Experiences of Family Care Givers of Patients with Surgical Site Infections at Jos University Teaching Hospital Nigeria

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Abstract— Background: Surgical site infection is the third most common healthcare associated infections in the world and the most common in Africa. Patients diagnosed with surgical site infection are faced with an array of issues among which is an extended inpatient stay and a high cost of treatment. These issues have an impact not only on the patient but also on their families.

Aim of the study

This study aimed at exploring the socioeconomic experiences of family caregivers with patient with surgical site infection in Jos University Teaching Hospital. Descriptive qualitative approach was used to explore experiences from a sample of twelve participants. A structured interview was conducted to collect data and content analysis was used for analyzing the data.

Result:

The cost of treatment was high and the participants had difficulty coping financially. Participants had to abandon personal businesses and work due to the lengthy stay in the hospital making it more difficult to cope with the cost of treatment. In addition Participant had social isolation and altered relationships.

Conclusion:

Family caregivers of patients with surgical site infection in JUTH experienced socioeconomic burden. It was recommended that support and interventions that are geared towards reducing the burdens of caring for family caregivers should be put in place to ease the burden of family caregivers.

Index Terms— socioeconomic experiences, surgical site infection, family caregiver.

I. INTRODUCTION

Background of the Study:

Surgical site infections (SSIs) are infections at the tract of

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Dr Abraham Dare Ajayi, Department of Nursing Science, Faculty of Health Science and Technology, College of Health Sciences, University of Jos, Plateau State. Nigeria. surgery that occur within 30 days of surgery or 90 days when surgery is accompanied by the insertion of an implant (Centre for Disease Control and Prevention, 2015). Surgical site infections may be limited to the operative site (localized infection) or may produce an effect in the other parts of the body (systemic infection) and it can either be managed as an outpatient case or as one that can lead to either an extended inpatient stay or reoperation (Phillips, O'Grady, & Baker, 2014).

Surgical site infections were found to be the most common healthcare associated infection (HAI) in Africa with a pooled prevalence of 12%. The prevalence rate in Africa was at least three times higher than those reported in Europe and in USA (Allegranzi et al., 2011). In a studyconducted in Nigeria, by Amoran, Sogebi, and Fatugase (2013), the overall incidence rate of SSIs was 13% with the mean length of hospital stay after surgery being appreciably longer for patients with SSIs than for those without infections. Patients with surgical site infection are unable to physically act independently and therefore become dependent on others, family members inclusive, for their daily activities (Mitnick, Leffler, Hood, & American College of Physicians Ethics and Human Right Committee, 2010). This condition can also have a great impact on the patients' families by causing significant economic burden (de Lissovoy et al., 2009). The cost of managing a patient with surgical site infection in the world over has been said to be high causing both direct and indirect burden to patients and their families, hospital and the nation at large. Furthermore, patients with surgical site infection most of the time require an additional surgical procedure as a form of treatment which can exert an extra cost on patients and their families.

Family caregiver (also known as informal caregiver) is a relative or a friend who provides care for a sick member of the family either in the hospital or at home. They are found to have no particular formal preparations and training necessary for caring. They are also found to receive no pay for the work they perform though they are committed to the work of caring. They provide care for 24 hours a day in 365 days a year. They are also found to perform a significant role in the care of patients with severe illnesses (Mora-López, Ferré-Grau&Montesó-Curto, 2016).

The experience of family caregivers of patients with surgical site infection is worth exploring as they go through the hassle of providing care and assistance for their relatives all through the length period of hospital stay. This study



Experiences of Family Care Givers of Patients with Surgical Site Infections at Jos University Teaching Hospital Nigeria

therefore, seeks to explore the experiences of family caregivers of patients with surgical site infections. This study will inform the development of a support intervention to relieve the socioeconomic burden of these caregivers thereby improving patients' outcome and continuity in care after discharge. It is also aimed at filling the gap in literature on the experiences of family caregivers of patients with surgical site infections. It will also improve the quality of nursing care and services these patients and their family caregivers get since findings will increase recognition of the family caregiver by health professionals and the need to work with them. These findings will as well direct the attention of other researcher to begin to look at the aspect of family caregiver in the holistic management of SSI, thereby, serving to increase the body of knowledge.

Problem Statement:

The impact of surgical site infection on the patients can be very profound. Patients with surgical site infection are usually on prolonged antibiotics medications. Surgical site infection also have impact on the length of days patients spend in the hospital. In a study conducted in Nigeria by Ameh et al. (2009), the length of hospital stay of patients with SSI ranged from eighty to one hundred and seven days. Even though family caregivers are greatly involved in their loved one's care, they have received only minimal attention by most healthcare providers and other organizations. There is therefore a need to focus on the economic impact of caring for a patients with SSI, especially in developing countries where family caregivers are deeply involved in the patients care while they are hospitalized (Khosravan et al., 2014).

Objective:

To explore the socioeconomic experiences of caring for a family member with SSI.

II. METHODS

Research Design:

Exploratory descriptive qualitative design was used in exploring the economic experiences of family caregivers of patients with surgical site infection at Jos University Teaching Hospital, Plateau State, Nigeria.

Research Setting

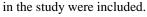
This study was conducted in Jos University Teaching Hospital (JUTH). JUTH is located inJos Plateau State, Nigeria, and is a government owned Teaching Hospital. The Hospital is a 600-bed referral Centre serving about five neighboring States. The hospital has a modular theatre with five en-suite units and emergency theatres units for daily surgical operations in various disciplines of surgery. The hospital has two main surgical wards (the male and female surgical wards) that cater for about thirty-four patients each. Total of twenty-two nurseswork in both the male and female surgical wards.

Population of Study:

This covered all family caregivers of patients with surgical site infections in the surgical wards of the hospital.

Inclusion criteria

The primary family caregiver of patients with surgical site infections that are above eighteen years. Only the family caregivers who gave consent and were willing to participate



Exclusion criteria:

Participant that could not speak English and the Hausa Language were excluded.

Sample and Sampling Technique:

This was not determined before the data was collected but was arrived at when data saturation was reached. Data saturationwas achieved after the twelfth participant was interviewed. Purposive sampling technique was used to enroll participants who met the inclusion criteria for the study. The researcherpurposively selected participants from the male and female surgical wards in the hospital.

Instrument for Data Collection

A structured interview guide was used to conduct in-depth interviews with participants. The structured interview guide contained open ended questions that captured data from participants in the form of feelings, thoughts, and insights.

Method of Data Analysis

Data analysis was done using content analysis.

Methodological Rigour:

Rigour was ensured by satisfying the following criteria: credibility, transferability, dependability and confirmability.

Ethical Consideration:

The study proposal was subjected to approval from Jos University Teaching Hospital Ethical Committee and approval was granted. This study considered the aspects of consent, anonymity, and confidentiality.

III. RESULT

Socioeconomic Experiences

Participant involved in the study experienced somesocioeconomic issues that can be associated with caring for the patient who had surgical site infection. Participants had no time for other activities other than the patient's care and so were unable to keep up with social activities. Most of the participants had to suspend major source of livelihood in order to provide care for the patient in the hospital. This affected the income of the participants, thereby, making it difficult to raise the money for patient's treatment. Four (4) subthemes emerged from this main theme and they include social isolation, altered relationships, financial burden and support and they are discussed below:

Social Isolation

All of the participants in the study experienced social isolation while they cared for the patient in the hospital. Not attending social activities such as going for visitations and attending ceremonies were reported by all participants in the study. This made participants to feel constrained.

"...it has affected my going out to places ...I am not able to visit any one, this has really constrained me and I feel like my life is kept on hold. I cannot do anything" (Hassan)

"I am not around in the house so attending all ...and ceremonies are affected. Last Saturday I was supposed to attend a wedding, but I was not able to, today I had another one but I am here..." (Mary)

Participants in the study also mentioned that not attending other gatherings such as religious fellowships as well.

"Since I came I have not gone to church fellowships. I have



not gone anywhere beyond the hospital gate ... " (Ifeoma)

"...it has affected my going to recitation class (Islamic school for adults)..." (Aisha)

Some of the reasons the participants mentioned for not socializing included having no time to socialize again as well as having to go a long distance to socialize.

"I don't have time for weddings... last week I had two weddings to attend but I did not attend any because I am here..." (Sarah)

"I don't have friends round here so I will have to go all the way to see them..." (John)

"I don't know anybody around here or in this town that I can go and visit..." (Caleb)

Other reasons participants mentioned included not being able to leave the patients all by themselves without any one to care for the patient and being too exhausted from the activities of caring for the patient.

"It has affected my going to church because I cannot go to church and leave him here on the sick bed. There are things I am doing for him so I cannot leave him all by himself and go" (Josephine)

"...even today, I was thinking of going out... but my body aches and I am very tired because of the things I have done today for my patient's care ..." (Hassan)

Altered Relationships

The data collected revealed that some participants had good relationships, however, most of the participants experienced strained relationships during the period of rendering care to the patient in the hospital.

"...here, we are all at peace with each other, we even gather together in the morning to pray for our sick patients, we also get encouragement from each other through this avenue. Those people that we sit outside with during the day, we chat and talk and fellowship together. This has helped us lighten our burden" (Mary)

"Those that I am staying with here, the ones I have offended let them forgive me and the ones that have offended me; I have forgiven them too..." (Binta)

Financial Burden

The findings from the study revealed that the cost of treating the patient was high. The cost of patient's medication and investigations were high. The cost of food and water for drinking, detergent for washing were also high.

"...the purchase of drugs and the investigations are quite expensive and it is affecting our finance, also we don't have any relatives here so we usually buy our food. This also cost a lot of money." (Caleb)

"...I have to buy things like water for drinking; I also have to buy omo (detergent) for washing clothes....so doing all these takes a lot of money" (Aisha)

Most of the participants had difficulties in coping with the high cost of treatment and so were financially burdened.

"It has affected my finances because I do not have even a kobo (smallest denomination of local Nigerian currency) left to care for him. After collecting my salary for November, I couldn't buy the necessary thing in the house even food was so difficult for me to buy because of the hospital bills..." (Sarah)

Some of the participants reported that they to go the extent of borrowing money in order to meet up with the cost of the treating the patient.

"...The illness has caused us to spend a lot of money; the buying of the drugs the transportations....the hospital expenses and feeding, all these have gulped our finances. We had to even borrow to meet some of the needs..." (Mary)

The data collected suggested that participants stayed in the hospital through the length of the period that the patient was hospitalized and so participants had to abandon work and personal businesses in order to provide care for the patients making it more difficult for them to cope with the cost of patient's treatment.

"...when you have a patient in the hospital ... and come in contact with people there... then one can stay in peace with others..." (Aisha)

"I don't have the opportunities to make money here, I am a farmer and I sell the product of my farm to make money but since I came, my farming activities halted. I only depend on the money from my farm produce..." (Caleb)

"...because of this illness I have not been able to go and do my business so money is not coming in ..." (Rhoda)

Support

Findings revealed that some participants in the study had support from other family members.

"...we got support from our family members ...they thought well to help even when we did not ask them towe thank them for their support." (Rhamda)

However, some of the participants received limited or no support from family members while they cared for the patient.

"Some of them tried to give what they had but others did not give anything" (Binta)

"Most of our relatives did not support us. They did not do anything about his health, it was only one of his brothers who stay in Shendam that gave us some money initially but it was not much, so we are just managing our self..." (Sarah)

Some participants had nobody to help in caring for the children at home as well as not having any form of assistance with unmet daily activities.

"I am worried about the children at home because there is no one to look after my children at home." (Rhoda)

"...my sugarcane plants on my farm have all dried up because there is no one there to water it." (Caleb)

Support received from family members were in terms of providing food, vehicle for transportation and money to pay for hospital bills.

"....there was support from family members, they provided food and transportation and other things, most especially his elder brother who had been transporting us to the hospital in his car always." (Josephine)

"Our family members also supported us with money to pay bills." (Rhoda)

Findings also revealed that participants received some financial support from the community they lived in. Members



Experiences of Family Care Givers of Patients with Surgical Site Infections at Jos University Teaching Hospital Nigeria

of the participant's community also visited participants in the hospital to show their concern.

"Members from our community offered help in the way they can. The various contributions made also helped us to upset some of our needs." (Mary)

"...sometimes when our friends from outside comes to greet us they will give..." (Sarah)

Some of the participants reported to have received some financial support from social welfare package that already exists in the hospital.

"...they were here once and they gave us ten (N10000) naira which was used to fund the patient's hospital bill." (John)

However, most of the participants never received any financial support from social welfare packages available in the hospital.

"...we have not received any support from any social welfare since we came." (Sarah) Information suggested that participants in the study needed support from hospital management in order to cope with the stress involved in caring for patient with surgical site infection in the hospital.

"...it is stressful; I need to take care of myself too. If I can get assistance or be helped by the hospital, then it will be nice." (John)

Some of the participants also mentioned the need for support from the government in rendering assistance by subsidizing the hospital bills and the cost of treatment for the patients.

"If government can find a way of helping or assisting us, then this will be good... if the cost of treatment can be subsidized by the government then this will benefit us and ease some of the difficulties..." (Mary)

"...those who have been discharged but cannot complete their hospital bills... government should please help such people." (Josephine)

IV. DISCUSSIONS

Participants in this study were isolated from social gatherings. Participants could not attend ceremonies, religious fellowships, social outings, as well as going for visitations after they started rendering care to the patients in the hospital. It has been found in previous studies that family caregivers in general are socially secluded and their social life style changed as a result of caring (Johansson et al., 2010; Stenberg et al., 2010). Participants in this study were unable to maintain friendship because they were constantly in the hospital. This resonates with findings from a study conducted by Ae-Ngibise et al. (2014), where family caregivers' social relationships were negatively affected by their inability to move from one position to another and interact freely with other people. Findings from this study also revealed that participants could no longer socialize because of reasons such as: having no time to socialize, being too exhausted and tired to go out for any social activities and being unable to leave patients all by themselves. These reasons echo findings from other studies carried out on family caregivers (Ae-Ngibise et al., 2014; Bialon& Coke, 2012; Chen, Ngo, & Park, 2013).

The task of caring for a sick relative was such that family



caregivers had no time for any other thing apart from rendering care to the patients and so unable to meet the need for socializing. Burden of care giving is associated with not being able to meet the family caregivers need for social relationships (Cadman et al., 2012). Experiencing social isolation can be very fatal as in the case of one who consumes excessive alcohol or smokes (Holt-Lunstad et al., 2010). It can increase the chances of mortality and morbidity among family caregivers population (Nicholson, 2012). It was also established in Martin and Brown (2010) that social isolation has a significant positive relationship with depressive symptoms such as anger, loss of interest in daily activities and so on.

Some participants in this study had cordial relationships while they rendered care to the patients. However, findings suggested that some of the participants had strained relationships in the course of rendering care. This is in line with findings from (Chang & Schneider, 2010).

Findings from the study suggested that cost of treating the patient was high. The money for patient's surgery, medication and investigations were high. The cost of buying food and water for drinking, detergent for washing clothes contributed to the cost implication of patient's treatment. Surgical site infections have been reported to be the health care associated infection that has the highest financial impact on the health care system (Zimlichman et al., 2013). The cost of managing a patient with surgical site infection in the world over has been said to be high causing both direct and indirect burden to patients and their families, hospital and the nation at large (Rao et al., 2011). Furthermore, patients with surgical site infection most of the time require an additional surgical procedure as a form of treatment which can exert an extra cost to patients and their families (Wick et al., 2012). Garner and Faucher (2014) reported that family caregivers feel responsible for providing their patient's financial need and so will go any length to raise the money needed for care.

Most of the participants had spent a lot of money in providing the patient with treatment and so were financially burdened. Some participants had to borrow money in order to meet up with the cost of the patient's treatment. The financial cost of providing care to a sick relative is a main determinant of caregiver burden (Lai, 2012). The financial hardship experienced by family caregiver as a result of caring can lead to deterioration in the financial wellbeing of the family. Findings from this study revealed that participants never left the hospital premises throughout the patient's hospitalization and so participants had to abandon work and personal businesses to render care to the patients. This made it more difficult for the participants to raise money needed for the patient's treatment. Family care giving has been found to have an effect on the work and finances of the caregiver (Haddock, Zimmerman, Lyness, &Ziemba, 2006). Family caregivers in general, reduce the number of hours of working, quit working or were fired from work after they started caring for their sick relatives (Douglas et al., 2010). The income of family caregivers influences the financial burden experienced, with family caregivers with lower income being more stressed than those with higher income. Poverty has been found to increase the vulnerability of family caregivers to

financial burden. Financial burden is related to the psychological wellbeing of caregivers and family caregivers who are financially burdened will experience psychological distress. Programs such as the health insurance scheme may benefit these caregivers since it has been found to alleviate the burden of the cost of treatment on the patients and families that have difficulty in affording health care services (Blanchet et al., 2012).

Findings revealed that some participants in the current study had support from family members. Support received from family members were in form of provision of food, vehicle for transportation and money to pay for hospital bills. Findings also revealed that some other participants received limited or no support from family members as they cared for the patient in the hospital. Some participants reported to have had no body to help in caring for the children at home as well as not having any assistance with abandoned roles of the family caregivers. In Garlo et al. (2010) burden was associated with the family caregivers need for help with the task of caring. There is a link between good physical and mental wellbeing of family caregivers and the satisfactions a caregiver has with the assistance received from other family members (Rodríguez-Sánchez et al., 2011). Lack of family support was seen to affect the caregiver's physical health (Yeh et al., 2009). Receiving both emotional and practical support from other members in the family has helped primary caregivers to cope with the burden of providing care.

Findings also revealed that participants received some financial support from the community they lived in. Members from participant's community visited participants and the patients in the hospital from time to time to show their concern. This agrees with findings from (Ae-Ngibise et al., 2014). Any form of support from the community can alleviate burdens of care giving (Nabunya, Ssewamala, &Ilic, 2014a). Community support serves to reduce caregiver burden by granting them a sense of hope and love.

Some of the participants in this study received financial support from social welfare package available in the hospital, although, most of the participants never received any social welfare. It was documented in Stajduhar et al. (2008) that family caregivers described the support they received from formal sources such as the health care facilities to be very beneficial and this helped the family caregivers to cope with the financial burden experienced. Findings from this study suggested that some participants needed welfare support from welfare packages in the hospital in order to cope with the financial stress involved in caring for patient with surgical site infection in the hospital. In a study conducted by Chow et al. (2010) family caregivers particularly those of African origin had no problem with receiving help and support from both formal and informal sources while rendering care to their sick relatives. Some of the participants in this study also mentioned the need for support from the government in rendering assistance by subsidizing the hospital bills and the cost of treatment for the patients. Economic strengthening interventions have helped to improve the economic wellbeing of families that are financially burdened in the course of providing care to a sick family member (Nabunya, Ssewamala, &Ilic, 2014).

V. CONCLUSION

The major findings of this thesis shows that family caregivers of patients with surgical site infection are impacted socially and financially in the course of providing care for the patient. Interventions that will alleviate the burdens of caring for a patient with surgical site infections will go a long way in providing a positive care giving experience for family caregivers of patients with surgical site infections in Jos University Teaching Hospital.

VI. RECOMMENDATION

Based on the findings of this study, the following recommendations are made to:

The Management of Jos University Teaching Hospital

1. The management of JUTH should ensure that the support/ social welfare packages that already exist in the hospital targets patients with surgical site infection and families as well. This will reduce the economic burden experienced by patients with surgical site infection and their families.

The Federal Ministry of Health

- 1. The Federal Ministry of Health should put on their agenda policies and measures in reducing the cost of hospitalization for the poor especially in the government owned hospitals in the country.
- 2. The Federal Ministry of Health should encourage government owned hospitals to employ more health professionals as this can go a long way in reducing family caregiver burden in the hospital.
- 3. The Federal Ministry of Health should extend enrolment into the National Health Insurance Scheme to non-government workers in every State in Nigeria, thereby alleviating the financial burden of healthcare on the poor and the vulnerable

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Experiences of Family Care Givers of Patients with Surgical Site Infections at Jos University Teaching Hospital Nigeria

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