Prevalence of occupational lung disease among Botswana men formerly employed in the South African mining industry

EDITOR—Steen, et al reported on a study to evaluate the prevalence of occupational lung disease among Botswana men who were formerly employed in the South African mining industry. The article states that an initial objective was to determine the magnitude of previously unidentified occupational disease. Statements were made by the researchers which they cannot validate as they failed to collect information on previous evaluation, certification, and compensation of these former miner workers. A recent request for information from the Chamber of Mines of South Africa (even though this study was done in 1994), confirmed that the researchers failed to acquire themselves with the compensation framework and neglected to collect essential information from the relevant authorities involved. The accusation made by the researchers: “Significantly, it indicates a failure of measures to prevent or identify pneumoconiosis while these men were in employment. Very few of them had been compensated, indicating a poor performance of systems set up under the ODMWA.”

When considering the compensation framework it is important to understand the South African Occupational Diseases in Mines and Works Act (ODMWA), the certification arrangements in terms of this Act as well as the Compensation Commissioners functions. This system is briefly as follows:
- Miners have to be examined periodically by accredited medical practitioners employed by mines. In terms of the regulations of ODMWA no miner may, or could legally previously, leave the industry without a previous medical examination within the last 30 days of employment.
- Should a compensable disease be present, the Medical Bureau for Occupational Diseases has to be informed with the necessary documentation.
- The Certification Committee (subject to appeal to the Reviewing Authority) appointed by the Minister of Health, considers each case and certifies the presence (or absence) of a compensable disease.
- Details of certification are then forwarded to the Compensation Commissioner to arrange compensation of such a person. The Compensation Commissioner first has to ascertain that the person did not receive due compensation previously, and if not, payment is arranged.

In the article published, a cross sectional sample of former miners were examined which showed pneumoconiosis in a considerable number of cases. It is stated in the article that many of these miners actually indicated to the researchers that they have received compensation for this disease: “Of the participants 83 (27.3%) reported that they had previously been compensated for an occupational injury or disease.” However, despite this, the researchers continued to claim that many of these miners were not recognised as having compensable occupa-
tional disease when leaving the industry. To make an informed statement to that effect, the histories of these miners would have needed to be checked at the Medical Bureau for Occupational Diseases and the Compensation Commissioner. The researchers seem not to have done this and their allegations are thus unsubstantiated.

The Chamber is concerned about allegations that miners with compensable disease were undetected or administrative arrangements of the compensation authorities in certain regions such as the TBVC and foreign countries may have failed to compensate miners, even after assessment and certification, due to a number of other reasons outside the control of the industry.

To establish whether these cases were truly undiagnosed and therefore not compensated, the Chamber briefly checked the registers kept at the MBOD and the Compensation Commissioner to evaluate the true situation of the Botswana men submitted by the researchers. It proved that from these 304 cases (66% being self selected and not random) only 26 were considered to have a certifiable disease of whom 15 were not eligible for compensation in terms of ODMWA or were already previously diagnosed and compensated. The remaining 16 cases were forwarded to the Compensation Commissioner and here another four proved to have been compensated before.

The Chamber has urged the researchers to complete their research and thoroughly follow up the cases as important information on these individual cases would be essential to plan for informed action. Crucial questions would be as to whether the cases actually recognized as such and medical information and a full work history would be required on some of the cases.

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Authors’ reply—We appreciate the opportunity of responding to La Grange’s letter. We are surprised that she has chosen to pursue this matter in further journal correspondence as we have already exchanged views in a series of correspondence on related matters in the South African Medical Journal. The context of this exchange relates to our survey of 304 Botswana men identified by census as former miners living in or around the village of Thamaga. Of these 234 had been underground gold miners in South Africa. This was the first systematic respiratory health evaluation of black former South African gold miners for >50 years. During that time millions of men, migrants from all over the subcontinent, have worked in a large scale industry that is well known to have high risks of occupational lung diseases, sometimes with long latency periods. The gold mining industry has seemingly shown an indifference to this fact. It happens to the health of these men after they leave the industry.

La Grange seems to define this status quo. She tutors us on South Africa’s miners’ compensation system as though it were not problematic, quotes our study out of context, and expresses the belief that we stand in need of issuing a correction. In support of her views she presents statistics from the registers of the South African compensation system to derive a minimal prevalence figure for our survey (compensable disease), that is not the same as the ILO classification of pneumoconioses actually used by us to define prevalence. Even with this outcome we found that 16/234 men had compensable pneumoconiosis (68.4/1 000) with a cumulative prevalence of men who could qualify for compensation but have gone unrecognized of 13/1000. This cumulative prevalence is of an order of magnitude higher than might be inferred from official compensation statistics and reflects a failure of the system somewhere. We think that the failure is principally that there was never any form of systematic follow up of the health consequences of mining for the black miners of Southern Africa. Since 1993 all miners, regardless of race, have had a theoretical right to regular follow up by a dedicated state occupational health service but a lot needs to be done to make this a reality.

Our experience of the South African state compensation system for miners is that it is not user friendly. Gyi, as the principal author for the 188 claims submitted to the MBOD in 1994, has had no direct notification of the outcome of any of these claims. We have made our own enquiries and understand that 24 claims went missing at the MBOD and subsequently we have asked for a further 13 claims to be referred to the Reviewing Authority. We do not yet know all of the outcomes. Although the Compensation Commissioner seems to have accepted at least 12 new cases of pneumoconiosis among these men, as far as we can ascertain nobody in Thamaga has actually received any compensation money as a result of one of our claims. It has always been our intention to publish the outcomes of these compensation claims once we were able to ascertain that they were finalised.

La Grange seems to suggest that we should have directly checked whether these 188 men were known to the Compensation Commissioner before we submitted claims on their behalf. This was clearly impractical and is not required by the ODMWA. Further, we do not think that we should have delayed publication of our survey until all of our claims had been finalised. La Grange quotes that 83 (27.3%) participants in our study had been compensated for occupational injury or disease. Reading on, our paper states that in 71 the compensation was for injury (not the subject of our debate, nor covered by the ODMWA). Ten men reported that they had been compensated for pulmonary TB and one was uncertain as to what disease he had been compensated for. Although we were happy with all of the decisions of the MBOD, we know that the Certification Committee admitted 31 cases as certifiable disease. Consequently we still feel justified in our critique of the systems set up under the ODMWA and the earlier failure of the mining industry to detect such cases.

La Grange refers to “the Chamber” briefly checking the registers of compensation claimants kept at the MBOD and Compensation Commissioner. The Chamber of Mines is an institution representing mining employers, not a person and La Grange is not telling us who actually physically checked these Department of Health registers. We do not know these named registers of miners are not
BOOK REVIEW

Book review editor: R L Maynard

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Air Pollution in the United Kingdom


This is a small, useful but expensive book offering an up to date summary of air pollution in the United Kingdom. The editors have drawn together a series of papers presented at a Royal Society of Chemistry Symposium held in 1996: the contributions are thus pleasingly up to date. The authors are all well known experts and several have played important parts in re-establishing the study of air pollution in the United Kingdom. It is always, to my mind, a pleasure to meet up with people who have contributed much in this field. The book is not quite so satisfactory, however, as some of the papers have been written at different times, and are thus up to date in different ways. The book is thus a valuable source of information for all those interested in the subject.

R L MAYNARD