# Work Conditions of the Mortuary Attendant in Ghana: A Qualitative Study

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#### Abstract

Mortuary workers play a crucial role in healthcare delivery by providing after-life care for dead bodies. Mortuary attendants ensure that corpses are well preserved before handing them over to bereaved families for burial. However, the work of mortuary attendants is a neglected area in most low- and middle-income countries, Ghana inclusive. This study explored the nature, duties and job requirements of mortuary attendants in three regions of Ghana. A descriptive exploratory study that utilised a qualitative approach was conducted. Nineteen mortuary attendants who worked in nine mortuary facilities in three regions were purposively selected and interviewed for the study. Semi-structured interviews were audio-recorded using an interview guide. Verbatim transcription of conversations was done, data were manually coded and analysed thematically. Scientific trustworthiness was ensured through applications of the philosophies of credibility, dependability, confirmability and transferability. Three themes were identified: nature of the work of mortuary attendants; qualification and training requirements; and working conditions of mortuary attendants. The emerged sub-themes revealed the critical role played by attendants in preserving the bodies for the families; the majority of attendants got their skills through apprenticeship and challenging work conditions. The lack of structured formal education among mortuary attendants exposes them to occupational hazards and leads to poor service delivery. It is recommended that a formal programme for training, certification and recruitment of mortuary attendants be instituted to equip them with the needed knowledge and skill to enable them to meet the demands of their work.

#### **Keywords**

mortuary attendants, formal education, skills, and knowledge, qualitative study

# Introduction

Globally, mortuary workers provide crucial support services to healthcare delivery as they preserve the dead body, thus preventing it from decay.<sup>1</sup> The presence of mortuaries services has changed people's experiences regarding death and funerals in most developing countries as it allows bereaved families to adequately prepare to lay their beloved ones to rest.<sup>2</sup> These services are well organised in industrialised countries but are one of the most neglected units in hospitals in low-income countries.<sup>3</sup> In most industrialised countries, individuals who choose mortuary work as a career are educated and may find the job rewarding.<sup>4</sup> On the contrary, mortuary attendants in low-income countries tend to be drawn from the poor or disadvantaged in the

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society who usually do not receive any formal education before their start of work in mortuary facilities.<sup>5,6</sup> Additionally, mortuary work is often regarded as unattractive and 'dirty'.<sup>2</sup>

Possessing the requisite knowledge, skill, abilities and the necessary experience is crucial in the successful performance of one's duties as a mortuary attendant. One requires a working knowledge of the techniques involved in handling and preparation of bodies; hospital methods and procedures; the care of surgical instruments and equipment; and hygiene and personal safety to function efficiently as a mortuary attendant.<sup>7</sup> The responsibilities of mortuary attendants are diverse and include handling, storage, cleaning, opening and closing up of corpses during autopsies as well as embalming and handing over corpses to families of the deceased.<sup>2,6</sup> Additionally, mortuary attendants perform important activities of transporting bodies from hospital wards to the morgue and from the morgue to funeral home; preparing dead bodies for pathological examination; cleaning and setting up instruments; picking tissue specimens; and ensuring that all specimens and cadavers are properly tagged.<sup>7</sup>

It is recognised that mortuary attendants are subjected to significant pressures, which may result in psychological problems.<sup>8</sup> Their work environment exposes them to several work-related dangers including chemical hazards (from chemicals used for embalming), physical strains (from the lifting of heavy corpses), biological hazards from body fluids if appropriate Personal Protective Equipment is not used, work-related emotional and psychological stress (unpleasant smells from portions of bodies that may have been burned, putrefied or fragmented) and hazardous environments that may result in hearing and sight problems, electric shock, burns and fractures or dislocations.<sup>9,10</sup>

Despite their crucial role in the healthcare system coupled with the many health hazards they are exposed to in their line of duty, mortuary workers in developing countries are often overlooked in studies on health and safety among health workers.<sup>5,7</sup> Also, people work for various incentives including financial rewards, which are necessary to increase productivity;<sup>11</sup> however, mortuary attendants in some developing countries are sometimes recruited and paid meagre salaries from internally generated funds of their facilities.<sup>12</sup> In Ghana, it has been noted that the lack of formal training and education makes it difficult if not impossible for mortuary attendants to seek career progression and promotion.<sup>13</sup> To fill these gaps, the current study explored the experiences of mortuary attendants in three regions in Ghana; with the view to describing the nature; duties and requirements; and conditions under which mortuary attendants work in Ghana.

# **Materials and Methods**

# Study Design

The study adopted an exploratory descriptive qualitative design that provided an in-depth understanding of the nature

and job requirements of mortuary attendants in Ghana.<sup>14</sup> This design was found suitable because there is a paucity of data regarding the experiences of mortuary attendants in Ghana, and also it gave voice to the participants.<sup>15</sup>

# Study Setting

The setting of the study was nine (9) mortuaries located in health facilities in the Volta, Oti and Bono East regions in Ghana. The health facilities consisted of one tertiary hospital (Ho Teaching Hospital one regional hospital (Bono East Regional Hospital) and six district hospitals (Ho Municipal Hospital, Keta Municipal Hospital, Peki Government Hospital, Anfoega District Hospital, Sacred Heart Hospital and Krachi District Hospital). The different facility levels, tertiary, secondary, and primary levels and locations, offered the researchers varying perspectives of the research problem from geographically distinct parts of the country.<sup>16</sup>

#### Study Population

The target population for this research was mortuary attendants from the nine selected mortuary facilities in the Volta, Oti and Bono East regions of Ghana. Inclusion criteria were mortuary attendants who had worked in the selected mortuary facilities for at least one year and consented to participate in the study. A year's working in the mortuary was considered adequate for the participants to have accumulated enough knowledge needed for the study. Besides, mortuary attendants in facilities other than the selected ones in the three regions were excluded from this study.<sup>17</sup>

# Recruitment of Participants

The selection of participants for the study was guided by principles of ethics and the opportunity of gaining access to people for observation, interview and from whom rich data could be obtained.<sup>18</sup> Participants were purposively selected from the nine selected health facilities and data saturation was achieved after interviewing 19 participants. Prior permissions were obtained from the management of the facilities as well as heads of the selected mortuaries who acted as gatekeepers. The researchers explained in detail the objectives of the study to the participants and their rights to refuse to participate as well as to withdraw from the study were explicitly explained to them. Additionally, the participants were assured of confidentiality and anonymity of their responses. They were also informed that their participation in the study was not going to affect their work anywhere.

# Data Collection Method

Data for this study was collected through semi-structured interviews using an interview guide.<sup>18</sup> Unit heads and heads of the pathology department acted as gatekeepers in the

recruitment of participants for the study. Consent was sought from the participants that were involved in this study before the individual interviews. Interviews were conducted in *Ewe* (Ghanaian language) and English languages according to participants' preferences. Interviews were recorded using digital voice recording devices. Using prompts and probes, participants' responses during the interviews were interrogated further to gain a full understanding of emerging themes. Interviews were conducted at a time and venue that was deemed by participants to be convenient, with the interviews lasting between 45 minutes to one hour each. Data were collected between October 2019 and March 2020. Fieldnotes were recorded and were incorporated in the transcripts before data analysis.<sup>19</sup> The interviews were transcribed verbatim and the transcripts were anonymised and prepared for analysis.

#### Data Analysis

Data analysis was done simultaneously with data collection to ensure that themes that emerged from the data reached saturation.<sup>16</sup> Data generated were read several times to immerse the 'self' in the participants' world.<sup>20</sup> Afterwards, thematic content analysis was adopted and data were managed manually. The researchers employed their expertise in qualitative data analysis and ensured that rigorous standards were maintained. The steps of data analysis proposed by Clarke and Braun<sup>21</sup> were adopted. Field notes were added to the main data to complement observations made on field.<sup>19</sup>

# Rigour

Scientific trustworthiness was ensured through the principles of credibility, dependability, confirmability and transferability.<sup>17</sup> Member checking to ensure that the views of participants were accurately captured was supported by concurrent content analysis by members of the research team. Three team members independently coded the data and the themes were later discussed and agreed upon by all the members of the team. These strategies were used to validate transcripts and interpretations made from the data, with follow-up on emerging themes to ensure their full understanding. Moreover, a detailed audit trail of data collections and analysis processes was maintained to enable other researchers to replicate the study in similar contexts. Interviews conducted in English were transcribed verbatim and those conducted in Ewe (Ghanaian dialect) were transcribed into English, with a stern focus on capturing participants' true accounts.<sup>14</sup>

# **Ethical Considerations**

Ethical approval for the study was given by the Ethics Review Committee of the University of Health and Allied Sciences, Ghana, with protocol identification number: UHAS-REC A.1 [35] 19–20. Also, approval was obtained from the management of the hospitals with the mortuary facilities where the study was carried out. Besides, individual informed consent was obtained from each participant, and permission was sought to record the interviews. The content of the study was expounded to participants and they were informed that participation was voluntary and that they were free to withdraw from the study at any time. Participants were anonymised to protect their identity and ensure confidentiality by designating participants' interviews with codes.<sup>22</sup> The identities of participants were replaced with names of bones of the human body.

# Results

#### Participants Demographic Information

Nineteen participants, made of eighteen males and one female, and aged between 25 and 65 years were involved in the study. Fourteen of them were married, two each were single and divorced and one was widowed. Seventeen of them were Christians, with one each being a Muslim and a Traditionalist. Participants' years of work experience as mortuary attendants ranged between one and thirty-eight (38) years. The minimum educational level of participants was basic education and the maximum was a certificate in prosectorship.

#### Research Themes

The researchers interviewed 19 mortuary attendants in nine hospital mortuaries across the Volta, Oti and Bono East Regions in Ghana. Three main themes were identified from the data analysis: the nature of the work of mortuary attendants; qualification and training requirements; and working conditions of mortuary attendants. Table 1 presents the emerged themes and their sub-themes.

# Theme One: Nature of the Work of Mortuary Attendants

This theme explored the nature and the job requirements of the participants. Three sub-themes emerged under this theme: the mortuary work, the duties and responsibilities of mortuary attendants, and knowledge of the work processes.

#### The mortuary work

The findings revealed that the work of the mortuary attendants involved an intricate process of receiving dead bodies, preparing them for preservation, embalming them and keeping them in the freezers. The participants explained who they are in terms of the work they do. They revealed that as mortuary attendants, they embalm to preserve dead bodies:

First of all, when we talk about mortuary attendants, we mean people who work on the dead body not as pathologists, but by preserving and embalming corpses. **RIBS** 

#### Table I. Themes and Sub-themes.

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Themes	Sub-themes
Theme one: Nature of the work of mortuary attendants	A. The mortuary work
	B. The duties and responsibilities of mortuary attendants
	C. Knowledge of the work processes
Theme two: Qualification and training requirements	A. The required qualification to be a mortuary attendant
	B. Apprenticeship/internship training
Theme three: Working conditions	A. Poor remuneration
	B. Medical check-up

A Mortuary assistant is a person who if someone dies or expires, you have to take care of the person, do your best to make sure the person's body is preserved for the family. **CLAVICLE** 

Someone who works on dead bodies, that is who a mortuary man is. Someone who takes care of the dead, and preserve them. **RADIUS** 

Some of the participants argued that they were no longer identified as mortuary attendants; rather, they were transitional managers as their responsibilities are now broader;

Now, we are no more mortuary men. We are now transition managers. We prepare the body we do a lot about the body. Formerly you see mortuary man, but now it is transitional managers. They have been calling us mortuary men, but now our name is transition managers. **STERNUM** 

# The Duties and Responsibilities of Mortuary Attendants

The study also discovered the daily duties and responsibilities of mortuary attendants. Aside from going for dead bodies from the hospital wards, dead bodies were brought to them from outside the hospital to be prepared and preserved:

My duty here includes picking dead bodies from the wards, bringing them to the mortuary, and doing embalmment. We sometimes receive bodies from outside as well. **RADIUS** 

Hmm, our work cut across a lot because first of all, when people die in the hospital, we go in to carry them and bring them to the mortuary for preservation. Some of them are brought from home. **ILIUM** 

The study revealed that the participants kept dead bodies picked from the hospital for further directives from the relatives on whether to embalm them or not. This is done with respect for the religious beliefs of Muslims, other religious groups and cultural preferences:

I am saying further directives because when a person passes on, we cannot wait and leave the body in the ward for other patients to witness. We wait for the family because they will decide whether to take the body home or put it in the mortuary before we work on the body. **FEMUR**  We ask the relatives to know whether or not the body will be buried right away, as in the case of Muslims or whether or not it should be embalmed. ULNA

In cases of mutilated bodies from accidents, mortuary attendants are responsible for suturing, mobilising and fitting the body parts together to make them presentable:

In case of an accident, some lost their heads and various forms of extreme injuries yet you must join, suture, and reinforce the body parts involved, make them fine before the family comes to collect the body. **TIBIA** 

According to the participants, they also assisted pathologists to perform autopsies. This they did by cutting open the bodies for the pathologists and also close after the examination:

Most of the time we work with the pathologist in autopsy examinations, our main job is the dissection of the dead bodies, take out the visceral that is the internal organs for the pathologists to ascertain possible cause of death. We closed up the body afterwards. **SCAPULA** 

Also, participants revealed that their duties involved the removal of foetuses from dead pregnant women. This is, however, done with the express permission of the medical doctor:

If the person is pregnant before passing on, we seek the doctor's directive and remove the baby ourselves. If the doctor is not here, we will not touch that [pregnant] body at all. MANDIBLE

A participant indicated that the mortuary attendants carried out the additional work of cleaning the morgue because they did not have cleaners in their departments. They also routinely examined corpses under their care to ensure that they are well preserved:

Those [additional] responsibilities are we sweep, we clean here, we clean our tools, we scrub here and then we inspect the bodies in the fridge sometimes. **CRANIUM** 

# Knowledge of the Work Processes

The study also explored the participants' knowledge of the work processes in the mortuary. The participants narrated that they prepared, embalmed and kept the corpses refrigerated until they were ready for discharge.

The described embalming as well as the rationale for it; that embalmment which involves the installation of chemicals into the corpse was to preserve the corpse and prevent it from decay:

Embalming *comprises injecting formalin into the system in an attempt to perverse the body.* **ILIUM** 

we inject formalin chemical to embalm it (corpse) before putting the body into the freezer to prevent decomposing. If we don't embalm well before putting it into the freezer, the body will ruin it when we release it to the family on the day, they will come for it. **FIBULA** 

According to participants, the current procedure for the installation of formalin is through a blood vessel. The essence of which is to get the formalin infused into every part of the corpse:

The embalming process is in different ways. At first, we injected almost every part of the corpse, but now, we locate an artery at the groin and connect formalin directly into the body. **PUBIS** 

There are two vessels, the artery and the vein; so, we choose the one that allows you to let formalin circulate through the body. **RIBS** 

However, the embalmment process was not always a smooth one. Participants described that some corpses required preparations to get them into a good state for the procedure:

Sometimes, some bodies have odours, plenty of air in their stomach we have to work on it to make sure the tummy comes down to make the body feel normal or the body to come down to the stage of a human being's body before we work on it.... So, the embalmment contains a lot. **PELVIS** 

Mortuary attendants prepared corpses by removing excess gas and fluids from them before the commencement of the embalmment process.

Sometimes some have fluids in their stomach, you have to tap it with a needle or sometimes you cut open If the fluid is small for the fluid to flow out of it and you re-stitch it back. **ILIUM** 

# Theme Two: Qualification and Training Requirements

The study explored the educational and training requirements to become a mortuary attendant. Two sub-themes that emerged under this theme are required qualifications to be a mortuary attendant and apprenticeship/internship training.

# The Required Qualification to be a Mortuary Attendant

It emerged that there is no formal training programme for mortuary attendants in the country; neither is there any standardised educational qualification required to becoming a mortuary attendant at the time of data collection. Participants explained that they acquired their skills through observation of those already on the job:

First of all, in Ghana, there is no programme for mortuary attendants. As a layman not knowing anything about the work, I went to learn how to do it from people who were already on the job. ILIUM

For that one, if I say there are any qualifications required for the work I'm lying; because some people didn't even go to class one before they are doing the mortuary work. **FIBULA** 

We normally accompany our colleagues who engaged in it, and as time went on, we developed an interest in it. When we accompanied them, they advised us to pay attention. **CRANIUM** 

Other participants, however, indicated that a minimum of senior high school education was required for employment as a mortuary attendant by some institutions, as literacy is a key requirement for employment in these facilities.

In this facility, they demand at least senior high school education. Your ability to read and write is crucial. **RADIUS** 

All participants acknowledged the importance of literacy and numeracy skills though not requirements for employment in most institutions. They conceded that these skills enabled them to serve their clients and also be able to keep records. Besides, formal education prepared them for any future developments in the profession:

It is good to go to school. At least, it is good to read and write. Because if you don't know how to read and write, how are you going to be able to deal with your clients? For example, if you are to write the name of the dead body, how are you going to go about it? CLAVICLE

... The work is practical, but we have to go to school so that we do not register the name of the deceased and other vital details wrongly. It (formal education) has helped me to be able to write, to account for the bodies over there, and then take records of them. **FIBULA** 

You can see the books around us. If you can't read and write, I don't think you can work here. I think they will issue us computers very soon, so if you can't read and write, you won't be able to work here. **FEMUR** 

Participants further revealed that some of their colleagues sometimes attended continuous professional development training to remain up to date. This opportunity was not, however, forthcoming as some of them were yet to attend any such workshops.

Occasionally my seniors attend workshops, but for me, I have not attended any workshops yet. I started work about a year ago. CRANIUM

# Apprenticeship/Internship Training

All participants had different learning routes to become mortuary attendants since there is no standardised training in Ghana. Most participants explained that they underwent prearranged internship training, which ranged from three months to two years:

To become a mortuary man, you have to undergo training. You can't just get up from home and say you're going to work in the mortuary. If you don't learn it means you can't do it. You have to learn it somewhere. It could be one, two, or three years so when you are done then you can now seek employment. HUMERUS

Per what I know, before you can do this work, you should have undergone some sort of education or had some prior experience in another facility...**RIBS** 

I underwent an internship at ... mortuary. I picked a form to undergo the internship through my brother who was an assistant to the administrator in the hospital. MANDIBLE

In this hospital, you have to apply to the senior mortuary man, then you come for an interview, and after that, you are trained for six months. **RADIUS** 

Some participants had prior experience as undertakers:

... I have worked as an undertaker before, but this is my first appointment as a mortuary man... SCAPULA

...I was not the one in-charge of the unit, but assisted with the work anytime they needed a hand with the undertaking work. Mostly, when it's the same town and there is more than one burial. **CRANIUM** 

# Theme Three: Working Conditions

The study further delved into the working conditions of mortuary attendants. Two sub-themes emerged under this theme: poor remuneration and medical check-up.

# Poor Remuneration

The salary of the mortuary attendants was one of the major issues of concern presented in the current study. Mortuary attendants lamented their meagre salary as compared to their workload which they felt was not commensurate. They complained that their current monthly salary was not enough to meet their basic needs:

The remuneration being given to us is unsatisfactory. At the end of the month, we are sometimes stricken by the work, but we are unable to cater for ourselves due to poor remuneration. **RADIUS** 

...hmmm, before God and man, I have a love for the job but the problem is the income. The salary for a mortuary attendant is nothing to write home about. Right now, my monthly gross salary is about 600 Ghana cedis (equivalent to \$103.08). **RAM** 

The study revealed that the mortuary attendants work around the clock. There was no mention of a shift system considering people die at any time. Due to this, they have no time to do any extra job to get additional money to support their meagre salary to sustain their families.

...Hmmm, doc. It's a problem. We work 24/7 and we don't have any time to go and do any other extra job...ILIUM

At least, I would have gone to make a small farm for myself. Even the foodstuffs I will not buy again but here I am, foodstuffs and everything I have to buy. **CLAVICLE** 

In this regard, participants appealed to their employers to come to their aid and also pay them allowances that are due them:

The government should pay serious attention to mortuary workers. And at the same time provide us with allowances that we are supposed to enjoy. **SCAPULA** 

# Medical Check-Up

In occupational health, a medical check-up is mandatory for all workers. While some hospitals abide by the mandatory rule, some do not pay attention to it. In Ghana, the National Health Insurance covers most medical expenses of its subscribers; however, the services that are not covered are paid for by the individuals when sick.

Some participants explained that they were required to undergo routine medical check-ups at least once every year. In some facilities, routine medical check-ups were mandatory and tied to the allowances of participants to ensure compliance. Some participants were, however, not enthused by this policy.

Yes. Every three months. Check-up is a hospital policy, which is compulsory for us. **RADIUS** 

Yeah. We go for check-ups. The hospital forces us to come for check-ups every five or six months. But we sometimes feel reluctant to go. So, for this, I will not blame the authorities. CLAVICLE Yes, every year we go for a medical check-up. Twice in a year. Yes, please, every six months. ILIUM

Yes, we have been checking it. Last year like this, it was compulsory for everyone to go and if you don't, you won't take your allowance. So last year we did it. And everything was ok. SACRUM

Nonetheless, other participants explained that routine check-ups were rarely done for them by their facilities. some of the participants took it upon themselves to seek medical check-ups on their own:

Once in a blue moon, we do medical check-ups to ascertain our health status. The hospital recently started helping us to do it for free. It was previously not there, but they have now seen the need for us to do periodic medical check-ups. **SCAPULA** 

Seriously. It is not all that frequent. I have a nurse here, sometimes I tell her to do a check-up for me. **RIBS** 

On one's own volition, one could go for a check-up but not as part of any special intervention by the hospital. **RADIUS** 

It was only when I was diagnosed with a hernia that I went to the hospital. Besides that, I don't go for routine check-ups. ULNA

Furthermore, some facilities provided no regular checkups for participants at all:

...but since I have been here for the past two years, not even a single check-up. **FEMUR** 

Not yet. I have not even sought a medical check-up. CRANIUM

One participant further narrated that, though he was given prompt treatment by his facility, he bore the cost of treatment himself in cases of in-patient care:

The thing is that you know I am staff, and they know what I am doing. So, when something is wrong, they take care of me quickly. But to say when you are sick and you go on admission, that one you have to take care of the bills yourself. **RIBS** 

# Discussion

The study explored the experiences of mortuary attendants in nine health facilities in Ghana. The work of mortuary attendants in Ghana mainly involved after-death care of corpses through preserving them for burial or autopsy. These findings are congruent with previous studies in this area.<sup>2</sup> The scope of work of the mortuary attendant spanned the collection of corpses to the mortuary; preparation, embalming and refrigeration of corpses for preservation. Given the wide scope of their work, some participants argued that referring to them as transition managers better encapsulated their job description, since their responsibilities have evolved to include assisting pathologists in performing autopsies. However, this nomenclature has been formalised in Ghana. Previous studies have acknowledged the different roles played by mortuary workers in the transition process to include the performance of autopsy and death care services in general.<sup>10</sup> The process of preservation of corpses as described by the mortuary attendants involved several processes which begin from picking or receiving corpses, preparation, embalming using formalin and refrigeration. Waschke, Bergmann, Braeuer, Brenner, Buchhorn, Deutsch, Dokter, Egu, Ergün and Fassnacht<sup>23</sup> noted that formalin (formaldehyde) is one of the modern chemicals for corpse preservation due to its bactericidal, fungicidal and insecticidal properties.

Depending on the state in which they received the corpse, the mortuary attendants prepared it by either suturing pieces together; removed excess gas and fluid from the abdomen; or remove the foetuses of pregnant deceased women. Mortuary attendants also took on the additional role of cleaning the mortuary environment in their departments. The scope of work described by mortuary attendants suggests that their roles cover a wide range of vital services in the transition process. They are crucial in maintaining the dignity of the dead by ensuring that corpses are well preserved and handed over to bereaved families in a presentable manner for burial. The preservation of the dignity of the dead is an important aspect of human society and after-life care.<sup>2</sup>

Again, in Ghana, there is currently no standardised educational programme for people intending to become mortuary attendants. Considering that mortuary attendants play a crucial role in the transition process, they ought to have working knowledge in human anatomy and physiology to understand the structure and function of the human bodies they work on. Despite the little emphasis placed on formal education and training requirements, participants acknowledged the importance of formal education to the success of their work. These findings are consistent with previous studies which found that most mortuary attendants in developing countries are not well educated and thus lack the needed knowledge to observe safety protocols and precautions.<sup>6,24,25</sup> It is also revealed in research by Adisah-Atta and Dim<sup>26</sup> that little attention is paid to the training of death care workers providing end-of-life services.

In addition, they lamented the limited opportunities for continuous professional development training to remain relevant in the job. The lack of formal training and CPD opportunities could place the life of even mortuary attendants at risk because they lack the basic education and training to carry out their work which could affect their knowledge and skill regarding the handling of infectious corpses and dangerous chemicals. A similar study in Gauteng Province, South Africa found that most mortuary attendants did not understand the concept of hazards pointing to a lack of adequate knowledge regarding their work.<sup>27</sup> This finding is not different from studies conducted by Molewa,<sup>27</sup> in Kenya, who also found that mortuary attendants lacked training on

infection prevention and control. The mortuary environment is a high-risk one loaded with various lethal disease-causing organisms.<sup>28,29</sup> Hence the widespread occupational health concerns among this group of health workers globally.<sup>27,30</sup>

On the contrary, studies in mortuaries in the Port Harcourt area in Nigeria found that most mortuary attendants had undergone training on mortuary-associated hazards and also had good working knowledge on health hazards and safety precautions.<sup>31</sup> Thus, mortuary attendants need to be knowledgeable about the chemicals used for embalming and the associated occupational hazards as well as the necessary protection to abate the dangers associated with their field of work.

The study findings also revealed that the employment of all mortuary attendants was not based on any standardised prerequisite education or training. In other jurisdictions, mortuary attendants are required to have at least a high school diploma or General Educational Development, while some employers require a minimum of a 2-year associate degree in Mortuary Science.<sup>2,32</sup> In another study conducted by Altaf Pervez, Zameer Ahmad and Asif Jamil,<sup>33</sup> it was further revealed that healthcare institutions should take the training of staff seriously including medico-legal issues on autopsy. Again, Adisah-Atta and Dim<sup>26</sup> note that it is important to train and equip the mortuary workers to make them feel comfortable at work and accomplish a lot for the facilities they work for. Regardless of their initial training, there is a pressing need for regular training programmes to help mortuary workers keep up with standard occupational health precautionary measures.<sup>2</sup>

The results from the study showed that participants underwent prearranged internship/apprenticeship at their current or similar facilities before being employed, with the duration ranging from three months to two years. Participants believed that for anyone to become a mortuary attendant, one should have undergone some sort of apprenticeship or have some prior experience in a health facility. This finding is in line with a study by Kessler, Heron, Dopson, Magee, Swain and Askham<sup>34</sup> who stated that apprenticeship is capacity building as it nurtures or provides growth to an individual in an institution. This gives direction and develops a supportive practice and system for those seeking to establish a clear career pathway. On the contrary, Cordner, Bouwer and Tidball-Binz<sup>35</sup> noted that in some cases people do not need apprenticeship to perform certain tasks. These researchers indicated that volunteers without formal training could take care and properly dispose of corpses that were highly infectious during the Ebola epidemic.

Finally, the study revealed that the conditions of service of mortuary attendants were not commensurate with the demands of their work. Mortuary attendants in Ghana are poorly remunerated and lack adequate medical care in most facilities. Most of them are casual workers paid from the internally generated funds of their facilities and are not on the government payroll hence do not benefit from privileges that come with being full-time employees. Participants were unhappy that their remuneration did not measure up to the work they do. They complained that they worked around the clock and thus had no time to engage in any additional work to supplement their income. Interviews with some mortuary attendants found that they are sometimes recruited and paid meagre salaries from internally generated funds of their facilities and that because they lacked formal training and education it is nearly impossible for them to seek career progression and promotion.<sup>36</sup>

Additionally, the mortuary attendants indicated that their roles and responsibilities have evolved over time and hence the need for increment in their meagre salaries to reflect their new roles. According to Umar and Aisha<sup>37</sup> work-related stress is the most common occupational health hazard among non-clinical health workers such as mortuary attendants. Schunck, Sauer and Valet<sup>38</sup> further noted that employees who receive low income may develop physical health problems. Poor conditions of service are a cause of worker dissatisfaction and low wages and salaries contribute to the attrition of most health workers from the public sector and government payroll.<sup>39</sup>

# Conclusion

The study uncovered that mortuary attendants in Ghana played a crucial role in the provision of after-death care through the preservation of dead bodies. Though their work involved intricate processes of preparation and embalming of the bodies, most mortuary attendants had low formal education to understand and appreciate the work they do. Furthermore, there are no regular professional continuous development training to keep them up to date. In addition, the conditions of services of mortuary attendants left a lot to be desired; the compensation and other conditions of services did not measure up to the work demand leaving the workers dissatisfied.

#### Implications

The lack of higher formal education among mortuary attendants could lead to poor service delivery and exposure to occupational hazards. Also, low compensation and the casual nature of their work could contribute to high attrition in this crucial workforce.

# Recommendations

Given the findings of the study, the researchers recommend that; The Ministry of Health (overseeing all health training institutions) introduces a formal programme for training, certification and recruitment of mortuary attendants to equip them with the needed knowledge and skill to enable them to meet the demands of their ever-evolving profession. The conditions of service of mortuary attendants should be reviewed to reflect the work they do consider that their job demands do not allow them to engage in other economic activities to meet their needs. This will also contribute to attracting better-educated people and improve the services of the mortuary attendants.

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