking in Occupational Health" was launched in May this year. The major objective of all these initiatives is to reduce injuries, occupational diseases and environmental incidents and if this objective is achieved, then the exercise has been worthwhile. There are critics who believe this is not the case and writing out procedures, measuring the statistics in numerous different ways etc has not resulted in improvements, but what is important is the total commitment of the management team, employees and their representatives.

Unfortunately targets are sometimes linked to job promotions, evaluations and bonuses with the result that safety and health staff may be coerced into being less than totally honest, by keeping employees at work in a "light duty capacity" when they should be booked off and by even not reporting incidents. In these situations, safety and health care workers should consult with their peers or professional societies.

In the auditing field, there are a number of systems being bandied about, namely the International Standards Organisation (ISO), the Occupational Health and Safety Assessment Specification (OHSAS), the British Standards Institute (BSI), the International Labour Organisation (ILO) etc. In SA at present, many companies are already ISO 9000 accredited and a significant proportion of these are working towards the environmental ISO 14000 accreditation.

It makes good business sense for an ISO Health and Safety system to be added on and OHSAS 18000 (later ISO 18000) has already been developed. However, this system seems to be out of favour in SA at present which is unfortunate for companies as it makes sense to rationalise all these systems into a single SHEQ (Safety, Health, Environment and Quality) system. The rationalisation would result in a single basic system which would reduce manpower, paperwork and cost and would be more likely to succeed in the objectives.

One of the other current problems in SA is that there is difficulty in companies being able to benchmark against other companies or with similar companies overseas. The reason is that there is neither a national nor international standardised system for reporting. The frequency, severity and fatality rates are defined differently by the Department of Mines, Compensation Commissioner, and organisations such as NOSA. There is a real need for the relevant government departments as well as private sector organisations to get together and thrash out a unified system.

As far as auditing, targets and benchmarking goes, there is still a lot of water to flow under the bridge, so stay tuned in.

HIV and AIDS

The final edition of each year features HIV and AIDS due to world AIDS day on 1 December. Our knowledge of the virus and the syndrome it causes has grown exponentially. Sadly much of this does not help us as we are a developing country without the resources or manpower to prescribe antiviral medication and so on. What is even sadder is that there has been so much wasted energy and effort in South Africa on issues that are irrelevant and had this energy and effort been directed correctly to preventative aspects, we could have had a success story as has been seen in Thailand. The epidemic is already advanced in this country and while education remains vital, we need to spend more effort now in treating those that are afflicted, developing home-based care, hospices, arrangements for orphans, and the like.

Ethics

London has discussed ethics and conflicts in occupational health in a two-part article; the second part to be published in the next edition. Ethics remains an important backbone of medical practice, but occupational health is an unique discipline in that the health care worker serves two "masters", the patient or employee and employer. Unfortunately there is always the potential for conflict as a result and thus health care workers in the discipline need to consider ethical consequences at all times and be seen to be impartial.

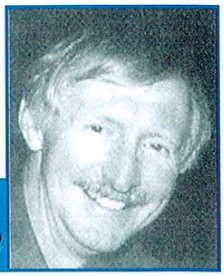
Resignation from the Journal

This is my last edition as editor and it has been a privilege to serve the members of the three societies whose official journal it is. As with any venture, there have been lows and highlights, but I do believe the journal is now well established and in my discussions with members of the societies, the vast majority enjoy reading it. There remain many challenges in the future and I am sure my successor Dr Fiona Robinson will tackle these effectively and enthusiastically.

One of my disappointments is that there is a wealth of good work and research being performed in SA, but much of this is published overseas and those who actually practice occupational health at the coal face remain unaware of most of it.

On the positive side, I believe the journal has published many article of a high standard and that it has fulfilled its primary functions of disseminating relevant knowledge and educating the readers.

I wish to thank the societies, the staff at Cannon Medical Media and all those who have supported me, including my wife Pru. I am confident the journal will go from strength to strength and I shall continue to enjoy reading each edition.



Mike Baker
HONORARY EDITOR

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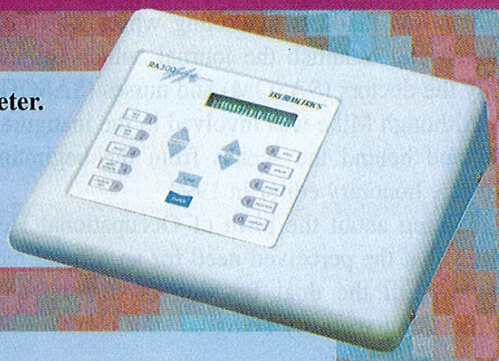

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Goodbye - but not farewell

It's goodbye - but not farewell - to Mike and Pru Baker, whose vitality and passion for this journal have been the driving force behind its publication for the past six years.

Pru was the first marketing whizz who toiled tirelessly to launch and establish the journal, which originally represented only the doctors (SASOM) and nurses (SASOHN).

Although Mike was involved in the inauguration of the journal and behind the scenes from the beginning, he officially became honorary editor in 1998.

Talking about the birth of Occupational Health SA, Mikes states that the perceived need for an official mouthpiece which could fulfil the dual function of disseminating information, while simultaneously being an educational vehicle, was among the original goals.

"After four years of publication, it was felt that occupational hygiene fitted well into our profile - which is why they came on board," Mike explains.

The production and publication was originally handled by Delinds Publishers and taken over by Cannon Medical Media in March 1996.

"When we started we knew nothing about the endeavour which we had embarked upon," Mike and Pru smile in agreement, "and there have been tough times and teething problems." No doubt they have reason to look at their handiwork with pride today.

Mike tells of many midnight and early morning disturbances with faxes being sent through from advertising agencies. Pru explains that, starting from scratch, she spent her days on the phone building up a database while many a candle burnt past the midnight hour. She was not alone - Mike worked tirelessly over the editorial - he cites his role as editor as a real feat because, he explains, English was his worst subject at school!

Both Mike and Pru describe this project as having been hard work, but extremely gratifying.

"Looking back to our inauspicious, small beginning, we are delighted to have seen the growth, the increased involvement of our readers, and the strides we have made on the editorial side," Mike says.

One of the major highlights was the achievement of CPD accreditation some 18 months ago. Mike does say that he is hoping for closer relations with the government and mining industry in future.

Thankfully Mike, while handing over the reins to incoming editor Fiona Robinson, will not be deserting us entirely but will be watching from the wings for some time to come.

The readers, editorial board and Cannon Medical Media would like to thank him for his tireless efforts and input into making Occupational Health SA the success it is today.

It is indeed goodbye, and NOT farewell.

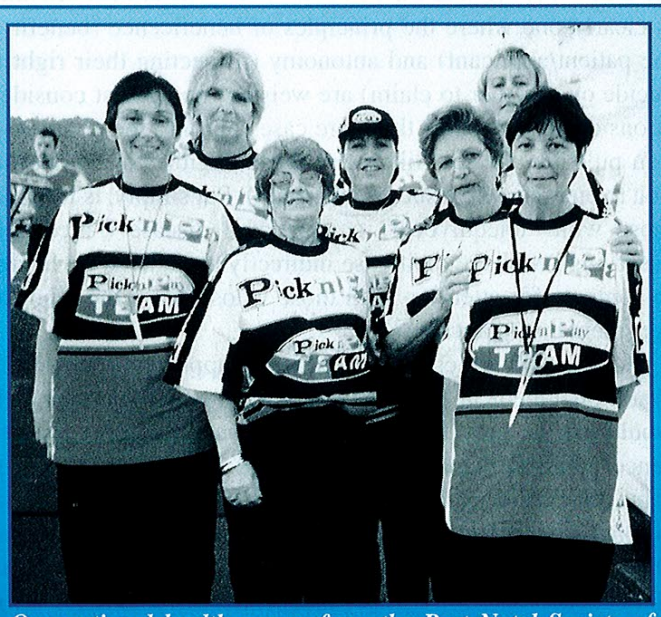
First for Western Cape

The Western Cape made a concerted effort to promote awareness of occupational health and safety during July this year.

Many businesses had special programmes to make management and employees aware of specific hazards, work safety and relevant legislation.

The Occupational Health Practitioners of the Cape West Coast held a successful Expo. One of its goals were achieved by reaching smaller companies.

Seen at the Expo (from left): Mr J Thiart, Mr C Timlin, Sr A van Heerden, Mr Nackerdine, Sr J Smith, Dr E Apies, Sr R Talmakkies.



Occupational health nurses from the Port Natal Society of Occupational Health Nurses ably assisted during the Comrades marathon -proving that they are people with many talents and helpful to boot! They are Back (from left): E Stupart, K Michell and G Hinds. Front (from left): R Mouton, M Oellerman, A Parkinson and E Arpin.

Appointment

Alan Dodds has been appointed operations manager of International Business Development for NOSA.

A word of thanks

We would like to thank our peer reviewers who have supported us during this year by giving of their time and expert input into reviewing our published articles. They are:
Arthur Begley; Chris Snyman; Dee Boorman; Frank Fox; Jenny Acutt; Jim Murphy;Leon Harmse; Louwna Pretorius; Neil White; Piet Marais; Rodney Ehrlich; Sue McIntyre; Tony Davidson

Careers in occupational hygiene

The University of the Witwatersrand offers two occupational hygiene courses: a diploma in Public Health as well as a Masters course. Both courses are run in association with the National Centre for Occupational Health (NCOH).

Students who complete the courses will be able to launch into a career in occupational hygiene in both the public and private sectors.

Both courses are part-time and a combination of contact and distance learning offered in three parts, each part lasting a year.

Students who complete part one and two are awarded the diploma and on completion of the third year, which consists of an applied research project, the Master of Public Health qualification.

More information can be obtained from Prof David Rees from the Faculty of Health Sciences on (011) 725-1589, fax (011) 720-6608 or Vali Yousefi at the NCOH,
Tel (011) 720-0209,
Fax (011) 720-6608.

LETTERS

The Editor

The recent, much publicised opinions of the President on the subject of HIV/AIDS, have caused much dismay in the country, particularly among those of us who are actively involved in the fight to manage the disease and prevent its further spread. His views, at times, seem to be in direct conflict with conventional knowledge and thinking and are causing a good deal of confusion. However, the President is neither unintelligent, nor poorly advised (we hope), and I believe that the "campaign" may have structure and well-devised intent.

The issue of the provision of antiretroviral drugs to pregnant women who are HIV positive, goes much deeper than just medical debate, but right to the core of the Constitution and the rights to life of the unborn child, which are not recognised in the same way as post-natal humans. I understand that there are similarities in this area with the American Constitution, and, as a result, abortion is legal in both our countries. Should antiretroviral drugs be made available to pregnant women with HIV, "to protect their unborn children", I foresee a barrage of demands from current HIV sufferers to be treated in the same way, and what would be a relatively minor budget (Nevirapine at R30 per shot) would escalate into something completely unaffordable. However, should the issue be taken to the Constitutional Court after the setting of a Pregnancy Precedent, I cannot see the Government winning.

All such issues return to the health funding reality that "South Africa cannot afford HIV" let alone contemplate provision of expensive medications on a grand scale. But how does the government communicate the harshness of this to South Africans without alienating them and creating the impression that they are being abandoned to their fate?

It is quite possible, that, by 2004, 30 to 40% of the voting public might be HIV positive, and it is my opinion that the ANC believes that, should they handle this issue badly, it might cost them an election, or at best a sizeable chunk of their political power. We are all well aware of the potential for some political parties to make wild promises to the electorate, in the full knowledge that they will never have to make good on those promises, but will do anything to get cheap votes.

So, faced with this political dilemma, what have the ANC done - what most politicians would do - create confusion, in the form of an "information smoke screen", with statements such as:

HIV does not cause AIDS

AZT is bad for you

AZT will harm your baby

AIDS is caused by poverty etc. etc.

I can understand the politics, but what irks is the short-sightedness of it, as, without a doubt, the President and his Health Minister are succeeding only in retarding the effects of hundreds of countrywide AIDS prevention initiatives, many of them by their own departments, and in so doing are likely to cost thousands of lives. I hope they think it is worth it.

Yours,

Dr R D McAulay **(MBChB DOH)**

PO Box 1727, Roodepoort 1723

The Editor

Prof David Rees makes a strong case for doctors separating their role as clinical assessors from that of arbiters of eligibility for compensation. He argues that the clinician's role should be to file a report based on his or her best knowledge and skills, which the social insurance system, however constituted, will use to come to decisions on eligibility and extent of compensation. From an ethical perspective, such an approach promotes beneficence and maximises patient autonomy.

In an ideal world, his arguments would be entirely correct. However, in practice, the inefficiency and inconsistency of the South African Compensation System as presently constituted cannot be ignored when making management decisions regarding compensation. The compensation system under COIDA continues to discriminate against workers eligible for compensation for work-related illness. Some of the key reasons for this are the considerable inefficiency in the COIDA office, the lack of skilled personnel to make eligibility judgements, and the absence of adequate guidelines for standardising decisions regarding compensation. In the context of such an environment, the choice to submit any potential cases will necessarily add to the existing backlog of cases and increase the workload on a compensation system already failing to meet its obligations to existing applicants.

If, in the opinion of the clinician, the likelihood of such compensation is slim, should clinicians in clear conscience submit such cases? Will submitting such "unlikely" cases have an adverse impact on other cases whom the clinician believes are eminently eligible for compensation? The ethical dilemma is clearly one where the principles of beneficence (benefit to the patient/applicant) and autonomy (respecting their right to decide on whether to claim) are weighed up against considerations of justice (since the more cases put into the compensation pipeline, the less likely are those eligible for compensation to emerge with a successful claim). Put simply, is it fair on those with "unequivocal" occupational disease ("medically deserving") to have their case indirectly prejudiced by having to compete for attention with those whose cases the clinician considers unsupportable?

How should we choose an ethically appropriate response? Traditional medical ethics, relying on the principled approach, would ask us only to weigh up the four principles (beneficence, nonmaleficence, autonomy and justice) and come to some conclusion as to how best to respond. However, such traditional approaches to bioethics are premised on the individual clinical encounter and assume that the actions involved in one clinical encounter are entirely independent from others. Yet in this case, it is evident that making a submission for patient A may well lead to discrimination against patient B because of the inadequacies of the compensation system, and that decisions made in the two situations are by no manner independent of each other.

Van Damme and Castelyn, addressing the use of genetic screening for pre-employment testing, have argued for an ethical approach based on a framework of social morality, in which the emphasis is on consensus between employees, employers and key stakeholders around values or objectives of a given policy. As applied to the management of compensation, ethical choices would need to be informed not so much by the rightness of what is done in relation to some normative principle, but rather the correctness of how it is done, in relation to a framework of values agreed between stakeholders that balances individual and social needs.

There could be no stronger case to argue that organised labour, employers' organisations and the state should develop a common approach to how compensation cases should be managed and how the clinician's role in submitting such cases should inform the process of arbitration of such cases. In the absence of such collective agreement on an ethical policy framework, clinicians are left with rather unsavoury choices – to act as gatekeeper or to allow all cases to be forwarded, to the detriment of some whom we know would otherwise be successful.

Dr Leslie London
Occupational and Environmental Health Research Unit
University of Cape Town

Let's talk straight now – an open letter

Dear Mr President and Minister Tshabalala Msimang

I have been working in the HIV/AIDS field in South Africa for 12 years now including the public and private sectors, NGOs and as a session doctor at the HIV clinic at the Johannesburg Hospital since 1990. I have done, and continue to travel the length and breadth of southern Africa, especially South Africa, dealing with various aspects of this HIV epidemic.

I am afraid to say that you are both highly confused about this issue and that you are misleading the public in a very serious and grave way (as is evident from numerous interactions I have had with different communities in the last few months).

HIV alone and only HIV causes AIDS and we all know this to be a fact and the truth. The immune deficiency associated with AIDS is directly resultant from HIV's slow and systematic damage and destruction of the CD4 cells of the immune system. This has been proven beyond doubt and some anti HIV drugs can suppress the virus and reverse the destructive process as long as the drugs are being taken. The level of HIV in the blood can be measured and this level is highly correlated with the clinical progress of the disease – the higher the viral load, the more rapid is the destruction of the immune system.

Of course there are many factors which destabilise and stress family and community life in South Africa, poverty, unemployment, crime, alchohol, homelessness, abuse of women, migrant labour, long periods away from home, etc increase the vulnerability of people getting HIV infection by promoting indiscriminate and unsafe sexual practices. Unsafe sex (unprotected sex with many different sexual partners) spreads HIV. I agree that these factors need to be addressed if we are ultimately to overcome the epidemic.

Chronic Infections

TB and other chronic infections may cause some immune dysfunction, but this is not the AIDS disease and this is not to be confused with AIDS. People with AIDS get TB because they have HIV-related immune deficiency. Malnutrition does not cause HIV positivity and malnourished people may be immunologically weaker, but this is not what we call AIDS. Also a patient with TB will always be treated for the TB regardless of the underlying cause, contrary to the muddled HIV-related comments in a recent TIME magazine. Your comments on HIV in TIME magazine were frankly incoherent and will surely cause an embarrassment to the medical fraternity in South Africa.

You state that you have never said that HIV does not cause AIDS, however you chose to spend more than R2-million to bring dissident and ill-informed 'scientists' to this country to debate the aetiology of AIDS and therefore you were in doubt about this yourselves. That you chose to investigate the issue is not problematic in itself, but rather that you did it with such fanfare and made it such a big public debate. In the context of a huge and expanding epidemic, where denial is a major feature of the society's response, this was clearly a highly dangerous move. After all, why did you not use the 'quiet diplomacy' that you chose with Mr Mugabe - and why did you not fully consult, behind the scenes, those South African HIV scientists and clinicians who have real expertise on this matter, some of whom have international recognition, before wasting money and misleading the country?

In any event, what is more important, is what the people heard (regardless of what you said) – and what the people heard is that you (The President of our country) do not think that HIV causes AIDS; this has set back the prevention programme many years and it is unacceptable for this to have been promoted by the country's top leader and thereafter by the Health Minister. The dissidents whom you funded on two trips to South Africa, and who toured the land, appeared in almost every newspaper and regularly on many radio stations, sprouting absolute nonsense and misinformation about HIV and promoted and fuelled disinformation, confusion and denial about this grave epidemic. You can blame the media and quarrel about how a radio host called the Minister by her first name and blame the media, racism, and everyone else but yourselves, because you yourselves are the only ones responsible for this mess.

Your leadership has failed the people of South Africa. In fact it is the opposite of leadership, for you have mislead the people and now you do not seem to have the boldness and the statesmanship to correct your mistakes in a clear and unambiguous way. You continue to give this 'double speak' even when you publish adverts to clarify the issue. In fact you have not clarified anything and you continue to display confusion and continue to confuse. Worse still, you seem to expect all your cabinet and other 'leading' officials to rally around you in this sea of confusion and disinformation and to tow the 'party line' even though your own political party is also rejecting your stance.

By diverting the attention from the real issue of prevention and care and support of people with the disease, you are indirectly causing more harm and misery to the many South Africans suffering from the disease. Why are we not rather debating how, within the constraints of the country, we will manage and fight this epidemic. This useless and unwanted debate which you have spurned is so destructive, and we who are working and battling this problem are angry and frustrated by your wrong doing.

Unfortunately HIV/AIDS is not renaissance friendly – neither are your actions - and now the two of you need to fix this mess and fix it fast.

Dr Clive Evian
HIV Public Health Consultant

This letter has been forwarded to the Department of Health for comment, which was not available at the time of publication. Their response will be published in the next edition.

GUIDELINES FOR AUTHORS

OCCUPATIONAL HEALTH SOUTHERN AFRICA

Official Journal of the SA Society of Occupational Health Nurses (SASOHN), the SA Society of Occupational Medicine (SASOM) and the Occupational Hygiene Association of Southern Africa (OHASA)
CPD accreditation number: A016/87/6/99

ARTICLES

Articles may be submitted in the following categories:

- *Original and Review*
  - These should follow the format of: introduction, methodology, results, discussion and references. The length should be between 2 000 and 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 all referees shall remain anonymous.
- *Opinions or short reports*
  These are short reports, with a length of less than 1000 words.
- *Case Studies*
  Less than 1000 words
- *Letters to the Editor*
  Less than 400 words

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

MANUSCRIPTS

- *Layout*
  - Manuscripts should be typed double spaced, using only one side of the paper.
  - Pages should be numbered consecutively and leave wide margins.
  - A word count should be included.
  - 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 should use Arabic numerals 1,2,3 etc.
  - X-ray films should not be forwarded, but glossy prints submitted.
- *Author's details*
  - A separate title page should contain the title, the author's full names, contact details relevant to correspondence and the author's place of work and job designation.
- *Submission*
  - Authors should submit one original article and two copies of each manuscript. This should be accompanied by a diskette or sent via e-mail. Diskettes will be returned.
- *References*
  - References 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.
  - References should be set out in the Vancouver style and only approved abbreviations of journal titles should be used.

  Examples:
  Journal references
  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
  1. Thompson L.A. History of South Africa. Newhaven and London: Yale University Press, 1990.

PROOFS

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

CONTACT PERSON

Articles should be sent to Ilse Dreyer, Managing Editor, at P.O. Box 1307, Ferndale, 2160 or faxed to (011) 791-2618 or e-mailed to jeni@cmmaccess.co.za.

The challenge of ethics in occupational health: Part 1

Dr Leslie London
Occupational and environmental health research unit
University of Cape Town

Occupational Health SA 2000, Vol 6, No 6, p. 10 - 13

Normative medical ethics as applied to occupational health may not fully assist the occupational medicine practitioner in dealing with the complexities of dual loyalties associated with workplace health care provision.

This is particularly emphasised in South Africa, where ethical and human rights failings by health professionals are increasingly coming under scrutiny.

Disputes in interpreting ethical codes relate to the extent to which health professionals have duties to be pro-active in protecting workers' health, and the lengths to which health professionals' practice must go to ensure independence from third party influence.

The importance of maintaining confidentiality of medical information in assessing fitness for work, divulging only information relevant to fitness for a particular job, is common to most codes. This implies that it is an ethical obligation for doctors to be familiar with the work environment, its tasks and requirements when conducting examinations to evaluate fitness for a job.

Moreover, only tests that are relevant to the particular job tasks should be conducted. Genetic screening has the potential to result in gross discrimination against workers and, in general, have too many unanswered scientific questions to justify their use in pre-employment screening at present, particularly if medical testing is used in a predictive rather than preventive manner. Lastly, occupational health practitioners should see effective hazard communication as part of their ethical responsibilities and seek to implement and evaluate the way they inform workers of potential hazards and risks.

Given that the international experience has shown that considerable uncertainty exists among occupational health professionals about what constitutes adequate ethical standards, the South African profession should seek ways to improve the consistency and adequacy of our own ethical practices. Such mechanisms include not only the adoption of ethical codes, but continuing medical education, an ombudsman function, peer review and audit, ethical scrutiny of company contracts and incorporation of ethical considerations in all quality assurance practices.

Introduction

It may be argued that ethics has always been a somewhat neglected aspect of professional practice in occupational health, largely because it was assumed that normative professional ethics could apply equally well to sub-specialties in the medical profession. It was a view held that doctors who subscribed to the Hippocratic oath and other professional codes should be able to apply these ethical principles in any circumstance where medical care was to be provided.

For example, reports of occupational health service provision in SA and neighbouring countries suggest that the majority of doctors providing services to industry were not expected to hold any specific training qualifications in occupational health.[1,2] Even if they were, such training did not specifically address ethical issues peculiar to occupational heath. Even in developed countries, levels of training on ethics in occupational health are low.[3,4,5]

Moreover, the traditional evolution of much of the discipline as a service to industry led to a natural downplaying of the potential for conflict around occupational health issues at the workplace. Health professionals do not feel comfortable with conflictual roles, and the nature of professionalism in medicine emphasises collaboration based on collegiality and consensus.

Yet, there can be no doubt that the workplace is a setting where health care is fraught with potential conflict. This stems not only from the conflictual nature of employer-employee relations, but from the particular position in which health professionals are placed.[6] The medical practitioner providing occupational health services has, on the one hand, a contractual relationship with the employer (or perhaps sometimes the workers' trade union) while, on the other hand, ethical codes demand placing the interests of his or her patient above all else.

However, the interests of the individual patient may well conflict with the organisational interest of the employer, or indeed that of the trade union. Such conflicts present the medical practitioner with a situation of dual loyalty, and the need for ethical guidelines to negotiate the maze of such dual loyalties becomes critical. The advent of managed care has added additional layers of third-party pressures, as funders, health care administrators and private-for-profit ventures will impose additional sets of obligations, implicit and explicit.[7]

In many senses, such pressures of dual loyalties are no different from those faced by medical practitioners processing disability grant applications for the state.[8]

However, while the essential duality (or multiplicity) of allegiance is common, the specific expression of this duality is often peculiar to the occupational health setting, and raises ethical conflicts that are not generic but particular to the occupational health domain. Moreover, it is important to remember that ethics does not provide an absolute set of rules but rather a set of principles to guide choices about appropriate behaviours. There are not right or wrong answers that should be justifiable in a moral framework.

Irrespective of one's ethical framework, the doctor must balance and trade off one set of principles or one set of utility values against another to come to a moral decision as to how to proceed. Yet the current body of medical ethical theory does not provide guidelines for how such trade-offs should be made, what criteria should be used to decide which principle or interest is more important, how such criteria should be tested, how transparent such decisions should be, etc. It is precisely in this area that our ethical codes are weakest, yet it is precisely in these areas that our challenges are greatest.

The roots of ethics in occupational health may be traced far back. Hippocrates himself admonished his followers in medicine to observe the patient's environment, while Ramazzini, the father of occupational medicine, sought to extend medical practice into working class homes in pursuit of a healing mission that few of his colleagues at the turn of the 18th century were prepared to do. Indeed, if one looks at Legge's aphorisms (Sir Thomas Morrison Legge being the first medical inspector of factories in England) one can see ethical concerns clearly emerging in his call for worker's right-to-know and for the application of the hierarchy of control.

However, the modern ethical codes only begin to appear during the latter half of this century.[9,10,11,12,13] For example, the 1976 American Occupational Medicine Association (AOMA) code was revised by the American College of Occupational and Environmental Health (ACOEH) in 1984.[9,10,11,12,13] Later codes of the Royal College in the UK were first published in 1980 and regularly revised over the next two decades, while the International Congress on Occupational Health (ICOH) Code of Ethics was published in 1992.[10,11] In general, the later codes tend to be more extensive and explicit, drawing on practical experience in developing professional responses to ethical dilemmas.

Medical ethics in SA

South Africa's Truth and Reconciliation Commission (TRC) placed the human rights abuses of apartheid onto the centre stage of public attention and challenged all South Africans across a broad range of political and civil society structures to re-examine institutional and individual conduct under apartheid within a framework of moral choices. In its findings, the TRC report highlighted how the health services were complicit in widespread human rights abuses under apartheid. In particular, a number of testimonies focused on the failure of health professionals to protect the health of workers from workplace hazards, actions argued to reflect "the tendency of health professionals to prioritise the interests of an uncaring industry under apartheid".[14,15] For example, a submission on systematic racial discrimination and the consequences for the health of mine workers, showed how large numbers of miners with tuberculosis were repatriated by the mining health system prior to 1985. This occurred with the full knowledge that a minority of such miners were likely to receive treatment in the homelands, and that many were likely to die as a result, and infect many family members in the process.[16]

A second factor driving greater scrutiny of professional accountability is the growth in statutory and non-statutory bodies aiming to promote a culture of human rights in SA, with spill-over into health care. For example, the Human Rights Commission (HRC) has the potential power to intervene in situations of ethical conflict in occupational health where rights are abused, such as could occur if employees reported systematic breaches in confidentiality or the use of workplace medical testing. Similarly, the Health Rights Campaign of the National Progressive Primary Health Care Network (PPHCN) and the Patient's Charter of the Department of Health (DOH) will enable patients to place greater demands on health care providers at the workplace to meet ethical standards in ways that are more transparent and visible.

While the tragedy of Bhopal and cases such as the ongoing use of the banned fumigant DBCP in Central American banana plantations have flagged unethical behaviours of corporates in occupational and environmental health internationally, South Africa has also seen its fair share of national occupational health disasters.[17,18,19] In the case of Thor Chemicals, much criticism was made of the failure of medical surveillance to trigger stricter remedial actions.[17,18,19,20,21] Similarly, there is currently an ongoing UK court action by survivors and families of asbestos mining victims from the northern Cape. High profile incidents like these are potent drivers of public calls for accountability, which occupational health practitioners should not ignore.

Why be concerned about ethics?

The primary motivation for addressing ethics in occupational health must be to improve the quality of professional practice, in the form of better care for patients, and better services to industry. In doing so, the occupational health professional can hopefully find ways to ensure compliance with legal, professional, and ethical standards simultaneously.

However, it is also in meeting public (and workers') expectations of the profession that ethics plays a key role. Plomp has shown that Dutch workers, asked their opinions on the role of occupational health doctors, voiced very high levels of uncertainty as to how the doctors apply their professional standards in the balance between the demands of employers and workers, which undermines workers' trust in their occupational health services.[22]

Professional solutions which emphasise the independence of the doctor based on adherence to a set of professional standards would not address the power relations and dependency structures that characterise occupational health services (OHS) or gain the confidence of the workers. If Dutch workers cannot trust occupational health doctors, how much more would such disjunctures apply in SA, where the legacy of racial discrimination and labour conflict continue to mark OHS provision? Precisely because of the lack of a responsive health care infrastructure for workers in the rural western Cape, workers' organisations established union-based primary care and occupational health initiatives more sensitive to workers' needs for employees in the canning industry. [23,24] A further issue is that of ethics in research, highlighted most recently by the high-profile case involving falsification of data by a highly regarded South African oncologist.[25] However, this probably represents a long-standing hiatus in ethical controls in South Africa. As far back as the 1970s, there is evidence of the suppression of scientific research into the hazards of asbestos by the Medical Research Council (MRC) at the indirect insistence of the asbestos industry.[15]

However, it is encouraging that SIMRAC, for example, intends introducing an ethics policy to apply to all research submitted and conducted through SIMRAC grants (Dr Mary Ross, personal communication, March 2000).

Clearly, then, attention to ethical practice may assist substantially in contributing to greater trust among employees using OHS, as well as more broadly to attempts to develop a culture of human rights in health care in the new South Africa.

The role of ethical guidelines

Although a number of different ethical guidelines exist that aim to address ethics in occupational health, probably the most substantive and detailed is that of the ICOH.[9,10,11,12,13] However, even in the matter of ethical guidelines, disputes around the comprehensiveness and validity of such guidelines are common cause. What is essentially in dispute is the extent to which health professionals have duties to be pro-active in protecting workers' health, and the lengths to which health professionals' practice must go to ensure independence from management influence.

	Location of participant		
Percentage believing disclosure of Medical information is ethical under the following circumstances	**UK**	**Netherlands**	**Singapore**
Danger possible to individual from work Danger possible to public	27	8	46
Increased cost to organisation due to medical bills	64	33	63
Specific request from management	9	4	29
Information pertaining to biological monitoring	8	18	50
Information pertaining to environmental monitoring	50	25	79
Activity believed to be ethically acceptable			
Screening potential chefs for HIV, following management request	9	13	25
Screening train drivers for alcohol	77	38	79
Screening bus drivers for drugs	68	38	79
Screening chemical workers for genetic abnormalities	36	13	50
Excluding an obese person from a job for safety reasons	50	8	25
Recommending an able-bodied person over a disabled	5	17	33
Disclosing confidential product data if health and safety at stake	82	64	67

Table I: Attitudes towards ethics amongst occupational medicine trainees

Matters of practicability also enter into some of the criticisms of codes in that highly aspirational idealistic codes are not easy to apply in practice.[26] Some commentators have argued that ethical codes in occupational health do not take into account practical constraints and cultural biases, resulting in a failure to integrate expectations from management, employees and professional bodies. [27] Other US commentators have similarly rejected the ACOEM code in favour of the ICOH code which sets itself up as a code applicable to all professionals in the occupational health field, and not specific to a particular profession.[28]

The South African Society of Occupational Medicine (SASOM) recently developed a comprehensive code that draws on most of the key documents, available from the SASOM offices.[29] However, guidelines in themselves are unlikely to be effective in the absence of professional support for ethics. Aw showed extremely low levels of awareness of international ethical guidelines among doctors training in occupational health from the UK, Holland, and Singapore *(see Table 1)*[4]

Moreoever, wide discrepancies in attitudes and understanding of ethical issues existed between doctors from different countries, even though occupational medicine trainees would be precisely the group one would expect to have the highest levels of attentiveness to ethical codes.

The second part of this article will appear in the Jan/Feb 2001 issue.

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Managing the impact of HIV on businesses

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Occupational Health SA 2000, Vol 6, No 6, p 14 - 18

Introduction

South African businesses are beginning to feel the effects of the AIDS epidemic. Throughout the country, some businesses are realising that the epidemic cannot be ignored, and that they must plan now to manage its impact. However, it is generally only the largest employers such as the mines, who have found the skills to identify the impact of the epidemic and establish a response.

Unfortunately, most South African employers do not yet understand how AIDS will affect them and many still believe that it will not. But make no mistake, all South African businesses will be affected, directly or indirectly.

A Financial Issue

AIDS will have the greatest impact on people in the 30 - 40 year-old age groups. Increased mortality among these age groups could lead to increases in overall mortality rates by five to six times. South African companies, therefore, will most likely feel the impact of AIDS in terms of loss of skilled labour, high labour turnover, and decreased productivity. AIDS could result in a 2% reduction in productivity for many South African companies.

The costs of employee benefits will also be affected. In Malawi, the cost of providing group life assurance has increased as much as five times since 1987. Today, those companies still offering risk-based benefits such as group life assurance and disability assurance offer very low levels of cover at greatly increased cost.

AIDS will also cause a significant loss in profits for many South African businesses. In one study of Kenyan businesses, it has been estimated that AIDS-related costs accounted for 1.7% of profits in 1994, and could be as high as 4% by 2005. Depending on the labour-intensity of the company and the costs of benefits offered to workers, individual companies could experience AIDS-related costs of up to 15% of its annual profits.

Employee benefits

Over the past few years South African companies have witnessed increasing numbers of people living with HIV/AIDS in their workforce, employees leaving work due to AIDS associated illnesses, and employees dying of AIDS while still in service.

The impact of these latter deaths and disabilities can be dramatic because they will occur in the younger age ranges where, in the past, the incidence of death and disability has been low.

Significant increases in mortality have already been observed in other African countries. In one Zambian firm, mortality rates of employed lives had increased to 48 per thousand by 1993. It has been predicted that, on average, crude mortality could increase from 2,5 per thousand to 18,3 per thousand.

The impact of AIDS will most likely be felt in terms of loss of skilled labour, high labour turnover, and decreased productivity. It has generally been accepted that most losses in South Africa will occur among unskilled workers who are easy to replace in an economy with high unemployment. Employers elsewhere in Africa, however, have learned that high staff turnover, even among unskilled workers, can have serious implications for productivity.

While the true magnitude of the impact on the South African economy has yet to be evaluated or quantified, it is certain that the economy will not be able to avoid the costs associated with the epidemic, be they borne by state, provinces, employers or individuals.

Companies which offer group life insurance, benefits on death-in-service, or ill-health retirement to their members are likely to face a notable increase in the number of death claims submitted to their group life scheme.

The increased costs resulting from AIDS could have a serious impact on the sustainability of these employee benefits.

Already, dramatic increases in the cost of providing group risk benefits such as group life and disability insurance have been experienced by the hardest hit companies in South Africa.

One South African transport company has experienced year-on-year increases of 60% in the cost of their employee benefits. Another, having capped the contribution to such benefits, has experienced a reduction in the benefit offered to less than one-third of previous levels.

In Zimbabwe, 75% of death and disability claims are AIDS-related, translating to a four-times increase in the cost of providing these benefits. Similarly, in Malawi, the cost of providing group life cover increased five times between 1987 and 1995.

South African companies will have to consider increasing the employee contribution to such schemes, or reducing the level of benefit. Fewer companies will be able to offer such benefits, fewer people will be able to afford the contributions, or the level of benefit will be decreased. The only alternative is to invest in actively managing the health of employees, ensuring their maximum health and productivity and minimising the cost increases associated with employee illness.

Medical Aid Cover

One of the government's most important initiatives is the restructuring of the health system to provide health care to all people. The impact that AIDS will have on government finances through the reduction in economic growth and the direct impact the epidemic will have on health expenditure will make this goal extremely difficult to reach. The Medical Schemes Act attempts in part to answer these problems by shifting some of the burden of health care from the state to the private sector.

The Medical Schemes Act significantly changes the impact that HIV will have on medical aids. In the past, medical schemes protected their risk pools from costly claims experience (including that caused by HIV) in two ways. Firstly, through individual underwriting, people with HIV were excluded from membership in many schemes. Secondly, exclusions, caps and limitations were placed on HIV-related claims.

The new Act, however, enforces community rating. Older individuals, people with HIV, or otherwise likely high claimants, cannot be excluded. Nor can they be charged higher premiums. Medical schemes cannot protect themselves from anti-selection and will therefore experience shifts in patterns of cross-subsidisation.

In the absence of AIDS, medical aid claims of older members are usually cross-subsidised by younger members. When there are numerous AIDS cases, while older members will continue to be cross-subsidised in terms of their normal claims, they are cross-subsidising the AIDS claims of the younger members. This raises questions of equity and fairness, particularly in schemes that have been in existence for some time, and older members with longer duration of membership have had, in the past, to cross-subsidise the claims of previous older members. For some, especially older members and pensioners, the overall shift upwards in the contribution rate will make benefits, including medical aid, unaffordable.

Another feature of the Medical Schemes Act is the provision for minimum benefits. With respect to AIDS, this requires medical schemes to pay for any treatment for HIV-related conditions that is available in the state hospital system. The scheme may not place any caps or limitations on this care. They can not, therefore, insulate themselves from escalating hospitalisation claims.

The inevitable results of this Act will be at least threefold. Positively, many individuals who have been excluded from health care will now have greater access to it. Unfortunately, this will require that premiums paid by all members increase. Finally, medical schemes will be forced to accelerate their movement toward managed care. Unable to protect their financial viability by excluding, charging, or capping, the only way to control risk will be to take an active role in the maintenance of their members' health. By managing the health of member, unnecessary or excessive claims can be prevented.

A Management Issue

In addition to the financial impacts, AIDS will become an important management issue. Managers will have to maintain confidentiality of their employees' HIV status, if told. They will have to manage gossip and rumour in the workplace if an employee becomes ill but has not disclosed his/her status. They may have to cope with employees who refuse to work with an HIV positive colleague. They may have to make decisions about recruitment, training, or promotion of someone they know or suspect to be HIV positive. They will have to manage the performance of an HIV positive employee as his/her health declines, and will have to make

accommodations to the work environment for that employee. All of these decisions will have financial and legal consequences for the business.

Many employers believe that they are ready to deal with AIDS, or will worry about it when they have the first case. **Managers should ask themselves the following questions:**

- What would happen in the workplace right now if someone came forward to say that they were HIV positive? Would confidentiality be maintained?
  If the confidentiality of an employee's HIV status is broken without the permission of the employee, then costly legal action could be brought against the offending party. In addition, the credibility of the process would be in question.
- Would colleagues refuse to work with them, or would they show understanding?
  If colleagues of someone identified to be HIV positive refuse to work with the latter person, the company could incur significant expense in terms of loss of productivity, and through legal action for discrimination.
- If someone is HIV positive, to whom in the company could they talk? What resources are needed to provide the required support?
  If the extent to which HIV infected employees can contribute to the company is not fully understood, they could be viewed as incapacitated sooner than is necessary. This could cause problems in terms of the Labour Relations Act, as well as losing valuable resources and having to recruit inexperienced resources sooner than is actually necessary.
- What are the rights and obligations of someone who is HIV positive in the workforce?
- What are the rights and obligations of those who are HIV negative in the workforce?
  The Labour Relations Act establishes many of the rights and responsibilities of workers and management. Failure to consider how these laws apply in terms of HIV/AIDS could open the company to costly and damaging legal action.
- What policies are in place for dealing with employee requests for leave to attend funerals?
  Even companies who manage their HIV positive employees well will have to plan for the impact the epidemic will have on the rest of their staff. Many families will be affected by AIDS deaths, and leave for grieving and funerals will become increasingly common. In many Zambian and Zimbabwean companies, nearly every week an employee is on leave to attend the funeral of a family member who died of AIDS. Workers will also have to deal with grief and lowered morale when colleagues become ill and die.
- How can skills levels be maintained, despite the impact of AIDS? What planning is needed in terms of training and recruitment to ensure that the company can continue to provide high levels of service?
  As the epidemic progresses, companies will experience growing staff turnover and difficulty with replacing skilled staff. Failure to consider how the company can ensure productivity with a changing workforce could have serious economic impacts for the business.
- What safety measures are in place to protect workers from accidental infection at work, and what is the company policy if this should happen?
  If an employee becomes infected with HIV in the workplace in circumstances which could have been avoided had appropriate measures been put into place, the company could face costly legal action together with the payment of compensation to the infected employee.

Line Management Issues

In accordance with the Labour Relations Act, employers must consider whether there are alternative positions available to an employee who can no longer perform his or her current job function, or whether the current job can be changed in a way that would allow the employee to continue working.

In practice, the investigation required in respect of the employee will be undertaken by the direct manager of the individual, with the support of the human resources department. The start of this process may not be obvious in the case of HIV and AIDS relative to instances where an employee is suddenly disabled, for example due to injuries sustained in a car accident. An HIV positive employee will be able to continue working for many years at their full capacity. In fact, both the employee and the employer could be completely ignorant of the employee's HIV positive status.

In the later stages of infection, however, the employee will become less and less able to fulfil the requirements of the job. The role of a performance management system could be critical in terms of managing the long-term effects of AIDS. Application of a performance management system would involve the manager and employee agreeing to and documenting the outputs required from the employee for a coming period of, for example, three months. The agreed outputs will take cognisance of the perceived capacity of the employee at that point in time. At the end of the period, the actual output achieved can be reviewed against the expected outputs, and any differences allowed for in a newly agreed set of outputs for the coming period. Any restructuring of the job should be done during this process with consultation between employee and manager, and input from other parties where required. For example, support may be given by a human resources representative, an occupational health expert, or by a trade union or employee representative. The documentation of this periodic process will provide evidence of the joint attempts that have been made to find alternatives for the individual.

It is likely that many managers will find this process of investigation and job restructuring an unfamiliar one. Companies may consider developing specific training programmes aimed at

equipping managers with the skills necessary to be able to manage a potentially disabled employee in a sensitive and positive manner.

Quantifying the Impact

To combat the increasingly detrimental impact of HIV/AIDS on finances and human resources planning, Lifeworks has developed a unique actuarial model to assist companies in identifying the financial impact of HIV/AIDS and developing cost-effective management strategies. The Lifeworks model will project increasing costs of employee benefits and the impacts of AIDS on recruitment and training costs and on productivity - areas that are difficult to quantify.

The model also demonstrates the financial savings achieved by implementing the positivelife™ HIV management services developed by Lifeworks. These services are specifically developed to manage escalating costs by managing the risk itself. Rather than continuing to increase benefit costs or reduce benefit levels, Lifeworks services intervene directly to promote and manage the good health of employees.

To raise awareness in the business community that HIV/AIDS is a business issue, and that there are strategies to manage it, Lifeworks has developed the AIDS Impact Calculator. The Calculator is a basic version of the Lifeworks model that allows executives to enter general information about their company and generate a range of financial impacts HIV could have on the organisation. The Calculator is not designed to be a detailed planning tool. However, it is an excellent first step for the manager who needs a general understanding of the scope of the financial impact AIDS could have on his or her organisation, or who needs to demonstrate to an executive the benefits of developing a management solution appropriate to their company.

Solutions

Studies over more than 15 years of caring for people living with HIV/AIDS have demonstrated that the most important factors in patient health and life expectancy are:

- The relationship between the patient and GP
- The doctor's knowledge of HIV treatment and care
- Support of the patient in compliance
- Holistic lifetime management of the disease

For HIV/AIDS care, co-ordination among the various service providers is crucial. The parties and services for co-ordination includes the primary care physician, consulting physicians, hospital, home care, counselling, insurer, nutritionist, pharmacy, hospice, etc. This service is ideally provided by a dedicated case management team. Other services such a team should provide include patient education, checking the patient's medical status by phone, reinforcing medication adherence, and reminding the patient of medical appointments.

Studies in the US have shown that appropriate case management can achieve reductions in hospital day utilisation of over 75% compared with unmanaged care. Over a decade of experience has demonstrated the types of management interventions required to ensure optimal patient health and financial management.

In addition to having a primary care physician who is trained and experienced in HIV/AIDS care, the patient should have access, at least by telephone, to the primary care physician or a related support system, 24 hours per day, 7 days a week. This access helps triage patient needs on a timely basis and prevents unnecessary trauma visits or hospitalisations. In an unmanaged system, patients with a clinical presentation that would suggest outpatient therapy will likely be admitted to hospital automatically and unnecessarily.

In a recent study of the benefits of efficient HIV/AIDS case management, Milliman & Robertson rated disease management programmes on how efficiently they treat patients for specific procedures.[1] The study separated programmes into three general categories: most efficiently managed, moderately managed, and loosely managed. As part of the study, the company measured how long HIV/AIDS patients stayed in hospitals for specific diagnoses. As with other ailments or diseases, the data indicate that the more efficiently managed the programme, the shorter the length of stay. This translates into significant savings for the payer.

In short, it has been demonstrated that appropriate HIV/AIDS case management achieves significant costs savings through:

- Lower hospitalisation claims
- Savings in pharmaceutical utilisation
- Reduced utilisation of specialists

Conclusion

As the incidence of HIV/AIDS in the South African workforce approaches 25%, it will be the rare company that is not affected by the epidemic. Complex analysis of the economic effects of AIDS will be beyond the resources of most companies, but even the smallest organisations can develop and implement appropriate strategies for managing the impact of AIDS in the workplace.

An effective company AIDS programme should enable you to

* reduce the rate of infection among employees;
* maintain the health and productivity of employees living with HIV;
* facilitate the fair management of employees with HIV;
* develop a supportive, caring environment for the person with HIV/AIDS.

The success of any programme depends not on its size, but on management commitment to putting AIDS on the agenda and ensuring that efforts are well co-ordinated, ongoing, and sustained. Throughout the process there should be consultation and involvement of worker and union representatives in the workplace.

The African Experience

In most African countries, data is difficult to obtain and often of questionable accuracy. Estimates suggest, however, that more than 25% of adults in Zimbabwe and Zambia are HIV positive. The numbers in Malawi may be even higher.

In Zimbabwe one employer estimated that as many as 40% of his unskilled and semi-skilled workers could be HIV positive, while similar figures were found among nurses and teachers in Zambia. Many businesses, however, feel they are beyond the need to discuss statistics. AIDS is a very real, and very visible part of the business environment in Africa.

The impact that AIDS has on a business, however, can vary a great deal depending on the size of the enterprise, the type of people it employs, and the industry in which it operates.

Larger employers, such as mining and agricultural estates, experience the most diverse impacts. They are also, by and large, the most aware of the effect AIDS has on their business. This is largely due to the fact that they have the resources, such as dedicated human resources staff, nursing staff, private clinics, and extensive employee benefits schemes, to investigate the causes of changes in their workforces.

Among the greatest day-to-day concerns of management are the impacts of the epidemic on productivity. Absenteeism has risen significantly in the past several years, as employees take time off due to illness and, increasingly, to attend funerals. The productivity levels of employees who are HIV positive is also a significant concern. Interestingly, employers in all countries stated that this is a greater problem among white-collar staff, whose concentration is affected even before they become physically ill. This can be directly caused by the virus, or by the stresses associated with knowing you are HIV positive.

In all larger enterprises, mortality has become a serious issue. Indeed, the epidemic is no longer measured by number of HIV positive people, but by number of deaths per year. Some enterprises' crude mortality rates are estimated to be as high as 4% (up from 0.25% in 1987)! The loss of workers to death and illness has created a serious skills shortage. The need to continuously replace skilled workers so frequently has also caused a major increase in training expenditures. Several companies in Zimbabwe have expressed concern that, not only do they have to hire new trainees to replace ill workers, but often the trainees become ill or die shortly after (or even during) their training.

The impact of these losses is not limited to skilled or semi-skilled workers, as many had expected. Certainly, early in the epidemic, the large surplus of unskilled labour in these countries made it easy to find replacements for lost workers. More recently, however, managers have found that even unskilled workers develop experience which is crucial to their production levels. A company can support a few new and inexperienced workers among their unskilled labourers. However, when a significant percentage of unskilled workers are in their first weeks or months of the job, production levels simply can not be maintained. It is perhaps this lesson, that unskilled workers are not so easily replaced, that stands out as one of the most important things to be learned from other countries.

For those companies which provide medical or health services to their employees, either in the form of nursing staff or full clinics, the demand on these services has increased dramatically. One doctor managing a major clinic in Lusaka estimates, conservatively, that at least 50% of all consultations are HIV-related. At several Lusaka hospitals, over 70% of all medical admissions are HIV-related. In some age groups, over 80% of all patients are there for HIV-related problems.

These costs also affect any employee benefits offered. In Malawi, the cost of providing group life assurance has increased as much as five times since 1987. Today, those companies which still offer risk-based benefits such as group life assurance offer very low levels of cover. Individuals who desire higher cover must undergo an HIV test. In Zambia and Malawi, few people opt for the higher cover. In countries where medical care is barely existent, most people believe no good can come from knowing their status. Many believe they will die sooner if they know.

The impact of AIDS on the health sector has also made the costs of medical aid schemes increasingly difficult to sustain, even the absence of medical services in many parts of these countries. There are only approximately 400 doctors in all of Zambia, a country with over 9-million people. Expensive treatments, especially those such as anti-retrovirals, are available only to a very few wealthy patients who have them imported privately. The development of effective treatment protocols which could keep people healthier for longer has been virtually impossible in most areas. Of course, the tragic result of this situation is that most people in Zambia and Malawi will live only another four to five years after becoming infected with HIV and they progress rapidly from initial illness to death. In these countries, medical costs are high, but the costs of AIDS are expressed most clearly in mortality figures, not hospital bills.

The impact of the epidemic on smaller employers is no less severe, but it is often more difficult to see. This is due in part to the lack of resources to study the effect of AIDS on companies, but it is also due to the way different workforces respond to AIDS.

It is important to note that this situation applies also to larger employers who rely on migrant labour. Migrant workers whose live away from their families, especially in isolated mining or agricultural communities, are likely to leave when they become ill. This is especially true in countries like Malawi. With over 85% of the population in rural areas, even most urban Malawians have more effective support networks in rural areas.

In these companies, the epidemic is expressed in rising staff turnover, which initially may not be seen as AIDS-related. It is interesting that one employer in Malawi stated that AIDS had not been a problem in his workforce; he was much more concerned about his high staff turnover and the difficulty in replacing skilled staff. He did note, however, that nearly every week, an employee reports the death of a family member.

Sulfuric acid burns in industry

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Occupational Health SA 2000, Vol 6, No 6, p 19 - 21

Introduction

Sulfuric acid is either colourless or a slightly brown, oily, odourless liquid.[1] It is used fairly often in the chemical industry, yet employees continue to receive very little education on its usage and treatment of burns. Burns appear to be mostly from spills and splashes, but in the case studies listed below, resulted from spillage on the floor. Normally human exposure is limited to small surface areas, with the resulting treatment of these. Sulfuric acid burns should not be treated lightly or dismissed, as scarring can be very severe.

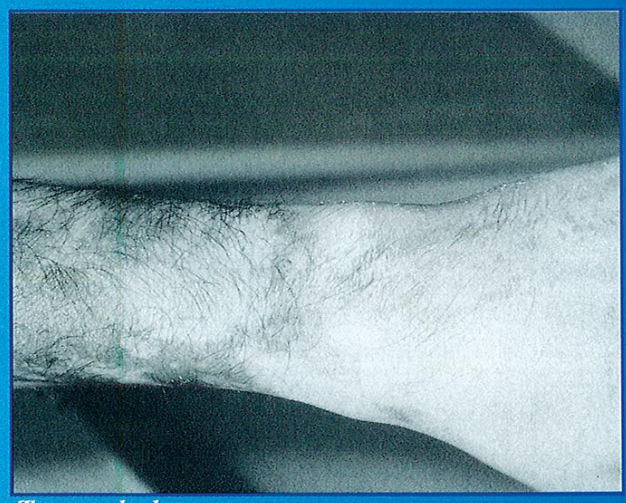
Sulfuric acid causes distinctive injuries. These tend to be both superficial and destructive of deeper tissue. The first aider and occupational health practitioner need to be aware of the specific treatment of sulfuric acid burns in order to ensure minimal scarring and prevention of contractures. Two cases of sulfuric acid burns recently presented in the occupational health centre. All the employees had been through a health and safety introductory course and given the correct personal protective equipment (PPE) to use and wear. The sulfuric acid was purchased in acid-resistant containers of 20 litres but needed to be used in smaller quantities, ranging from two to five litres. Decanting was done on site.[2] The only source of supply of two-litre bottles, unfortunately kept the acid in glass bottles. These were not purchased as it was felt that there was a higher risk of the bottle being dropped and the resultant spillage causing severe burns. Workers were expected to tilt the 20-litre container to decant into smaller amounts, which were manageable for all to use. Both male and female workers are employed on this site and as their physical strengths are not equal, decanting was always considered to be a high risk.

Case study 1

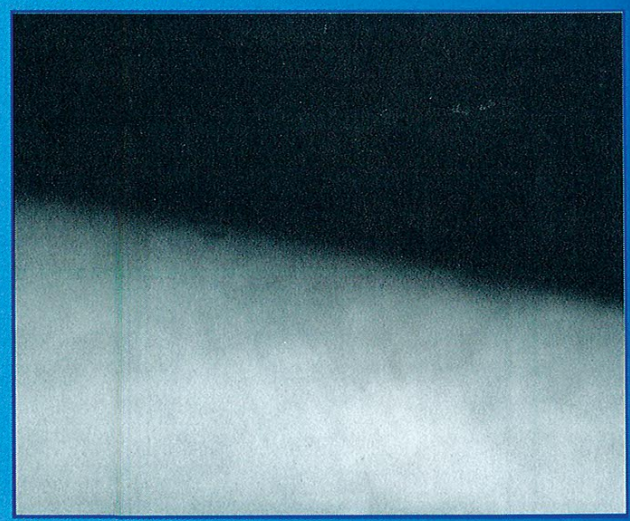
A male worker needed to carry approximately three litres of acid to decant into a smaller container. He was wearing safety shoes, acid resistant pants and jacket, with his own T-shirt underneath. He decanted the acid into a bucket which was assumed to be acid proof, (as no other type of equipment was meant to be in the work area), to carry it approximately five metres. Unknown to the worker, a thin layer of water was on the bottom of the bucket, the acid and water together reacted and burnt through the bottom of the bucket. The worker slipped in the fluid on the floor, which splashed back into his shoes and when he fell down, onto his forehead and neck. In attempting to get up, he put his left hand and arm into the acid. He sustained burns on the upper part of his fingers, between his index and middle fingers and the

Case Study 1

Burn on lower arm and hand

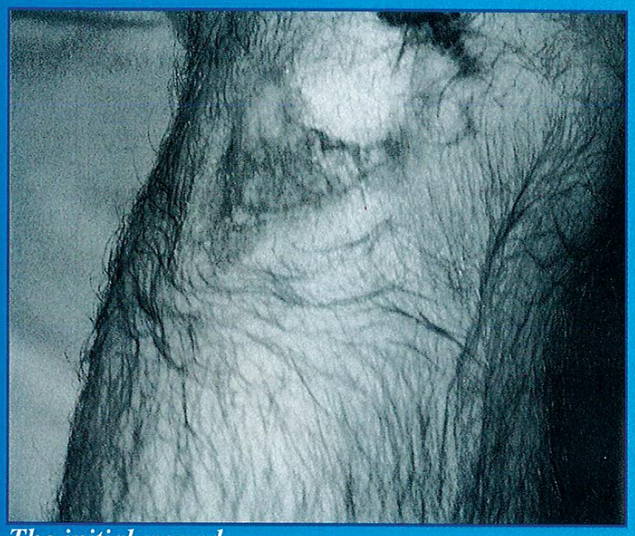


Two weeks later

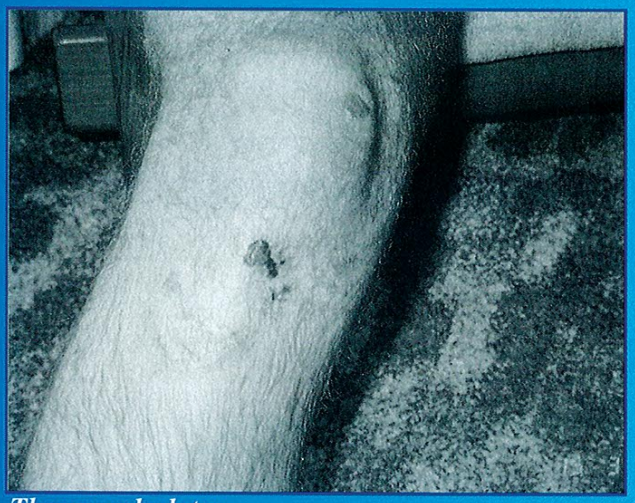


Six weeks later

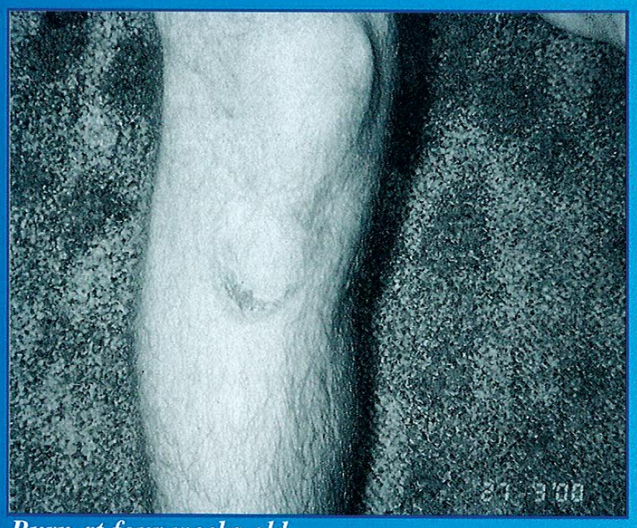
Case Study 2



The initial wound



Three weeks later



Burn at four weeks old

wrist area to his elbow on the lateral aspect. This appeared to be approximately 13cm^2 in total. His shoelaces and socks were dissolved by the acid but no burns were noted on his feet.

Case study 2

A male worker in the same area, wearing safety shoes, jacket and long pants which were not acid resistant, observed his fellow worker slipping and attempting to get up without success. He went to assist his colleague and tripped on a concrete lip of approximately 2cm, thereby tearing his pants below the knee, grazing his knee with a wound of 7cm wide. He fell into the acid spill and when lifting himself up he received superficial burns on his right lower arm approximately 5cm wide. On presenting at the medical centre, the knee wound was bleeding with a large grazed area approximately 7cm in length with the surrounding skin appearing to be burnt. The worker was not complaining of much pain.

Discussion

In both cases the acid, which was undiluted, burnt through the shoelaces of the safety shoes but no burns were noted on the soles of the feet. A drench shower was available but not properly secured to the floor. Both workers attempted to use the drench shower, individually and then together. This was one piece of safety equipment that had not been demonstrated to them, so they were unsure of whether it needed a specific weight to be activated.[3] Either in their anxiety or due to improper fitting, the drench shower did not function properly. No first aid was offered, so they disrobed and ran to the medical centre in their underwear.

All burnt areas were washed and continuously irrigated with water for as long as possible. The hand and lower arm area was immersed in water. This was kept up for approximately 20 to 30 minutes.[4] Burn-shield pads were applied over the burnt areas with a single layer of gauze over it, and then crepe bandages used to keep the dressings in place. Bactrazine ointment was put directly onto the wound in case study 2, under the burn shield, in an attempt to reduce the chances of the site becoming infected. Specific care was taken to keep the skin intact as much as possible and to cover all areas that appeared to be burnt. Pain control was offered and taken in case 1 but declined in case 2.

The wounds were all checked again three hours after the initial treatment. Bactrazine ointment was applied over all burnt areas and then burn shield dressings reapplied, with a single layer of gauze and crepe bandages to keep the dressings in place. These dressings were left on for 24 hours and thereafter the burns were redressed daily using the same technique. On the second day, case study 2 had severe blistering on the lower arm. Care was taken to keep the skin intact, dressings were floated off in water in an attempt to ensure blisters did not pop and new granulating skin was not removed. Both workers were educated on the risks of infection and requests to report the onset of fever as soon as possible. Initially all superficially burnt areas had darkening pigmentation of the surrounding tissue, blistering increased on day two but no secondary infection occurred by day six, blisters had been reabsorbed.

Conclusion

There was fairly rapid healing of all areas concerned. The minor splash burns on the neck and forehead healed quickly with scab formation within two days. These were left open with Bactrazine ointment being applied p.r.n. by the workers, to stop the scabs from falling off too early and causing scarring. After three days the dressings between and over the fingers of case study 1 were covered with burn shield, gauze and micropore only to encourage the worker to become more mobile and less likely to get contractures. The rest of the burnt areas were kept covered with burn shield and crepe bandages to keep the dressings in place. Scarring was minimal in both cases and this is probably due to prompt treatment of the burns, the burn shield keeping the burns moist and lack of infection of the burn site. After three weeks the burns were left open while the workers were at home, and covered lightly in the work place. Neither worker has any major scarring at the wound sites. The open wound for obvious reasons took slightly longer to heal. After six weeks, case 1 still has slightly darker pigmentation on the back of the hand. Both workers were requested to use aqueous cream on the burn site, once the scabs/dead skin had fallen off naturally and new skin granulation had occurred. Photographs were taken at one-week intervals to plot the progress of the wounds.

Recommendations

All personal protective equipment to be used correctly and worn throughout the shift.[5] T-shirts are not to be worn under jackets, only acid-resistant protective equipment should be used in the workplace. Specific utensils only (buckets), to be used for decanting of sulfuric acid. A special container has since been built with a tap at the outlet to reduce the chances of spillage. Education of the uses of sulfuric acid were re-enforced and all workers were shown how to use the drench shower.[6] The drench shower pressure was checked and it was bolted to the floor to ensure stability when stood upon. First aiders were instructed in specific treatment of sulfuric acid burns. The health and safety introductory course was altered slightly to include items such as how to use the drench shower and use of utensils lying around in the work area.

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6. South Africa. Occupational Health and Safety Act, no. 85 of 1993.

Evaluation of the Abbott Determine HIV-1/2 Rapid Assay

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Occupational Health SA 2000, Vol 6, No 6, p 22 - 26

Introduction

It is important for a diagnostic laboratory to use a sensitive and specific assay to limit unnecessary retesting of samples when assays with low specificity are used. The Determine HIV-1/2 rapid assay was developed by Abbott Laboratories to yield quick and reliable results by using a very simple protocol. The test was specially designed for use in remote/rural areas of third world countries, where sophisticated laboratory infrastructure and specially trained laboratory technologists are not always available. Severe climatic conditions are often experienced there, and have a negative effect on the test performance of many commercial assays, requiring specific storage and test performance temperatures. HIV-1 subtype B infections predominate in Europe and North America where most of the commercial assays are manufactured, and these assays should also be evaluated in regions where other subtypes predominate, such as Southern Africa where subtype C is prevalent.

Aim

The study was initiated to evaluate the sensitivity and specificity of the Abbott Determine HIV-1/2 rapid assay using routine serum samples from Tygerberg Academic Hospital, Western Cape, South Africa.

Materials and methods

Patient samples

A total of 600 routine serum samples were selected for evaluation. All samples were kept at 4°C until tested. To determine sensitivity and specificity the Determine test results were compared to those generated by the routine laboratory protocol.

All samples are routinely screened for HIV antibodies using the Abbott AxSym System (Abbott Laboratories), and any positives are then confirmed on a second ELISA (Vironostika HIV Uni-Form II plus O, Organon Teknika). Any discordant results are subjected to a Western Blot assay.

All tests were performed according to the manufacturer's instructions.

Determine methodology and interpretation

1. Fifty microliters of the serum sample was applied to the sample pad.
2. Results were red after a minimum of 15 minutes (up to a maximum of 60 minutes).
3. Results can be either positive, negative or invalid.
4. If an invalid result if achieved, the test was repeated once.

Results

For the 600 samples tested 493 and 103 were positive and negative respectively using the routine laboratory protocol. The Determine assay's results were: 495 positive, 104 negative and one invalid. There were therefore two false positive and one false negative result on the Determine assay.

The sensitivity and specificity of the Determine assay was therefore calculated using the following formulas:

$$\text{Sensitivity} = \frac{\text{True Positive}}{\text{True Positive + False Negative}}$$

$$\text{Specificity} = \frac{\text{True Negative}}{\text{False Positive + True Negative}}$$

Determine sensitivity : 99.8%
Determine specificity : 98.1%

Conclusions

This rapid assay performed well, compared to the standard Laboratory protocol, and can be used as a screening test in epidemiological studies or for routine diagnosis of HIV-1 infections.

The test was able to pick up antibodies to HIV-1 subtype C viruses, which occurs predominantly on Southern Africa.

Due to the fact that no cold storage, special training, equipment or reagents are required, this assay is ideal to be used under field conditions.

Managing the incapacitated worker

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Eskom

Occupational Health SA 2000, Vol 6 No 6, p? - ?

Introduction

The pension fund industry is experiencing ever-increasing pressure to retire a growing number of members for reasons related to ill health or injury.

The reasons include,:

- Socio-political influences on the workplace, and employees' inability to adapt to the constantly changing environment.
- Ill-health retirements are perceived to be the best "retirement deal" available, as well as employees' expectations that this would often be a solution to either securing their financial future or resolving current financial difficulties.
- The inability of managers to manage incapacitated employees effectively, and their subsequent perception of ill-health retirement as a solution to a managerial problem, i.e. managing an employee's (in)capacity to perform in terms of his contract of employment.

Applications for ill-health retirement constitute a substantial burden for pension and provident funds. Unnecessary approval of such applications could potentially cripple a fund financially. Pension and provident funds that evaluate such applications against set international norms and standards do not approve applications that fail to meet the set criteria.

This is rightly so. However, from an organisational point of view this offers no solution to any of the problems set out above, the point being that incapacity in the workplace should be managed by the organisation. It should not merely be transferred to the pension and provident funds to "retire the problem".

The support and evaluation of ill-health retirement applications is based on a medical evaluation process of the employee's impairment, set against medical criteria, norms and standards. It is neither a managerial nor social or socio–economical evaluation.

Those employees who are impaired, but do not qualify for retirement based on ill-health or injury, should be managed.

The purpose of this article is to discuss a suggested process to fairly manage incapacity in the work place.

Applicable legislation

The management of incapacitated employees, whether those employees are temporarily or permanently incapacitated, should be done effectively, fairly and equitably, and in compliance with the requirements of:

- **The Constitution, 108 of 1997**
  The Constitution contains provisions that ensure that no unfair discrimination takes place - among other things - on grounds of age or disability, as required by the Constitutional Bill of Rights.
- **The Labour Relations Act No 66 of 1995**
  The Labour Relations Act (1995), and particularly those provisions for addressing incapacity on the grounds of ill health or injury which are provided for in Schedule 8 (Code of Good Practise, Items 10 & 11).
- **The Employment Equity Act, No 55 of 1998**
  This Act has been designed to promote, among other things, the constitutional rights and interests of job applicants and employees who are, or may become disabled.
- **Contractual and Common Law Principles**
  Note: It is not the purpose of this article to discuss the provisions of the above-mentioned legislation. The model to be discussed does however satisfy these provisions.

Scope of model

Incapacity in terms of this model includes incapacity due to ill health, injury, disease or degeneration as a result of age.

A multi-disciplinary team supporting the responsible manager is created. Such a team should consist of experts that can advise the responsible manager on the following aspects:

- Occupational health medical assessments by an occupational health doctor and nurse;
- Occupational health psychological assessments by a psychologist;
- Occupational therapy, by an occupational therapist;
- Biokinetics input by a biokinetisist;
- Occupational social assessments by a social worker;
- Industrial relations/labour law advice provided by an industrial relations/ labour law expert.

Model

Preliminary Investigation *(diagram 1)*

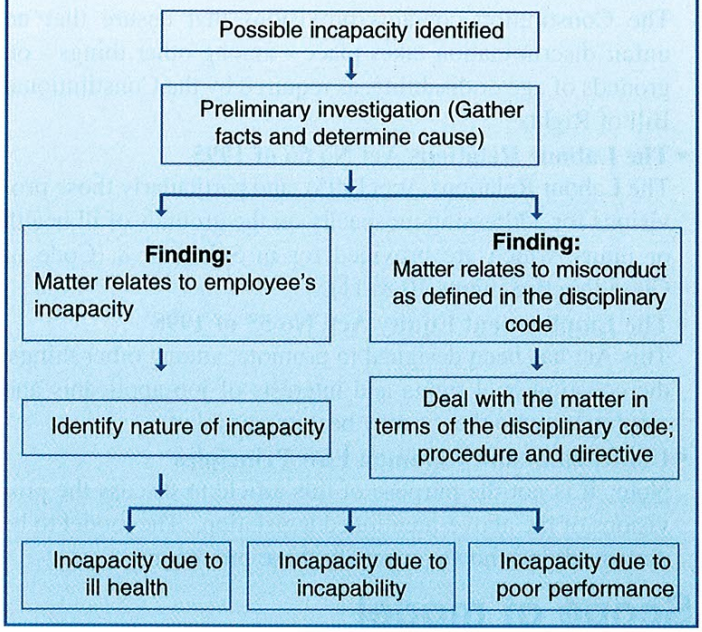
The purpose of preliminary fact gathering is to determine, at the earliest possible time, what the nature and extent of the incapacity appears to be. Preliminary fact gathering therefore provides an indication as to whether the matter must be managed in terms of:

- Incapacity due to illness or injury;
- Conduct conforming to the description of misconduct as per the employers disciplinary code and procedures.

Possible sources for this information could be:

- Employee's performance history;
- Medical records;
- Employee's own submissions;
- Employee's sick leave record;
- Any other relevant investigation information.

Diagram 1:
INCAPACITY MANAGEMENT PROGRAMME



The purpose of this is to identify the type of incapacity, and not to evaluate the substance of the incapacity.

The line manager should identify the type of incapacity in consultation with the industrial relations department, revelant occupational health services practitioner and the human resource department.

Incapacity due to ill-health or injury

Application for early retirement due to ill-health

An application for ill-health retirement must be brought where there is evidence that the incapacity of the employee is due to illness/injury. (Based on a medical opinion.)

Applications for ill-health retirement take place in terms of the pension and/or provident fund rules, as well as the administrative processes applicable to applications and appeals for ill-health retirement, and managers/supervisors should refer to the human resources function in this regard.

Depending on the rules, applications for ill-health retirement may be made by:

- An employee, who applies for his/her own retirement on the grounds of ill-health; or
- A line manager who applies for the retirement of an employee on the grounds of the employee's ill-health.

The advice and guidance of human resources practitioners should be obtained in order to ensure that the employee concerned or the line manager is consulted and assisted in the process of the application. Further assistance and support may be obtained from occupational health practitioners (medical doctor).

Medical panel assessment

Normally the medical assessment panel should consist of at least the following functionaries:

- The chairman (medical doctor);
- Medical doctors;
- Secretariat (representative of the pension and/or provident fund).

Normally the process such panel would follow is:

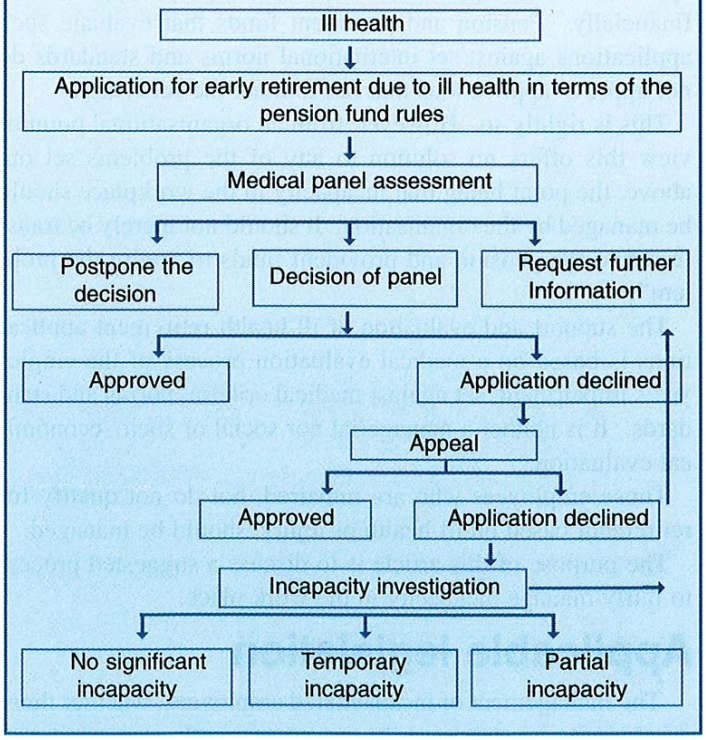
- The medical doctor who examined the applicant presents the details of the case to the panel;
- The panel considers and discusses all relevant documents, including medical reports submitted by the applicant;
- An assessment based on international standards is made to determine the extent of the impairment.
- The impairment/assessment is then compared with the applicant's job output.

Decision of the medical panel

The application is directed to the medical panel for consideration to reach any of the following four decisions:

- To postpone any decision on the application, in which case the application will be re-tabled in due course. In the interim the advice of the medical doctor should be obtained on how to accommodate the employee in the workplace, until such time as the application is re-tabled; (i.e. when the success rate of surgery can be determined); or
- To call for more information; or
- To approve the application (in which case the employee's services are terminated by retirement on the grounds of ill-health); or

Diagram 2:
INCAPACITY MANAGEMENT ILL HEALTH



- To decline the application.

In the event that the application is declined, the medical panel should advise on possible alternative outputs/recommendations to accommodate the applicant's impairment in his current or alternative position, if applicable.

Appeal against the medical panel's decision

Any decision taken by the medical panel should be appealable. Such an appeal would normally be directed to the pension and/or provident fund, in terms of the rules of the fund.

Upon receipt of the appeal, the pension and/or provident fund appoints a medical specialist of their choice to examine and evaluate the applicant. Normally this is for the Fund's costs.

The appointed medical specialist will recommend an appropriate and final course of action to the pension fund. This recommendation may include the following actions:

- Approval of the application. (This will result in ill-health retirement);
- To decline the application;
- Recommend the accommodation of the impaired employee in the workplace.

The grounds on which the pension and/or provident fund may decline this appeal, will be one of the following:

- No significant incapacity;
- Temporary incapacity;
- Partial incapacity.

Notification of the outcome of the application is submitted by the pension and/or provident fund to the:

- affected employee,
- relevant human resources department and
- line manager concerned, for their further attention and action.

(Note: if the employee's application for ill-health retirement has finally been declined, it negates the employee's argument that he qualifies for ill-health retirement and may therefore not be actively managed for incapacity. It is also known at this stage that the employee can not be totally permanently incapacitated and therefore can still provide the employer with some kind of productive work.)

Incapacity investigation (in terms of Schedule 8 of the LRA)

In terms of Schedule 8, items 10 and 11, the line manager is obliged to conduct an incapacity investigation.

The investigation takes the form of a meeting between all parties involved which might include:

- The relevant line manager;
- The employee and his representative;
- The industrial relations and/or human resources practitioner;
- Medical doctor and or the occupational health services practitioner;
- Labour law expert. (where appropriate)

A written notice advising the employee of the reasons for the meeting, that he is entitled to representation, the date, time and venue of the investigation, shall be furnished to the employee. (Preferably at least three working days prior to the investigation.) (The employee has the right to be notified and to be represented.)

The purpose of the investigation is to establish:[4,5,6]

- Whether or not the employee is capable of performing the work, and to record the employee's submissions. (Medical or psychological opinion.)

In the event that the employee is found to be incapacitated:

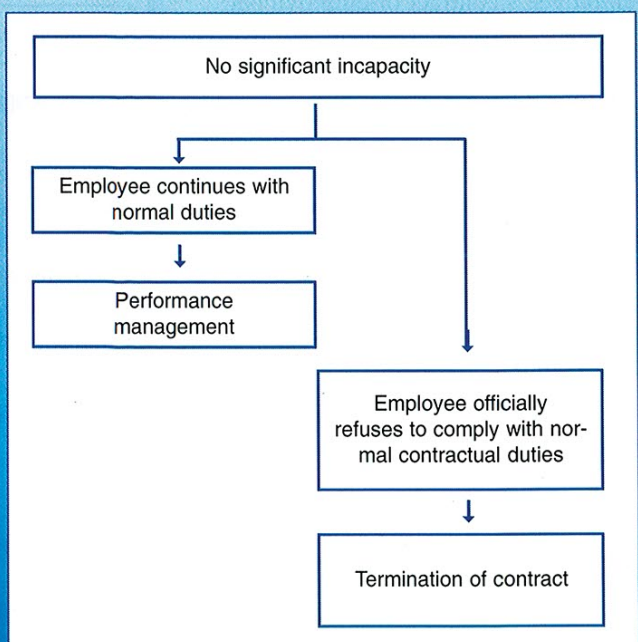
- The extent to which the employee is able to perform his current work outputs; (Medical or psychological opinion.);
- The extent to which the employee's work circumstances/duties might be adapted to accommodate his impairment; (Medical or psychological opinion, occupational therapy assessment);
- The availability of any suitable alternative work. (Employer's operational requirements, line manager to determine.)[7]

During this investigation the line manager may use the information gathered to determine the degree and nature of incapacity. This may result in one of the following findings:

- No significant incapacity;
- Temporary incapacity;
- Partial incapacity.

Note: permanent incapacity should not be an option, as it should have been dealt with during the application for ill-health retirement.

Diagram 3:
NO SIGNIFICANT INCAPACITY



No significant incapacity *(diagram 3)*

"No significant incapacity" can be defined as when the employee's impairment does not significantly affect his ability to perform the job outputs of the employee's current position. (Based on a medical opinion, which could include occupational therapy assessment and biokinetic interventions.)

The employee is instructed to return to his position and to perform his normal duties.

The employee is managed in terms of the normal principles of performance management.

In the event of the employee refusing to comply with his normal contractual duties, the contract of employment may be terminated in accordance with the conditions of the contract of employment. (Based on a legal opinion.)

Temporary incapacity *(diagram 4)*

"Temporary incapacity" can be defined as when the employee's impairment is of a temporary nature and full recovery is probable. (Medical prognosis.)

The line manager has to ascertain the degree of incapacity in the specific instances. (Based on medical opinion.)

Should the employee be **totally incapacitated for a temporary period** the following procedure will apply:[2]

- Grant sick leave in accordance with the employee's contract of employment;
- For incapacity of a reasonable period, the normal conditions of service will apply and the employee will resume his normal duties after a period of absence. (Line manager's decision based on a medical prognosis.)
- For incapacity of an unreasonably long period, to the extent that the employee's sick leave entitlement is depleted, the line manager has to consider alternatives short of dismissal. (Line manager's decision based on a medical prognosis.) When alternatives short of dismissal are considered, relevant factors may include:
- the nature of the job; (high physical demand vs sedentary work)
- the period of absence;
- seriousness of the illness or injury;
- the possibility of securing a temporary replacement for the ill or injured employee.

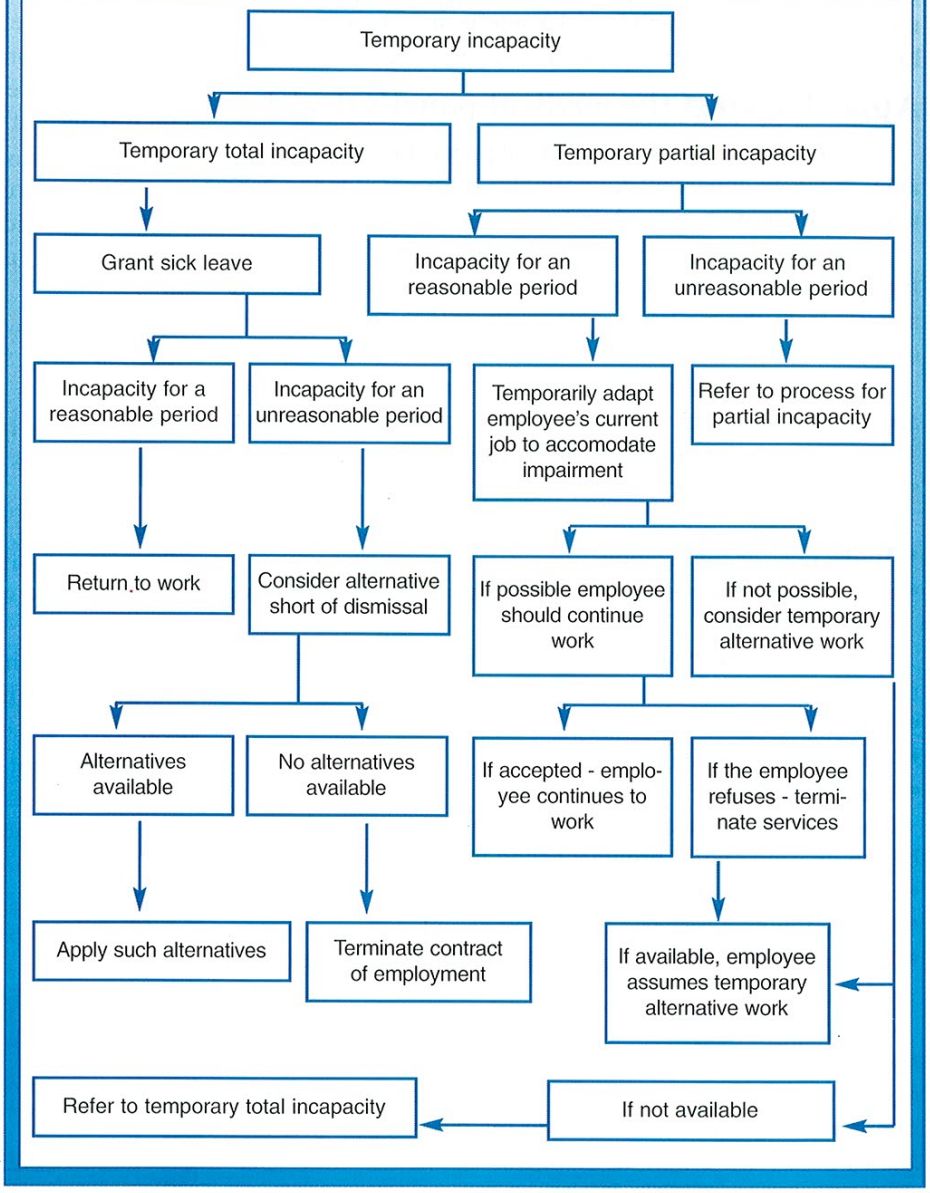
Where viable alternatives short of dismissal are available, the line manager should apply such alternatives.

Where no viable alternatives short of dismissal are available, the employee's employment may be terminated in accordance with the employee's contract of employment.[7]

Should the employee be **temporarily partially incapacitated** the following procedure will apply:[2]

- In the event of partial incapacity being of a reasonable period and the employee's current job outputs could be temporarily adapted to accommodate his impairment, the line manager must implement the adaptations and the employee must assume the adapted duties.[8] (Medical opinion.)
- In the event of incapacity of an unreasonably long period, the line manager will deal with the matter in accordance with the procedure for permanent partial incapacity.

Diagram 4:
TEMPORARY INCAPACITY



Permanent partial incapacity *(diagram 5)*

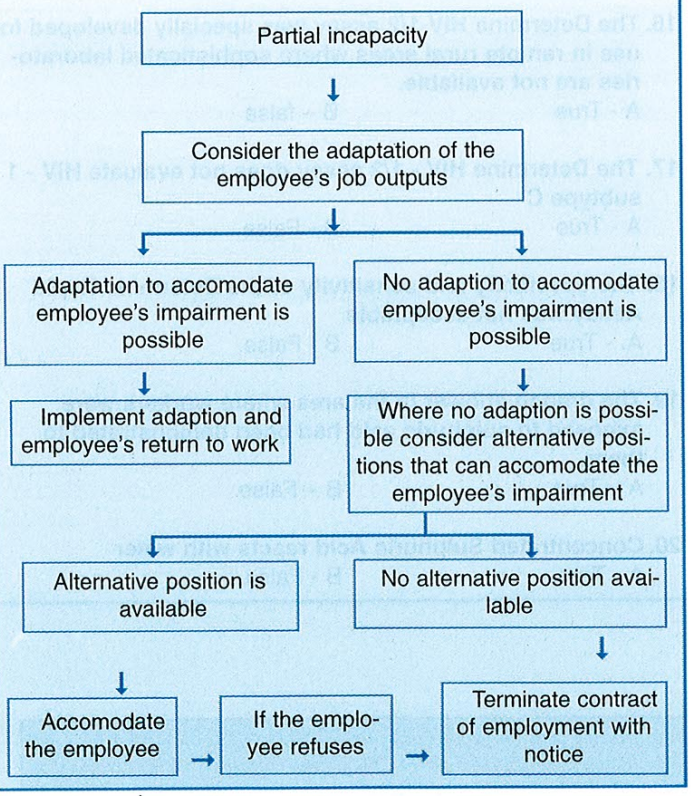
If, in the event of permanent partial incapacity, the employee's current job outputs can be adapted to accommodate his impairment, the line manager needs to implement the adaptations and the employee must continue with his adapted duties.[6,10] (Based on a medical opinion, which could include occupational therapy assessment and biokinetic intervention.)

In the event of permanent partial incapacity where the employee's current job outputs cannot be adapted to accommodate his impairment, the line manager has to consider whether a viable alternative position is available which can accommodate the employee's impairment.[6] (Based on a medical opinion, which could include occupational therapy assessment.)

Where no such alternatives are available, or where such alternatives are declined, the employee's employment may be terminated in accordance with the employee's contract of employment.[8,10]

In the event that the employee needs training or development to enable him to continue with his adapted duties, or in the alternative position offered, the employer should make such training and development available to the employee.

Diagram 5:
PERMANENT PARTIAL INCAPACITY



Concluding thoughts

The success of this multi-disciplinary approach in the management of incapacity is directly linked to the fact that each specialist should only restrain his inputs to his area of expertise, i.e. the medical doctor should only provide a medical opinion to the manager. The doctor is not involved in the actual management of the employee nor does he decide on actions to be implemented, such as the termination of service of the employee. The latter is essentially a legal matter and is the responsibility of the manager in consultation with the labour law expert.

Conclusion

The management of an impaired employee in the workplace is now subject to specific legislative requirements which are pertained in among others the Labour Relations Act, Schedule 8, Code of Good Practice.

For the employer to effectively adhere to the said legislative requirements the employer needs to consider the nature and extent of the employee's incapacity and whether the employer can accommodate the incapacity of an employee. In the event that accommodation is not possible, the employer may,within the legislative framework, terminate the services of the employee. In order to display the nature and extent of the employee's incapacity the employee's impairment with regards to the performance of his job outputs needs to be determined. For such purposes, if possible, the employer should use a multi-functional team as indicated above.

The approach to manage impaired employees consist of two logical aspects which are:

- The impairment assessment of the employee which is primarily a medical concern.
- The accommodation of the employee which is primarily a legal concern.

The success of this approach will greatly depend on the success of interaction between the members of the multi-disciplinary team.

References

1. The Constitution, Act 108 of 1996.
2. Labour Relations Act, No 66 of 1996, Schedule 8, Items 10 and 11.
3. Employment Equity Act, No 55 of 1998.
4. Davies v Clean Deale cc (1992) 13 ILJ 1230 (IC).
5. NUM & another v Libanon Gold Mining Co Ltd (1994) 15 ILJ 585.
6. AECI Explosives Ltd (Zomerveld) v Mambalu (1995) 16 ILJ 1505 (LAC).
7. NUM v Rustenburg Base Metal Refineries (Pty) Ltd (1993) 14 ILJ 1094 (IC).
8. Carr v Fisons Phramaceuticals (1994) & BLLR 10 (IC).
9. Du Toit. The Labour Relations Act. Durban Butterworths; 1996, p366.
10. NUM & Another v Vryheid (Natal) Railway Road & Iron Co Ltd (Hlobane Colliery) (1986) 1 ILJ 587 (IC).

CPD QUESTIONNAIRE

1. **Impairment, Disability and Handicap all mean the same**
   A - True B - False

2. **True or false: Temporary incapacity can be defined as when the employee impairment is of a temporary nature and full recovery is not probable.**
   A – True B – False

3. **Temporary incapacity can be categorised into the following main categories:**
   A – Temporary total incapacity
   B – Temporary partial incapacity
   C - Incapacity for a reasonable period
   D – Incapacity for an unreasonable period
   E – all of the above

4. **True or false: A multi-disciplinary team exists only of medical experts who can treat, diagnose and rehabilitate the incapacitated employee.**
   A – True B – False

5. **In the event of incapacity of an unreasonably long period, the line manager will deal with the matter in accordance with the procedure for permanent total incapacity.**
   A – True B – False

6. **Reports in South Africa and neighbouring countries suggest that the majority of doctors providing services to industry were not expected to hold any specific training qualifications in occupational health.**
   A – True B – False

7. **Interest of the individual patient may conflict with the interest of the employer.**
   A – True B – False

8. **Which of the following is NOT an ethical code?**
   A – AOMA B – ACOEH
   C – ICOH D – TRC
   E – Patient's Charter

9. **The roots of ethics in occupational health can be traced as far back as Hippocrates.**
   A - True B - False

10. **Which SA society has developed a code of ethics recently?**
    A – SASOM B – SASOHN
    C – SAIO D – none of the above
    E – all of the above

11. **Indicate the incorrect answer: The impact of AIDS on business will be felt in terms of:**
    A – loss of skilled labour
    B – high labour turnover
    C – decreased productivity
    D – increased costs of Employee benefits
    E – Reduced Medical Aid Costs

12. **Failure to consider the Labour Relations Act in dealing with HIV positive employees could open the company to litigation.**
    A - True B - False

13. **Indicate the correct answer: An effective company AIDS programme should enable the company to:**
    A – reduce the infection rate among employees
    B – increase production levels
    C – facilitate fair management of HIV-infected staff members
    D – maintain health and productivity of employees living with HIV
    E – develop caring and supportive environment for persons with HIV/AIDS

14. **The HIV epidemic in Afrca is no longer measured by the number of HIV-positive people, but by the number of deaths per year**
    A – True B – False

15. **Indicate the incorrect answer: Appropriate HIV/AIDS case management achieves significant cost savings through:**
    A - Lower Hospitalization Claims
    B - Savings in drugs
    C - Reduced utilization of specialists
    D - Increased Absenteeism

16. **The Determine HIV-1/2 assay was specially developed for use in remote rural areas where sophisticated laboratories are not available.**
    A - True B – false

17. **The Determine HIV - 1/2 assay does not evaluate HIV - 1 subtype C**
    A - True B - False

18. **The specificity and sensitivity of the Determine Rapid Assay was not acceptable**
    A. - True B - False

19. **The drench shower in the area where workers were exposed to sulphuric acid had been demonstrated to them.**
    A – True B – False

20. **Concentrated Sulphuric Acid reacts with water**
    A - True B - False

Instructions

1. Read the articles in the journal to find the answers to the questions
2. Make sure that your name and address details are correctly filled in.
3. Clearly indicate the edition of the journal
4. Answer questions by ticking correct answers with an "x" in the appropriate box. Use a black pen and do not mark more than one answer.
5. Keep a copy for your records.
6. Post the completed form to: CPD Points (Occupational Health SA) PO Box 16179, Lyttleton, 0140. Please do not register the envelope.
7. All completed forms must be posted - not faxed
8. Answers are recorded by SASOM and a certificate will be issued in due course.

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CONGRESS	DATE	VENUE	ORGANIZERS	CONTACT DETAILS
Asthma for Africa	1-3 February	Kramer Building, Middle Campus, UCT	Jodi Fyfe	Tel: (021) 406-6407 Fax: (021) 448 6263 e-mail: jfyfe@curie.uct.ac.za
SASOM - Compensation of Injury Diseases Act	9 March	Spier Estate, Stellenbosch	Dehlia Müller	Tel: (012) 667 5160 Fax: (012) 667 5160 and e-mail:sasomdm@iafrica.com
Hypertension Society Congress	10-13 March	Sandton Sun Hotel, Sandton	Sandra (Boerhinger Ingelheim)	Tel: (011) 886 1075
NOSHCON 2001 International Occupational Safety, Health & Environment Risk Management.	18-20 April	Sun City	Marina Nel	Tel: (012) 303-9700 Fax: (012) 303-9856
Dermatology Congress	26-29 April	Sandton Convention Centre	Yvonne Pyne-James	Tel: (011) 463 4064 Fax: (011) 463 1041 e-mail: rsvp@yebo.co.za
Safety Health & Environment and Fire & Emergency Medical Exhibition & Conference	16-18 May	MTN Sundome, Johannesburg	Joan De Beurges	Tel: (011) 794 5511 Fax: (011) 794-5811 e-mail: raigroupsa@global.co.za
Allergy 2001	Oct/Nov	Durban	Dr Stevan Bouwer	Tel: (011) 794 4788 Fax: (011) 794 3685 e-mail: jabo@icon.co.za
Joint Congress of the Infectious Diseases & Sexually Transmitted Diseases Societies of Southern Africa	2-5 December	Spier Estate, Stellenbosch	Suné Van Rooyen	Tel: (021) 938-9245 Fax: (021) 933-2649 e-mail: sdk1@gerga.sun.ac.za
SAPS CME - SA Pulmonology Society	TBA	TBA	Sally Elliot	Tel: (021) 406-6381 Fax: (021) 448-6263 e-mail: selliott@curie.uct.ac.za www.uct.ac.za\depts\pgc

HIV/AIDS Sites

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*Frank Fox - **Frank_Fox@mhs21.tns.co.za**; Hans van der Merwe - **polimed.merwe@cyberserve.co.za***

HIV/AIDS is everyone's concern. This NetPage (ninth) provides a listing of sites providing useful information on HIV/AIDS. The links are included on the HIV/AIDS page of ASOSH.ORG. A number of the Southern African links are also included on the South African Society of Occupational Health Nursing Practitioners (SASOHN) web site **(http://www.sasohn.org.za).**

Health Physics and Industrial Psychology will be covered in the next two issues of the NetPage. We look forward to your comments and links for the NetPage and ASOSH.ORG.

Southern Africa

AIDS Action Group **(http://www.icon.co.za/~fjc/Welcome.htm)** NGO in the Northern Areas of Cape Town

AIDS Bulletin **(http://www.mrc.ac.za/aids/intro.html)** Medical Research Council (MRC), South Africa. Quarterly newsletter

HIV/AIDS 2000 **(http://www.mrc.ac.za/UHDbulletin/june2000/contents.htm)** Urban Health Development Bulletin June 2000

AIDS in Africa, statistics, origin and the three tests **(http://www.rebirth.co.za/AIDS_in_Africa_1.htm)** rebirth.co.za

AIDS Law Project (ALP) South Africa **(http://www.hri.ca/partners/alp/)** University of the Witwatersrand

A Rapid Appraisal of Community-based HIV/AIDS Care and Support Programs In South Africa **(http://www.hst.org.za/research/hivsupp.htm)** Health Systems Trust (HST)

Links **(http://www.hst.org.za/links.asp)**

Centre for the Study of AIDS (CSA) **(http://www.up.ac.za/academic/centre-study-aids/)** University of Pretoria

COSATU Campaign Against HIV/AIDS: A Guide for Shopstewards **(http://www.cosatu.org.za/docs/2000/hivbook.htm)**

Health **(http://www.africa.com/health/)** HIV/AIDS country information for Africa

Health, HIV/AIDS & Occupational Health **(http://www.tarsc.org/publist1.html)** Training and Research Support Centre, Zimbabwe

HIV/AIDS **(http://www.iclinic.co.za/topics/aids/aids.htm)** iClinic

HIV/AIDS and Human Development South Africa 1998 **(http://www.undp.org.za/docs/pubs/hdr.overview.htm)** UNDP

HIV/AIDS and STD Directorate **(http://www.health.gov.za/hiv_aids/)** Department of Health, South Africa

Key organisations **(http://www.health.gov.za/hiv_aids/ngos.htm)**

Beyond Awareness Campaign - Tools for AIDS Action **(http://www.aidsinfo.co.za/)**

HIV/AIDS Resources on the Internet **(http://www.medguide.org.zm/aids/aids.htm)** University of Zambia

HIV-e **(http://www.hiv-e.com/)** South Africa. Provides support for people infected, affected and concerned with HIV/AIDS

Ministry of Health and Social Services **(http://healthforall.net/grnmhss/)** Republic of Namibia

National Conference on HIV/AIDS in Botswana 1997 **(http://www.healthnet.org/programs/procaare/conferences/indexbot.html)**

Red Ribbon **(http://www.redribbon.co.za/)** Metropolitan Group, South Africa

Regional AIDS Training Network (RATN) **(http://www.ratn.org/)** Kenya. Network of training institutions in the Eastern and Southern Africa (ESA) region

Secure the Future **(http://www.securethefuture.com/)** Bristol-Myers Squibb Company

The Department of Medical Microbiology **(http://www.uct.ac.za/depts/mmi/)** University of Cape Town and Groote Schuur Hospital

Europe

Aidsmap **(http://www.aidsmap.com/)** National AIDS Manual and the British HIV Association

AIDS Treatment Project (ATP) **(http://www.atp.org.uk/)** Terrence Higgins Trust (THT), UK

AVERT **(http://www.avert.org/)** UK. Aids education and research

HivNet.ch **(http://www.hivnet.ch/)** Fondation du Présent, Switzerland

Strategies for Hope **(http://www.actionaid.org/stratshope/)** Action Aid, UK

NET Page

International

HIV/AIDS **(http://www.worldbank.org/hiv)** World Bank
HIV/AIDS and Mining **(http://www.worldbank.org/html/fpd/mining/key/aids/aids.html)**
EU HIV/AIDS programme in developing countries **(http://europa.eu.int/comm/development/aids/)** EU
HIV/AIDS **(http://www.undp.org/hiv/)** UNDP
HIV and Development Regional Project for Sub-Saharan Africa **(http://www.undp.org/rba/regional/hivproj/hivdev.htm)**
HIV/AIDS **(http://www.who.int/health-topics/hiv.htm)** WHO
WHO Initiative on HIV/AIDS and Sexually Transmitted Infections (HSI) **(http://www.who.int/HIV_AIDS/first.html)**
Links **(http://www.who.int/HIV_AIDS/links.htm)**
HIV/AIDS and the World of Work **(http://www.ilo.org/public/english/protection/trav/aids/index.htm)** ILO
Initiatives on HIV/AIDS **(http://www.ilo.org/public/english/protection/trav/aids/initiatives.htm)**
The International AIDS Economics Network (IAEN) **(http://www.iaen.org/)**
UN AIDS **(http://www.unaids.org/)** The Joint UN Programme on HIV/AIDS
XIII International Aids Conference 2000 (Durban) **(http://www.aids2000.com/)**

USA

AEGiS **(http://www.aegis.com/)** Sisters of St. Elizabeth of Hungary
AETC National Resource Center **(http://www.aids-ed.org/)** Aids Education Training Centers
AIDS Clinical Trials Information Service (ACTIS) **(http://www.actis.org/)** U.S. Department of Health and Human Services
HIV/AIDS Treatment Information Service (ATIS) **(http://www.hivatis.org/)**
AIDS/HIV **(http://aids.about.com/health/aids/)** About.com
AIDS/HIV **(http://dir.yahoo.com/Health/Diseases_and_Conditions/AIDS_HIV/)** Yahoo!
Africa AIDS Epidemic **(http://fullcoverage.yahoo.com/fc/World/Africa_AIDS_Epidemic/)** Yahoo! News
AIDS Pathology **(http://www.medstat.med.utah.edu/WebPath/TUTORIAL/AIDS/AIDS.html)** University of Utah
AIDS Virtual Library **(http://quniverse.com/aidsvl/)** WWW Virtual Library, Quniverse
Divisions of HIV/AIDS Prevention **(http://www.cdc.gov/hiv/dhap.htm)** CDC
HIV/AIDS Resources **(http://www.cdcnpin.org/hiv/start.htm)** CDC National Prevention Information Network (NPIN)
Harvard AIDS Institute **(http://aids.harvard.edu/)**
HIV/AIDS **(http://www.intelihealth.com/)** InteliHealth
HIV/AIDS **(http://www.medscape.com/Home/Topics/AIDS/AIDS.html)** Medscape
HIV/AIDS Education **(http://www.redcross.org/hss/HIVAIDS/)** American Red Cross
HIV/AIDS Information **(http://sis.nlm.nih.gov/hiv.cfm)** U.S. National Library of Medicine (NLM)
HIV/AIDS Information Center **(http://www.ama-assn.org/special/hiv/hivhome.htm)** JAMA
HIV/AIDS Information on the World Wide Web **(http://www.patf.org/info.htm)** Pittsburgh AIDS Task Force
HIV and AIDS Activities **(http://www.fda.gov/oashi/aids/)** U.S. Food and Drug Administration (FDA)
HIV InSite **(http://hivinsite.ucsf.edu/)** University of California at San Francisco (UCSF)
International Association of Physicians in AIDS Care (IAPAC) **(http://www.iapac.org/)**
John Hopkins AIDS Service **(http://www.hopkins-aids.edu/)** John Hopkins University
Media/Materials Clearing House **(http://www.jhuccp.org/mmc/)**
Management Sciences for Health, Inc. (MSH) **(http://www.msh.org/)**
National AIDS Treatment Advocacy Project (NATAP) **(http://www.natap.org/)**
National Association of People with Aids (NAPWA) **(http://www.napwa.org/)**
theAIDSchannel.com **(http://www.theaidschannel.com/)** Provides Webcast viewing
The AIDS Memorial Quilt **(http://www.aidsquilt.org/)**
The Body **(http://www.thebody.com/)** Body Health Resources Corporation
The Immune System Including AIDS, HIV, and Chronic Fatigue Syndrome **(http://www.sumeria.net/aids.html)** WWWVL: Sumeria
Youth Against AIDS (yaa) **(http://www.worldvoices.org/aids/)**

Primary AIDS Care by Dr Clive Evian

Third edition Jacana Education

This book is intended as a practical user-friendly guide for primary health care personnel in the clinical and supportive care of people living with HIV/AIDS. For those who thought that a diagnosis of HIV and no medical aid equates to no treatment, this book makes it abundantly clear just how much can be done in a cost-effective way to extend the quality and duration of life.

This third, updated edition has been necessitated by the many developments that have occurred during the past few years. New chapters have been added on AIDS and Tuberculosis, Sexually Transmitted Diseases and Reducing Mother to Child Transmission, and include up-to-date treatment guidelines. Other chapters deal with HIV testing and pre-test/post-test counselling, the medical management of early and advanced HIV infection, and prophylaxis and treatment of opportunistic infections.

The risk management approach to the use of anti-retroviral drugs is stressed, i.e. balancing the risk of the disease versus the optimum time to start therapy, drug regimen, costs and side effects.

It offers worthwhile information on counselling. From an occupational health point of view, protocols for needle-stick injuries are included.

Pictures/illustrations are used to enhance the text which is easily readable and written with a caring attitude.

HIV/AIDS is far more of an issue for South African businesses than occupational health. This accessible book will be of enormous value to occupational health nurses and doctors, as well as social workers and psychologists, as it illustrates how much can be done cost-effectively to improve the quality and duration of life of people living with HIV/AIDS. Buy a copy for your clinic and donate another to a health care worker or clinic close to you.

Reviewed by Dr Jim Murphy - Barloworld

Diagnosis and management of Sexually Transmitted Diseases in SA

– Prof Ron Ballard et al

The new 3rd edition of the STD book commonly known as "the blue book" has now been published by the STD reference centre at SAIMR.

This text is excellent value for money and is thoroughly illustrated with many clinical colour photographs. It also includes revised STD management guidelines appropriate to the private sector.

The new book is available from Glenda Fehler at SAIMR for R30 per copy plus packaging and postage (or R25 per copy for orders larger than 1 000).

Contact Glenda Fehler at the STD Reference Centre, SAIMR, P O Box 1038, Johannesburg 2000, or tel (011) 489-9500, fax (011) 489-9492, or e-mail **glendaf@mail.saimr.wits.ac.za.**

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