Original Article

An Assessment of Female Prisoners' Perception of the Accessibility of Quality Healthcare: A Survey in the Kumasi Central Prisons, Ghana

Sarpong AA, Otupiri E, Yeboah-Awudzi K[1], Osei-Yeboah J[2], Berchie GO[3], Ephraim RKD[4]

Departments of Community Health and [3]Molecular Medicine, School of Medical Sciences, Kwame Nkrumah University of Science and Technology, [1]Kumasi, Metropolitan Health Directorate, Ghana Health Service, Kumasi, [2]Department of Nursing, School of Biological Sciences, [4]Department of Laboratory Technology, University of Cape Coast, Ghana

Address for correspondence:
Ms. Afia A Sarpong,
Department of Community Health,
School of Medical Sciences,
Kwame Nkrumah University of Science and Technology, Kumasi, Ghana.
E-mail: aachiaasarpong@gmail.com

Abstract

Background: Accessibility of quality healthcare across the globe has generated a lot of attention among public health practitioners. **Aim:** This study explored the background characteristics of female prisoners and how it influences their assessment of the quality of accessible healthcare in the Kumasi Female Prison. **Subjects and Methods:** This descriptive cross-sectional survey was conducted at the Female section of the Kumasi Central Prisons from June to December 2011. We used pretested questionnaires to obtain quantitative data from all 39 inmates of the female Prisons. An in-depth interview was used to obtain qualitative data from the prison healthcare giver. Data were analyzed with Epi Info Version 3.5.1, (Centers for Disease Control and Prevention), Excel, and Graph Pad Prism version 5.00 for Windows (Graph Pad software, San Diego California USA, www.graphpad.com). **Results:** Using a 12-point scale inventory questionnaire, inmates with no formal education gave the highest mean health provision assessment score (6.0) whereas those with tertiary education gave the lowest (4.5). Females serving prison sentences gave the highest mean health assessment score whereas remand prisoners gave the lowest. Single females' mean health assessment score was 5.7 whereas that of married inmates was 4.9. Unemployed inmates scored 5.8, informal 5.4 while civil servants scored 5.0. **Conclusion:** Access to quality healthcare was poor and demographic characteristics, marital status, educational background, and occupation influenced inmates' perceptions of accessibility to quality healthcare. Inmates should be encouraged to be proactive in seeking healthcare irrespective of their background characteristics.

Keywords: Accessibility, Female, Kumasi, Perception Prisons, Quality of health care

Introduction

Healthcare issues of incarcerated females remain are a daunting challenge across the globe.[1] Female prisoners who comprise 1–3% of the total population of convicts in most prisons across Africa[2] have had to grapple with issues of overcrowding and unsanitary conditions. These unsavory conditions encourage poor health resulting in the spread of common infections. Again, women face unique healthcare challenges related to menstruation, pregnancy and childbirth, childcare in and out of prisons, violence, and sexual abuse.[2]

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The work of Todrys *et al.*,[3] established that female inmates of a prison in Zambia have poor access to basic amenities such as soap, toothpaste, and sanitary pads. They also exposed the challenges that confronted women in accessing general prison healthcare campaigns such as Tuberculosis and human immunodeficiency virus (HIV) prevention, testing and treatment campaigns. Similarly, experts have advocated that women should be held in environments "suitable for their condition and ensure that they are treated with dignity."[3] The Southern African Development Community protocol on gender and development has tasked member states to ensure the provision of hygienic sanitation facilities, as well as meet the nutritional requirements of female prisoners.[4]

The Kumasi Central Prison was established in 1901 by the British colonial authorities as an all-male facility to accommodate about 800 prisoners. The facility now houses around 3000 inmates including females after the backyard had been converted into a female prison. Issues on the accessibility to quality healthcare for female prisoners' in Ghana and parts of West Africa have not been well-elucidated. This study examines the background characteristics of female prisoners and how it influences their assessment of the quality of accessible healthcare in the Kumasi Female Prisons. This will provide a baseline data that can be used to inform service planning or monitor change in this population.

Subjects and Methods

Study site and design

This descriptive, cross-sectional study was conducted from June to December 2011 in the female section of the Central Prisons situated in Kumasi. It is the only facility with a prison for females in the Ashanti Region; a region with a female population of 264,328. Qualitative and quantitative methods were used for data collection and analysis. Open-ended questions and key informant interviews were used to generate qualitative data whereas quantitative data were obtained from closed-questions.

Study population and ethical issues

All 39 female prisoners in the facility were enrolled in the study. Ethical clearance was granted by the Committee for Human Publications, Research and Ethics of the Kwame Nkrumah University of Science and Technology, School of Medical Sciences and the Komfo Anokye Teaching Hospital. Written informed consent was sought from the Ghana Prisons Service and the participants.

Sampling techniques/sample size/pre-testing

A non-randomized sampling technique involving a census of all the 39 inmates in the female prisons was employed. Pre-testing of the study (pilot) was conducted in the Sunyani Female prison, in the Brong Ahafo Region, Ghana.

Data collection techniques and tools

Techniques of data collection included administration of a questionnaire to the inmates and a key informant interview with the prison's health caregiver.

During the study, data were collected on two categories of variables.

Background variables

- Level of education
- Type of incarceration
- Occupation
- Marital status
- Ethnicity
- Age.

Access to health care

- Screening on incarceration
- Access to medication
- Access to specialist care.

The 12 point scale inventory questionnaire employed in this study rated the quality and accessibility of healthcare delivery: Poor (0–5 points); good (6–8 points); excellent (9–12 points).

The age grouping of inmates employed that of Eric Erikson Psychosocial developmental stages.[5]

Data analysis

Data were analyzed with Epi Info Version 3.5.1, (Centers for Disease Control and Prevention (CDC) 1600,Clifton Road Atlanta, GA 30329-4027, USA), Excel, and GraphPad Prism version 5.00 for Windows (GraphPad software, San Diego California USA, www.graphpad.com).

Results

Quantitative data

Almost one-in-five (7/39) (18.0%) of the respondents were on remand. The ages of inmates ranged from 17 years to 57 years with a mean age of 31.7 years. Respondents were mostly single with about a third (29.0%) being married. About five percent (2/39) (5.0%) of the population interviewed had tertiary, education. However, 28.5% (11/39) of the study population had no formal education. Seventy-nine percent [31/39 (79.0%)]of the respondents had worked in the informal sector whereas (6/39) 15.4% had been unemployed. Seventy-four percent [29/39 (74.0%)] of the inmates were of Akan extraction; however, 2.6% (1/39) of the inmates were foreigners (Togolese) [Table 1].

A 12-point scale inventory questionnaire was used to assess healthcare quality as shown in Table 2. Twenty-three [23/39 (58.7%] of the female prisoners interviewed rated the quality and access to healthcare in the facility as poor (0–5 points), but in the view of 2/39 (5.1%), the delivery and access to healthcare at the Kumasi prisons was excellent (9–12 points).

Table 1:Eric erikson psychosocial developmental stages

Stage	Period	Personality Attributes	Age
1	Early Infancy	Trust vs. Mistrust	1–1 ½
2	Toddler	Autonomy vs. Shame and Doubt	1 ½ –3
3	Early Childhood	Initiative vs. Guilt	3–6
4	Middle Childhood	Industry vs. Inferiority	6–12
5	Adolescence	Identity vs. Identity Confusion	12–18
6	Young Adulthood	Intimacy vs. Isolation	19–40
7	Middle Adulthood	Generativity vs. Stagnation	40–65
8	Older Adulthood	Integrity vs. Despair	65+

Table 2: Background characteristics of female inmates in Kumasi Central Prisons

Background characteristics	Frequency	Percentage
Total population	39	100.0
Type of incarceration		
Remand	7	18.0
Sentenced	32	82.0
Marital status		
Single	28	71.8
Married	11	28.2
Educational background		
No education	11	28.2
Basic education	19	48.7
Secondary education	7	18.0
Tertiary	2	5.1
Employment status		
Unemployed	6	15.4
Informal sector	31	79.5
Civil servants	2	5.1
Ethnicity		
Akan	29	74.4
Mole-Dagbani	9	23.1
Other (Togolese)	1	2.6
Age group		
Adolescent	3	7.7
Young adult	27	69.2
Middle-aged adult	9	23.1

Table 3: Inmate assessment of quality of and accessibility to health care delivery in Kumasi female prisons, stratified by respondent demographic characteristics

Parameter	Poor (%)	Good (%)	Excellent (%)
Incarceration type			
Remand	7/7 (100.0)	0/7 (0.0)	0/7 (0.0)
Sentenced	16/32 (50.0)	14/32 (43.8)	2/32 (6.3)
Marital status			
Single	15/28 (53.6)	11/28 (39.3)	2/28 (7.1)
Married	8/11 (72.7)	3/11 (27.3)	0/11 (0.0)
Educational background			
No education	5/11 (45.5)	4/11 (36.4)	2/11 (18.2)
Basic education	12/19 (63.2)	7/19 (36.8)	0/19 (0.0)
Secondary education	4/7 (57.1)	3/7 (42.9)	0/7 (0.0)
Tertiary	2/2 (100.0)	0/2 (0.0)	0/2 (0.0)
Employment status			
Unemployed	3/6 (50.0)	3/6 (50.0)	0/6 (0.0)
Informal sector	18/31 (58.1)	11/31 (35.5)	2/31 (6.5)
Civil servants	2/2 (100.0)	0/2 (0.0)	0/2 (0.0)
Ethnicity			
Akan	18/29 (62.1)	10/29 (34.5)	1/29 (3.45)
Mole-Dagbani	4/9 (44.4)	4/9 (44.4)	1/9 (11.1)
Other (Togolese)	1/1 (100.0)	0/1 (0.0)	0/1 (0.0)
Age			
Adolescence	2/3 (66.7)	1/3 (33.3)	0/3 (0.0)
Young adult	16/27 (59.3)	9/27 (33.3)	2/27 (7.4)
Middle adult	5/9 (55.6)	4/9 (44.4)	0/9 (0.0)

All the inmates on remand rated the accessibility to healthcare as poor, whereas 16/32 (50%), 14/32 (43.8%) and 2/32 (6.3%) of the sentenced prisoner population rated healthcare delivery and accessibility as poor, good, and excellent, respectively.

Of the 11 married respondents, 8/11(72.7%) felt the healthcare delivery in the female prison was poor. The majority of single women [15/28 (53.6%)] affirmed that there is poor accessibility to health care in the Kumasi female prisons.

Nineteen (19/39) (48.7%) of the inmates had basic education while 11/39 (28.2%) had no formal education. With the exception of the group without any formal education, majority of inmates in each of the educational levels rated the quality of accessible healthcare in the facility as poor for basic (12/19 [63.1%]), secondary (4/7 [57.1%]) and tertiary scoring, (2/2 [100%]). The average age on admission of females to the Kumasi Central prisons was 31.70 ± 1.70 years.

Erik Erikson's stages of psychosocial development was used to classify inmates as adolescents, young adults, and middle-aged adults. Two of the adolescent prisoners (2/3) (66.3%) rated the quality of assessable healthcare as poor, whereas 16/27 (59.3%) and 5/9 (55.6%) fell in the young adult and middle-aged adults groups.

The mean scores of female inmates ratings of health provision in the study setting is shown in Figure 1. The female inmates with no form of formal education had the highest mean health provision assessment score (6.0) whereas those with tertiary education had the lowest (4.5). Females serving prison sentences gave the highest mean health assessment score whereas those on remand gave the lowest. Marital status influenced the mean health provision assessment scores of inmates, in that, the single females scored 5.7 while married inmates scored 4.9.

The mean scores for employment status were similar; the unemployed scored 5.8, informal 5.4 while civil servants scored 5.0.

Qualitative data

According to the prison health caregiver, she was trained as a village health worker to provide health care service in places where there are no doctors.

When asked questions about the screening of inmates on admission, she confirmed that inmates do not go through any laboratory examination prior to admission into the facility. She added that "on admission inmates are physically examined to rule out pregnancy and/or other ailments." This is done without the help of any apparatus since no functioning sphygmomanometer or thermometer, exist.

The healthcare giver also stated that inmates who report with health problems are treated with the available medication. If

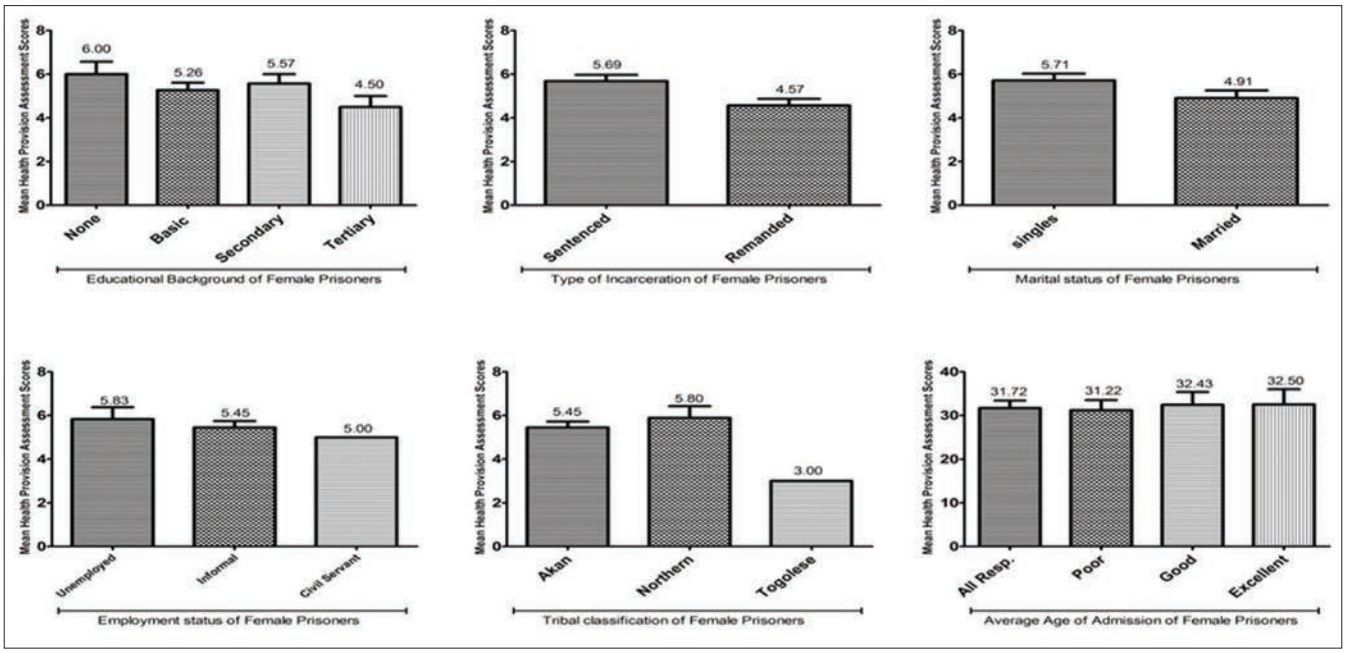

Figure 1: Mean scores of female inmates rating of health provision in the Kumasi Central Prison with the score of 0–12, stratified by respondents' demographic characteristics

symptoms persist for days or weeks, the inmate is sent to a hospital. However, this she said has been a challenge since some inmates are likely to take advantage of this and abscond. In view of the above, she explained the need for availability of drugs to cure common ailments like malaria, candidiasis, and symptoms like headache and fever since they could not send inmates to hospital with conditions like "simple malaria" she intimated.

The healthcare giver further added that pregnant inmates with chronic conditions like ulcer, hypertension normally visit the hospital to see the doctor on duty.

Under reproductive health, her duties included; ensuring that inmates with babies are retained and stayed until first birthday of the child after which social welfare or the family will take custody of the child.

In the case of chronic or serious ailments, inmates are sent to the hospital she added. She also stated that pregnant inmates are allowed to visit the hospital for antenatal care and finally deliver at these facilities when they are due. Unless otherwise specified by a doctor, pregnant women receive the same treatment like everyone else in the prison. In addition, depending on the type of sentence, they are restricted (handcuffed) while going for antenatal or post natal services. She stated further that inmates do frequently report with candidiasis, which she treats. However, some are not treated due to nonavailability of drugs. She associated the reoccurrence of the disease (candidiasis) to the single water closet available for all inmates. In general, the caregiver stated that they make sure inmates keep the facility clean as much as possible; however there still existed skin infections and bed bugs in the cells. She explained that the cells are of different sizes and are overcrowded.

When asked whether she had attended any health refresher training she said no (and mostly they are not invited for such meetings as they are the minority group). The healthcare giver intimated that their major concern is the nonavailability of drugs as the metro health directorate fails to come to their aid any time they send a request for nonprescription drugs.

The issue of female inmates being at a disadvantage as compared to their males counterparts was evident. Whereas healthcare givers in the male prisons were provided with everything including drugs and opportunities to update their skills, their female counterparts were often left in the dark. Finally, the inmates were not on any form of health insurance including the state-run National Health Insurance Scheme which placed a huge burden of the facility as drugs and other materials for healthcare had to be bought from the resources of the prisons. She thus appealed to all stakeholders to come to their aid to improve and promote healthcare in the facility.

Discussion

Accessibility to healthcare for females in detention worldwide is an issue that has generated intense discussions among stakeholders.[6-8] This study sought to examine the background characteristics of female prisoners and how it influences their assessment of the quality of accessible healthcare in the Kumasi Female Prisons. To the best of our knowledge, this study is the first to access the quality of accessible healthcare among female prisoners in Ghana. We observed that 32 (82.1%) and 7 (17.9%) of the inmates were on ordinary prison sentence and remand respectively. This implied that none of the inmates was on preventive detention an indication that there was no "dangerous but sane" individual during the

period of the study. Two-thirds of the participants were within the young adult group out of which only about a quarter were married. The present study adds to the evidence that married women are more likely to have a stable morale and social life when compared with single women and as such less likely to commit crimes.[9]

The daily strive to satisfy needs coupled with low education level, therefore, make this group more liable to petty crime.[10] On the whole, 29 (76.9%) participants had either basic or no education. This invariably attests to the fact that the majority of the inmates have very low level of education, which is likely to influence their assessment of the quality of health care, reproductive health needs, and environmental hygiene. Most informal workers earn less than the threshold for personal income. The tendency in most countries is that workers pay blanket levies which are too high for the very poor. The Penal Reform International[11] confirms that women in prison frequently come from deprived backgrounds, and many have experienced physical and sexual abuse, alcohol and drug dependence, and inadequate health care before imprisonment.

Majority of the inmates were from the informal sector, which influenced their assessment of health care quality. Reviews of existing studies[12,13] revealed problems in accessibility to health care services for female prisoners. These deficiencies in health care accessibility exist despite data confirming greater health care needs among women inmates. Condon *et al*.[14] revealed that prisoners considered health services as part of their personal prison journey, which started on the day of their imprisonment until their release. For those who did not access health services outside prison, imprisonment improved access to both mental and physical health services. This assertion however, contradicts the situation existing in the Kumasi Central Prison, where majority of the inmates (58.7%) concluded that the quality of and accessibility to health care was poor, and as such imprisonment could rather worsen their health status.

Maeve[15] reported that the health care provided to women is often mediocre. It is largely an attempt to "catch up," in that considerable effort is often necessary to raise women's health status to legally acceptable levels he stated. In fact, most lawsuits filed by women in prison are for complications developed while receiving medical services.[16] This report however, contradicts findings made in the Kumasi Central prisons where inmates may not be able to file lawsuits as done by their counterparts in the United States judging from inmates' background characteristics notwithstanding the mediocre healthcare facilities in the prisons.

Majority of the participants with no education rated quality and access to health care as excellent or good. However, most of the inmates with higher educational levels rated the quality and accessibility to healthcare as poor. The civil servants rated the healthcare quality and accessibility as poor indicating that one's employment status is likely to influence her assessment of the quality of assessable healthcare. These findings are similar to the observation of Nobile *et al*.[17] who reported that the background of an inmate determined their perception of quality healthcare.

Furnee *et al*.,[18] affirmed that a year of education improves the Quality Adjusted Life Years of an individual. In addition Grossman and Kaestner[19] presented an overview of studies on the relation between education and health which showed that well-educated people are less likely to smoke, exercise more, wear seatbelts more often, and are more likely to participate in screening programs for breast cancer and cervical cancer.

Females serving prison sentences gave the highest mean health assessment score whereas those on remand gave the lowest. Marital status influenced the mean health provision assessment scores of inmates, in that, the single females scored 5.7 while married inmates scored 4.9.

The study has some limitations which may affect the generalization of our findings: This is a single center work among a small group of female prisoners in Kumasi, Ghana. The participants were relatively younger with a mean age of 31.5 years similar to the observations made in Greece.[20]

Conclusion

Female inmates of the Kumasi central prisons have poor access to quality healthcare. Their perception of the quality is influenced by background characteristics such as age, marital status, level of education and occupation. In general, qualitative analysis indicates poor quality of healthcare in the Kumasi Female Prisons. The prison authorities should provide basic healthcare materials and upgrade the skills of the healthcare giver to ensure the provision of primary healthcare in the facility. In addition, inmates should be encouraged to seek healthcare irrespective of their background characteristics.

Acknowledgments

The authors would like to express their heartfelt appreciation to the officers and men of the Ghana Prisons Service, Kumasi Central Prisons for their immense contributions in making this work a success.

References

1. Fearn NE, Parker K. Health Care for Women Inmates: Issues, Perceptions and Policy. Calif J Health Promot 2005;3:1-22.
2. Vetten L. The imprisonment of women in Africa. In: Sarkin J, editor. Human Rights in African Prisons. Cape Town: HSRC Press; 2008. p. 134-54.
3. Todrys KW, Amon JJ, Malembeka G, Clayton M. Imprisoned and imperiled: Access to HIV and TB prevention and treatment, and denial of human rights, in Zambian prisons. J Int AIDS Soc 2011 11;14:8.
4. S.A.D.C. Protocol on Gender and Development; 2006. Available from: http://www.sadc.int/index/browse/page/465. [Last accessed on 2009 Dec 20].

5. Erikson EH. The Life Cycle Completed. New York: Norton; 1982.
6. Belenko S, Dembo R, Rollie M, Childs K, Salvatore C. Detecting, preventing, and treating sexually transmitted diseases among adolescent arrestees: An unmet public health need. Am J Public Health 2009;99:1032-41.
7. Estébanez P, Zunzunegui MV, Aguilar MD, Russell N, Cifuentes I, Hankins C. The role of prisons in the HIV epidemic among female injecting drug users. AIDS Care 2002;14:95-104.
8. Watson R, Manthorpe J, Stimpson A. Learning from carers' experiences: Helping older people with dementia to eat and drink. Nurs Older People 2003;14:23-7.
9. Bart AS. Those marriage inhibit antisocial behaviour? An examination of selection vrs causation via a longitudinal twin study. Arch Gen Psychiatry 2011; 67:1309-15.
10. Lund F, Skinner C. Intergrating the informal economy in urban planning and governance: A case study of the process of policy development in Durban, South Africa. Int Dev Plann Rev 2004;26:31-456.
11. PRI. Women in Prison: Incarcerated in a Man's World. London: Penal Reform International (Penal Reform Briefing); 2007. p. 3.
12. Lewis C. Treating incarcerated women: Gender matters. Psychiatr Clin North Am 2006;29:773-89.
13. Wilper AP, Woolhandler S, Boyd JW, Lasser KE, McCormick D, Bor DH, *et al.* The health and health care of US prisoners: Results of a nationwide survey. Am J Public Health 2009;99:666-72.
14. Condon L, Hek G, Harris F, Powell J, Kemple T, Price S. Users' views of prison health services: A qualitative study. J Adv Nurs 2007;58:216-26.
15. Maeve MK. Adjudicated health: Incarcerated women and the social construction of health. Crime Law Soc Change 1999;31:49-71.
16. Belknap J. The Invisible Woman: Gender, Crime, and Justice. 2nd ed. Belmont, CA: Wadsworth; 2000.
17. Nobile CG, Flotta D, Nicotera G, Pileggi C, Angelillo IF. Self-reported health status and access to health services in a sample of prisoners in Italy. BMC Public Health 2011 4;11:529.
18. Furnee, C.A., Groot, W., van den Brink, H.M., *The health effects of education: A meta-analysis*. Eur J Public Health, 2008. 18: p. 417-21.
19. Grossman M, Kaestner R. Effects of education on health. In: Behrman J, Stacey N, editor. The Social Benefits of Education. University of Michigan Press Ann Habor: 1997. p. 69-123.
20. Togas C, Raikou M, Niakas D. An assessment of health related quality of life in a male prison population in Greece associations with health related characteristics and characteristics of detention. Biomed Res Int 2014;2014:274804.

How to cite this article: ????

Source of Support: Nil. **Conflict of Interest:** None declared.