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Women's Contributions to Biomedical Healthcare in Ghana: A Focus on Obuasi

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ABSTRACT: From economic, through politics to domestic support, women have been the major engineers of valuable roles towards the development of every culture. Historically, their impacts in medicine and healthcare in general have been evident across time and space. Prior to European influx and the modernization of healthcare in Ghana, women delivered such roles that simulate that of modern midwives, nurses, herbalists and priestesses. Although, denied access to formal education in the colonial days, because of cultural reasons, women have risen to occupy central stages in biomedical services. Regardless of their numerical strength and contributions towards the provision of healthcare, they have been neglected and marginalized both within the society and by scholars. Significantly, the place of Obuasi, in particular, within the literature on women's contribution to healthcare delivery has received little attention. Dwelling on a qualitative research approach grounded in both primary and secondary data, the current study attempted a prime discourse on the contribution of women in the biomedical spheres using the Obuasi community as a case study. The current study has revealed that women as nurses and midwives work toward reducing child mortality and improvement of maternal health. Also, we have analyzed the challenges women face within the biomedical sphere as nurses and midwives.

KEYWORDS: Women; Contribution; Biomedicine; Healthcare; Obuasi.

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RESUMEN: *Contribución de las mujeres a la atención biomédica en Ghana: un enfoque centrado en Obuasi.*– Desde la economía, pasando por la política hasta el ámbito doméstico, las mujeres han sido las principales artífices de funciones valiosas para el desarrollo de todas las culturas. Históricamente, su impacto en la medicina y el cuidado de la salud en general ha sido evidente a través del tiempo y el espacio. Antes de la afluencia europea y la modernización de la atención médica en Ghana, las mujeres desempeñaban roles que simulaban los de las modernas parteras, enfermeras, herbolarias y sacerdotisas. Aunque le fue negado el acceso a la educación en la época colonial, por razones culturales, las mujeres han ascendido a ocupar escenarios centrales en los servicios biomédicos. Independientemente de su fuerza numérica y sus contribuciones a la provisión de atención médica, han sido ignoradas y marginadas tanto dentro de la sociedad como por parte de los académicos. Significativamente, el lugar de Obuasi, en particular, dentro de la literatura sobre la contribución de las mujeres a la prestación de servicios

de salud ha recibido escasa atención. Con un enfoque de investigación cualitativo basado en datos primarios y secundarios, el estudio actual abordó un discurso principal sobre la contribución de las mujeres en las esferas biomédicas utilizando la comunidad de Obuasi como estudio de caso. El estudio actual ha revelado que las mujeres como enfermeras y parteras trabajan para reducir la mortalidad infantil y mejorar la salud materna. Asimismo, hemos analizado los retos a los que se enfrentan las mujeres en el ámbito biomédico como enfermeras y matronas.

PALABRAS CLAVE: Mujeres; Contribución; Biomedicina; Atención sanitaria; Obuasi.

INTRODUCTION

Women have played varied roles in the development of every culture spanning economic, through politics to household chores. Historically, they discharged duties in every aspect of the society aside their traditional roles as mothers, nurses, cooks, processors and food keepers (Manuh, 1991). Politically, during the latter days of colonization, women in the Gold Coast (Ghana) played active role in the decolonization process of the country (Manuh, 1991).

Essentially, women's role in medicine and health has been evident across all cultures and civilizations in the world till date (Jefferson, Bloor and Maynard, 2015). The literature on the history of indigenous medicine in Africa, particularly among the Akan's of Ghana, has revealed that women played a very dominant role in providing healthcare for the population (Adu-Gyamfi and Adjei, 2017). Historically, women traditionally delivered such roles that were similar to modern roles of midwives, nurses, herbalists and priestesses before the advent of Europeans and the modernization of healthcare in Ghana (Adu-Gyamfi and Adjei, 2017). This notwithstanding, the modernization of healthcare in Africa during the colonial period cramped in the attempt to neglect women's roles by the state (Twumasi, 1975). Significantly, it has been reported that the colonial government and the immediate heirs of the political system of Africa were generally biased toward females (Osseo-Asare, 2013).

Writing in 2017, Adu-Gyamfi and his contemporaries put forward the argument that in the late twentieth century, the medical profession in Ghana was a reserve for men, neglecting their female contemporaries (Adu-Gyamfi and Adjei, 2017). It is however worthy to note that the marginalization of women in terms of their contributions to the development of the health sector was not limited to Africa alone. Comparatively, a study in the United Kingdom by Jefferson and his contemporaries argued that, for centuries, the profession of medicine and health like law, was dominated by the male population (Jefferson, Bloor and Maynard, 2015). Consequently, women were denied entry into UK medical schools until the late nineteenth century (Jefferson, Bloor and Maynard, 2015). In America too, medicine was a male-dominated profession until 1847 (Staff Care, 2015).

Aside from the institution of medicine, it is significant to also state that formal education during its inception in Africa, was restricted to men and the world at large. In 1687 in England, schools admitted only boys; girls could only attend schools when boys were not using facilities (Matthews, 1976). In Ghana, it has been reported that the first five Science Centers that were opened during 1964, which were laboratories, sought to represent the male population alone (Osseo-Asare, 2013). While the five science centers were made available and accessible to only males, their female counterparts were tracked into courses such as sewing, cooking and family hygiene. This underlines the fact that women were not given the opportunity to engage in learning related to health, hence female human resource in the medical field was unequivocally limited.

The existence of discrimination in the medical environment coupled with the notion that the profession was 'male-defined', at its inception, are some of the challenges that women in health professions continue to counter till date (Bourne and Wikler, 1978). It has been investigated in Ghana that biomedicine in the country operated, and still operates, according to patriarchal and other related hierarchies (Roberts, 2011).

Irrespective of the above, women have demonstrated beyond doubt that when given the room to operate, they could equally achieve greater heights just as their male counterparts in all aspects of life, including provision of healthcare (Beatley, 1995). In the UK, after the nineteenth century, women have risen to occupy a core stage in the delivery of healthcare in their respective societies (Jefferson, Bloor and Maynard, 2015). Significantly, the literature on women and health has revealed that women comprise a large part of the workforce in the healthcare sector (Berlin et al., 2019). Research has shown that the number of women in the healthcare institutions in Ghana and Africa as a whole outweighs that of men (Adu-Gyamfi and Brenya, 2016). Similarly, studies in the United States of America among health workers claim that women nurses are more than (80%) their contemporary men in the United States (Berlin et al., 2019).

Nevertheless, despite their numerical strength and their contributions towards the provision of healthcare, women have been neglected and marginalized both within the society and by scholars (Anyidoho et al., 2016). Most of the literature on healthcare pays attention to the contribution of male practitioners with limited focus on that of female practitioners. Significantly, there has been lack of attention given to women in the writings of history pertaining to the biomedical healthcare profession. There are several works which focus on women. These

include the works of Manuh (1991), Osseo-Asare (2013) and Adu-Gyamfi and Brenya (2016) among many others. Significantly, only a handful of these studies give peculiar attention to women's contribution to biomedical healthcare. Also, most of the literature on women and their roles in Ghana highlight their contributions to the political development of the Ghanaian state and economy, leaving their contributions to the health sector in particular, in a vacuum.

The focus of this research is Obuasi, a town which lies on the southern part of Ashanti Region of Ghana (OMA, 2013). The history of Obuasi affirm that the area covered by the township forms part of the stool lands of Akrokerri Traditional Area (Ampene, 1965). Significantly, the town is believed to be a subset of the larger Akan group of Adanse (Ofosu-Mensah, 2012). The traditional council of the Obuasi community owe allegiance to the Akrokerri State Council (Ampene, 1965). Since pre-modern times, the town has been synonymous to gold due to its long history of gold mining (OMA, 2013; Ofosu-Mensah, 2012). To this extent, Ofosu-Mensah reports that the people had developed their indigenous means of mining prior to the influx of Europeans (Ofosu-Mensah, 2010). The presence of gold and the mines have created a lot of employment outlets to people from across Africa. Through time, there has been the influx of people as migrant labour from all corners of the country and the globe as a whole, making the area ethnically heterogeneous (OMA, 2013; Ofosu-Mensah, 2010, 2012).

Healthcare delivery in Obuasi begun with traditional medicine and practices. With the large traffic of immigrants into the community, people from across the globe introduced different kinds of medical systems including the biomedical healthcare delivery. This has defined the area as a medically pluralistic community. The community has four main hospitals namely; the Obuasi Government Hospital, Anglo Gold Ashanti Health Foundation (AGAHF), Bryant Mission Hospital and St. Jude hospital (OMA, n.d.). There are also six clinics which complement the services of the Hospitals (OMA, n.d.).

As an Akan town, women have played various roles towards the development of the community. Historically, it has been reported that, since the beginning of gold mining in the community, women have been the major suppliers of food for mine workers (Ofosu-Mensah, 2012). Among other things, women have been reported to supplement household incomes via their economic activities (Ofosu-Mensah, 2012). Similar to other Akan groups, women have been very active in the medical practices of the community since the pre-colonial era (Adu-Gyamfi et al., 2019).

Nevertheless, the place of Obuasi within the literature on women's contribution to health care delivery has received little attention. Against this background, this current research seeks to address the gap in the literature on women's contribution to healthcare in Obuasi which is within the Asante territory of Ghana. Essentially, we aim at tracing the contribution of women to scientific midwifery and nursing care in particular.

METHODOLOGY

We have employed the qualitative research approach and retrieved data from both primary and secondary sources which include written and oral sources. Documents and reports of the Ghana Health Service (GHS) and World Health Organization (WHO) among other stakeholders were selected as major sources of primary data.

Also, based on a convenience yet purposive sampling technique, we gathered oral data from forty (40) participants in the Obuasi community. The key respondents for the current study were drawn from both in-service and retired female practitioners in biomedicine within the Obuasi area as well as lay people. The respondents included fifteen (15) nurses, thirteen (13) midwives, two (2) doctors, five (5) pharmacy assistants and five (5) patients from the four main hospitals in the community. Interviewees were selected based on their knowledge and experience in relation to the subject under review. Guided by a semi-structured interview guide, the purpose of the interviews was to gain a comprehensive understanding concerning their experiences on the subject matter. Due to its heterogeneity, we conducted the interviews in both English language and Asante Twi. Significantly, the five (5) patients included in the study were interviewed in the local Asante dialect and later transcribed and translated by the researchers. Manually, the results of the interviews were analyzed thematically to discuss the subject matter. The secondary data was used to corroborate primary findings.

Information taken from secondary sources comprised data from books, journal articles, reports and web resources. Significantly, the authors conducted searches in databases such as *Pubmed, Scopus, Google Scholar, MedicineNet, Web of Science, BMJ, EBM, Medline and Scientific American Medicine* under the following keywords: "Women and Medicine," "Women and Biomedicine," "Womens' role in biomedicine in Africa," "Gender and Biomedicine in Africa," "History of Women in Medicine" and "the functions of women in the hospital." Following the searches, the authors selected data from different sources. The criteria for selecting a particular material was premised on the fact that the material was published in English with discussions in line with roles of women, women contribution to society and medicine in particular. The studies of Jefferson, Bloor and Maynard (2015), Adu-Gyamfi and Adjei (2017), Anyidoho et al. (2016), Beatley (1995), Bourne and Wilker (1978), Berlin et al. (2019) and Osseo-Asare (2013) among many others were very useful for a take-off. We also did bibliographical searches in the secondary materials to find other sources that are relevant for this contribution. These sources corroborated each other and the analyses were presented thematically.

DISCUSSIONS

We have analyzed our findings from the field to discuss the subject under review thoroughly. Significantly, we have divided this section into three main parts to dis-

cuss the emergence of women in biomedical services; their contribution to the field of biomedicine and the challenges they are facing in discharging their roles as medical practitioners.

The Rise of Women in Biomedical Practices and the Factors that have motivated their Rise

Women in Africa have been at the forefront of medical practices since time immemorial (Adu-Gyamfi and Adjei, 2017; Twumasi, 1975). Historically, women performed functions that simulate the modern practices of midwifery, nursing, herbalists among others (Adu-Gyamfi and Adjei, 2017; Twumasi, 1975). This notwithstanding, several historical and cultural factors have discouraged women from playing active roles in the scientific medical delivery and health profession over the years. At the dawn of its inception in Africa and Ghana in particular, biomedicine and its associated medical practices were exclusively a reserve of the Europeans with few indigenous males employed as orderlies to perform the relatively menial duties of medicine (Opare and Mill, 2000).

During the era under review, the literature reports that cultural beliefs and norms among other factors deterred women from the institution of scientific medicine (Alesina, Giuliano and Nunn, 2013). The Obuasi woman in history was culturally believed to be a specialized being, discharging her services within the home. The discourses on women argue that these cultural norms about the specificity of women's role in the community, due to patriarchy, affected their participation in activities outside the home (Abane, 2004). Nevertheless, scholars argue that, within the pre-colonial Akan traditional society in particular, the model was complementarity rather than the sole concentration on the concept of patriarchy (Arhin, 1983; Aidoo, 1985; Manuh, 1991). Manuh (1991) rather suggests that the "Victorian values" introduced in the colonial days entrusted men with the obligation as the "heads-of-the-house," sidelining women and subjecting the latter to little recognition.

During the era under review, the institution of biomedicine in adherence to the "Victorian values," operated along patriarchal and racial hierarchies (Roberts, 2011). Significantly, despite women's involvement in the informal and traditional medical set up, they were denied access to education in the health or biomedical profession during the colonial days (Roberts, 2011; Beatley, 1995). In modern times, however, in Obuasi, this tendency has changed considerably with women taking central places within the medical profession.

While data on gender distribution of health workers in Obuasi seems problematic, the information on Ghana from Table 1 can be used to make possible generalization on same. The information suggests that as at 2010, females comprised over 70% of the total health workforce in the country. The rise of women in the provision of healthcare has been driven by various forces. In the section that follows, we discuss the factors that have accounted for the rise of women in the biomedical profession in the Obuasi community.

Prestige and Passion

Existing literature claims that most women enter into the health profession as a result of passion to care for humanity (Adu-Gyamfi and Brenya, 2016). Findings from our study justify the above claim as women in Obuasi had naturally discharged roles as nurses, midwives and lay caregivers since time immemorial. Most of our interviewees hinted that choosing their professions as nurses and midwives were borne out of their compassion for humanity and the will to serve others. In an interview, a participant explained:

> Since childhood, I had always wanted to be a midwife. I first graduated as a nurse. To be able to reach my goal as a midwife, I subsequently applied to read Midwifery. Based on my desire to serve humanity and mothers in particular, I had to go through all these "required stress" in my training as a nurse and subsequently as a midwife (Mary, interview, 2019).

TABLE 1: Gender Distribution by Health Occupation in Ghana 2010.

	MALE		**FEMALE**		**TOTAL**
	Number	%	Number	%	Number
Doctors	1509	73.69	539	26.31	2048
Nurses	2882	17.43	13650	82.57	16532
Midwives	---------	----------	3780	100	3780
Pharmacy Assistants	797	67.89	377	32.11	1174
Total	5188	22.04	18346	77.96	23534

Source: MoH (2012). Ghana, Human Resource for Health Country Profile.

Similarly, another interviewee explained how she forfeited her trade in order to follow her passion. She argued that:

> I had interest in becoming a midwife since I was a child. I actually fancied the urge to help women have safe deliveries but due to the low financial strength of my parents, I could not further my education to become a midwife. I subsequently learned a trade as a hairdresser. I graduated and started my own saloon with numerous apprentices under my care. With the required financial strength, I had to stop working as a hair dresser to receive my training at the Obuasi Government hospital as a midwife. Upon successful completion of the course in 2015, I have been working as a midwife (Lucy, interview, 2019).

From our studies, out of the fifteen nurses, thirteen (86.6%) of them believed that nursing profession is a call to serve humanity. As a prerequisite, people 'called by God' need to develop the passion to serve humanity in the area of meeting their medical needs. One nurse claimed that, after schooling, her parents had limited funds to aid her to further her studies; and due to the interest she had in the profession, she joined the mission's work to be trained as a nurse (Rahamat, interview, 2019). Additionally, she hinted that:

> The nursing and midwifery professions require people who are selfless. Being a nurse or a midwife means one should be compassionate, patient, empathetic and sensitive. It means being there for a total stranger. It requires the ability to bring hope and love to the helpless and the needy in the society. All these values fall within my personal values and they influenced my decision to enter into the medical profession (Rahamat, interview, 2019).

Our findings simulate the information within the literature. From the literature, it has been argued that most nurses and midwives were naturally born with the attitude and character exhibited by Florence Nightingale; the care for humanity (Adu-Gyamfi and Brenya, 2016). It is argued that about 60% of nurses quit work within their first year due to the lack of compassion for the profession and towards people in particular (Tye, 2015).

The prestige attached to the nursing and midwifery professions is believed to be a motivating factor. While all the midwives attached prestige to the profession, our study showed that out of the fifteen (15) nurses included in the study, ten (10) (66.7%) of them also associate prestige to their profession. Also, all the two doctors and five pharmacy assistants attach such prestige to their respective professions. On the attachment of prestige to the medical profession, most of our respondents claimed it was as a result of the fact that health workers deal with human lives and as such are seen as "God-sent." They are regarded as God-sent in critical points of life. A patient hinted:

> I just love the nurses' attire. When I was a young girl, I had so much respect for ladies who wore the attire. For those female doctors, I extremely respect and cherish them. I saw in them, a special people because of their knowledge about the human body. I do not know why I had so much respect for these people (Maame Nyamekye, interview, 2019).

In their study, Beach and her contemporaries argued that respect is frequently regarded as an important dimension in the profession of medicine (Beach et al., 2007). Similarly, Adu-Gyamfi and Brenya's study found out that some of these professional health workers choose their profession based on the respect the populace attach to these professions. Writing in the latter part of the twentieth century, Gostin and his peers put forward the argument that commanding respect will aid the development of natural or instinctive preference from patients and people in general (Gostin, 1995). Significantly, it has been contended that this form of respect imposes a distinctive moral feature upon the responsibilities of physicians and health workers (Beach et al., 2007).

Education

The literature on education in Africa argues that, few women during the colonial era and at the dawn of independence had attained formal education with the ability to read and write; they were specifically trained to be nurses and midwives (Akiwumi, 1971; Adu-Gyamfi and Brenya 2016). An 82-year-old patient hinted that:

> Education among women is as young as women in medicine. During our youthful days, we were denied access to education and medicine in particular. Nevertheless, the *owonta(s)* (mother of twins) and traditional birth attendants were actively involved in our indigenous medical practices. Formal education denied women the chance to be in the classroom because our parents believed the woman was perfectly created for the kitchen (Maame Nyamekye, interview, 2019).

This finding is consistent with information from the literature on women and education which puts forward the argument that, women were marginalized when it comes to the issue of education in Africa and Ghana in particular (Akiwumi, 1971; Manuh, 1991; Adu-Gyamfi and Brenya 2016). This notwithstanding, few women received formal education and were subsequently employed as teachers, nurses, and clerks whose employment was subject to termination upon marriage and/or pregnancy (Manuh, 1991). With few women attaining formal education during the era under review, Manuh (1991) and Robertson (1984) described women's access to education during the era as generally inadequate and limited. Significantly, a study published in the latter part of the second half of 1980s argued that it was only during the 1970s that girls received equal opportunities to be represented in formal education with their fellow men (Robertson, 1984).

Significantly, at the inception of midwifery training in the country, only girls with better education were recruited to be trained (Robertson, 1984). This notwithstanding, women have been provided with the avowed opportunity

to take up spaces in the health sector to address the question of limited health workers. As a result, the health sector has recorded the recruitment of many women to act as nurses and midwives to aid the provision of healthcare in the Obuasi area (Diana, interview, 2019).

As economies grow, girls' education has been reported to grow at a faster rate than boys (Heath and Jayachandran, 2017). Also, it has been argued that people receive education to fill available job spaces (Heath and Jayachandran, 2017). In an interview, it was reported that the provision of education for women and the expansion of the health profession have influenced women to grab these opportunities of becoming providers of healthcare (Regina, interview, 2019).

Africa, and the world at large, have limited health workers. According to Lori et al. (2012), in their quest to address the challenges of limited healthcare providers, Ghana's Ministry of Health (MoH) aimed at improving nursing and midwifery practice by expanding and opening new nursing and midwifery schools. This opportunity has motivated a larger portion of the women population in the community and Ghana as a whole to enroll in these schools to take up spaces in the health profession (Diana, interview, 2019). The requirements to become a nurse is relatively relaxed than most programmes run in health training institutions. In recent times, there are other avenues that health professionals utilize to improve upon their training and certification. In Ghana, general nurses are required to spend at least two years in Colleges to earn diploma, or four years to earn bachelor's nursing degree (Diana, interview, 2019). Concerning midwifery, it is a three-year post-secondary programme after which one obtains a diploma (Agyei-Baffour et al., 2013). Also, doctors -both general and specialists- are required to obtain a professional doctorate degree (MD) before they are appointed to serve in health institutions.

From a different perspective, based on the findings of Heath and Jayachandran (2017), we argue that increase in female enrollment in formal education has increased their numbers in the health sector. Significantly, in Obuasi, the limited number of health workers in the community has caused several women to enroll to take up responsibilities in biomedical practice (Mary, interview, 2019).

Our studies in the health centers have specifically revealed that, the number of women in the healthcare sector of the community is satisfactory vis-à-vis the information from the literature which argues that women have been marginalized in the area of health and education (Adu-Gyamfi and Brenya, 2016; Akiwumi, 1971). Comparatively, a study in China has revealed that aside the large number of women in the country, women have achieved parity, with the potential of achieving superiority compared to their male counterparts in professional and technical occupations (To, 2015). The debate above suggests that, the provision of equal opportunities for women and men in the area of education has caused a rise in the number of women being trained to become midwives and nurses. Going beyond the discourse, the expectation has been whether there could be much women in other spheres of the medical profession including pharmacy, surgery, and oncology among others (Adu-Gyamfi and Brenya, 2016).

Job Security and Evasion of Unemployment

The issue of rampant unemployment in Ghana and Obuasi in particular is not a recent issue (Regina, interview, 2019). Within the literature, unemployment stands as a major problem which threatens the globe and Africa in particular (Jahoda, 1982; Johnson-Saylor, 1984; Silva and Marcolan, 2015). Significantly, aside economic problems, the issue of unemployment has tremendous impact on the individual level (Jahoda, 1982; Silva and Marcolan, 2015). The literature argues that unemployment has the proclivity to result in psychosocial stress and emotional distress which can consequently result in serious mental health complications (Jahoda, 1982; Johnson-Saylor, 1984; Silva and Marcolan, 2015).

Significantly, most of the nurses and midwives interviewed admitted that their aim to secure a job coupled with the interest of improving their conditions and to evade unemployment informed their decision to be health practitioners. In an interview, a participant argued that, she trained to be employed into the health sector as a pharmacy assistant in order to evade unemployment. She claimed that her psyche changed during her training, and that the fear of being an unemployed youth prompted her to develop a special interest for the profession. In a similar manner, Elizabeth hinted:

> I never had this profession at the back of my mind. When I completed my form four education, my parents had unsatisfactory resources to be able to cater for my education. Life became very difficult as my certificate could only earn me a menial job as a cleaner –which I was not interested. Staying at home without any job and the hope to avoid the stress of unemployment transformed me a lot. Fortunately, a mission was providing a training scheme for young women within the community as pharmacy assistants with the assurance of employment after graduation at a relatively lower cost. The urge to secure a job to meet my financial obligations for my family pushed me to enter this profession (Elizabeth, interview, 2019).

The stress attached to the issue of unemployment compel individuals to take opportunities that will earn them financial resources to cope with the problems of life (Silva and Marcolan, 2015). A contribution emanating from this research further suggests that people aim at pursuing career in health because they want to avoid the debilitating effect of unemployment.

From the study, it was revealed that most health workers within the Obuasi community joined the health professions in order to secure a stable job. Significantly, an informant hinted that the monthly allowances provided to nursing students by the government and the readily available jobs after school motivated her to join the health profession. A participant hinted that, women who enroll

in the nursing training easily qualify to secure a place in the profession in Ghana due to inadequate health personnel in the country (Ofosu, interview, 2019). Similarly, an earlier study within the discourse of nursing claims that, nursing profession in Ghana is seen as a safe haven for those who want to secure jobs since they are readily posted upon completion of their studies (Adu-Gyamfi and Brenya, 2016). In Australia, it has been reported that the availability of jobs within the nursing profession serve as both intrinsic and extrinsic rewards for specializing in the profession (Hickey, Sumsion and Harrison, 2013). Significantly, this tendency has increased the number of nurses across the globe (Adu-Gyamfi and Brenya, 2016; Hickey, Sumsion and Harrison, 2013; Ditommaso et al., 2003). This notwithstanding, in our study, only a handful (17.5%) of our respondents claimed they were lured into the profession due to the financial allowances they received in school as well as the salary they anticipate during their time of work, while thirty-three (82.5%) of the participants interviewed indicated the need to serve humanity as the primary motivating factor.

Physiology and Nurturing

Nursing is looked upon as a caring, nurturing, feminine, motherly and soft profession considered ideal for women (Frimpong, 2016). Similarly, midwifery and its training, from the onset of biomedical practices, was reported to be readily accessible to women due to the fact that the nature of the job is in line with the traditional role of women (Adu-Gyamfi and Brenya, 2016). Significantly, the activities and practices associated with midwifery is perceived to be reserved for women (Twumasi, 1975; Adu-Gyamfi and Adjei, 2017).

Thirty-seven (92.5%) of our respondents claimed that the availability of women have proclivity to speed the recovery pace of patients. Specifically, a patient argued that "women possess empathy and other features that stimulate the fast recovery of patients" (Opanyin Kwasi Poku, interview, 2019). Studies on the life of Nightingale have revealed that showing your clients empathy is key to the nursing profession (Karimi and Alavi, 2015). Similarly, a physician hinted that, "women are patient and have the motherly tendency to care; they take care of other people as their own wards" (Dr. Agnes, interview, 2019). She further hinted that:

> Naturally, men cannot condone certain attitudes of patients; they do not have the patience to tolerate same. But women, even when patients insult them, keep having that motherly passion and love to care for them until they recover. Sometimes these women cry in their closet. (Dr. Agnes, interview, 2019).

Women are generally perceived to be empathetic and would take care of people as if they were their own (Adu-Gyamfi and Brenya, 2016). A current study by Pompilio argues that "the stereotypical toxic masculinity roles claim that men are not empathic; they cannot nurture; they are not compassionate. Those roles are reserved for females" (Pompilio, 2020). This has the tendency of discriminating against males who are enrolled in the nursing profession. A patient hinted:

> So far, at almost all the hospitals I have visited, only female nurses attend to me and their reception towards me I can say is good. I have not encountered a male nurse yet, I will say the women are doing well based on my personal experience with them. There are few bad ones who have given poor reception (Osei, interview, 2019)

It is worthy to note that not all nurses, and for that matter women nurses, possess the qualities of empathy discussed. Our conversation with patients revealed that a handful of the female nurses' present poor reception skills coupled with poor communication skills –which has been identified by Nightingale as an influential factor in healthcare (Karimi and Alavi, 2015). Pompilio (2020) puts forward the argument that although dissatisfied with gender-based stereotypes in nursing, some males possess more caring and physiological qualities than their female counterparts.

The Role of Women as Biomedical Healthcare Practitioners

The role of women as healthcare practitioners, as stated in the literature, has been in existence since time immemorial dating back to their roles as traditional medical practitioners (Twumasi, 1975; Adu-Gyamfi and Adjei, 2017; Pompilio, 2020). It has been reported that the role of women within the biomedical healthcare practice and setting began after the inception of the first nursing sisters in the country (Opare and Mill, 2000). During this era, women were given lessons in human anatomy, psychology as well as surgical and medical nursing (Opare and Mill, 2000). Subsequently, women within the biomedical healthcare have become core agents of healthcare (Boniol et al., 2019; Adu-Gyamfi and Brenya, 2016). Statistics show that they amount to 70% of workers in the health and social sector (Boniol et al., 2019). At the Okomfo Anokye Teaching Hospital in Ghana, a study has revealed that out of a total of 1290 nurses employed between 2007 and 2016, 1080 (84%) of them are females (Budu et al., 2019). In Obuasi, aside being the majority workforce within the healthcare sector, women in the healthcare industry have equally discharged profitable duties to the attainment of proper healthcare within the community. Under this section, we explore women's role in the sectors which are dominated by women within the biomedical healthcare in the Obuasi community.

Women as Nurses

Historically, it has been reported that nursing in the West was a menial job reserved for women (Pompilio, 2020). Around the 1500s, the Protestants view of women as housekeepers (Pompilio, 2020), caring for family members

and raising children entrenched the debate of women as natural nurses (Manuh, 1991). In a similar manner, prior to the introduction of biomedical practices in Africa, nursing care, according to Adu-Gyamfi and Brenya (2016), was a role assigned to females. There is a long-held assumption and belief that women have special talent for tending the sick (Adu-Gyamfi and Brenya, 2016). In contrast to this traditional notion, the first nursing school in the world is believed to have included men only and was started as far back as 250 BC in India (Pompilio, 2020).

Within various households and communities, women are also renowned in their social roles as nurturers and caretakers of the young, aged and the sick (Pompilio, 2019). In a similar view, a respondent hinted that a nurse "is someone who cares for people; someone who helps a sick person out of his or her situation to a better and healthier situation (Rahamat, interview, 2019). She added that "even as parents, all women are natural nurses in their various homes." Within the discourses of the World Health Organization on nursing, the profession encompasses collective and autonomous care of individuals of all ages, families, groups and communities -sick or well in all settings. Globally, nurses play essential role in healthcare provision by stimulating health, preventing illness, restoring health, and lessening suffering (Adu-Gyamfi and Brenya, 2016). One of the interviewees, a nurse, hinted that her role as a nurse included, attending to emergency cases, managing trauma and taking care of patients (Mercy, interview, 2019). Similarly, a retired nurse hinted:

> My duties as a nurse during my service included making beds, cleaning the wards, monitoring patient's health and taking vital signs of patients, giving injections and medications, dressing wounds, assisting doctors during surgery, helping midwives in wards, running errands for patients in critical states and acting as a teacher where I give and share ideas on good health with patients (Mansa, interview, 2019).

> The literature summarizes the duties of nurses as discussed in the extract below:

> The Code for Nurses (ethical concepts applied to nursing) adopted by the International Council of Nurses Council of National Representatives in Mexico City in May 1973, denotes four main areas of responsibility for the nurse: to promote health, to prevent illness, to restore health and to alleviate suffering of their patients, friends and families in their collaboration with physicians (Chapman, 1980: 129).

In an interview with a community nurse, she put forward a similar idea in relation to the normal duties of general nurses. Specifically, she added that;

> … as community health nurses, we go down to the communities. It is our duty to move into communities to educate them about their health issues, the outbreak of diseases, the causes of the diseases, how to prevent them and cure them when infected as well as treat health conditions within our power (Regina, interview, 2019).

Aside discharging their healthcare roles, nurses in Obuasi provide emotional support to catalyze patients' recovery. Specifically, we argue that female nurses are the best when it comes to the provision of emotional support than their fellow men. Information from both the literature and our respondents confirmed that women have the qualities that ensure proper emotional support for people. An interviewee hinted;

> You know that communication is therapeutic ...some patients do not only come to the hospital for treatment; some only come here for emotional support and we, especially the women, perform all these duties aside our daily duties, to ensure that patients are healthy and in good state of mind (Mavis, interview, 2019).

Women who are community nurses –together with their male counterparts- have been at the forefront at educating the people within the remote parts of Obuasi concerning their health needs. Education of the population and the sick in particular is a core part of nursing. Flavin (2018) reports that nurses usually educate their clients (sick or healthy) concerning "illness, procedures and symptoms they experience in the healthcare environment, as well as their plan of care upon leaving."

Women as Midwives

Throughout history, women have been the main healthcare providers for their fellow women in Africa during childbirth and postpartum (Adu-Gyamfi, Gyasi and Poku, 2018). Since time immemorial, midwives have played vital roles in providing support, care and advice to pregnant women during pregnancy, labour and after birth. Within the scheme of the WHO, midwifery involves care of women during pregnancy, labor and the postpartum period as well as care of the newborn (WHO, 2018). Since its inception as far back as 1917 in Africa, modern midwives in Ghana played paramount roles. The initiators of the occupation saw it to be in line with the traditional role women were expected to play within society. This included attending to women during child birth (Akiwumi, 1971; Adu-Gyamfi and Brenya, 2016). When asked who a midwife is, a respondent hinted; "a midwife is a person who provides care and support women while pregnant, during labor and after the baby is born" (Mary, interview, 2019).

Unlike the prehistoric era where midwives, popularly referred to as traditional birth attendants (TBAs), received their training from apprenticeship (Adu-Gyamfi and Adjei, 2017), modern midwives in the biomedical setting acquire their knowledge through formal education. Significantly, all the thirteen midwives included in the study revealed that they gained their training through formal education. A respondent hinted:

> … after completing the junior high school, I could not further my education. I had the passion of becoming a nurse, I later heard the Obuasi government hospital was giving

> opportunity for people interested in becoming healthcare practitioners to apply and be trained. So I applied, later went for an interview and upon passing I was selected to be trained. We were trained in order to be able to work in different sections of healthcare. I had the zeal to specialize in midwifery. As a matter of fact, I decided to gain more knowledge in the midwifery by observing the practices of traditional birth attendants through a part-time apprenticeship. After gaining the skill, I later applied to be trained as a modern midwife (Elizabeth, interview, 2019).

Midwives within Obuasi perform roles that transcend the responsibility of assisting pregnant women to deliver safely and easily. An interviewee hinted:

> As midwives, we have the responsibility of ensuring safe and easy birth during labor. We advise pregnant women on the need to visit the hospital for antenatal through their nine months journey. We insist that "difficult patients/ clients" attend antenatal programmes with no intermissions. We also educate them on complications related to pregnancy and the activities they should do to avoid them (Lucy, interview, 2019).

Similarly, an informant claimed that the activities of midwives include the advice on what food pregnant women should eat. She added:

> We organize programmes to educate pregnant women on what they have to do to stay healthy. There are several occasions where we have to prescribe certain foods for pregnant women to eat. While some of the clients do not follow our guidelines, others heed to these requirements. Specifically, women who follow our advice such as the need for regular visits for checkups and the right diet among others normally go through safe deliveries without complications (Mercy, interview, 2019).

Essentially, both earlier and current literature report that women are advised by midwives concerning the type of food they should eat, the kind of water they need to drink as well as the kind of exercises they can engage in, in order to help the baby grow well and healthier. They also help pregnant women to live a healthy life (Twumasi, 1975; Adu-Gyamfi and Adjei, 2017; Adu-Gyamfi, Gyasi and Poku, 2018).

In Obuasi, aside the traditional responsibilities of assisting women to safely deliver their offspring, midwives also give advice to pregnant women to regularly visit healthcare centers for checkups in order to avoid complications throughout their journey. Significantly, this role simulates the pre-historic traditional roles discharged by traditional birth attendants. During the era under review, it has been reported that TBAs regularly visited and gave guidance and necessary advice to their clients immediately after conception, through delivery to postpartum activities (Twumasi, 1975). The literature suggests that aside being specialists in obstetrics, providing women with basic healthcare during and after pregnancy, TBAs also provided advice and sex education to their clients (Adu-Gyamfi, Gyasi and Poku, 2018). Among other things, precolonial TBAs educated their clients on the ethics surrounding pregnancy and child-birth (Twumasi, 1975; Adu-Gyamfi and Adjei, 2017; Adu-Gyamfi, Gyasi and Poku, 2018).

Midwives are guided by the aim of achieving the Millennium Development Goals targeted at reducing maternal mortality in the country. In an interview with Diana, she hinted:

> … Since our school days till now, we have been told to target the Millennium Development Goals (MDGs) that is purposefully aimed at reducing child mortality and improve maternal health. Toward this end, when I am able to help a pregnant woman deliver and have a safe delivery, in terms of saving the life of both the mother and that of the child, it gives me much joy. It also makes me feel I have contributed to the goals of MDGs and this adds to my achievements (Diana, interview, 2019).

To emphasize, in Obuasi, midwives helped to contribute towards the achievement of the Millennium Development Goals set by the United Nations to influence health which in turn have a positive effect on development within the community and Ghana in general. Essentially, their interest was geared toward the achievement of the fourth and fifth goal: the reduction of child mortality and the improvement of maternal health respectively.

Table 2 suggests a persistent decrease in infant mortality in Ghana. In consonance with information from our respondents, the current table indicates that from 2010 to 2018, infant mortality rate has decreased from 47.5% to 34.9%, a greater contribution towards the attainment of MDGs. It is important to argue that it is the aggregate efforts of respective midwives and medical staff in respective hospitals, clinics and health centers in Ghana including Obuasi that such targets were achieved.

To ensure the attainment of these goals, midwives in the community employed the necessary measures to save the lives of their clients. As a traditional community with an avowed interest towards explaining disease causation as a natural phenomenon, midwives in Obuasi associate some complications to supernatural forces. According to Elizabeth, there are instances where a midwife would

TABLE 2. Ghana: Infant Mortality since 2010.

Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Value (%)	47.5	45.6	43.7	42.0	40.4	38.9	37.4	36.1	34.9

Source: World Data Atlas. "Ghana- Infant Mortality Rate." Available at: http://knoema.com/atlas/Ghana/Infant-mortality-rate [Accessed 23 June 2020].

have to pray for pregnant women in labor to ensure safe delivery. She added;

> There are situations where pregnant women would have spiritual forces fighting against them and their delivery in particular. This makes the delivery processes very challenging to a midwife who has been assigned the mandate to help enhance safe delivery. In instances like these, if she (the pregnant woman) has offended anyone, the midwife supports her to pray with the goal of helping her have a safe delivery. When pregnant women have safe deliveries, midwives have enough reasons to wear a smile on their faces (Elizabeth, interview, 2019).

The above claim clearly demonstrates that, the social causative theory is still embedded within the Obuasi community and in the scientific medical practices in particular. Similarly, in a recent study, Adu-Gyamfi and Adjei (2017) have reported instances where women could have easy and worthwhile delivery during the time of labor when they had the opportunity to apologize to family members or mothers they had offended (Adu-Gyamfi and Adjei, 2017).

Challenges of Women as Healthcare Practitioners

The literature on women in biomedical healthcare identifies a range of challenges that militate against women and the delivery of their services. Similarly, the current study revealed, through the interviews conducted among midwives and nurses in the Obuasi community, several challenges in relation to their profession. Among other things, all the health professionals interviewed mentioned limited or no logistics to support them in their work, long working hours, inadequate staffing, and increased workload. We have discussed the challenges faced by these nurses and midwives in the subsequent paragraphs.

Workload and Inadequate Staff

An institution is required to have the right number of individuals at the right time to support its functions (Rajan, 2018). To that extent, the health sector is one of the most critical areas that have less capacity to perform the needed task entrusted to it. Significantly, in Africa, the required responsibilities to deliver adequate healthcare far outweighs the numerical strength of health workers (Lori et al., 2012).

Staffing shortages was found to be one of the factors challenging the operations or activities of nurses and midwives in the Obuasi community. This has become an anathema to their practice due to increased workload. In an interview with a nurse, she hinted:

> Although it may appear that many people today are developing interest in the health sector, the various institutions within the sector do not have the required number of staff. I think this problem come about due to government's negligence of the sector and the Obuasi community in particular. As a result of the limited number of staff, we are burdened with volumes of work which are to be executed by more than the existing number of staff in the institution. In this hospital for instance, we have only one doctor overburdened with the tasks that require more physicians (Regina, interview, 2019).

Despite the recorded increase in the number of female health practitioners, the results emphasize that there is still inadequate staffing in the hospitals, especially among women medical workers in relation to the required staff to patient ratio. Several studies have addressed the shortage of staff within the healthcare sector in Ghana and Africa as a whole. From our respondents, we report that government's negligence and lack of political will toward providing morale and support for women in biomedicine also serve as a hindrance for other women who hitherto had interest in working in the health sector. According to Adu-Gyamfi and Brenya (2016), some nurses and midwives choose to work outside the country due to inadequate morale within their profession as well as insufficient salaries (Adu-Gyamfi and Brenya, 2016). This invariably leads to limited number of nurses, hence, increasing the workload on the few that are available.

As our respondents are women who are traditionally tasked with managing their homes, increasing workload at the workplace affects their family duties and health. Significantly, being tied to and tired at the workplace means female health practitioners' inability to support their homes the way they ought to. A recent study by Rajan argues that increasing workload results in tiredness in the work place, weight loss, stress, irritation and general body pains (Rajan, 2018).

Lack of Logistics needed to work

Aside understaffing, previous studies have addressed the question of inadequate logistics as a major detriment to proper health delivery in Africa (Manso, Annan and Anane, 2013; Jahre et al., 2012; Apanga and Awoonor-Williams, 2018). In Ghana, the literature argues that there are inadequate facilities coupled with limited drugs that are required to treat patients (Manso, Annan and Anane, 2013). Similarly, Apanga and Awoonor-Williams (2018) have postulated that the healthcare delivery system in Ghana is weak due to the fact that there are no available basic logistics including medical and laboratory equipment. Our findings confirm that limited logistics and facilities tend to be a challenge to proper healthcare delivery. A midwife in one of the hospitals hinted:

> I remember a pregnant woman in labor was rushed here sometime ago. We tried our best but we lost the child right after delivery because we did not have the necessary technological support and facilities which would have been of help to save the child. I believe none of the healthcare centers within this community has a single incubator to assist newly born babies (Mercy, interview, 2019).

Inadequate logistics result in the loss of lives of the patients of women health practitioners. Significantly, when

the above persists, it hinders the efforts of women health practitioners from reaching their sustainable development goals, especially aspects that focus on maternal and infant health.

On several occasions, serious and severe cases reported at the hospital becomes challenging due to inadequate logistics. In cognizance with the above, the Ministry of Health (MoH) have implemented a policy that seeks to transfer patients from primary care levels to other appropriate centers for continuous care (MoH, 2012). This policy allows patients to be referred to relatively larger hospitals around the town (MoH, 2012). However, there is the challenge of access and proximity. In the case of Obuasi, patients in critical conditions are referred to "larger hospitals with adequate facilities like the Komfo Anokye Teaching Hospital in Kumasi" (Dr. Agnes, interview, 2019). Referrals can be threatening to the health and well-being of expectant mothers and the unborn baby including patients in general, considering the distance from the health centers to the referred hospitals in Kumasi. An interviewee also claimed that travelling to the referred hospitals also tend to be a major problem due to the fact that vehicles as well as ambulances needed for such purposes are not available in the hospitals. On several occasions, patients have to be transported via the normal passenger cars.

Non-Compliance by patients

The relationship between health workers and their clients has not always been successful as most of the patients display high level of non-compliance toward their care givers (Russell et al., 2003; Kleinsinger, 2010; Naghavi et al., 2019). Our finding on non-compliant behavior has revealed that it becomes very challenging for health workers to fully discharge their responsibilities as most patients tend to break the chain of success by not adhering to the suggestion of health workers. Significantly, the nurses, midwives and physicians included in the study hinted that lack of cooperation by patients and their family members is one of the pressing challenges they face. The literature on patients' non-compliance mostly focus on medication non-adherence (Sharif, Ogunbanjo and Malete, 2003; Lauffernburger et al., 2019; Trivedi and Asch, 2019). A study in the United States of America for example, argues that almost half of the patients with chronic diseases report medication non-adherence (Lauffernburger et al., 2019). In addition to the above, we discuss a workplace non-adherence arising from the impatience of patients. A nurse hinted:

> Most of the patients and their family members do not comply with instructions given to them. There are situations where people who were discharged in good conditions returned for reviews in bad conditions due to their failure to follow the instructions and take the medications given to them. Sometimes, when they report to the hospital and are told to follow a required procedure, some of them overlook the required procedures with the excuse of being in 'hurry'. This increases the challenge we face with patients in the course of treatment (Doris, interview, 2019).

Our finding has revealed that, though patients are discharged upon recovery, there has been several instances where most discharged patients returned to the hospital with serious complications of same diseases that were treated. As reported in the literature, this results from non-adherence on the part of patients concerning their medication (Sharif, Ogunbanjo and Malete, 2003; Lauffernburger et al., 2019; Trivedi and Asch, 2019). This notwithstanding, our current discourse argues that in addition to failure to follow medication protocols, some patients are also impatient and can even go to the extent of abusing health workers whiles the latter discharge the responsibilities towards relieving the former of their condition. In Obuasi, guiding, directing and supporting patients and clients to be in good shape in the "wait-queues" of health centers have been a role played by nurses, and women nurses in particular.

Longer Working Hours

Within the Obuasi community, women in the biomedical sphere revealed that their work is time consuming. Discourses on long working hours report that the act can be detrimental to one's health (Tucker and Folkard, 2012; Bernstrøm et al., 2019; Berniell, 2012; Rogers et al., 2004). Tucker and Folkard (2012) argue that long working schedules can result in stress, fatigue, derail physical health, social and family disruption among others.

As already described above, due to the shortage of health workers in the health centers of the Obuasi community, there is an increase in work load which results in spending much time in health facilities or hospitals. On a different level, spending longer hours at the work place also affect the time health workers spend with their families. A nurse hinted that:

> Due to the fact that I come to work every day, I do not spend enough time with my family. As a nurse I work on weekdays, weekends and even holidays to assist patients. As a result, it tends to reduce the bond I have especially with my kids who only have quality time with me few occasions or times (Afia, interview, 2019).

Similarly, a respondent argued that:

> You know, within the African continent and our community in particular, women, irrespective of their profession, are culturally assigned to the kitchen. But due to my profession, I have actually ceased to discharge such roles at home. My husband and I are facing challenges especially raising our children. Often those who are supposed to take over come late and as a result, I do not get home early most of the time leaving him with the children which he finds stressful having to take care of them till I return from work (Diana, interview, 2019).

It can be argued that work schedule has a direct relationship with the time one spends with her family. From the interviews conducted, it can be established that long working hours limit the time women health workers spend with their families and vice versa. According to Manuh (1991), women are specifically tasked with holding their household units and families together. Once women in the biomedical sector spend more time at work, their role of "holding the household units together" is challenged. To that extent, spending long hours at work results in family conflict, especially between the women in the biomedical centers and their husbands. Significantly, a nurse reported that, it is as a result of the fear of entering into conflicts with her spouse that she is still single (Mary, interview, 2019).

Concerning working for longer hours, a respondent hinted:

> … when I am on the night shift, my normal schedule starts at exactly 6pm and ends at 6am the next morning. This notwithstanding, the colleague who ought to report in the morning normally delays, sometimes reporting after 8am. You could be very tired and stressed but as it happens to everyone of us; we do not raise concerns on that; we understand, every woman has to take care of the home in the morning… and it takes some time (Afia, interview, 2019).

We infer from the above that in Obuasi, health workers are likely to work more than twelve hours a day. As already established in the literature, our respondents also reported that working for long hours affect their health. Significantly, aside having an impact on the health worker in question, long duration at the work place also has the proclivity to affect their efficiency at the hospital, especially caring and supporting their patients. In support of this assertion, a research by Rogers and his peers revealed that the risks of healthcare error increases when healthcare workers exceeded twelve hours a day and more than forty hours per week (Rogers et al., 2004).

CONCLUSION

Women have since time immemorial supported medical practice. From prehistoric to modern times, their roles in medicine cannot be gainsaid. This notwithstanding, both humanity and the literature on women and health tend to sideline women's contribution to medicine and biomedicine in particular. Nevertheless, women have demonstrated beyond doubt that when given the room to operate they could equally achieve greater heights just as their male counterparts in all aspects of life, including the provision of healthcare.

Significantly, we have discussed the roles of women health workers and the challenges they face within the biomedical sector. Based on their physiology, women have been able to make impact on healthcare within the Obuasi area. The current study has clearly indicated that female medical practitioners in the Obuasi community have contributed to healthcare by educating, saving the lives of patients and giving care among many other roles. A close study of the cultural roles played by women in the community as mothers, wives and sisters coupled with their roles in the health profession have indicated that women contribute immensely toward healthcare than their male counterparts. The results of this study indicated that, in the course of discharging their roles in the biomedical sector, women face various forms of challenges. The inadequate staff members leading to increasing workload and longer working hours affect women in their professional and traditional functions in a typical Ghanaian traditional setting.

Despite the numerous challenges faced by women in the healthcare profession, they have risen beyond the horizon, playing key roles in meeting the health needs of humanity. Taking into consideration the importance of women in the profession, it is imperative that a comprehensive policy is adopted and implemented to widen the access of women to health and medical education. Women should be highly motivated to deliver what they have been known for and have the innate capacity to deliver especially after training. Indeed, women in biomedical health practice have shown that they have keen interest in meeting the health needs of the people in the Obuasi community. In view of this, the challenges and grievances expressed by the female medical practitioners should be taken into consideration and addressed in order to ensure better healthcare in Obuasi community and Ghana in general. It is important to state that our findings have wider ramifications on the West African block within the continent of Africa.

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