Article:
Domapielle, MK, Akurugu, CA and Mdee, A orcid.org/0000-0002-8260-1840 (2020) Horizontal Inequity in Healthcare Delivery: A Qualitative Analysis of Perceptions of Locality and Costs of Access in the Jirapa Municipality, North-western Ghana. Journal of International Development, 32 (8). pp. 1308-1323. ISSN 0954-1748

https://doi.org/10.1002/jid.3504

Introduction

The concept of universal health coverage (UHC) has received considerable attention in the policy plans of many governments in developing countries. Its package includes a comprehensive set of health services in line with the World Health Organisation's (WHO) description of UHC as access to promotive, preventive, curative, rehabilitative and palliative health care (WHO, 2005, WHO, 2010). However, the challenge facing developing countries in their quest to implement UHC is limited fiscal space for health expenditure (Barrientos and Hulme, 2008). For this reason, public health scholars have proposed a variety of approaches for implementing of UHC in developing countries. For some (Sachs, 2012, Schieber et al., 2012) the focus of UHC should be on the provision of essential health services that cover priority health needs for which there are effective low cost interventions. Others, (Kieny and Evans, 2013, WHO, 2013) have placed emphasis on disease-specific interventions in line with the health-related Millennium Development Goals (now SDGs) that will improve health and reduce health system costs at the same time. Yet, another school of thought has it that the provision of primary health care to everyone appears to be a feasible UHC approach developing countries can adopt (Stuckler et al., 2010, WHO, 2008, Yates, 2009, WHO, 1978, WHO, 2010). The latter is of interest to this article because it resonates with the policy objectives of both the Ghana Health Service (GHS) and the Health Insurance Scheme (NHIS); to ensure that every resident of Ghana has access to basic quality health care without financial hardship (NHIA, 2003, NHIA, 2012, GHS, 2019). This approach also echoes the Sustainable Development Goals (SDGs), specifically, SDG 3 sub-goal, which aims to "achieve universal health coverage, including financial risk protection, access to quality essential health care services and safe, effective, quality and affordable essential medicines and vaccines for all" (WHO, 2015b).

Notwithstanding extensive research interest and policy programming in support of UHC, access to health care continues to be a major concern, and recent evidence suggests that at least 400 million people were not receiving at least one of seven essential services for MDG priority areas[1] (WHO, 2015b). From these statistics, inequities in access to health services persist both within and between countries. Wealth, gender, age and geographical location are known to play

[1] The total estimate of 400 million includes all women whose demand for family planning is not met, pregnant women who did not make at least 4 antenatal visits (minus 38% to account for unintended pregnancies), infants who did not receive 3 doses of DTP-containing vaccine, HIV-positive adults and children not receiving HIV treatment, adults with new cases of TB not receiving TB treatment and children 1–14 years not sleeping under an insecticide-treated bed net (ITN)).

a role in determining whether or not, and to what degree, people benefit from quality, essential health services (Aday and Andersen, 1974, Jehu-Appiah et al., 2011a, Jehu-Appiah et al., 2011b, Jacobs et al., 2012, McIntyre et al., 2002, Donaldson et al., 2005, WHO, 2015b).

This article analyses perceptions of locality and cost of accessing health services and the implications on uptake of health care among rural and urban residents in a municipal in the Upper West region of Ghana. It contributes a qualitative perspective to the debate around equitable financial access to health care under Ghana's NHIS. It argues that even under the provisions of a National Health Insurance Scheme, health care may not be affordable to some residents of rural Ghana due to expensive costs of transportation, food and lodging when seeking health care in a higher level heath facility. This is an important finding because the discourse on equitable access to health care goes beyond the elimination of direct costs of treatments and paying for drugs, to addressing such indirect costs as transportation cost and expenses on food and lodging (Aday and Andersen, 1974, Penchansky and Thomas, 1981, McIntyre et al., 2013, WHO, 2015a). Whereas poor transport services resulting in limited access to health care in rural areas has been extensively researched (Macha et al., 2012, Apoya and Marriott, 2011, Gobah and Liang, 2011, Mills et al., 2012, Akazili et al., 2012), the issues of costs of food and lodging leading to variations in the utilization of health care between urban and rural residents in Ghana has not been specifically researched, although these are important in the discourse on horizontal equity and access to health care for all. This study adds to the existing research on equitable access to health care by examining the specific rural-urban differences in perceptions of affordability of health care services in the Jirapa municipal in the Upper West region of Ghana. Using the qualitative approach underpinned by a framework for assessing equity and affordability of health care the findings of this study are an indication of the factors that create disparities in access to health care among rural and urban populations. This can guide the design of policy interventions aimed at increasing utilization of health services in poor rural communities in developing countries.

Equity and affordability of health care

There seems to be a general consensus around the view that equity is fundamentally about fairness and justice, yet its definition is not simple and straightforward as it tends to mean different things to different people (Jan and Wiseman, 2011, Mooney, 1993, Mooney, 1994, Wagstaff et al., 1989, Wiseman, 2011, Wagstaff and Van Doorslaer, 2000, Donaldson et al., 2005). In the specific context of health care, for example, equity is often interpreted loosely as

providing a basic level of health care to everyone (Jan and Wiseman, 2011). The problem with this definition however, is that it is ambiguous and unhelpful when attempting to implement a specific policy on equity in health care (Jan and Wiseman, 2011, Donaldson et al., 2005). In the search for this specific criterion that is consistent with the objectives and analytical criteria of the study, horizontal equity is one operational definition that provides a specific operational dimension of equity in health care.

Horizontal equity is about ensuring that people in the same circumstances are treated the same. The British NHS and the Canadian health systems have been influenced by this horizontal equity objective (Donaldson et al., 2005). And whereas horizontal equity can be interpreted from a variety of dimensions, its "equal access for equal need" dimension is considered here, and defined in terms of "people with the same level of need who face the same level of barrier to health care taking into account distance, cost and any language or cultural issues that may limit access to services" (Jan and Wiseman, 2011: 253). Inequities in access may arise when there is uneven urban-rural distribution of health resources. As rural areas are disadvantaged in this respect, such unequal distribution means that health care is least available to the neediest group of the population (Tipping et al., 1994, Whitehead, 1992, Peters et al., 2008). The NHIS has a horizontal equity element in its design reflected by the recruitment of 'Community Agents' who are tasked to register members, distribute membership ID cards as well as help in the renewal of membership at the community level (NHIA, 2004). The purpose of this arrangement is to ensure that rural residents do not incur additional costs in transport and time when accessing NHIS services. Contrary to this horizontal equity objective however, the Scheme's benefits package covers neither ambulance services nor food and lodging. Thus clients referred from primary health facilities in rural areas to the Jirapa Hospital pay out of pocket for these services. Unfortunately, out of pocket payment for transportation costs has been observed to deter the poor from seeking treatment when they need it (Macha et al., 2012, Mills et al., 2012, Akazili et al., 2012, Masters et al., 2013, Nesbitt et al., 2016, Johnson et al., 2015, Hjortsberg and Mwikisa, 2002, WHO, 2015a). Other scholars in this field have found that although prevalence of disease is higher in poor areas, rural residents utilize health services to a lower extent compared to their non-poor urban counterparts partly due to transportation challenges (Diop et al., 1998, Hjortsberg and Mwikisa, 2002). Hjortsberg and Mwikisa (2002) found in the case of Zambia (with similar health and demographic characteristics as Ghana) that the poor are less likely to seek health care when ill than the non-poor, and that distance to health facilities has an impact on utilization; where nearly 50 percent of people living

less than 5km from a health facility will seek health care when ill, compared with 17 percent of people living more than 40 km from a health facility. Similar findings emerged in Ghana where transport difficulties has been cited as a barrier to health care access in rural areas (Masters et al., 2013, Johnson et al., 2015, Nesbitt et al., 2016, Macha et al., 2012, Haruna et al., 2019). Thus, whereas the relationship between transportation difficulties and limited access to health care has received research attention, the issues of costs relating to food and lodging during admissions have not been investigated in the specific context of the NHIS. We argue that access is a critical factor in seeking healthcare and perceptions and experiences of high costs of transportation, food and lodging during referral might deter or prevent poor rural residents from accessing health care when they need it.

While much of the discourse on affordability has focused almost exclusively on individuals' or households' socioeconomic status as the main determinant of access to health care, the variations in cost of health care for rural and urban residents in Ghana are seldom explored. For example, are rural residents paying more in terms of transportation in order to access health services, even when health insurance premiums are subsidised? Do the costs of transportation, food and lodging deter or prevent the rural poor from accepting referral from primary health facilities to higher level health facilities? The WHO observes that health care is equitable and affordable if poor households are not made to pay more than they can to gain access. This view is consistent with the argument presented by McIntyre et al. (2009) about access as empowerment, where poor individuals and households need to be empowered to enable them access care without the threat of catastrophic spending. This threat could deter them from accessing care when they need it, leading to variations in the uptake of health care.

Research Context and Methodology

The Jirapa municipal is located in the Upper West Region of Ghana. The municipal has a projected population of 102767, and 85.6 percent of this number reside in rural areas (GHS, 2019). Agriculture is the main livelihood activity and an estimated 82.7 percent of households are engaged in subsistence agriculture (GSS, 2014). Two different surveys have found that poverty in Ghana is disproportionately higher in rural areas, and even highest among subsistence crop farmers (GSS, 2015, Cooke et al., 2016). The poverty situation in the Jirapa Municipal is not expected to be better given that it is located in the most deprived region. This raises concern about households' ability to afford the costs of health services.

In terms of health infrastructure, the municipal has a total of forty-five (45) health facilities. The breakdown includes seven (7) sub- municipal health centres, thirty-seven (37) CHPS, a polyclinic and a hospital. While the population of the municipal has been growing at an average of 1.9 percent since the 2010 Population and Housing Census, with exception of CHPS, all other facility types have not increased in number in last decade (GHS, 2019). In terms of human resources, the most recent data indicates that the municipal has 6 Medical Doctors, 12 Medical Assistants, 123 Midwives, 72 Registered General Nurses, 85 Enrolled Nurses and 89 Community Health Nurses to a projected population of 102767 (GHS, 2019). The number of midwives in the municipal is commendable, but the doctor-population ratio of 1:17,128 is worrying because it far exceeds the WHO recommended density of 1:600. This shortfall has implications for the quality of health care that is provided to the population particularly that demand for care has increased along with the implementation of the NHIS. Equally worrying is the asymmetrical distribution of health personnel in the municipal. In the normal order of things, every health centre should have at least a Medical Assistant, a Midwife and a number of Enrolled and Community Health Nurses that matches the size of population of the catchment area. However, the absence of Midwives in some sub- municipals (Yaga, Tuggo and Douri), and the lack of dispensary technical assistants and laboratory technical assistants at health centres has meant that a sizable proportion of pregnant women would be referred to Jirapa for attention. Similarly, aside from Douri, Jirapa Urban and Han sub- municipals, the remaining four sub- municipals were without Medical Assistants. As a consequence therefore, certain minor illnesses that should be treated at the health centre level by Medical Assistants are being referred to Jirapa hospital. Without a commensurate expansion of health infrastructure and related resources to absorb and meet the needs of the population, it is no surprise that some health challenges persist in the municipal. In the area of reproductive health, for example, whereas no cases of maternal mortality were recorded in 2018 and 2019, infant and under 5 mortality rates increased from 18 in 2018 to 38 in 2019, and 34 in 2018 to 60 in 2019 respectively. In terms of communicable diseases, while the number of Tuberculosis (TB) cases dropped slightly from 32 in 2018 to 29 in 2019, HIV/AIDS prevalence rate increased from 0.7% in 2018 to 0.8% in 2019. Malaria, which is the commonest disease condition in the municipal increased from 33.4% in 2018 to 36% in 2019. Increases were also observed for total admissions and general mortality; the total number of admissions increased from 14404 in 2018 to 14555 in 2019, and general mortality rate increased from 1.6% to 2.1 % for the same period. Although these statistics do not represent progress in the health situation of residents in the municipal in

general, given the limited availability of health personnel in rural health facilities, residents are most likely to shoulder a higher burden of diseases and the costs of care. Douri, Yaga, and Tuggo[2] are three of the four sub- municipals where this study was carried out. These sub-municipals were described by a health official as the most difficult sub- municipals because of the very limited availability of health facilities and personnel in these areas. In addition to this limitation, these facilities are more than 5km of travel distance to Jirapa, where the municipal hospital is located. And, according to the Municipal Public Health Nurse the number of patients referred from health centres and Community-based Health Planning and Services (CHPS) compounds to the hospital has increased in recent times. This is largely because these facilities do not have qualified midwives and physician assistants to provide the desired level of care to rural residents. Their inability to afford travel related expenses to the nearest health facility may result in delays in treatment. Others may seek treatment from traditional health practitioners, as observed in the rate of deliveries conducted by traditional birth attendants (GHS, 2005, GHS, 2012b).

Study Design

A qualitative approach was employed in the collection and analysis of data. In addition to reviewing relevant literature on equity and financial access to health services, the study collected data through in-depth interviews, observation and relevant secondary sources. In-depth interviews were conducted with key informants such as health providers, health administrators, NHIS officials and users of health services. Key informants were asked about their views on the costs of transportation, costs of food and lodging and other indirect costs such as the opportunity cost of accompanying patients to health facilities. Non-participant observation was also carried out to compliment data gathered via interviews. For example, in the absence of records on household income levels, we relied on proxy indicators such as the types of houses interviewees lived in, to get a sense of their socioeconomic status, which gives an indication of their ability to pay for health services. Houses built with mud and roofed with thatch were an indication of the households' low level of income, which is an indication that members of such households may face challenges paying out-of-pocket to access health services. However, houses built with cement bricks and roofed with zinc sheets or baked roofing tiles were an indication that members were relatively well-off (Brockington et al., 2019), and may be able to pay out-of-pocket for health services without much difficulty. In

[2] The sub-district health centres of Douri, Yaga, Tuggo, and Jirapa Urban communities of the Jirapa Municipal Health Service were selected for this study.

terms of secondary analysis of data, the article draws significantly on findings of the 5th and 6th rounds of the Ghana Living Standard Surveys (GLSS 5 and 6), the 2010 Ghana Population and Housing Census report, annual reports of the Ghana Health Service and the Ministry of Health, and annual reports of the National Health Insurance Scheme.

Multi-stage sampling was employed to select the study municipal, sub- municipals, villages in the sub- municipals, and the research participants. The Jirapa Municipal was selected on the basis that, although largely rural, it has a sizable urban population to satisfactorily explore rural-urban differences in financial access to health services. The second stage involved the selection of sub- municipals within the municipal. The Jirapa urban sub- municipal and three rural sub- municipals were purposively selected from a total of seven sub- municipals to represent geographically and economically diverse areas. In each of the four sub- municipals, three villages were purposively selected, including the village where the health centre of the sub- municipal was located, and two other villages that were without a health facility. A total of 12 villages were selected, with four having health centres, and eight without any health facilities. The villages without facilities were also 5km or more away from the nearest health centre. A health facility is described as remote if it is over 5km away from the user's place of residence (Jordan et al., 2004). Based on this classification majority of communities in the municipal fall under the remote category (GHS, 2012).

Figure 1. Multi-stage sampling procedure

Thirty-three key informants participated in the research. They included users of health care services, providers of health care services, and officials and agents of the NHIS. With regards to users, 20 participants, comprising ten females and ten males were interviewed. Aside from ensuring gender balance, the locality and enrolment statuses of participants, their understanding of health issues in the municipal and willingness to participate in the study were key considerations for selection. Fifteen participants were selected from rural areas and five were chosen from urban residents. The uneven distribution of participants was in recognition of the fact that Jirapa is the only urban area in the municipal. Each sub- municipal had five participants. From this number, four (two females and two males) were selected from villages

that did not have a health centre, and the fifth interviewee was selected from the village that had a health centre. In addition to interviewing users, four heads of sub- municipal health centres, a public health nurse at the Jirapa municipal health secretariat, a midwife and a medical doctor at the Jirapa Municipal Hospital and one official from the Upper West Regional Health Directorate. These participants were sampled for the study because their respective positions and roles in the health system made their contributions relevant in addressing the research questions. The last group of participants interviewed were four officials of the NHIS. This category of respondents demonstrated a good understanding of the dimensions of access to health care in the municipal, including the prospects and challenges of expanding health insurance coverage to underserved areas. Their participation in this research helped in establishing that although the NHIS has caused an increase in access and utilization of health care services, there are challenges related to affordability faced mostly by users in rural areas.

Analysis of Data

The analysis was based on data generated in the municipal between 2015 and 2019. The framework approach to thematic analysis was employed to analyse the qualitative data. The analytical framework employed for this research was the framework for assessing the dimensions of equity of access to health care services. Thus, the analytical process started right from the stage of developing the data collection instruments where the questions were structured to focus on the horizontal equity dimension of the framework. The process involved transcribing and getting familiar with the data. It also involved reading each interview transcript line by line, noting down repetitions, similarities and differences that were relevant to the research questions. For example, if 'users' mentioned lack of money as the reason they failed to visit a referral centre, we would write this down under 'Affordability – lack of money.' At the margins of each page we wrote down the main themes that had come from the page's conversation. From this preliminary analysis, we examined the themes a second time and then put them into the thematic networks. For the final phase, we used the soft copies of the transcripts to pull together the segments of data that represented each theme and developed qualitative analysis by analysing in detail what users, providers, officials of the NHIS said about these themes and what they signified in relation to the research question.

Ethical Issues

Anonymity and confidentiality were strictly adhered to during this research. Following the selection of the municipal, permission was obtained from the Regional and Municipal Health

Secretariats to carry out the research. Additionally, permission was sought from the Regional Director of the National Health Insurance Scheme and the Municipal Manager of the Jirapa Municipal Health Insurance Scheme to interview staff of the NHIS for the research. Informed consent was sought from all participants. The purpose of the study was explained to each of them. They were also assured of strict anonymity and confidentiality, and data collected have been managed as such. Participants were informed that their decision to participate in the study was completely voluntary and that their responses were anonymous. They were given the possibility to withdraw from the study at any time and to skip any question(s) they did not wish to answer. All information provided by respondents was treated as strictly confidential. Interviews were conducted in English for interviewees who speak it, and in Dagaare (local language) for non-English speakers. Interviews were audio recorded (with their consent) and transcribed, and quotations have been anonymised.

Limitation of the Study

Given that the sample size and its rural-urban distribution was not representative of the population of the municipal, the findings of this research are not meant to be generalised to represent the perceptions of locality and costs of access in other municipals in Ghana. The findings are merely indicative of the views of different groups of health care users and other important stakeholders in health sector in this part of north-western Ghana. These limitations therefore call for an expanded, large scale research that will provide a representative view and understanding of the issues that create disparities in access to health care among rural and urban populations.

Results

The results show interesting urban-rural differences in perceptions of costs of access to health services in the municipal. These differences relate to high costs associated with transportation, and referral-related maintenance costs.

Costs of travel to health facilities

The study analysed affordability of health care services in relation to the costs of transport to health facilities as well as transportation difficulties experienced by health workers in their bid to conduct outreach services in rural areas. The results largely represent experiences and perceptions of the costs of transport services to health facilities in the municipal and how these perceptions vary in relation to locality. For example, the majority (86%) of interviewees in

rural areas perceived transportation cost to health facilities, mostly to the Jirapa Hospital to be unaffordable, and this resulted in limited facility visits, delay in seeking treatment or a resort to traditional medicine. Consider the view of one respondent:

> *"Three months ago I was referred from the Yaga Health Centre to the Jirapa Hospital's laboratory to test for an infection but I have still not been able to visit the laboratory because my village is about 30km away from Jirapa and the available means of transport is a motor cycle that charges around GHS25.00*[3] *for a return trip to Jirapa. I do not have the money that is why I am here, with my condition left untreated*" (KII, rural Kol-Ora, under Yaga sub- municipal).

Although maternal care is free under the NHIS some pregnant women in rural areas resort to the services of Traditional Birth Attendants (TBAs) due to the transportation difficulties. The results show that walking to health facilities becomes a struggle in the advanced stages of pregnancy. This, coupled with high cost of vehicular transport reduce the number of times pregnant women accessed skilled antenatal care. When asked how she was transported to the Douri Health Centre for antenatal care, a young mother of two from Tankuri (a village in Douri sub- municipal) said although her husband transported her on a bicycle, it was not a convenient experience. She explained that:

> *"Sitting on the bicycle carrier was very difficult particularly in the third trimester of my pregnancy. Yet I find myself in a privilege position because some pregnant women in this village are unable to go to the health centre because they cannot sit on a bicycle and they are unable to pay the cost of transportation".* (KII in Tankuri; a village in Douri sub- municipal).

One of the tasks of sub- municipal health facilities is the provision of outreach health services, including antenatal care to pregnant women who reside in rural areas far away from a health facility. However, outreach services have been limited due to difficulties related to transportation. According to the Sub-Municipal Heads interviewed for this research, the villages in their catchment areas are many and dispersed yet the roads are in a poor state. This makes it impossible to effectively reach every pregnant woman in these remote rural areas. As a result some of them resort to TBAs in the community for care. The nurses stressed that long

[3] 1.00 Ghana Cedis (GHS) = 0.13916 British Pound (£).

distance to facilities coupled with the poor state of the roads is the reason TBA deliveries are still common in the municipal. One respondent, a mid-wife, complained that:

> "*We are unable to visit more than one community in a day because the communities are far apart and the roads are in bad shape. So when they [pregnant women] do not see us for some time they start to visit the TBAs in the community".* (KII with a Midwife, Douri Health Centre)

Additionally, transportation related difficulties were cited as an impediment in the referral of clients from lower-level health facilities to the municipal hospital in Jirapa, which is the referral facility in the municipal. At the Yaga Health Centre, a Community Health Nurse[4] lamented that referring clients to the Jirapa Hospital for further treatment has often been resisted by clients because they cannot afford to pay for transport services. She explained:

> *"We don't have a midwife in this facility, which means that obstetric care and other complications must be referred to Jirapa Hospital. At the same time we don't have a van or an ambulance on standby. And when you call the Jirapa Hospital for an ambulance, you're told it's gone to pick up a patient in another community. The alternative means of transport is always a private van hire. Unfortunately, because the people here are so poor and in most case cannot pay the fees charged, they often refuse to take up referrals*". (KII with Community Health Nurse at the Yaga Health Centre)

The story is different for the urban areas where paying for transport services was reported by a negligible percentage of interviewees. The vast majority of interviewees sampled from urban areas in Jirapa said they do not pay for transport to visit a health facility.

> *"I have never paid for transport to visit a health care centre. I often walk into the facility when I have a minor illness, and when I am seriously ill and have difficulties walking, one of the neighbours will volunteer and pick me on their motor cycle to the hospital. I do not pay them any money for it because it is a very short distance from my house*". (KII in Urban Jirapa)

[4] Community health nurses are trained to provide primary health care services. Their primary responsibilities are limited to treating minor illnesses, looking after pregnant women, and caring for children. They may also provide family planning services, promotion of sanitation and hygiene, screening for communicable diseases, performing health education activities, collecting statistics, maintaining records, and providing health care referrals.

The remaining small fraction of interview participants from urban Jirapa said they were not charged any fee for transport services given that the distance to health facilities is short. However, they paid a token to show appreciation to the person who offered to transport them to the health facility. These were mostly close neighbours or friends who own a means of transport and were willing to help.

> *"The last time my wife went into labour a neighbour's son who was paying a visit to his parents nearby offered and drove her to the Jirapa hospital. When I gave him money to buy a gallon of petrol for his car he declined to collect it, but he accepted to share a few bottles of beer with me when I insisted on showing appreciation for his help"*. (KII in Urban Jirapa)

The difference in cost burden between rural and urban areas stems from the variation in proximity to health facilities where two health facilities (Jirapa Urban Health and the Municipal Hospital) are both located at the centre of Jirapa town, and within walking distance from residential areas and work places. We found that patients who are seriously ill and are unable to walk are often offered free transport by a household member or a neighbour to either the Urban Health Centre or the Municipal Hospital, depending on the level of care needed. On the contrary, most rural areas in the municipal are more than 5km[5] from the nearest health facility (GHS, 2012a), and clients are required to pay for transport services to Jirapa in particular when they needed a higher level of care.

Costs of Food and Lodging

In addition to expensive transport fares, the costs and expenses on food and lodging during admission at the Jirapa Hospital also emerged as having serious financial consequences for rural households. Whereas urban residents do not worry about incurring additional cost on food and lodging when a relative is admitted at the hospital, rural residents are faced with the reverse. Hospitals have an obligation to feed inpatients, but this does not include relatives who accompany the patients. Feeding and any lodging related expenses are borne by the patient's family. As a result of this some clients in rural areas resist or refuse to accept referral to the

[5] A health facility is described as near if it is less than 5km from the user's place of residence Jordan, H., Roderick, P., Martin, D. and Barnett, S. (2004) Distance, rurality and the need for care: access to health services in South West England. *International journal of health geographics,* 3 (1)**,** 1.

Jirapa Hospital. In response to an interview question regarding the cost of food and lodging during admission, a resident of Jirapa said this:

> "*Apart from paying for drugs and other direct costs of treatment, we (family of the patient) do not spend extra money on food and lodging when a relative is on admission. This is because we stay at home and go for visits, and the hospital feeds the patient. Although they occasionally need special foods, I would say that the extra expenditure on food is not significant*" (KII in Jirapa).

On the contrary, rural residents are faced with the challenge of paying for food and lodging when a family member is referred to the Jirapa Hospital for further treatment. An interviewee from Douri[6] who was caring for a patient at the Jirapa Hospital had this to say:

> *"We (family of patient) don't have any close relatives here in Jirapa and because we don't have money to pay and stay in a guest house, we sleep here in the hospital. As for food, the hospital makes provision for only the patients. So we buy food from town for ourselves. It would have been better to receive treatment at the health centre in Douri so that I could walk back home to eat and come back to take care of my patient"* (KII in Douri).

Just as reported in the case of transportation costs, clients in rural areas also often resist accepting referrals to the Jirapa Hospital for further treatment mainly because of the costs involved. Nurses reported of instances when clients had tried to avoid catastrophic spending by pleading to be detained and treated at the primary facility instead of accepting a referral to the Jirapa Hospital for further treatment. In explaining the challenges they encounter in an attempt to refer patients to the Jirapa Hospital, a community health nurse at Yaga informed us:

> *"Most of them [patients] do not understand the reasons why we refer them to the Jirapa Hospital. Sometimes they (clients) are literally begging me not to refer them to Jirapa because they don't have the money to travel and stay there. They need to buy food, soap and other things while they take care of the sick relative".* (KII with a Community Health Nurse at the Yaga Health Centre)

[6] Douri is one of the communities within which the study for this article was conducted. It has a sub-district health centre.

Thus, analysis of the costs of food and lodging revealed that, unlike their urban counterparts, rural residents incur additional costs to be able to access services at the municipal hospital. This has often affected their willingness to accept referral to the municipal hospital for further medical attention.

Discussion

Cost of access remains a significant barrier to poor populations especially those in rural areas when they become ill and need to seek care. Studies in developing countries (Gabrysch et al., 2011, Hjortsberg and Mwikisa, 2002, Lohela et al., 2012, Målqvist et al., 2010) including Ghana (Masters et al., 2013, Johnson et al., 2015, Nesbitt et al., 2016, Macha et al., 2012, Haruna et al., 2019) have shown that proximity to health facilities strongly influences health care use. In these contexts however, distances to health facilities are often long, health related infrastructure is poor and a significant proportion of the population live in poverty. Additionally, the distribution of health resources is skewed in favour of urban areas, making access easier and cheaper for urban households, although they tend to have higher incomes than rural households[7]. These factors make cost of access a critical determinant of whether rural dwellers seek care to the extent as their counterparts.

The analyses provide compelling evidence of horizontal inequity in the distribution of the burden and benefits of health care between urban and rural populations in the municipal. This is established in relation to the cost of transportation and costs associated with food and lodging when rural households seek care at the municipal hospital in Jirapa[8]. The study found that rural residents incur additional costs when they are referred from primary health facilities within their localities to the municipal hospital. The costs of travelling to the Jirapa Hospital for care is perceived to be high and unaffordable to a large number of rural dwellers wishing to access health care. On the contrary however, the cost of transportation does not impede access to care in the urban area because the health facilities in Jirapa are centrally located and accessible to users. Unlike users in rural areas, urban residents who visit the municipal hospital spend less or nothing on transport, even though they tend to have higher incomes than their rural counterparts. Previous research findings have highlighted high costs of transportation as a

[7] Two different surveys have found that poverty in Ghana is disproportionately higher in rural areas, and even highest among subsistence crop farmers GSS (2015) *Ghana Poverty Mapping Report.* Accra: Ghana Statistical Service, Cooke, E., Hague, S. and McKay, A. (2016) *The Ghana Poverty and Inequality Report: using the 6th Ghana Living Standards Survey.* Ghana: UNICEF.

[8] The Jirapa District Hospital is a secondary level health facility and serves as the main referral facility to the seven sub-district health centres in the Jirapa District.

major barrier to health care access in rural areas (Macha et al., 2012, Mills et al., 2012, Akazili et al., 2012, Masters et al., 2013, Nesbitt et al., 2016, Johnson et al., 2015, Hjortsberg and Mwikisa, 2002, WHO, 2015a). These studies concluded that although rural populations are more susceptible to illnesses there is inadequate health-related infrastructure where they live, which makes them pay more in travel costs and thus utilize health services to a lower extent than their urban counterparts.

Whereas poor transport services resulting in limited access to health care in rural areas has been extensively reported, the issue of costs of food and lodging during admissions has not been specifically investigated, although these are also important determinants of access to health care. Expenses on food and lodging while on admission at the Jirapa Hospital emerged as having serious financial consequence for users referred from rural areas. Whereas urban residents do not worry about additional cost of food when a relative is admitted at the hospital, the reverse applies to rural dwellers caring for their sick relatives who are on admission at the Jirapa Hospital. They are burdened with expenditure on food and accommodation as the hospital is not obliged to provide these services. Thus, feeding and any lodging related expenses become an extra financial burden that is normally shouldered by the patient's household. We argue that access is a critical factor in seeking healthcare and perceptions and experiences of high costs food and lodging during referral might deter or prevent poor rural residents from accessing health care at the receptor municipal hospital. Clients' inability to afford referral related expenses compels them to delay medical treatment, self-medicate or rely on the services of quack practitioners. Others resort to available traditional medicine as observed in relation to deliveries conducted by Traditional Birth Attendants. Over reliance on these alternative sources of health care can be harmful because it delays access to modern health care and ends up making health care too expensive and unaffordable (GHS, 2005, GHS, 2012b).

A package of policy measures is needed to achieve horizontal equity in the delivery of health care. In the medium to long term, health reforms and innovative strategies are needed to eliminate inequities in urban-rural distribution of health resources. In the short term however, innovation is required in a variety of areas to improve access. Firstly, the number of ambulances allocated to the Jirapa Hospital should be increased from one to a number that will commensurably serve all the 137[9] communities in the municipal. But it also brings to the fore

[9] There are a total of 137 communities in the Jirapa Municipal (GHS, 2019).

the need to advocate for ambulance services to be included in the NHIS benefits package. There seems to be a general acceptance of the view that ambulance service is essential in health care delivery and its accessibility will reduce the constraints of transporting the sick from remote rural areas to higher level health facilities and contribute to achieving the horizontal equity objective of the health system. Medium to long term measures will focus on reducing referrals from primary facilities to the municipal hospital in order to reduce or eliminate referral related costs. The first is to strengthen primary health care delivery by adequately resourcing first level health facilities to provide quality care close to users in rural areas so that they would not have to travel as far as Jirapa to receive quality care. Another way to reduce or eliminate cost of access to care is to improve outreach care and mobile health services in communities where residents are faced with transportation difficulties. Outreach services could focus on proving basic health care including preventive care and maternal and health.

Conclusions

This paper concludes based on its findings that rural residents bear a disproportionate burden of health care cost than their urban counterparts. What appears to account for the disparity in the cost of access is not the user fee per se, but the travel cost and the cost associated with food and lodging when rural residents are seeking care at the municipal hospital. We find this to emanate largely from a combination of inadequate health resources in rural areas that result in increased referrals from primary health facilities to the municipal hospital, and limited transport services which makes the cost of access high for rural residents. The consequences of these, are delayed medical treatment, self-medication or reliance on traditional medicines, all of which come with harmful consequences. In order to improve horizontal equity in health care delivery in the area, there is the need for innovation in the planning and management of health resources. These would include adequate resourcing of primary health facilities to provide quality care that is accessible to rural residents. Improving the provision of outreach services in mobility constrained communities, a strong emphasis on preventive care practices as well as including ambulance services in the NHIS benefits package would help reduce and eventually eliminate horizontal inequity in access to health care in the area.

References

Aday, L. A. and Andersen, R. (1974) A Framework for the Study of Access to Medical Care. Center for Health Administration Studies, University of Chicago,, Robert Wood Johnson Foundation to the Center for Health Administration Studies, University of Chicago,.

Akazili, J., Garshong, B., Aikins, M., Gyapong, J. and McIntyre, D. (2012) Progressivity of health care financing and incidence of service benefits in Ghana. *Health policy and planning,* 27 (suppl 1)**,** i13-i22.

Apoya, P. and Marriott, A. (2011) *Achieving a shared goal: Free universal health care in Ghana.* Oxfam International.

Barrientos, A. and Hulme, D. (2008) Poverty and Access to Health Care in Developing Countries. In: Barrientos, A. andHulme, D. (Eds.) *Social Protection for the Poor and the Poorest.* Hamsphire, England.: Palgrave Macmillan.

Brockington, D., Coast, E., Mdee, A., Howland, O. and Randall, S. (2019) Assets and domestic units: methodological challenges for longitudinal studies of poverty dynamics. *The Journal of Peasant Studies***,** 1-21.

Cooke, E., Hague, S. and McKay, A. (2016) *The Ghana Poverty and Inequality Report: using the 6th Ghana Living Standards Survey.* Ghana: UNICEF.

Diop, F., Seshamani, V. and Mulenga, C. (1998) Household health seeking behavior in Zambia.

Donaldson, C., Gerard, K., Jan, S., Mitton, C. and Wiseman, V. (2005) *Economics of health care financing: the visible hand.* New York: Palgrave Macmillan.

Gabrysch, S., Cousens, S., Cox, J. and Campbell, O. M. (2011) The influence of distance and level of care on delivery place in rural Zambia: a study of linked national data in a geographic information system. *PLoS medicine,* 8 (1)**,** e1000394.

GHS (2005) *Annual Health Report - Jirapa District Health Services.* Jirapa: Ghana Health Service.

GHS (2012) *Annual Health Report - Jirapa District Health Services.* Jirapa: Ghana Health service.

GHS (2019) *Annual Health Report - Jirapa Municipal Health Services.* Jirapa: Ghana Health service.m

Gobah, F. F. K. and Liang, Z. (2011) The National Health Insurance Scheme in Ghana: prospects and challenges: prospects and challenges: a cross-sectional evidence. *Global Journal of Health Science,* 3 (2, October 2011).

GSS (2007) *Pattern and Trends of Poverty in Ghana 1991-2006.* Accra: Ghana Statistical Service.

GSS (2012) *Population and Housing Census 2010.* Accra: Ghana Statistical Service.

GSS (2014) *2010 Population and Housing Census: District Analytical Report, Jirapa District Accra: Ghana Statistical Service.* Accra: Ghana Statistical Service.

GSS (2015) *Ghana Poverty Mapping Report.* Accra: Ghana Statistical Service.

Haruna, U., Dandeebo, G. and Galaa, S. Z. (2019) Improving Access and Utilization of Maternal Healthcare Services through Focused Antenatal Care in Rural Ghana: A Qualitative Study. *Advances in Public Health,* 2019.

Hjortsberg, C. and Mwikisa, C. (2002) Cost of access to health services in Zambia. *Health policy and planning,* 17 (1)**,** 71-77.

Jacobs, B., Ir, P., Bigdeli, M., Annear, P. L. and Van Damme, W. (2012) Addressing access barriers to health services: an analytical framework for selecting appropriate interventions in low-income Asian countries. *Health Policy and Planning,* 27 (4)**,** 288-300.

Jan, S. and Wiseman, V. (2011) Equity. In: Guinness, L. andWiseman, V. (Eds.) *Introduction to health economics.* (Understanding Public Health) Vol. 2. 2 ed. London: Open University Press, pp. 249-263.

Jehu-Appiah, C., Aryeetey, G., Agyepong, I., Spaan, E. and Baltussen, R. (2011a) Household perceptions and their implications for enrolment in the National Health Insurance Scheme in Ghana. *Health Policy and Planning,* 27 (3)**,** 222-233.

Jehu-Appiah, C., Aryeetey, G., Spaan, E., De Hoop, T., Agyepong, I. and Baltussen, R. (2011b) Equity aspects of the National Health Insurance Scheme in Ghana: Who is enrolling, who is not and why? *Social Science & Medicine,* 72 (2)**,** 157-165.

Johnson, F. A., Frempong-Ainguah, F., Matthews, Z., Harfoot, A. J., Nyarko, P., Baschieri, A., Gething, P. W., Falkingham, J. and Atkinson, P. M. (2015) Evaluating the impact of the community-based health planning and services initiative on uptake of skilled birth care in Ghana. *PLoS One,* 10 (3)**,** e0120556.

Jordan, H., Roderick, P., Martin, D. and Barnett, S. (2004) Distance, rurality and the need for care: access to health services in South West England. *International journal of health geographics,* 3 (1)**,** 1.

Kieny, M.-P. and Evans, D. B. (2013) Universal health coverage. *East Mediterrinean Journal,* 19 (4)**,** 305-6.

Lohela, T. J., Campbell, O. M. and Gabrysch, S. (2012) Distance to care, facility delivery and early neonatal mortality in Malawi and Zambia. *PloS one,* 7 (12)**,** e52110.

Macha, J., Harris, B., Garshong, B., Ataguba, J. E., Akazili, J., Kuwawenaruwa, A. and Borghi, J. (2012) Factors influencing the burden of health care financing and the distribution of health care benefits in Ghana, Tanzania and South Africa. *Health policy and planning,* 27 (suppl 1)**,** i46-i54.

Målqvist, M., Sohel, N., Do, T. T., Eriksson, L. and Persson, L.-Å. (2010) Distance decay in delivery care utilisation associated with neonatal mortality. A case referent study in northern Vietnam. *BMC Public Health,* 10 (1)**,** 762.

Masters, S. H., Burstein, R., Amofah, G., Abaogye, P., Kumar, S. and Hanlon, M. (2013) Travel time to maternity care and its effect on utilization in rural Ghana: a multilevel analysis. *Social Science & Medicine,* 93**,** 147-154.

McIntyre, D., Muirhead, D. and Gilson, L. (2002) Geographic patterns of deprivation in South Africa: informing health equity analyses and public resource allocation strategies. *Health policy and planning,* 17 (suppl 1)**,** 30-39.

McIntyre, D., Ranson, M. K., Aulakh, B. K. and Honda, A. (2013) Promoting universal financial protection: evidence from seven low-and middle-income countries on factors facilitating or hindering progress. *Health Res Policy Syst,* 11 (1)**,** 36.

McIntyre, D., Thiede, M. and Birch, S. (2009) Access as a policy-relevant concept in low-and middle-income countries. *Health Economics, Policy and Law,* 4 (02)**,** 179-193.

Mills, A., Ataguba, J. E., Akazili, J., Borghi, J., Garshong, B., Makawia, S., Mtei, G., Harris, B., Macha, J. and Meheus, F. (2012) Equity in financing and use of health care in Ghana, South Africa, and Tanzania: implications for paths to universal coverage. *The Lancet,* 380 (9837)**,** 126-133.

Mooney, G. (1993) Equity in the finance and delivery of health care, an international perspective. British Medical Association.

Mooney, G. H. (1994) *Key issues in health economics.* Harvester-Wheatsheaf.

Nesbitt, R. C., Lohela, T. J., Soremekun, S., Vesel, L., Manu, A., Okyere, E., Grundy, C., Amenga-Etego, S., Owusu-Agyei, S. and Kirkwood, B. R. (2016) The influence of distance and quality of care on place of delivery in rural Ghana. *Scientific reports,* 6**,** 30291.

NHIA. (2003) *National Health Insurance ACT, 2003.* Service, G. H. NHIA,

NHIA (2004) *National Health Insurance Regulations, 2004 (LI 1809).* Accra:
NHIA. (2012) *National Health Insurance Act, 2012 (Act 852).* GPCL/Assembly Press,
Penchansky, R. and Thomas, W. J. (1981) The concept of access: definition and relationship to consumer satisfaction. *Medical Care,* 19 (2).
Peters, D. H., Garg, A., Bloom, G., Walker, D. G., Brieger, W. R. and Rahman, M. H. (2008) Poverty and Access to Health Care in Developing Countries. *Ann N Y Acad Sci,* 1136**,** 161-71.
Sachs, J. D. (2012) Achieving universal health coverage in low-income settings. *The Lancet,* 380 (9845)**,** 944-947.
Schieber, G., Cashin, C., Saleh, K. and Lavado, R. (2012) *Health financing in Ghana.* World Bank Publications.
Stuckler, D., Feigl, A. B., Basu, S. and McKee, M. (2010) The political economy of universal health coverage. In: *Background paper for the global symposium on health systems research. Geneva: World Health Organization.*
Tipping, G., Dung, T. V., Tam, N. T. and Segall, M. (1994) *Quality of public health services and household health care decisions in rural communes of Vietnam.* IDS Publications, Institute of Development Studies.
Wagstaff, A., Doorslaer, E. v. and Paci, E. (1989) Equity in the finance and delivery of health care: some tentative cross-country comparisons. *Oxford review of economic policy,* 5 (1)**,** 89-112.
Wagstaff, A. and Van Doorslaer, E. (2000) Equity in health care finance and delivery. *Handbook of health economics,* 1**,** 1803-1862.
Whitehead, M. (1992) The concepts and principles of equity and health. *International journal of health services,* 22 (3)**,** 429-445.
WHO (1978) *Declaration of Alma-Ata 1978: report on the international conference on primary health care.* Geneva: WHO.
WHO (2005) Sustainable health financing, universal coverage and social health insurance. Resolution WHA58. 33. Geneva: WHO; 2005.
WHO (2008) *World Health Report 2008: primary health care: now more than ever. Geneva: World Health Organization.* Geneva: WHO.
WHO (2010) *Health systems financing: the path to universal coverage.* Geneva: World Health Organization.
WHO (2013) *Monitoring progress towards universal coverage at country and global level.* Geneva: WHO/IBRD/The world Bank.
WHO (2015) *Tracking universal health coverage: first global monitoring report. .* Geneva: World Health Organization.
Wiseman, V. (2011) Key concepts in health economics. In: Guinness, L. andWiseman, V. (Eds.) *Introduction to Health Economics.* (Understanding Public Health) second ed. London: Open University Press, pp. 7-20.
Yates, R. (2009) Universal health care and the removal of user fees. *The Lancet,* 373 (9680)**,** 2078-2081.