The Construction Regulations of the Occupational Health and Safety Act No. 85 of 1993: a review and discussion of the current medical surveillance requirements

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ABSTRACT

In response to the lack of health care in a hazardous industry, medical surveillance programmes have been introduced to the construction industry. The legislative route has been utilised to determine the fitness levels of high risk occupational groups in the construction industry of South Africa (SA).

Workers involved in working at heights, on construction vehicles and mobile plant are required to have ongoing medical surveillance to determine their medical and psychological fitness. However, the requirement to be both medically and psychologically fit has caused confusion and misunderstanding in the construction industry. Further confusion has been caused by the difference in the definitions of the professionals who are authorised to examine the worker physically and psychologically.

This paper constructs an argument regarding the position of the legislator, and a pragmatic approach to the management of medical surveillance as it relates to the construction industry in SA.

Keywords: medical surveillance, construction, fitness for duty, occupational health

1.1 INTRODUCTION

The Construction Regulations (CRs) of the Occupational Health and Safety Act (OH&SA) Number 85 of 1993 were promulgated on 18 July 2003. In terms of the Regulation, employers are obliged to ensure that employees, in certain occupations, are in possession of medical certificates of fitness for their occupations, namely:
- Employees on supported or suspended platforms (12)(a);
- Crane operators (20)(g), and

The CRs were developed in response of the need to regulate a particularly hazardous industry, and to create a legislative framework for higher levels of health and safety (H&S). However, on promulgation of the legislation, confusion arose among occupational health (OH) professionals, relative to the use of terminology for the OH professionals, the need to determine the medical and psychological fitness of an employee and which OH professional should do the final certification of fitness.

1.2 MEDICAL SURVEILLANCE

Medical surveillance is defined as an ongoing systematic collection, analysis and interpretation of health and exposure data (Welch and Roto, 1995). Medical surveillance, or assessing the physical state of workers, is performed at various intervals in general industry, namely: pre-placement, or pre-employment; periodic intervals; transfers to new positions; on return from absence due to significant injury or illness, and when leaving the company (exit medical) (Deacon, von der Marwitz, Smallwood and Lapere, 2004). On completion of the medical surveillance a certificate of fitness is provided that provides information relative to the employee’s ability or limitations of employment.

Medical certificates of fitness certify the medical capability or capacity of an employee to perform the required work, and the presence or absence of symptoms of occupational disease or work-related conditions, given the occupation and exposure of the employee. Current SA legislation requires medical surveillance in various industries, and the professional roles of the OH nursing practitioner (OHN) and OH doctor are relatively well defined.
1.2.1 Minimum standards of fitness

A medical certificate of fitness indicates that there is a minimum standard of fitness against which the health of the employee is measured. Standards were developed in SA by Safety in Mines Research Advisory Committee (SIMRAC) for the mining industry, and for drivers, as a requirement of the Road Traffic Act. Such standards are applied by occupational health (OH) professionals in the respective fields, and often used in general and the construction industry (Kew and Ehrlich, 2001).

Occupational diseases and work related conditions are well researched internationally, and standards of fitness are implemented in various ways. However, occupational issues cannot be addressed in isolation, as individuals could be prone to chronic diseases such as hypertension, diabetes, and general illnesses. Each of the aforementioned chronic diseases could exacerbate existing conditions, or may be precipitated by exposure to external factors in the workplace (Deacon et al., 2004).

1.2.2 Current medical surveillance requirements in SA construction

Following the promulgation of the CRs and the medical surveillance requirements, OH Professionals were positive but unsure as to how to apply the requirements that were new in comparison to previous medical surveillance requirements. Employees in the specified positions were required to be certified both medically and psychologically fit. Confusion arose as to the meaning of “psychologically” fit. The aforementioned is a particularly difficult aspect to manage and measure, as there are no psychological standards of fitness. Therefore occupations where psychological fitness is required as a statutory standard are difficult to apply and interpret.

The regulations further require that the certificate of fitness be signed by an OH Practitioner, recognised by the Health Professions Council of South Africa (HPCSA). The OH Practitioner as defined in the OH&SA includes the doctor and a registered nurse with a qualification in OH, as well as an occupational hygienist. The OH&SA has a further definition for the OH doctor, namely, an Occupational Medicine Practitioner (OMP). However, OH Nursing Practitioners (OHNs) are not recognised by the HPCSA but by the SA Nursing Council (SANC). Therefore, the general interpretation by OH Professionals was that this was a typing error, and that the intention of the legislator was that the certificate of fitness should be signed by the OMP, in line with existing legislation and practice. In generic industry the medical surveillance programme is organized and operationalized by the OHN, under the supervision and guidance of the OMP (RSA, 1993). Therefore the interpretation was deemed a logical conclusion, as the requirement is similar for medical certificates of fitness in general (return to work after sickness absence; Professional Drivers; Divers, and Pilots).

A further uncertainty was relative to who should assess the psychological fitness of the employee, whether this aspect required or included an examination by a psychologist. Further confusion therefore includes the final certification of fitness, as the psychological and medical fitness are very individual specializations and it is not clear who should then make the final decision, the OMP, the psychologist, or both?

1.2.2 What was the real intention of the legislator?

During informal attempts to determine the intent of the legislator, it was determined that the intention behind the use of the term ‘medically and psychologically fit’ was that of common law. Employees should be in a sound state of mind, appropriate to the level of responsibility of the tasks at hand. It was not the intention that detailed psychological testing be required to determine the level of psychological fitness. Rather, it was intended that the examining practitioner should apply basic tests (interview questions, clinical findings or laboratory tests) to draw a reasonable conclusion regarding the employee’s psychological status.

Regarding the matter pertaining to who should certify the certificates of fitness, the meaning behind the terms of reference to OH practice and governing professional legislation, and the application to OHNs and OMPs, was unknown to the legislator. The intention was to ensure that a medical professional with the appropriate qualifications and training would make the decisions regarding the certification of fitness. The questions regarding the level of qualification required to adjudicate fitness therefore remain largely unanswered.

SA has a high level of expertise among OHNs, and it should be noted that it is a virtually impossible task to have all the identified occupations in the construction industry examined by OMPs. It must be concluded, therefore, that the most practical solution lies in a team approach. The examination can, therefore be completed by the OHN, allowing the OMP to complete the fitness adjudication. Psychological assessment would only be addressed by a psychologist should abnormalities or psychological illness be identified.
1.3 STANDARDS OF FITNESS AND PROGRAMME DESIGN: DISCUSSION

For the CR to achieve the required objective and for medical surveillance to be effective, nationally and internationally accepted standards need to be determined, and include examination content as well as minimum standards of fitness.

A good medical surveillance programme comprises three phases, namely standard setting, based upon a hazard identification and risk assessment (HIRA); the implementation of the medical surveillance programme including the risk related medical testing, and management of the outcome and certification of fitness. For the purpose of this paper, the latter two phases will be discussed.

1.3.1 Exclusion factors for medical fitness

The CRs are self-explanatory regarding crane operators and operators or construction vehicles and mobile plants. However, employees on supported or suspended platforms bring a wide list of potential candidates into the target group, some of which may be forgotten, such as maintenance workers and service artisans. These include mechanics, electricians, general servicemen, etc, who may be required to perform maintenance work on tower cranes.

The medical tests required to determine levels of fitness should therefore take the key risks identified in the HIRA into consideration.

1.3.1.1 Working at height

The following requirements should form the minimum requirements, *inter alia*: the physical capability to climb to the place of height; the ability to remain at that height in a relatively confined space for a reasonable period of time; have no serious medical conditions that would require emergency rescue and treatment (e.g. angina, untreated high blood pressure); 6/6 bilateral vision, dexterity, and cognitive function.

1.3.1.2 Plant operators and drivers of construction vehicles

The requirements for capability to operate dangerous equipment only apply to crane operators and operators of construction vehicles and mobile plants – not necessarily to employees on supported or suspended platforms. These are similar to the tests required for driver certification and the following conditions, *inter alia* need to be excluded:

- disorders of thought and judgement: - mental disorders, substance abuse; disorders involving level of consciousness i.e. uncontrolled Type 1 diabetes, blackouts, epilepsy; conditions that impair operator’s ability to respond to external signals (i.e. vision, hearing); disorders of critical organ function (i.e. hypertension, ischaemic heart disease, dysrhythmias and severe lung impairment; disorders of musculoskeletal system that may impair the ability to maintain control (i.e. impaired use of limb(s), neuromuscular disease, joint dysfunction (including cervical spine), and amputated limbs.

1.3.2 Medical testing

The CRs are self-explanatory regarding crane operators and operators or construction vehicles and mobile plants. However, employees on supported or suspended platforms bring a wide list of potential candidates into the target group, some of which may be forgotten, such as maintenance workers and service artisans. These include mechanics, electricians, general servicemen, etc, who may be required to perform maintenance work on tower cranes.

The following basic constituents could be considered as the minimum requirements for use during the medical examination, and include, *inter alia*: a comprehensive questionnaire that include specific psychologically oriented questions, a full clinical examination including:

- General health status, urine test, blood pressure, cardio-respiratory status, neurological screen (mainly focussed on CNS functions such as co-ordination, dexterity, cognition).
- Visual function (visual acuity)

Optional further tests include:

- Tests for alcohol consumption;
- Tests for substance abuse (cannabis, etc.);
- ECG (those with uncertain cardiac status or over the age of 55);
- Lung function tests (those with uncertain respiratory function and who have to climb to a cabin that is situated more than two storeys from the ground), and
- Audiometry (for those exposed to occupations with high levels of noise).
With respect to psychological testing common sense must prevail. A detailed psychological evaluation is neither appropriate nor required. Simple questions can be applied to determine the psychological fitness of the employee to work at heights. These should be augmented by questions ascertaining whether or not the employee has medical conditions that might impair cognitive function or emotional state. Such answers can be assessed by the examiner regarding the employee’s responses to the questions. Employees that are new applicants to these positions should probably have a more rigorous examination than those who have already been in the field for a number of years. It is likely that those who have been in these occupations for greater length of time are older, and at greater risk for medical problems (cardio-respiratory and musculoskeletal) than psychological, whereas the younger candidates could be at risk for psychological problems (including substance abuse).

1.3.3 Management of outcomes and certificates of fitness

One of the complexities of the construction industry is the peripatetic nature and short-term employment of construction employees (Deacon et al. 2004). The aforementioned gives rise to the ability to track problem cases. Outcomes outline the whether the worker is fit, fit with restrictions (temporarily unfit), or simply unfit (i.e. epileptic). Employees identified as temporarily unfit may be asked to obtain spectacles, etc. Employees leaving the OH service provider are essentially lost to the screening programme. Currently OH programmes are provided on the basis of an on-site mass-screening, or at off-site medical facilities.

There should be a sound mechanism in place whereby these cases are tracked by the employer and the service provider, not only until certified, but with on-going monitoring as necessary (blood pressure, blood glucose, etc.).

1.4 CONCLUSIONS AND RECOMMENDATIONS

The confusion regarding the intention of the legislator is still evident, and needs to be clarified and corrected by amending the CRs. There is no evidence to suggest that the inclusion of a psychologist will add value to determining the overall fitness of the employee. Alignment of all Regulations requiring medical surveillance is further recommended to streamline the role of the OH professionals.

While the intention of the CRs was to benefit employees in the construction industry, it is largely the actions of the OH professionals to support this initiative and to provide a satisfactory and practical implementation mechanism.

Employers need to take cognisance that the certification of fitness has a statutory status and should not accept certificates of fitness that do not carry statutory approval. Currently a certificate signed by the OHN for the cited high risk work should not be regarded as legal, as OHNs do not have qualifications accredited by the HPSA. A continued team approach between the OHN and OMP is imperative, the role of the OHN being to perform the examinations, with the OMP retaining the responsibility for the certification and support outside the scope of work of the OHN.

The combined efforts of the OHN and OMP are required to ensure the adequacy of a medical surveillance programme. This is because it is this approach whereby all the nuances pertaining to fitness to work can be fully appreciated. It is important that the medical programme be designed with clear outcomes in mind and a clear understanding of the standards of fitness required.

1.5 REFERENCES