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Impact of Mining Activities on Workers' Health Status

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Abstract
Illness, injury, or death disrupt or compromise the quality of the human capital. In turn, even in the wake of companies' implementation of OHS practices, certain indirect costs are incurred and tend to outweigh direct costs (and decreasing the profitability), yet most of the estimation models proposed and implemented previously emphasize direct costs. The eventuality is that there tends to be a decrease in firm profitability while implementing OHS practices due to two main forces. These forces include the existence of indirect costs and the expenditure on occupational health and safety (OHS) that tends to exceed the amount received from workplace safety and insurance boards. Other costs that are seen to decrease the overall profitability of companies are seen to come in the form of equipment expenses, time off for employees (to participate in OHS reviews and appointments), and medical staff hiring and service costs.

Keywords: Impact, Mining Activities, Workers' Health etc.

1 Introduction

In the mining sector, one of the critical aspects that are worth considering in relation to company operations entails the health and safety of workers. According to theInstitute for Health and Work (2018), the provision of an enabling work environment that ensures the health and safety of employees in this sector yields beneficial outcomes such as employee engagement and motivation, high employee retention rate, and connectedness in the workplace, as employees feel valued and wanted. For other studies, however, the focus has been on some of the approximate expenses that companies incur while seeking to achieve occupational health and safety. For instance, Stewart (2019) focused on this subject and reported that for companies, some of the safe work practices that are worth implementing include the provision of training to supervisors and workers, the provision of personal protective equipment to workers, the provision of management and coordination of safety and health practices and policies, and investing in safer technologies. However, despite this promising trend that seeks to boost employee morale and commitment to the workplace, evidence suggests that in the mining sector, this implementation of occupational health and safety practices translates into decreased profitability in several ways.

2 Methodology

The expenditure on occupational health and safety (OHS) tends to exceed the amount received from workplace safety and insurance boards, implying that there is a decrease in the overall profitability of firms, as they spend more than they receive for work-related illnesses or injuries (Blackley, Halldin & Laney, 2018). Another way in which the profitability of a company decreases relative to the implementation of OHS entails the estimation of the cost of injuries in the mining sector. According to

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Morrison (2014), previously proposed models, which have been implemented mostly in relation to injury cost estimation, focus on direct costs of injuries and deaths that occur in the mining industry. As avowed by the Institute for Health and Work (2018), these direct costs come in the form of expenses such as property losses, litigation costs or civil liability, medical expenses, and the compensation of workers. As such, there is a significant in firm profitability due to the models' failure to account for indirect costs that tend to accrue due to injuries that occur or are anticipated in the mining sector, as well as deaths. In the study by Stewart (2019), it was documented that some of the indirect costs that the estimation models fail to incorporate, which are more expensive than direct costs in some instances, include the attorney fees, an increase in insurance premiums (that companies pay), training, the replacement of an incapacitated or dead employee, loss of productivity due to physical, mental, emotional, or psychological derailing following injury or illness, and workplace disruptions that result from and interference to the workforce chain.

3 Results and Discussion

It is also worth indicating that OHS implementation compromises the profitability of companies in such a way that it demands medical staff. As indicated by Blackley, Halldin and Laney (2018), the ability and extended training of these individuals reflect the presence of an expensive commodity in mining companies. Compared to nurses, doctors tend to be more expensive, with nurses also proving more expensive, compared to technicians. In a similar observation, the Institute for Health and Work (2018) stated that during OHS implementation, many companies have had to rely on the in-house medical staff, yet Morrison (2014) contended that these personnel demand ongoing training, regular continuing professional development, and specialist insurance, a costly affair that poses negative effects on mining firm profitability. These demands arise relative to the affirmation that the nature of occupational health makes it a specialist profession on the part of nurses and doctors, making it more costly than the remainder of professional medical groups (Stewart, 2019).

Company profitability is also compromised by OHS implementation in terms of time off work. For employees in mining companies, OHS implementation implies that they are expected to be given opportunities to participate in occupational health reviews and appointment, with referrals to specialists exacerbating the situation, with the resultant time lost off duty posing negative effects on company profitability (Blackley, Halldin and Laney, 2018). The factor of equipment also makes OHS implementation a costly affair that causes a dramatic decrease in the overall profitability of mining companies. According to the Institute for Health and Work (2018), equipment may come in the form of medical facilities such as on-site audio booths and lung function testing, making mining firms to pay for them, especially in situations where in-house services are provided. Regular checks of the equipment tend to compound the situation, with costs also included in contracts where external visiting or OHS services are provided (Morrison, 2014).

The observations above demonstrate that during OHS implementation, mining companies are likely to experience decreased profitability because the practice demands contract plan preparation (such as visitors and workers identification and work permits, safety procedures, and work manual preparation), OHS promotion and induction (such as statistical and informational boards, posters and banners, simulation and safety training, and toolbox meetings), and safety equipment (such as

perimeters and guard rails, fall arresters, safety lines, and safety nets). Also, OHS implementation is seen to compromise firm profitability due to the need for licensing and insurance (operator's license, equipment permit, and insurance premium), OHS personnel (such as medical officers, emergency response officers, supervisors, and managers), and risk control systems and safety signs.

4 Conclusion

In summary, findings in this paper demonstrate that human capital is the most significant source of return on investment that mining companies experience. As such, illness, injury, or death disrupt or compromise the quality of the human capital. In turn, even in the wake of companies' implementation of OHS practices, certain indirect costs are incurred and tend to outweigh direct costs (and decreasing the profitability), yet most of the estimation models proposed and implemented previously emphasize direct costs. The eventuality is that there tends to be a decrease in firm profitability while implementing OHS practices due to two main forces. These forces include the existence of indirect costs and the expenditure on occupational health and safety (OHS) that tends to exceed the amount received from workplace safety and insurance boards. Other costs that are seen to decrease the overall profitability of companies are seen to come in the form of equipment expenses, time off for employees (to participate in OHS reviews and appointments), and medical staff hiring and service costs.

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