



FAMILIAL CAREGIVER SPACES FOR GYNEACOLOGY CENTER DESIGN AT MIRI DISTRICT IN BAUCHI STATE, NIGERIA

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ABSTRACT: *The involvement of family in the patient's care has been ignored in healthcare settings. It was also limited because of the amount and type of space available in the patient's room. There is an extensive body of literature emphasizing the advantages of family members' presence on patients' clinical and psychological outcomes. This study examines the provision of familial caregiver spaces in the design of a Gynecology Centre at Miri District, Bauchi. It employed a qualitative research design. A population size of 283 was used; purposeful sampling techniques and descriptive surveys were adopted. Interview was used as an instrument for data collection. Percentage and mean were used in the analysis of the data. It was clearly established that there is a need for familial caregivers' space in some parts of the hospital, particularly the gynecology ward. This therefore necessitates the need to provide spaces for caregivers in the hospital wards because of its significance in the area of patients' recuperation and stabilization. It is therefore pertinent to recommend that the government and other critical stakeholders in healthcare delivery should increase efforts in the provision of more caregiver space in gynecology centers.*

KEYWORDS: Familial Care, Caregivers Space, Gynecology Center.



INTRODUCTION

Hospital forms an integral part of a social and medical organisation. Its function is to provide for the patient, complete health care. It is not only a place to cure illness and for promoting health care but is also a place where patients are admitted and accommodated (World Health Organization, 2017).

Family involvement in caring has been established to be the basis of nursing care, but it has not always been recognized as such (Wright & Leahey, 2009.) Moreover, their involvement in nursing care originated from patients' homes where family involvement and family-centered care were natural (Wright & Leahey, 2009). These become well established local norms on these kinds of family contributions, making the expectations of health care providers and service users compatible. Studies have established that a family member who holds valuable information concerning the patient may stay in hospital, work collaboratively with the health care team, and participate in caregiving for the patient (Entwistle, 2004; Bertakis & Azari, 2011).

Caregiving is defined as the process or act of rendering care services to other people, who as a result of illness or disorder have a deficit in or have lost the independent capabilities of carrying out certain fundamental activities on their own (Schulz & Patterson, 2004). It encompasses the provision of assistance to another who needs help in carrying out the activities of daily living (Utah, 2006). In another definition, caregivers in hospitals refer to the individuals who provide care and support to patients during their stay in a medical facility. These caregivers can be healthcare professionals, such as doctors, nurses, and medical assistants, as well as non-medical staff like hospital aides and technicians (Whaley, 2022).

Caregivers are generally found in hospitals, communities, and homes, but this research will specifically talk on familial caregivers that are found in hospitals and address the lack of spaces for their comfort. In a developing country such as Nigeria, there exists an issue with a global perception where a patient on admission is expected to be accompanied by one or more family member(s) throughout the hospitalization period as the value and norms perception occurs, particular with respect to the gynecology issues.

Gynecology deals with non-pregnant women, their physiology and medicine. It manages the functions and diseases specific to women and girls, especially those affecting the reproductive system, such as menstrual irregularities, uterine problems, infections and irritation, family planning, perimenopause and menopause issues, breast pain, infections or changes (Kwawukume & Samba, 2005). When it comes to women hospitalization, the feelings of insecurity, fear and uncertainty are even stronger, more complicated and very crucial for their well-being. Women are a unique group that are still developing perception of the body, as they find it difficult to perceive recovery after their present discomfort (Lambert, Coad, Hicks & Glacken, 2013). Hence the need for caregiver's space is required to help in speedy recovery of the women's health and security.



LITERATURE REVIEW

Rendering of care, assistance, support, and aid to include meaning the term 'caregiving' to individuals unable to function independently due to some certain form of impairments/disability or the other, often involving two groups of individuals: the caregiver and the care recipient (Olagundoye, Akhjemokhan & Alugo, 2007).

Caregivers live in both rural and urban areas. Caregivers include people of diverse racial, cultural and linguistic backgrounds, different sexual orientations, and persons with disabilities. Many people of all backgrounds and walks of life are involved in caregiving. Caregivers include both men and women, though women are more likely than men to be caring for a friend or family member. Women are also more likely to take on intense and long-term caregiving involving personal care on a daily basis. (Schulz & Tompkins, 2010). Caregivers are vital to the work and family research network which said caregiving is generally rendered in three dimensions, which are instrumental, informational and emotional caring (WFRN, 2017).

Caregiving is often discussed in the light of unpaid workers who are usually relatives and friends. Although all forms of caregiving are also rendered by paid workers who are usually trained professionals (WFRN, 2017). Caregiving is of optimal importance as it is an inevitable way of ensuring that the ill and the disabled can succeed.

TYPES OF CAREGIVING

Every caregiving situation is different, but most caregivers are helping out in at least one of the following areas: Personal Care, Orchestrating Care and Psycho-social Support. The International Federation on Aging (2014) categorizes caregiving into two major types based on the source of care being rendered; these are formal and informal.

Formal caregiving is a planned and structured form of caregiving where the caregivers are employed and get paid for the services they render. These caregivers are mostly professionals such as nurses, doctors, and other professional health workers who are trained to carry out services (Community Care, 2010). Informal caregiving signifies a form of caregiving, less structured and in which the caregivers are not paid for the services rendered (Community Care, 2010). The Los Angeles Public Health Publication (2010) describes informal caregiving as the daily support and help rendered by family members and friends to their temporarily or permanently ill relatives who are unable to function independently. The scope of caregiving involves support with Activities of Daily Living (ADL), care of illness-related symptoms and management of care (Walker, Pratt & Eddy, 1995). ADL activities cover self-care practices such as taking a shower, feeding and changing clothes, exercising-to-chair transport, using the toilet, food preparation, buying groceries, making phone calls and financial budgeting.

THE IMPACT OF INFORMAL (FAMILIAL) CAREGIVING

Important positive aspects of the caregiving role include giving pleasure to the care recipient, maintaining the dignity and maximizing the potential of the care recipient, experiencing enhanced relationships, meeting perceived responsibilities, sharing mutual love and support, and developing personally (Nolan, Grant & Keady, 1996; Lundh, 1999). In the Australian Bureau of Statistics (ABS) data, 33% of caregivers indicated that their relationship with the care recipient was closer as a result of their caregiving role (ABS, 1998). It is likely that these positive aspects of caring would impact positively on the caregiver's overall mental health.



Some of the factors that affect the impact of caregiving on caregivers are related to the caregiving situation itself, such as the relationship with the care recipient and the type of disability of the care recipient. Clearly these factors are extremely important when assessing the most appropriate supports for individual caregivers or for caregiver groups.

Relationship between Caregiver and Care Recipient

The relationship of the caregiver to the care recipient has been reported to be an influential factor in relation to the impact of caregiving. How close the relationship is between caregiver and care recipient appears to be important. Therefore, intimacy and love in the relationship between caregiver and care recipient have been associated with lower levels of minor psychiatric symptoms and burden (Braithwaite, 2000), and the quality of the relationship between a caregiver and a care recipient who is their parent proved to have influence on the ability to be satisfied with family functioning (Carruth, Tate, Moffatt & Hill, 1997).

Spatial Organization

Factors pertaining to the spatial organization of rooms and spaces within the healthcare setting include the layout of the unit (e.g., proximity of nurses' station to high fall-risk rooms) and layout of the patient room, particularly bathroom and bedroom design. However, studies are available that included spatial characteristics as part of psychosocial and behavioural interventions, and at the scale of unit design; one factor that was mentioned was designing the unit so that bedrooms were easily visible from the nursing station (Hitcho *et al.*, 2004).

Furthermore, grading of space would afford residents more retreat options and places to socialize in smaller groups. Various authors have recommended smaller areas in which residents can socialize or observe others without participating (Calkins, 1988; Lawton, 2001).

Configuration is at least understood as a two-dimensional relationship, but in its development the complexity of the relationship takes into account other "dimensions" (Hillier & Hanson, 1984). However, the personal space is the psychological dynamics of privacy created by overwhelming social and privacy processes that make people feel alienated (Helmi, 1999). The personal space governs how closely a person interacts with others depending on the situation (Bell & Fisher, 1996). The personal space is not absolute or fluctuating and moving; it can be said that personal space is a territory that always follows wherever a person is (Sommer, 1969). There are several dimensions within the personal space that affect the size of individual personal space. According to Bell and Fisher (1996) and Sommer (1996), it has three factors:

1. Situational factors, personal space can be enlarged or decreased depending on the situation such as attraction, similarity and type of interaction.
2. The factor of individual differences, the interaction between a person and another person may differ from one to another; this difference is due to culture and race, sex and age.
3. Physical factors of the room, the architectural factors of a building will affect the personal space.

Spaces designed to bring people together and spaces designed to minimize contact between individuals also include physical factors that affect the size of the personal space. This can be interpreted as the space around the individual that is always taken anywhere and will be



disturbed if the space is interfered with (Grifford, 1987). Similarly, Hall (1966) argued that physical distance indicates four types of relationships (intimate, personal, social, public) between communicators.

MATERIALS AND METHOD

Bauchi State is a state in north-eastern Nigeria. During the colonial era, it formed part of the Bauchi Plateau of the northern region; it became a province under the North-Eastern state with headquarters at Borno. Bauchi became a state in 1976 when the former Eastern state was divided into three: Adamawa, Bauchi and Borno States on February 3, 1976 by the then Head of State, late General Murtala Muhammad. Bauchi state has gone through tremendous transformation over the years.

Miri is a district under Bauchi Local Government Area of Bauchi State Nigeria with coordinates of 10.33039,9.748498 Aw Tropical Savanna, wet or 9° 47' 5" E. Its major tribes are Gerawa, Gerumawa and Anfawa. It was founded in the year 1674, the people of Miri at that time lived on the hill of Miri. It was Muhammad Kanasa, a Fulani man who came from Zaria with his cows and settled down at Miri, that led him to bring them down from the hills to the present day land of Miri. At that time, the people of Miri did not have any religious beliefs except traditional religion. Their major occupation is hunting. The people of Miri at that time proposed Mal. Muhammad Kanasa to be their head due to the fact that he converted many of them from traditional religion to Islam before the coming of Malam Yakubu the first emir of Bauchi who led them to be part of present day Bauchi emirate council.

Miri is bounded by Tirwun from the east, Dutsen buli to the south, Zaranda village to the west, and Rauta to the north. The urbanization brought development in the area where Miri District is now 7 kilometers away from the state capital.

Due to local government reforms in 1976 and in order to bring the government nearer to the people, Gunduman dan iya was carved from Miri. Miri is a settlement of much population, with a district head and a village head; it comprises 5 village heads, namely Miri, Durun, Kundum, Dandango and Birshi. From its creation to date Miri was ruled by 12 village heads and 44 hamlets heads within the jurisdiction. Therefore, their religion and culture permits the caregivers to have direct contact with their patients.

METHODOLOGY

To identify the hospital functional spaces requiring familial caregivers, data were collected from relevant health care personnel through in-depth interviews on the criteria for establishing familial caregiver spaces. Case study approach was equally utilized to extract relevant data on the standard best practice for establishing familial caregiver space (Mile & Huberman, 2013).

Semi-structured interview was carried out on respondents from different perspective, the questions are open ended questions which are not planned in advance. The interview was carried out at different places and time, depending on the convenience of the respondents. The interviews were audio recorded and notes were taken to enable further analysis and interpretation without losing details.



RESULTS AND DISCUSSION

The concept of space and its function is a common phenomenon in architecture and therefore forms the bedrock for spatial configuration. The spatial configuration relationship determines the effectiveness and functionality of an architectural product. Thus, the function of space forms the basis for judging the success or otherwise of an architectural configuration this applies to all building designs especially to a hospital ward setting intended to accommodate various complex and diverse functions. The concentrations in design of healthcare facilities in the past two decades were mostly on providing accommodation for physical functional requirements of space and service delivery.

In determining areas within a hospital requiring caregiver's space, respondent's ideas and perceptions were obtained through interviews and case study.

The table below is the frequency of respondent's opinion depicting the need for the provision of caregiver's space. 100% of the respondents interviewed have repeated expressions showing the desirability of providing caregivers space represented by an abbreviated code of (DCGS) in gynecology ward. Similarly, female medical ward, male medical ward and pediatric ward have been supported to have provision of caregiver's space with respondent's percentages of 100%, 87%, and 62% respectively, all containing themes, words or concept suggesting the desirability for the establishment of caregiver's space in the affected wards. Whereas contagious disease ward/isolation centers, intensive care unit and psychiatric wards are revealed by the interview to have little or no desirability for the provision of caregivers space represented by non-desirability percentage of 100%, 75%, and 62% respectively, due to repeated expressions of words, themes and concept portraying non-desirability represented by code (NDCGS). It is therefore clear that there is a need to provide caregivers space for gynecology wards. However, such will require a comprehensive spatial organization.

Table 1: Determination of needs for caregiver's space in hospital wards

S/ N	No of participant in interview	Wards for caregivers needs assessment	supporting (DCGS)	No: of respondents expressing (NDCGS)	% of respondents supporting (PDCGS)	% of respondents expressing (PNDCGS)
1	8	Male medical ward	7	1	87.5	12.5
2	8	Female medical ward	8	0	100	0
3	8	Gynecology ward	8	0	100	0
4	8	Pediatric ward	5	3	62.5	37.5
5	8	Psychiatric ward	3	5	37.5	62.5
6	8	Intensive care unit	2	6	25	75
7	8	Contagious diseases/Isolation ward	0	8	0	100



SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATION

- i. It has been established that there is a need for provision of caregiver space in the gynecology ward.
- ii. It has been found that other wards like male and female medical wards require provision of caregiver's spaces.
- iii. Psychiatric wards, contagious/isolation and pediatric wards do not require provision of caregiver space.
- iv. Inpatient department of gynecology ward requires caregivers space as a very essential functional element, the finding was supported by an average mean of 63.9% whereas 61.1% of respondents indicated the need for provision of similar facilities in the consulting room of the outpatient department of gynecology ward.

CONCLUSION

The study focused on the needs of providing caregivers space in gynecology center. It found that the challenges associated with the absence or inadequacies of this essential facility in hospital constitute serious problem in the health sector management. Thus, bringing a challenge for architects of health care facilities. The findings suggest that hospital ward settings need to be configured in a way to provide spaces for caregiver's activities. Support and caring provided by the family of patients in hospital has been identified to be of importance in meeting their needs and expectations.

RECOMMENDATIONS

- i. Government and health policy makers should work toward formalizing and ensuring familiar caregivers' spaces at gynecology centers.
- ii. Public and private sectors involved in hospital constructions should equally integrate familiar caregivers' spaces in essential wards like male and female medical wards.
- iii. Care should be taken in ensuring that some hospital wards such as psychiatric, contagious/isolation wards are not provided with familiar caregiver's space.

REFERENCES

- Ashworth M & Baker A H (2000) '**Time and space: Carers' views about respite care**', *Health and Social Care in the Community*, vol 8, no 1, pp 50-56.
- Australian Bureau of Statistics (ABS) (1998) *Disability, ageing and carers, Australia: Summary of findings 1998*, Australian Bureau of Statistics, Canberra.
- Bell P. A. and Fisher J.D., 1996. *Environmental Psychology (4th ed.)*. USA: Harcourt Brace Collage Publisher



- Bertakis & R. M. Azari, (2011.) '**Determinants and outcomes of patient-centered care**' *Patient Education and Counseling*, vol. 85, no. 1, pp. 46–52.
- Calkins, M.P. (1988). *Design for dementia: Planning environments for the elderly and confused*. Owings Mills, MD: National Health Publishing.
- CAMH, (2004.) '**Putting family centered care into practice.**' Entwistle, V. (2004) Caregiving Definition. Work and Family Researcher's Network Available from: <http://workfamily.sas.vpenn.edu/glossery/c/caregiving-definitions> (Accessed: October 2, 2017)
- Carruth A K, Tate U S, Moffat B S & Hill K (1997) 'Reciprocity, emotional well-being, and family functioning as determinants of family satisfaction in caregivers of elderly patients, *Nursing Research*, vol 46, no 2, pp 93-100.
- Connecting the Dots: Formal and Informal care. International Federation on Aging 2014. Available from: www.IFA-FIV.org (Accessed June 10, 2014)
- Epidemiology. Informal Caregiving: Implications for Public Health, LA Health Available from: [www.publichealth.lacounty.gov/ha/reports/habriefs/2007/Caregiving Final](http://www.publichealth.lacounty.gov/ha/reports/habriefs/2007/Caregiving%20Final) [Accessed: February 2010]
- Families in critical care: A qualitative study using Telephone Interviews," *Intensive and Critical Care Nursing*, vol. 26, pp. 154–160.
- Grifford, R., 1987. *Environmental Psychology: Principle and Practice*. Boston: Allyn and Bacon, Inc.
- Hillier, B. and Hanson, J., 1984. *The Social Logic of Space*. Cambridge: Cambridge University Press.
- Helmi A.F., 1999. *Beberapa Teori Psikologi Lingkungan*. *Buletin Psikologi*, Vol. 07 No. 2 Desember 1999
- Hitcho, E., Krauss, M., Birge, S., Dunagan, W., Fischer, I., Johnson, S., et al. (2004). Characteristics and circumstances of falls in a hospital setting. *Journal of General Internal Medicine*, 19, 732–739. *Journal of Intercultural Studies*, 29(3), 231-246. doi: 10.1080/07256860802169188.
- Kwawukume EY, Samba A. (2005) Reproductive health. In Kwawukume EY, Emuveyan EE, editors. **Comprehensive gynaecology in the tropics, Accra**: Graphic packaging limited.
- Lambert, V., Coad, J, Hicks, P., Glacken, M., (2013). Young children's perspectives of ideal physical design features for hospital-built environments. *Journal of Child Health Care*; Vol. 18(1) 57–71.
- Lawson, B. (2013.) 'Design and the Evidence,' *Procedia - Social and Behavioral Sciences*, vol.105, pp. 30–37.
- Levine, C., Reinhard, S., Feinberg, L.F., Albert, S., & Hart, A. (2004). Family caregivers on the job: Moving beyond ADLs and IADLs. *Generations: Journal of the American Society on Aging*, 27(4), 17- 23. Retrieved from https://www.researchgate.net/publication/288606429_Family_caregivers_on_the_job_Moving_beyond_ADLs_and_IADLs
- Los Angeles County Department of Public Health, Office of Health Assessment and Control.
- Ma. L. Mitchel & W. Chaboyer, (2010.) Patient-Centered Care- A way to connect Patient, Family and Healthcare Providers. Thousand Oaks, California: SAGE publication Inc.
- Miles, M.B, Huberman, A.M, and Saldana, J. (2013). *Qualitative Data Analysis*; A method sourcebook (Third Edition). Thousand Oaks, California: SAGE publication Inc.
- Nolan M, Grant G & Keady J (1996) *Understanding family care*, Open University Press, Buckingham.
- Nursing shortages and patient safety problems in hospital care: is clinical monitoring by families' part of the solution? *Health Expectations*, vol. 7, no. 1, pp. 1–5.



- Olagundoye O, Akhmemokhan V, & Alugo M. (2017) *Towards caring for caregivers: Assessing the burden of care and experience of associative stigma among caregivers of patients with 17 chronic mental illnesses at a mental health care facility in Lagos Metropolis, Nigeria. Family Medicine & Primary Care Review. 19(2):149-155.*
- Schulz R, & Patterson TL. (2004) Caregiving in geriatric psychiatry. *The American Journal of Geriatric Psychiatry. 12(3):234-237*
- Schumacher, K., Beck, C.A., & Marren, J.M. (2006). Family caregivers: Caring for older adults working with their families. *American Journal of Nursing, 106(8):40-49.*
Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/16905931>
- Sloane PD, Slatt LM, Ebell MH, et al., (eds) (2002) **Essentials of Family Medicine.** 4th ed. Philadelphia: Lippincott Williams & Wilkins.
- Sommer R., 1969. *Personal Space : The Behavioral Basic Design.* Englewood Cliffs, New Jersey: Prantice-Hall, Inc.
- There is No Place Like Your Home. Understanding the Roles of Formal and Informal Caregivers. Community Care. 2010. Available from: <http://www.communitycarehhs.com/formal-informal-caregivers.html>
- Utah Coalition for Caregiver Support. What is caregiving? Available from: <http://utahcares.org/caregiving-2/> [Accessed: September 16, 2016]
- Walker, A. J., Pratt, C. C., & Eddy, L. (1995). **Informal caregiving to aging family members: A critical review.** *Family Relations.* 44, 402-11. DOI: 10.2307/584996
- World Health Organization, (2012) For permission to reprint, reproduce, use extracts or translate <http://www.who.int/about/licensing/en/index.html> www.nextstepincare.org C. *11 Most Common Caregiver Duties.* CaringBridge.
<https://www.caringbridge.org/resources/caregiver-duties-responsibilities/>