

“Mental health is not our core business”: A qualitative study of mental health supports in the Ghanaian mining industry

Winifred Asare-Doku^{a,d,*}, Carole James^{b,d}, Jane Louise Rich^{a,d}, Kwesi Amponsah-Tawiah^c, Brian Kelly^{a,d}

^a School of Medicine and Public Health, University of Newcastle, University Drive, Callaghan, NSW 2308, Australia

^b School of Health Sciences, University of Newcastle, University Drive, Callaghan, NSW 2308, Australia

^c Department of Organisation & Human Resource Management, University of Ghana Business School, Legon-Accra, Ghana

^d Centre for Resources Health and Safety, Faculty of Health and Medicine, University of Newcastle, University Drive, Callaghan, NSW 2308, Australia

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ABSTRACT

Background: There is growing recognition of mental health aspects of workplace health and safety. Mining is a significant enterprise in the African continent; however, limited attention has been given to mental health in mining in this region. Ghana is the largest gold producer in Africa and mining contributes significantly to the economy. Mental health problems can have significant implications for the wellbeing and safety of mining employees, yet little is known about this in diverse geographic and cultural contexts. This study aims to explore mental health and available supports from the perspective of managers in mining companies in Ghana.

Methods: A qualitative descriptive methodology was used to collect in-depth information from managers of international mining companies in Ghana. After receiving institutional ethics approval, all managers from the five mine sites were invited to participate in an interview. All interviews were audiotaped and transcribed verbatim for thematic analysis.

Results: Three major themes were identified: Health Promotion, which explored health assessments and health promotion onsite activities; Onsite Support which included policy, human resources and medical supports; thirdly External Support, examined formal and informal supports such as family and social networks.

Conclusion: Mental health was implied in various activities undertaken at the mine rather than being specific to targeting mental health directly. This study demonstrates the absence of mental health supports in mining in Ghana. Efforts should be made to incorporate mental health programs within the general health and safety policy, and an understanding of the local social norms and culture is vital.

1. Background

Mental health is a state of well-being and the ability to cope with the normal stresses of life, work productively and contribute to the community (WHO, 2018). The prevalence of mental health disorders in Sub-Saharan Africa is not well documented, although globally it is estimated that about 450 million people suffer from mental disorders making it one of the leading causes of ill health and disability worldwide (WHO, 2001). In Ghana, Oppong, Kretchy (Oppong et al., 2016) acknowledged the challenges in data gathering and access. They estimate about 13% of the adult population are affected by mental health disorders.

The Biopsychosocial Model of Health and illness conceptualises

human health and states that the interactions between biological, psychological, and social factors determine the cause, manifestation, and outcome of wellness and disease (Engel, 1978). These dynamic components affect the overall health and wellbeing. The Model allows for health to be viewed amongst its social and environmental backdrop, which includes the workplace and social networks (Mościcka-Teske et al., 2019). This approach to understanding health acknowledges the role of family and community, the availability of health resources, cultural norms, values, and health policies all have a dynamic influence on the well-being of mining employees.

Discussions around mental health at the workplace has heightened among scholars and practitioners with the underlying cause largely

Abbreviations: EAP, Employee Assistance Programs; WHO, World Health Organisation; PRIMA, Psychosocial Risk Management Model; MIM, Mates in Mining.

* Corresponding author at: School of Medicine and Public Health, University of Newcastle, University Drive, Callaghan, NSW 2308, Australia.

E-mail address: Winifred.asaredoku@uon.edu.au (W. Asare-Doku).

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attributed to unhealthy work environment (WHO, 2017). Workplace stressors such as unrealistic deadlines, job insecurity, isolated working conditions, physical risks, and work overload may put a high strain on the mental health of employees (Harnois and Gabriel, 2000; Rajgopal, 2010). The mining environment is a pressured workplace with unique issues such as high psychological job demands, long working hours, shift work in remote locations, poor sleep habits, miner fatigue, living away from family and limited access to support services, all with the potential to influence the mental health of employees (McLean, 2012; Roche et al., 2016; Batts et al., 2014; Sadeghniaat-Haghighi and Yazdi, 2015). Shift work, heavy workload and low staffing especially have been noted to be one of the causes of employee fatigue and sleepiness at work (Magnavita, 2014). Late night working or a night without sleep, causes sleepiness while forceful physical exercise during the daytime causes fatigue as found in the mining population (Sadeghniaat-Haghighi and Yazdi, 2015; Bauerle et al., 2018). These unique issues more likely cause decreased alertness, slow response time, impaired judgement and decision-making ability which have safety-related consequences (Magnavita, 2014). Common mental health problems that have been identified in the mining industry in Australia and China are depression (Considine et al., 2017; Joyce et al., 2013; Molek-Winiarska and Żońnierczyk-Zreda, 2018); anxiety (Tynan et al., 2017; Velander et al., 2010; Liu et al., 2015), and stress (Joyce et al., 2013; Molek-Winiarska and Żońnierczyk-Zreda, 2018; Torkington et al., 2011). Whereas the importance of mental health in the mining industry is gaining recognition in other parts of the world, there are very limited studies concerning psychosocial and mental health issues in the mining industry in Ghana (Amponsah-Tawiah et al., 2014). The mining sector is important and a major driving force to the economy of Ghana (Kim et al., 2015). Ghana has 23 large-scale mining companies producing bauxite, gold, manganese and diamonds, and about 300 registered small-scale mining groups and support services (Kim et al., 2015). Mental health problems can impact the wellbeing and safety of mining employees, yet little is known about this in Ghanaian mining companies.

According to WHO estimates, only about 5–10% of the workers in developing countries and about 20–50% of workers in industrialized countries have access to adequate occupational health services such as occupational medicine and wellness promotion activities (WHO, 2003). Ghana does not have a national policy on occupational health and safety management yet although there are some regulations around health and safety such as the Factories, Offices and Shops Act 1970, (Act 328), the Mining Regulations 1970 (LI 665), and the Labour Act 2003 (Act 561) (Asumeng et al., 2015). The existing regulations do not have provisions for workplace psychosocial risk assessment (Chirico et al., 2019). There is however a policy and guideline on occupational health and safety for the health sector (Asumeng et al., 2015).

With the limitation of non-existent national occupational health and safety policies, employers may not be obligated to ensure this at the workplace. However, this study brings attention to the necessity of ensuring encompassing health policy at the workplace including mental health. Like that of other jurisdictions, the Ghanaian mining industry has a focus on occupational health and safety with all the mining companies having health and safety departments as well as being equipped with medical facilities (Minerals and Mining, 2006). However, the industry has been primarily focused on safety issues, most of which are engineering in nature. There has been less concentration on the psychosocial and mental wellbeing of the employees. Although mental illness is a serious psychological condition, it is often perceived as less legitimate than physical disorders or conditions hence little or no attention is given to it (Follmer and Jones, 2018). The provision of mental health services is left to the discretion of each mining company with many unprepared to support those with mental illness in a way reflected in industry policies. However the workplace is identified as an ideal place to promote the mental health of employees (Petrie et al., 2018). Health promotion and prevention are somewhat similar but different. Health promotion enhances healthy living and general

wellbeing, empowering people to increase control over their health through health literacy efforts and activities (WHO, 2020). Health prevention minimizes the burden of diseases and associated risk factors (WHO, 2020). Similarly, mental health promotion involves a positive view of mental health rather than emphasizing mental illness (WHO 2004).

Mental health promotion involves actions that improve psychological well-being by creating an environment that supports mental health (WHO, 2018). Employee assistance programs (EAP) are an example of a work-based program designed to identify “troubled employees”, motivating them to resolve personal issues, and providing access to counselling (Sonnenstuhl and Trice, 2018). Studies in Australia, Japan, and USA identify EAPs as a tool to assist in the management of mental illness of employees in diverse occupations (Torkington et al., 2011; Nakao et al., 2007; Richmond et al., 2016). Other mining studies in Australia and China have reported that creating a positive workplace culture is an investment in reducing work-related stress. Besides, management support has been found to improve mental health (McLean, 2012; Liu et al., 2015). It is unclear the state of mental health supports available in the mining industry in Ghana. Furthermore, there is currently no published study about the type of mental health supports offered by the mining industry in Ghana, nor acknowledgement of cultural feasibility for such supports. This study aims to explore mental health and available supports from the perspective of managers in mining companies in Ghana. To capture these views and perspectives, a qualitative in-depth interview study was used to understand supports available.

2. Methods

2.1. Research design

This qualitative descriptive study used semi-structured interviews to gain an understanding of the mental health support systems available within mining companies for employees. Qualitative descriptive study seeks to discover and understand the perspectives and worldviews of the people (Caelli et al., 2003). It offers the opportunity to gather rich descriptions about the mental health supports available for employees. The focus of the study was exploratory; to gain an understanding of workplace based mental health supports from the perspective of managers in the mining industry and provide insight into this area. The Human Research Ethics Committee of the University of Newcastle (H-2018-0194) and the Ghana Chamber of Mines research committee (074/M2/18C) approved the study

3. Research setting

This study was conducted in five international gold mining companies in Ghana. All participating mining companies were international conglomerates. Interviews were conducted at each mine site with managers at a convenient time and location for the consenting participants.

3.1. Population/ sample recruitment

The population for the study was managers of gold mining companies in Ghana. All managers were invited to participate in the study and the convenience sampling technique was used to recruit those interested. Inclusion criteria to participate were; being a manager, Ghanaian, and permanent or contract employee. All managers, including high level, middle level and lower-level managers were invited to participate and received an information statement describing the study that explained that participation was voluntary. Interested managers contacted the authors via email, phone or in-person to express interest, and a mutually convenient time was agreed upon for an interview. Consent forms were signed prior to the start of interview on the scheduled day.

3.2. Instruments

A semi-structured interview guide was developed based on relevant literature (see Additional file 1). This was peer-reviewed by authors for appropriateness. The guide included open ended questions to encourage discussion with probes used to expand on responses. Questions were modified based on the responses given by the participants to allow for further probes during the interview (Smith et al., 2003). The semi-structured interview allowed for flexibility and enhanced a deeper exploration of the topic under study. Some of the items on the interview guide included: “Do you think the workplace has a role in supporting mental health of its employees?”, “What forms of support systems are you aware of for workers who are having emotional problems/stress at the workplace?” and “What happens when a worker has a mental health issue? What if anything is done for the person?”

3.3. Data collection procedure

The Ghana Chamber of Mines introduced and facilitated contact with the mining industries. The Chamber is the main minerals industry association in Ghana and oversees all mining companies in Ghana. The Chamber provided mining companies with information statement outlining the study and inviting them to participate in the research via email. The Head Office of the mining companies provided contacts to individual mines at the various locations. Interested managers of the mines were requested to contact the researcher via phone or email for more information about the research, express interest, and to arrange appropriate time for participation of employees. Upon receiving consent for participation by each mine site, a mutually convenient time and location for the interview was arranged with participants. At the start of the interview, consent to record was re-confirmed and WAD explained their rights of confidentiality and informed participants they could request a copy of the recording after transcription. Interviews were recorded with a philips digital recorder and took approximately 30 min. Data collection spanned from December 2018 to March 2019.

3.4. Data analysis

Recorded interviews were transcribed verbatim and imported into the NVivo version 12 software to help organize and analyse the data. NVivo (QSR International Pty Ltd, 2018) is a qualitative data analysis computer software package that is used to assist in classifying and sorting data, and is used to identify themes within data. Inductive thematic analysis was conducted with interesting patterns being highlighted in the text (Braun & Clarke, 2006). Mixed coding techniques were used; descriptive coding summarised the primary topic and in-vivo coding used direct language of participants (Saldaña, 2015). Each interview transcript was read several times to familiarise with the data, then potential emergent codes were noted. Data was coded line by line and recurring texts were identified and coded systematically. Initial codes were sorted into potential themes and superordinate themes, then re-categorised and redefined. Data saturation was reached prior to the end of coding and repetition of concepts became consistent. Several steps were undertaken to ensure the trustworthiness of the research. These included peer review via ongoing discussion with the research team on data coding and analysis processes and an audit trail involving examining the coding and analysis processes and interpretation of findings (Cohen and Crabtree, 2008).

4. Results

Nineteen managers participated in the study, two females and seventeen males, from five international mining companies. Four participants were from site one, three from site two, three from site three, one from site four, and eight from site five. Job roles of participants included Human Resource Managers, Occupational Health and Safety/

Health professionals, Mining Managers, Public Relations Managers and Security Managers. These roles are further classified into operational and non-operational roles. The demographic profiles of participants are presented in Table 1.

Three major themes were identified in the study: health promotion, onsite support, and external support. Sub-themes were developed for each major theme; health promotion (health promotion site activities and health assessments); onsite support (policy, supervisor support, management support, job accommodation/return to work (RTW) and onsite medical support); external support (formal support and informal support). Fig. 1 below presents a visual summary of identified themes and subthemes.

4.1. Health Promotion

The mine organises activities, programs, and events for employees to promote health. Some of the health promotion activities reported were recreational activities, wellbeing programs, stress management programs, financial literacy programs, social events, fatigue management programs, and drug and alcohol testing. Health assessments included medical assessments and tests organised for employees to monitor health.

4.1.1. Health promotion onsite activities

Workplace wellness programs, seminars and workshops are organised aiming to reduce the causes of stress and promote health of employees. Some of the programs identified were indirectly related to mental health. Financial wellbeing has a significant impact on emotional and mental health, and sites organised financial literacy programs to assist employees.

“So the company does trainings like financial literacy training, which tends to help employees manage their funds properly, and in my opinion, I think that it is a very good driver of mental health. Because if people finances are not good it will impact on their state of mental health” (Site 1)

Fatigue is a state of physical and/or mental exertion that reduces the ability to work safely. It is caused by prolonged periods of not resting. Fatigue management programs were frequently organised while modern and sophisticated technology is also used to monitor fatigue of employees in high-risk job roles. This was to enhance safety and productivity while managing fatigue in the workplace

“What we do for the fatigue management training is we have intermittent breaks on the job. So that people will relax.... For instance, a dump truck operator who is just doing load and haul, will be driving for almost 12 hours and if you don't regulate that, complacency sets in. So, you manage that fatigue management” (Site 3)

Other initiatives included wellness programs to maintain or improve wellbeing through stress management, diet, exercise and illness

Table 1
Demographic profile of groups (n = 19).

Job roles	Participants	Gender
<ul style="list-style-type: none"> Operational managers (Engineering Manager, Health, Safety & Environment Manager, Underground Mine Manager, Mine Manager, Industrial Hygienist) 	8	8 males
<ul style="list-style-type: none"> Non-operational managers (Human Resource Manager, Information Systems Manager, Occupational Health Doctor, Wellbeing Administrator, Security Manager, Communications and External Relations Manager, Project Manager, Learning and Development Superintendent) 	11	9 males; 2 females

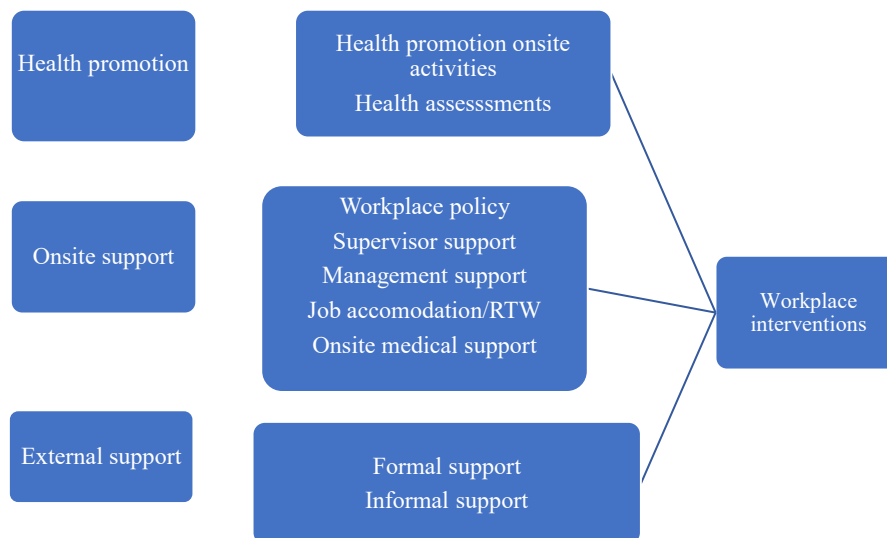


Fig. 1. Major and subthemes identified.

prevention;

“We do wellness programs. The wellness programs include walking, running all to create the awareness that as a human being you need to stay healthy” (Site 1)

Although social events were reported as promoting health, a challenge identified was the timing of the event which was not accessible to employees because they had to travel to see family on weekends.

“...so on weekends that’s when you want to travel and see family... Then Friday will be travel days, then you have Saturday and Sunday and come to work on Monday” (Site 5)

In contrast, at one mine site, one manager reported he had not attended any training or seminar on mental health awareness;

“I haven’t seen any trainings or workshops before on site. I have seen blood donations and health walks, but I haven’t seen anything like mental health awareness” (Site 2)

4.1.2. Health assessments

Health assessments may be considered a form of health prevention. Periodic health assessments were conducted at all mine sites by performing physical examinations which included HIV tests, cholesterol, substance use, blood pressure (BP), and diabetes test. These health assessments identified the specific needs of employees and how to address them. However, the annual medical review was basically only for physical health.

“Everybody is monitored, and everybody goes through a comprehensive medical review once a year, at least once a year” (Site 2)

However, it was also recognised that attention should also be given to psychosocial risk assessments instead of only focusing on physical risks;

“if you come to the mining industry, most of the risk assessment that we do are on physical hazards...noise, dust, vibration and all that but we also need to look at psychosocial risk assessment where you are looking at factors that influence peoples mental health, like what are the demands” (Site 1)

In addition, at the entrance of each of the mine site, a breathalyser is placed to screen for alcohol and other drugs. This is a daily routine as part of health and safety measures on the mine site;

“We do random drug test, and, on some occasions, we also get positive drug test for cannabis (Site 4)

4.2. Onsite support

Onsite support refers to the systems and processes available at the mine site for employees. This theme explored mental health support systems available on each mine site. The sub-themes identified were policy, supervisor support, management support, job accommodations/RTW, and onsite health support. Mental health was referenced infrequently and was implied through other activities and programs at the mine rather than being explicitly noted.

4.2.1. Workplace policy

Each of the five mines reported having policies relating to the provision of a safe working environment for employees, which included aspects of mental health. Safety was identified as critical to mining operations and various related policies were highlighted. Workplace policies supporting employee mental health were identified as fatigue policy, wellbeing policy, safety policy, alcohol, and other health policies. No site specifically identified having a mental health policy. Two sites reported having a wellbeing policy that seemingly addressed mental health.

“We have a policy on fatigue management. And we have told the guys “raise your hands up, be confident, that’s the kind of people we want”. If you are fatigued, we will not label you as lazy” (Site 1)

“Yes we have a wellbeing policy and EAP is covered in it” (Site 3).

Provisions for employees who have mental health problems were made at the mine site despite not having a mental health policy, however the development of such was recommended;

“...in providing support you need to have a clear-cut policy, the workplace can develop policies on mental health and that policy would guide practice. But unfortunately [the company] does not have any mental health policy...to the best of my knowledge I have not seen any policy on mental health. So that policy should incorporate accepting people with mental health problems, helping them reintegrate back to work. The company should if possible, contract the services of mental health specialist to support people with mental health problems.” (Site 1).

In contrast although a participant felt a mental health policy for

employees was not needed as the focus of the mine is production, there was support for reviewing health policies to include mental health. This sentiment is emphasized in this quote;

“We don’t have a specific policy that addresses mental health... Mental health is not our core business. Our core business is mining gold”... I will support reviewing policies to ensure they support employees’ mental health (Site 2).

All the participating mining companies are international companies and comply with international standards. Some mining companies had well-being departments in addition to the health service available at the mine site. Although occupational health and safety was unanimously viewed as important at the workplace, views differed relating to the need for a specific mental health policy and for others health policies included mental health. However, the attitude of the participants did not relate to tensions between the general approach and local approach but rather what was considered more important by the management at each mine site. All participants therefore embraced the idea of improving the mental health and well-being onsite, but that it had not been prioritised.

4.2.2. Supervisor support

Direct supervisors provided support to employees at work regarding their general health and well-being. Referrals were part of the support provided, hence supervisors would refer employees to the human resource department or to the clinic when there was any health issue for further assistance if it was not in their capacity to assist. Supervisors also provided support with informal conversations about employees’ overall well-being;

“Personally, what I do every morning is that if I don’t see or hear from my employees, I go to their offices to check how they are doing ... so by chatting with them I can know if they have any challenge or problems... they are free to come to me when they have problems. So we have fun and eat together just to know and observe, then if something about them changes, I can identify it” (Site 5)

“When you give that person a job and is unable to do it you just have to find out what his problem is...However if for one reason or the other you don’t feel fine, when you call your supervisor, he will give you time to rest” (Site 2)

A barrier to employee seeking support that was identified included a culture of not discussing personal problems at work. Building communication bridges to allow employees to freely engage with their supervisors was recommended;

“the only way to know these things [*mental health problems*] is if you have constant communication with the employees whether it is formal or informal...if you actually set out time to have talks and chats with your employee to find out, what is actually going on in the person’s life, then those things come out [*mental health problems*]... We must put in structures to enable the person go to his boss, and tell him that, look I am not well in my mind, I don’t feel good” (Site 1)

4.2.3. Management support

Managerial support has been identified as a key influence in employee mental health. Management in this context refers to the human resource department, managers, and heads of department at the mines. Management offer support by providing internal and external referrals to employees if employees are unwell.

“I think that our management has gone beyond the stage where they see mental health problems as a recalcitrant behaviour or something, but we also view it as a form of illness that organisations need to appreciate and support people with such conditions” (Site 5)

“[*management*] values the health of employees so if a mental health issue should crop up, it will be taken equally seriously as physical health” (Site 1)

4.2.4. Job accommodations/RTW

Another form of onsite support provided for employees is job accommodations. This involves job adjustments and accommodations for employees who have recovered from either physical or mental health conditions and those returning from leave. Some employees work from home if needed and for others who return to work after an illness or injury, they complete light duties until they can perform their regular duties.

“When they [*employees*] return, we do graded return to workplace. We just don’t reintroduce them to their usual routine...the shift is 12 hours but somebody returning from leave we can start him on 6 or 8 hours and then to do day shifts rather than night shifts” (Site 4)

“For instance, we do 12 hour work but we give [*employees*] 8 hour work” (Site 1)

“...We re-evaluate the job and check whether it’s realistic for one person to performing such work” (Site 2)

Job accommodation is provided to employees on return from leave. For instance, employees working the shift system are scheduled to only day shift for a period before returning to night shift. This is to help employees adjust to the work routine and rhythm of shift work.

4.2.5. Onsite health support

Onsite health facilities were located at each mine site to provide medical services to employees. These included onsite hospitals accessed by employees, their families and members of the community. The medical facilities are the first point of contact for employees who are unwell, with more serious cases referred to other general hospitals for care.

“We have an onsite clinic with competent doctors who ensure that employees get the right treatment” (Site 2)

“We have occupational health doctors’ onsite” (Site 3)

“We have medical facility on site” (Site 5)

In addition, two sites had well-being departments to support healthy behaviour and psychological well-being in the workplace. Psychological support was also recommended in addition to existing services;

“We need counsellors in place who can counsel people who need it” (Site 5)

4.3. External support

External support refers to receiving assistance outside of the mine site which was identified to be helpful. Participants explained that formal support included services provided by professionals who were not onsite or under the direct management of the mine. Informal support referred to the wider social network such as family.

4.3.1. Formal support

Some mines provided EAPs, outsourced professionals and made external referrals to hospitals for their employees.

“Yes, we have what we call EAP...there is an opportunity to get support and assistance from them and its confidential” (Site 5)

“Sometimes we do bring in the clinical psychologist to attend to certain conditions” (Site 1)

Unions were also identified as a formal external support as they are independent of the mine. Two of the sites had union groups and provided support to its members;

"If they [employees] actually find out that they are under stress or they have a condition that is not allowing them to perform at their best, they [employees] have their supervisor to talk to, if he [employee] is not comfortable to talk with supervisor, he can talk to the union leader, who then approaches the HR" (Site 1)

4.3.2. Informal support

Informal support included the support provided by the family, social networks and the community of employees. In addition, the stress of the job was identified as being further compounded by domestic stressors.

"Some people [employees] come and you see their stress is not because of the work but some situation in the house. If we [management] find out that the situation is beyond us, we then try to get the family involved" (Site 1)

In addition, a process of negotiating domestic roles of employees with their spouses to enable them to get the needed rest for work was noted;

"In the course of operating a machine at work, and they start to doze, the fatigue tracker picks it up and sends the information to the control room. If that happens, employee's supervisor will ask him what he did during his off-day to ensure he had enough rest...supervisor counsels him and sometimes [management] brings [employees] family and wives to the mine for a tour. The family is informed of how stressful mining is so when [employees] finish work, wives should not give [employees] any stress or household chores to do... [management] informs them to allow their husbands to rest. The wives might think otherwise but from the job perspective, the worker needs rest" (Site 5).

What this exploratory data indicates is that mining companies have instituted strong policies around health and safety to however mental health is implied rather than being explicit, with data suggesting that some of the activities and programs within the companies indirectly influence the mental health of employees.

5. Discussion

The WHO recognises mental health promotion in the workplace as a global priority (WHO, 2002), and this study contributes valuable knowledge on supports available in mining in Ghana. This is the first study to explore and identify mental health supports available in the Ghanaian mining industry from the perspective of management. This is an important research as managers and higher-level staff can play a gatekeeper role to service access for employees with mental health issues. The identified themes were Health Promotion, Onsite Support and External Support. Each theme included subthemes addressing various aspects although mental health supports were not specifically identified. This finding is common among other companies worldwide (Dalsbo et al., 2013; Joyce et al., 2016).

All the participating mining companies complied with the international occupational health and safety regulatory framework. This was evident in the fact that the various health and safety representatives, together with other managers interviewed, gave a positive account of the safety protocols which were consistent in all the sites visited and with what was set out by the regulator. The Ghana Minerals Commission regulations stipulates among other things a maximum of 8 working hours per day or 40 hours per week (7 days). However, through a petition to the regulator (Ghana Minerals Commission) by the Ghana Mine Workers Union, workers are permitted to work overtime to earn extra income. Ghana as a country does not have an overarching policy on occupational health and safety (Asumeng et al., 2015). However, the Mining and Minerals Act, which regulates the mining industry has sections which cover occupational health and safety albeit focussing on physical safety issues to the almost neglect of the psychological and

social issues. The Minerals Commission is empowered by the Act to regulate occupational health and safety related activities in the sector and has been firm in ensuring compliance.

The results of this study demonstrate that while employers may be cognisant of the benefits of mentally healthy workers, they remain uncertain about the corporate responsibility to provide direct mental health care for employees (Pescud et al., 2015). A mental health policy for the workplace defines the vision for improving the mental health of the workforce and establishes a model for action (WHO, 2005). There are factors that may hinder the progression of mental health policy in the workplace although the mining companies may follow international standard operations. Generally, mental health is considered a low priority for the government and a seldomly discussed topic in the Ghanaian culture and the workplace (Bird et al., 2011). Also the Ghanaian cultural context is deeply spiritually-oriented and cultural norms prioritise males as strong and tough, therefore admitting to mental ill-health can be seen as a sign of weakness and male impotence (Owusu-Ansah and Donnir, 2017). Further, masculine ideals such as the male-dominated culture in mining, reluctance to seek help and stoicism is an added factor (Seaton et al., 2018). In addition, spiritualisation of mental disorders in the Ghanaian context explains why it is not seen as a medical issue to be addressed through formal clinical structures, hence rely on the extensive psychosocial support within the Ghanaian society provided by immediate and extended family (Owusu-Ansah and Donnir, 2017).

Most people do not consider mental illness as a physical health problem, but consider it as spiritual health and so often resort to faith or traditional healers for help (Ae-Ngibise et al., 2010). For the religious, their mental health needs might be met through their faith healers because most mental health issues are considered as spiritual breaches (Owusu-Ansah and Donnir, 2017; Idemudia, 2004). Moreover, faith healers sometimes serve dual roles; religious professionals and mental health professionals, especially in areas where there are insufficient mental health resources (Kehoe et al., 2018). Religion and cultural norms are important sociocultural components in the Biopsychosocial Model of Health and illness, these must be considered in identifying appropriate help-seeking approaches and mental health interventions in the Ghanaian mining context.

In other industries, mental health policies aid implementation of strategies to improve mental well-being (Rajgopal, 2010). In the Australian coal mining industry for instance, there is the inclusion of mental health programs within the general health and safety policy (Kelly et al., 2012). In addition, adopting the Psychosocial Risk Management Model (PRIMA), which is the management of psychosocial risks and the promotion of (mental) health, and safety at the workplace and beyond (Leka and Cox, 2008) is recommended to assist industry to include mental health as part of workplace policy and process.

Supervisor and management support were considered a resource for employees; employees received support to help in their job roles from supervisors and colleagues. Management support and employee engagement were therefore positively identified, however other studies perceive management support negatively. In Australia, FIFO (Fly-In-Fly-Out) employees reported that although mental health support was available it was negatively viewed and not accessed by employees for fear of losing jobs (Gardner et al., 2018). This study identified that in Ghanaian mining, management attempts to break hierarchical barriers at work and relate more positively with employees. This is uncommon in other Ghanaian companies (including the public sector) where the workplace is very formalised and hierarchical with respect to authority (Williams and Innovation, 2019). Thus, although the mining industry is trying to incorporate this with the culture of an open-door policy to allow for more employee engagement, this social norm of reverence and respect for the elderly and persons in higher positions still exists. To break this sociocultural norm requires a deliberate effort from management to implement a culture of informal relationships across the hierarchy. Though many Ghanaian mining companies have international standards for workplace health and safety, the company culture

should reflect the values, beliefs and social norms of the Ghanaian people to influence the behaviour and attitudes of employees. However, this was not obvious from this study's results, it became clear that little attention was given to cultural norms and practices regarding mental health support (Oppong et al., 2016).

The workplace is an ideal setting for health promotion, and it is common across organisations and companies to organise physical activities, wellness programs, and other events in promoting wellbeing (Hutchinson and Wilson, 2012). Overall health promotion activities identified were well-being and stress-reduction events, financial literacy programs, social events and fatigue management programs. According to the Centre for Disease Control and Prevention, workplace health promotion programs become successful when mental and physical health interventions are combined (CDC, 2019). Companies that have incorporated mental health supports as part of the well-being programs have seen benefits such as positive workplace outcomes (Wagner et al., 2016). Indeed, as a culture in the mines, all the participating mining companies organise daily toolbox meetings where they receive health and safety briefings and discuss other occupational health and safety concerns before the commencement of work. Inclusion of mental health within the workplace health and safety policy, programs and toolbox meetings within the mining industry will help to address mental health. While there are limited in-house well-being programs and services on the mine site, the results showed that mining companies are supportive and provide both physical and mental health care for employees when this is required. The mining companies that operated union groups advocate on behalf of employees by working with management to help resolve workplace issues.

Although in this study mental health was implied in occupational health and safety, fatigue management, and the well-being policies of the mining companies, there was no evidence of mental health supports at the mine. Although these policies are effective in maintaining health and wellbeing, in the absence of a direct or inclusive policy, there is no motivation to provide a workplace mental health strategy. This lack of motivation stems from the concern that mental health policy may reduce profits, insufficient resources of the organisation to tackle mental health and the belief that interventions for mental health problems may not be effective. Strategies to overcome these barriers may include demonstrating to stakeholders that addressing mental health issues can improve productivity leading to returns for the organisation; educative information sessions and consultation with stakeholders about the effectiveness of addressing mental health at work; developing low-resource mental health strategies and providing evidence that challenges the myths of mental illness (WHO, 2005). Expanding the occupational health and safety policy to include a mental health policy provides the needed pragmatic step to improve the well-being of employees. The workplace mental health policy needs to be based on a comprehensive needs analysis of the issues in mining. The needs analysis might include human resources data (e.g. absenteeism records or the number of resignations); occupational health and safety data (e.g. accidents or risk assessments), financial data (e.g. the cost of replacing employees who are on long-term disability leave) and health data (e.g. common health and mental health problems among the employees) (WHO, 2005).

5.1. Conclusions

This study explored mental health supports from the perspective of management and can assist with the establishment of mental health supports in mining companies. Creating awareness for employees through workplace health promotion, onsite support mechanisms, and external supports demonstrates a level of encouragement around mental health and well-being in the workplace. While the findings are most applicable to the Ghanaian context, they may have relevance for international settings given the universal applicability of workplace mental health promotion and the growing trend towards the implementation of

health and well-being programs in the workplace.

5.2. Recommendations

All the mining companies that participated in the study are global and comply with international operational standards, this has resulted in a disconnect for local customs, and an internalisation or blanket approach to work, health and safety (Vignali, 2001). This means that, often nuanced approaches to mental health may be overlooked, for example local customs, appropriate language or social norms are neglected which may lead to increased barriers to access. Although an international standard is important, understanding the local context and social factors when addressing mental health and developing interventions should be considered. For instance, in Australia, the "mateship" cultural idiom has been harnessed and used to develop the Mates in Mining (MIM) program. MIM is an educational program that aims to help improve mining industry employees' ability to recognise mental health problems (Tynan et al., 2018). Consequently, we need much deeper grassroots understanding of mental health in the Ghanaian context to best develop mental health supports and interventions. Working with managers is one of the first steps.

An investment into mental health research across the resource industry will help to build evidence, develop policies, and design appropriately tailored interventions for employees (Deloitte, 2017). The industry can also partner with mining companies and other stakeholders to learn from best practices elsewhere. It is recommended that the Ghanaian mining companies combine both international and local approaches in providing culturally sensitive mental health supports and interventions in mining. Culture, as identified in the Biopsychosocial Model influences mental health in various ways, from the formation of a disorder, its clinical manifestation and what is deemed as an appropriate coping response or help seeking behaviours (Owusu-Ansah and Donnir, 2017). Furthermore, primary and secondary prevention of mental health problems are recommended. Primary prevention includes measures that prevent the onset of mental health problems. This would enable mining companies to promote mental health and well-being as part of broader health and safety policy. Workplace health promotion should include mental health programs within the general health and safety processes and procedures to provide a healthy work environment. Moreover, as part of increasing mental health awareness, it is recommended that employees become actively engaged in their own mental health literacy, well-being and be encouraged to participate in workplace programs around mental health and strategies that promote mental well-being.

A recommendation for future studies would be to follow an integrative approach to explore supports and interventions from the viewpoint of employees. Also, the PRIMA is recommended as a risk management framework to minimise psychosocial risks in the workplace. Future studies may build on this research to explore contextual supports and interventions that may work with this population. It would also be helpful to capture qualitatively the experiences and perspectives of employees regarding mental health supports that would be suitable.

6. Limitations

Limitations of the study must be acknowledged. This study focused on the experience of management staff in the context of mental health supports. Participants (managers) were asked whether they thought the workplace had a role in supporting mental health of its employees and how it was done. They were also asked about preventative measures that minimise mental health problems and improve well-being. Managers were not directly asked about future intentions or anticipated problems with pursuing this, as this study was focused on current practice. In Ghana the field of mental health is under-developed with the Mental Health Act still in its nascent stage of implementation. It was not surprising that the mining companies did not have policies on mental health but referred any suspected cases to the few experts in the

treatment centres dotted across the country. Consequently, the views on supports from the employees' perspective remain under-researched. Acquiring a better understanding of the needs of employees would assist in the development of supports and interventions offered by the mining companies to employees. This would contribute to a more comprehensive understanding of this phenomenon. However, this research is a stepping stone to developing this knowledge base. The aim of this study was to explore available mental health supports, hence did not determine outcomes of these supports. Future studies are required to explore the success and effectiveness of supports.

Declarations

Ethics approval and consent to participate

The Human Research Ethics Committee of the University of Newcastle approved the study (H-2018-0194). Consent was sought from participants and information stated that the research is voluntary. Codes were given to each participant to preserve confidentiality and anonymity and all reporting of data used amalgamated or deidentified responses. Signed consent forms and codes were separated to further ensure anonymity.

Consent for publication

Not applicable.

Availability of data and materials

For researchers who meet the criteria for access to confidential data, the data are available through the University of Newcastle Human research ethics committee giving the reference number (Approval Number H- 2018-0194). Requests for data access may be sent to humanethics@newcastle.edu.au.

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None.

Authors' contributions

All authors conceptualized the study concept and design. WAD collected the data, WAD and CJ analysed the data. WAD drafted the manuscript and CJ, JLR, BK and KAT interpreted the results, edited, and approved the final manuscript. All authors critically and substantively revised the manuscript for important intellectual content.

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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