The Challenge of Water Accessibility: Implication for Social Work Practice

By

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Abstract

Provision of safe, reliable and potable water remains a challenge to water system in most developing societies and communities. Water inaccessibility is accompanied by challenges that expose user communities to perils that threaten their social well-being. The aim of this study is to determine households' access to potable water, gain an in-depth understanding of the issue of water accessibility and the social work response to the phenomenon in Edo State, Nigeria.The descriptive survey method and the with the four point Likert scale structured questionnaire is adopted for this study. Twenty 105 residents, both male and female of three communities, Evbuomore, Ekosodin and Utekon respectively, were randomly selected, which give the sum of three hundred and fifteen (315) participants of the study. The instrument was validated by three experts' involved with eco-social work. The data collected was analyzed using frequency count, percentage, mean and standard deviation statistics. Results reveal that households in Utekon, Evbuomore and Ekosodin depended mainly on water supplied from Borehole with 38 (36.19%), 49(46.67%) and 74(70.48%) respectively. There is an increasing challenge of water accessibility in the Edo communities with mean value of 2.86, impacts on communities with 2.65 and influence of social measures to water accessibility at 2.89. Social work intervention is recommended for communities with water issues to enhance their eco-social functioning.

Keywords: Community, Portable water, Social work, Sustainability, Water accessibility,

Introduction

Water, as it is largely referred to, sustains life. Life is intolerable without "the availability of water, hence, it is viewed as the global common heritage and everyone should effectively, have an inalienable social and political right to it" (Ajibade et al., 2015, p. 20). Even though water is one of the precious gifts to mankind, lack of access to safe drinking water is one of the problems affecting billions of people around the world (Hesperian Foundation, 2005). Worldwide, water availability is possibly a key issue in the 21st century. Thus, the scarcity of portable water has been noticed worldwide (Ele, 2013). Azubike (2013) reports that only 58% of the Nigerian population has access to potable

water; that is 87 million people, while 63 million are sidelined. This varies from urban to rural communities as the latter is worse hit by the problem. This is particularly so in a number of Nigerian communities where level of access to water and are said to be very low. Recently, Oyesanmi (2018, p. 48) indicates that "in Africa, water scarcity is a menace and it is estimated that by 2030, 75 to 250 million people will be living in water stressed areas and in Nigeria, about 57 million people do not have access to safe water".

The scarcity of water in Nigeria is taking a new dimension as residents of many urban and mostly rural communities do not have access to a readily available source of domestic water (Ojo, 2014; Omorogiuwa, 2018). The social, economic and political consequence of this is disturbing. Infrastructures are basic facilities provided by the public or private organizations to facilitate efficient development in an organization, the society, community or nation in general (Akpan, 2009). While infrastructure encompasses recreation and tourist services, health care services, welfare, housing and education, electricity, transportation and communication, it also involves the provision of potable water, which can enhance the development of a nation. The challenges of water accessibility have created impacts and "a factor inducing conflicts in societies because the earth's fresh water is diminishing due to man's activities, climate change" (Ajibade et al., 2015, p. 20) and limited replacement. Although, there have been efforts to increase provision of domestic water for both rural and urban communities. However, water is still unavailable to many, mainly those located in sub-Saharan Africa, South Asia and East Asia (Ellen & Kellog, 2005). Rural communities particularly, in a number of developing countries obtain their drinking water from untreated surface sources, often situated far away from their residence. For instance, in many Nigerian rural communities, water supply infrastructures are still at developmental stage or are completely absent (Kanati & Omorogiuwa, 2018). This made the United Nations International Children's Emergency Fund and World Health Organization (2012) suggests that improving water accessibility could drastically reduce the rate of living standard and death worldwide.

Provision of safe, reliable and potable water remains a challenge to water system in most communities in Nigeria and largely, in Africa (Kanati & Omorogiuwa, 2018). When provision of clean water is inadequate, people are compelled to use unclean water, which often result to water related issues. Thus, the major sources of water supply for the rural communities in are wells, bore holes, streams (Ohwo, 2014; Omorogiuwa, 2018), rivers and harvested rain fail, which is often not dependable during the dry seasons. As in other parts of the world, efforts geared towards rural development in Nigeria and towards "water for all by the year 2020" have increased the assessment, exploration of water resources both surface and underground (Ellen & Kellog, 2005). Provision of water is critical to the

improvement of the quality of life of people because having access to sufficient quantities of clean and safe water enhances the health and productive lives of people in rural areas.

Although the UNICEF and WHO (2009) recommended 120 liters of water per person daily to meet domestic water utilization and function effectively. Given the proliferation of the challenges of water supply, most people could not attain this. Ensuring availability of water resources is absolutely necessary to sustain the society and the economy as a whole. However, limited efforts had been made to comprehensively address the challenges confronting the water sector in the Nigerian context. Consequently, this study strives to gain an understanding of the issue of water accessibility and the social work response to the phenomenon. Hence, the main objective of this study is to determine the sources of water in Edo State Communities, explore the concerns regarding water accessibility and the role of social work in water accessibility.

Research questions

In line with the objectives of the study, the following research questions are raised:

1. What are the sources of water in Edo Communities?
2. What are the challenges of water accessibility?
3. What are the consequences of inadequate water supply?
4. What is the role of social work in water accessibility?

Methodology

A descriptive survey research design was adopted for the study. The population of this study consists of all residents of Evbuomore, Ekosodin and Utekon communities of Edo State, Nigeria. A descriptive survey research design was adopted for the study. A random sample of 315men, women and youths were selected, using the simple random sampling technique. Firstly, 3communities in the population were randomly selected and there after randomly selecting 105residents from each of the selected communities. The instrument used is a 4 point Likert scale questionnaire, with reliability coefficients of 0.83, 0.84 and 0.86 for challenges of water accessibility, consequences on inadequate water and social work and water accessibility respectively. The instrument was thereafter administered to fifteen residents in the communities that are not to form a part of the sample of study. The content validity was determined by 3 experts involved with eco-social work issues. The data collected was analyzed using descriptive statistics of; frequency percentage, mean and standard deviation. As presented in the tables below.

Results and discussion of findings

Research Question 1: What are the sources of water in communities of Edo State?

Table 1: Thesources of water supply in communities

Sources of Water Supply	**Stream/River**		**Well**		**Borehole**	
Communities	**F**	**%**	**F**	**%**	**F**	**%**
Evbuomore	-	-	31	29.52	74	70.48
Ekosodin	21	20.00	35	33.33	49	46.67
Utekon	34	32.38	33	31.43	38	36.19

Source: Field Survey, 2018

The source of water supply to the communities in Edo State as revealed in table 1 was mainly through individual and community bole holes. The Water Board established by the State Government is defunct and do not develop and distribute water to the people. Boreholes, wells and river/streams constitute important sources for residents of Evbuomore, Ekosodin and Utekon communities of Edo State. This study revealed that households in Utekon, Evbuomore and Ekosodin depended mainly on water supplied from Borehole with 38 (36.19%), 49(46.67%) and 74(70.48%) respectively. This implies that most of the households had private boreholes drilled in their residences and community borehole as their major source of water supply. Some households depended on wells, with harvested rain water located in their compounds or in neighbouring houses. However, some households still combined two or more sources of water for use.

Research Question 2: What are the challenges of water accessibility?

Table 2: The challenges of water accessibility?

S/N	**Challenges of Water Accessibility**	**N**	**Mean**	**Standard Deviation**	**Decision**
1	Inadequate supply of electric power causes water inaccessibility.	315	2.98	1.32	Agreed
2	Poor funding by the government is a huge challenge of water accessibility.	315	2.87	1.14	Agreed

3	Poor engagement stakeholders has played an instrumental in contributing to water scarcity	315	2.78	1.97	Agreed
4	Lack of proper policies targeted at water availability also hinders water accessibility.	315	1.73	1.35	Disagreed
	Grand Mean	**315**	**2.86**	**1.44**	**Agreed**

Source: Field Survey, 2018 ***Criterion: 2.50***

Table 2 shows that the challenges of water accessibilityin Edo State have a calculated mean value of 2.86 and standard deviation 1.44. The grand mean is above the criterion mean of 2.50, indicating that respondents agreed that the common challenges of water accessibility of Evbuomore, Ekosodin and Utekon communities are inadequate supply of electricity, insufficient of funding from government, poor stakeholders engagement and lack of suitable policies targeted at water supply. Indicating that, the above challenges contribute to poor water accessibility. This signifies that the respondents lack adequate access to portable water due to lack of commitment from government and other stakeholders. This is in correspondence with the work of Ohwo (2014) that posited that the national water supply strategy should pursue an integrated approach for the delivery of safe water, targeting communities as well as institutions in the Nigerian context. Similarly, Ajibade et al. (2015) and Akpan (2009) confirm that government support and the provision of infrastructure plays an important role in water supply to as it constitutes the hub upon, which socio-economic aspects of communities revolve.

Research Question 3: What are the consequences of inadequate water supply?

Table 3: Theconsequences of inadequate water supply?

S/N	Consequences of inadequate water supply	N	Mean	Standard Deviation	Decision
1	Water scarcity has a devastating impact on sanitation and personal hygiene.	315	2.55	1.92	Agreed
2	Inadequate water worsens economic hardship for the populace.	315	2.98	1.63	Agreed
3	High level of health challenges today are caused by water inaccessibility.	315	2.20	1.17	Disagreed
4	Crops in the farm and garden suffer more from water inaccessibility.	315	2.89	1.47	Agreed
	Grand Mean	**315**	**2.65**	**1.56**	**Agreed**

Source: Field Survey, 2018 ***Criterion = 1.50***

Table 2 shows that the consequences of water accessibilityin Edo State have a calculated mean value of 2.65 and standard deviation of 1.56. The grand mean is above the criterion mean of 2.50, indicating that respondents agreed that the consequences of water accessibility of Evbuomore, Ekosodin and Utekon communities of Edo State are poor sanitation, economic hardship, health challenges and poor farming yields, which should be given complete attention in order for the populace to have access to clean water in the communities. Inadequate supply of electricity, insufficient of funding from government, poor stakeholders engagement and lack of suitable policies targeted at water supply. Indicating that, the above challenges contribute to poor water accessibility. This signifies that the respondents lack adequate access to portable water due to lack of commitment from government and other stakeholders. This is in agreement with Ellen and Kellog (2005) and Oyesanmi (2018) in analyzing the consequences of the increase in inadequate water supply that it is necessary to bring into focus how the impacts of water accessibility has induced the incidence of personal, health, social and economic issues on the user communities.

Research Question 4: What is the role of social work in water accessibility?

Table 4.Social work and water accessibility

S/N	Social work and water accessibility	N	Mean	Standard Deviation	Decision
1	Social Work locally rooted initiatives that promote water accessibility.	315	2.78	1.39	Agreed
2	Social Work advocacy roles to support policies that address the unbalanced	315	2.88	1.38	Agreed
3	Social work public awareness of the human impacts of scarcity of water.	315	2.74	1.45	Agreed
4	Social work practice emphasis on preventive work, to ensure sustainable community development and social solutions to environmental problems.	315	2.7.4	1.45	Agreed
	Grand Mean	**315**	**2.89**	**1.44**	**Agreed**

Source: Field Survey, 2018 ***Criterion = 2.50***

Table 4 social work and water sustainability reveals a calculated mean value of 2.89; standard deviation of 1.44; the grand mean is above the test mean of 2.50. Implying that respondents agreed that the social work measures to water accessibility of Evbuomore, Ekosodin and Utekon communities of Edo State are support for local initiatives/participation of the communities, social work advocacy, awareness and preventative measures with stakeholders of water in order for the users to have access to water in the communities. This shows that social work intervention measures are likely to be supportive in response to the issue of water accessibility. The findings of this research work support the assertion made by Norton (2012), which found out that social workers should be encouraged to support locally rooted initiatives that promote environmental sustainability, such as accessibility and availability of water. Omorogiuwa (2011) confirms that any effort seeking to influence development must embrace social work measures, which provide local communities with opportunities for dealing with practical issues, including water accessibility. These finding suggest that reinvigorating the place of social work is imperative in addressing water related issues of inaccessibility, which promotes the transition to an eco-social practice paradigm.

Implication for social work practice

The findings of this research support the assertion made by eco-social work theorists that social workers should be encouraged to support locally rooted initiatives that promote environmental sustainability (Coates, 2003; Norton, 2012), such as water. These finding suggest that reinvigorating social work research and education related to community organization and community development will be an important part of making the transition to an eco-social practice paradigm. While beneficial for their contributions to mitigating environmental degradation, the findings from my study reinforce the idea that local 'environmental' issues, such as water are also a potent focus around which community convenes. In this way, social work greater integration into environmental justice of community-based initiatives through research collaboration could bridge the eco-social sustainability (Schmitz et al., 2012; Omorogiuwa, 2018). Hence, the need for social work intervention measures that promotes water availability and sustainability.

Water, which is the crux of this research, can be viewed as an aspect of community development. Hence, with the shortage of fresh water, various organizations and professionals comprising social care networks, human rights and environmental groups, international agencies, NGOs and diverse community groups have indicated interest in the water issues (Barlow & Clarke, 2002). Thus, calling for actions that would help preserve, protect and ensure the systematic distribution of the earth's fresh water to meet the need of humanity. Given the need for sustainability, there is a growing interest in responding to the effects of environmental challenges such as difficulties of water accessibility. Consequently, social workers are likely to have a valuable contribution to make to the water supply sector, which is crucial to rural communities, because of their understanding and skill in dealing with social and community development problems (Coates, 2003; Omorogiuwa, 2011; Case, 2016).

At a general level, the findings affirm and amplify the call of eco-social work advocates for more direct engagement of social workers in environmental justice initiatives on the basis of a concurrence of value for water and its accessibility (Schmitz et al., 2012). At the centre of the social network of water activism there are values, norms, and priorities that not only situate water issues in the social context, but which also lie at the core of the social work profession: social justice, including the implicit concern for the most marginalized communities (Case, 2016; Omorogiuwa, 2018). As a consequence, there is the need for the establishment of social relations that support self-reliant, sustainable, and resilient local community water supply. According to Omorogiuwa (2011), community participation is geared towards tapping the potentials of people in improving their standards. This is important both in water community development promoted by social workers. In this way

social work practice addressing environmental issues and sustainable development is likely to improve the living environment, physical infrastructure and facilities, as well as ensuring participation and empowerment of people (Schmitz et al., 2012) in water provision and accessibility.

In this context, the priorities emerging from this research work on water accessibility highlight what eco-social work theorists, such as Coates (2003, p. 113) observe about the growing importance of the "connectedness and relationship, which consequently makes the re-establishment of a sense of community – of place and belonging – a primary concern for social work". Significant opportunity exists in community-based education advocacy and socio-environmental action contexts such as water activism. Considerable collaboration in provision of water by helping stakeholders will help to solve the water crisis in the African continent (Kanti & Omorogiuwa, 2018). Hence, the call for social work to pursue the social priorities of water availability, accessibility, usability and sustainability; around, which the profession has evolved and to promote human and social functioning.

Recommendations

Based on the findings above, recommendations are made that:

- Government should ensure that all water regulatory agencies in the country provide access to potable water to deprived communities;
- Government should ensure proper funding of water projects;
- Social work profession should continue to develop her expertise in assisting communities to organize themselves to address specific, emerging concerns of water;
- Government should assist schools of social work through encouraging students practicum placements in water related organisations, research collaborations and developing new courses designed to explore theory and highlight practice approaches that bridge the social divide in Nigeria.

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