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Play Intervention in Paediatric Ward: Evaluation on its Benefits to Hospitalized Children

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Abstract:

Hospitalization in Nigerian focused mostly on medical satisfaction which was linked to service delivery to some extent. Design, especially in children's hospital seldom provides settings related aspects such as play activities that has the potential to influence children interaction with the environment. The aim of this study is to evaluate caregivers' perception of incorporating natural play items in children's hospital ward environment. Play intervention characterized by natural items such as sand, wooden blocks and logs, water, shells and stones are used to enhance children coping abilities on hospital norms and protocols. Structured interview was conducted with twelve caregivers to elicit their perception of the ward as play environment. Content analysis of the responses was done to evaluate the introduced play items and their effectiveness on coping abilities of children. Result indicates that the play activities represent a useful techniques for a more friendlier and restorative hospital environment which can reduce the negative effect of children hospitalization experiences.

Keywords: Children; Hospital Environment; Play materials; Caregivers

1. Introduction

Healthcare Research, has focused most recently on the connection between the physical environment and their benefits on health outcomes. At the same time, modern hospital had to address complex technological issues due to complex medical procedures (Monti et al., 2012; Mourshed & Zhao, 2012; Ulrich, 2002). Priorities in the healthcare design emphasizes on the functionality and treatment of diseases (Dijkstra, Pieterse, & Pruyn, 2006). Consequently, consideration has been given on the mode of architectural design of healthcare facilities to reflect psychological fit between People and their physical surrounding (Bringslimark, Hartig, & Patil, 2009; Holfelder & Schott, 2014). Based on the assumption that environment can influence on mood, stress level, and wellbeing of patient and their families (Bluyssen, Janssen, van den Brink, & de Kluizenaar, 2011; Gatrell, 2013).

Healthcare design in recent, has shifted from the geometric style of providing space towards incorporating users perceptions and performance in a context (Kosmadoudi et al., 2013). Such needs have been pointed out in past studies on post occupancy evaluation (Sherman, Varni, Ulrich, & Malcarne, 2005). Gardens as restorative environment to hospitalized children (Said, 2008). Other aspects that are considered to influence the patient's outcome are nature view from windows, presences of green open spaces, colour, sounds and lighting (Abbas & Ghazali, 2012; Dijkstra et al., 2006). This reveals human desire for natural settings which shows that nature offers an avenue for re-cooperating from the effect of acquired stress (Joye & van den Berg, 2011), (Dunleavy, Kennedy, & Vaandrager, 2014). There are established research findings which support stress and pain reduction during hospitalization. Examples are active and passive distracts on pain reduction (Carlson, Broome, & Vessey, 2000; Koller & Goldman, 2012; Kuo & Faber Taylor, 2004; Pluhar, Piko, Uzzoli, Page, & Dull, 2010; Srouji, Ratnapalan, & Schneeweiss, 2010; Svendsen & Björk, n.d.). Pain reduction can be enhanced through active and passive activities such as assorted visuals and audio, example are classical music or nature sound, singing, breathing exercise and video game (Koller & Goldman, 2012).

The importance of all these aspects of pain reduction and health restoration are seldom provided in Nigerian hospital context, especially to children whose facilities are designed and provided without their inputs or consideration given to their preferences (Bowen, Sustar, Wolstenholme, & Dearden, n.d.). Children hospitalization is associated with negative psychological outcomes, which may represent stressful situation due to changes in child routines (Rennick & Rashotte, 2009). The negative effect to children hospitalization are more evident in children of early to middle childhood, with major stress attributed to separation from the familiar environment to a new and unfamiliar settings (Bartos, 2013). With the view to, relatively influence, healing process and health restoration, especially to early and middle childhood children, where the ward as play environment can bridge the gap between their familiar home environment and their hospital ward environment (Adams, Theodore, Goldenberg, McLaren, & McKeever, 2010).

2. Objectives

The objective of the study is to evaluate caregiver's perception of children's behavior in hospital ward, before and after introduction of positive distracts. Using natural play materials, characterized by items such as sand, wooden blocks and logs, water, shells and stones.

3. Methods

The study was conducted with 12 number caregivers, doctors (n=4) and nurses (n=8) at the paediatric ward of Abubakar Tafawa Balewa University Teaching Hospital Bauchi. They were recruited to observe children behavior in the controlled and uncontrolled cubicles in the ward setting. All caregivers involved were contacted by the head matron of the paediatric ward and obtained their consent to participate in the study. They were specifically asked to evaluate their general perception of the ward environment that has natural play items and material and the ward environment that does not have the natural play environment. Note books was given to record children behavior for the period of the study and followed by structured interview to elicit their perception of children behavior during hospitalization. No clue was given to the participants on the kind of interview questions they will be asked, this is to avoid influencing their answers (Borlund & Dreier, 2014). Caregiver's were only asked to express their perception of the two given environment on the behavior of their patients during the study period. Apart from their behavior the study intends to find out if the play environment can be integrated together with medical norms and hospital protocols.

4. Analysis

Data was analyzed using constant comparison analysis, this method of analysis is inductive, as the researcher draws new meaning from the data, rather than a deductive approach which defines at the outset what will be found (Glaser, 1965). A total of seven days of observation was performed with notes taken on daily basis. Data obtained in each cubicle is compared with one another, with hospital protocols as the unit of analysis in both cubicle. Moreover, it is used as the unit of analysis because it is the main attributes of the hospital environment that influences on children behavior which is the focus of the study. The verbal interview responses was transcribed to words; constant comparison analysis was used to analyze the data for descriptive comment about the caregivers' perception of incorporating natural play items in children's hospital ward environment. Furthermore, the outcome of the observed behaviors' of the children's and perception of the caregivers were grouped and summaries as presented in table 2.

5. Result and Discussion

The themes generated from the notes and interview in the ward with natural play activities are attributes of positive relationship and negative relationship domain as shown in table 1, all the participants recognized that children in the ward with play activities are friendlier and cooperating to medical protocols. The results from the field notes and oral interview indicate that the provision of natural play materials contribute to the healing process and non-pharmacological approaches to the relief of pain during hospitalization. Noticed behavior indicates on the ability of patients to relax, feel excited, cooperating to medication and more peaceful relationship with their peers and caregivers. Results portray children's attitude and behavior in the ward without natural play activities to child restlessness, boredom, distressing as more. The children prefer the ward environment with natural play materials as observed during the study, as children from other cubicle find their way into the research cubicles to enjoy play. As such play activities need to introduce within the hospital ward space.

Coding	Behavior	Often	Sometimes	seldom	Themes	Domain
Ward with play activities	Relax	x			Influenced environment	Positive relationship
	Excitement		x			
	Cooperating	x				
Ward without play activities	Restless	x			Conventional environment	Negative relationship
	Bored		x			
	Distressing	x				

Table 1: showing children behavior in each given environment

6. Conclusion

Children in paediatric ward settings are in an environment which they cannot influence or alter to suit their needs. The environment can cause additional stress and difficulties to children, which can be improved upon by incorporating natural play material in to the context. The ward needs to be configured to provide a setting that allows children to have access to positive relationship attributes. The children need to feel that they come first, not the usual hospital protocols and routines. The caregiver can as well influence the situation, by taking children's view and demands that is normal as possible into consideration.

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8. References

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