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Recreational Facilities and Patient Health Promotion in Southwest Nigeria: the role of Nonmedical Intervention

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ABSTRACT

The usage of non-biomedical intervention otherwise known as recreational facilities is a new strategy employed to enhance patient recovery in hospitals. These facilities such as board games, gym facilities, arts, and music, engages patient in different recovery activities. Therefore this study investigate recreational facilities as nonmedical intervention for patient health promotion. Using 362 questionnaires six hospitals in Southwest Nigeria were chosen using purposive and stratified sampling techniques. Also using purposive sampling, six individuals were chosen for an interview. The findings indicate that the use of recreational/ nonmedical interventions will effectively reduce the levels of stress, anxiety, and depression in patients. They also improve recovery periods and provide a necessary diversion from the monotony of hospital routines. The study provides valuable insights into how these interventions can augment hospitals' clinical treatment and enhance health promotion. This will strengthen the region's healthcare sector and foster a holistic approach to healthcare in Southwest Nigeria.

Keywords: Recreational facilities; patients; health promotion; nonmedical interventions; healthcare.

INTRODUCTION

Growing awareness over the past few decades has shown that depending exclusively on biomedical facilities is insufficient to guarantee better health outcomes. This shift is due to the emergence of global challenges that have prompted changes in the healthcare landscape, leading to the adoption of health promotion strategies (WHO, 2008). Nowadays, hospitals are expanding their role

beyond traditional diagnosis and clinical services to embrace health-promoting approaches and incorporating non-medical interventions such as recreational facilities, nutritional services, social support, coaching, and more (Hamidi et al., 2017). In 2017, the global social movement "End-PJ-Paralysis" was launched in United Kingdom in order to reduce extended bed rest, the program encouraged patients to get out of bed, put on clothes, and engage in activities that will make them feel better while being hospitlaised (Doh, 2015; Oliver, 2017). Due to the inactivity while in the hospital, adult patients are highly susceptible to their health deteriorating (Pavon et al., 2020). Similar to this, children's hospitalisation process also causes an imbalance in their development because it interrupts their social and academic lives and results in a number of stressful and painful situations ((Fuqua, 2012). Therefore a comprehensive, multidisciplinary, and humanised approach must be implemented in order to support hospital adaption (Van Rooyen & Janine, 2013), where areas for amusement, socialising, and leisure are offered (Adam-Castello et al., 2023). As a result, integrating recreational facilities into hospital settings have emerged. Hospital nonmedical interventions that have been shown to be effective in improving patient mood include; music sessions, art sessions, board games, dance miniature libraries, bead making, crocheting, table tennis, electronic devices, play, gym facilities, and others (Adam-Castello et al., 2023). Both adults and children have proven the advantages of hospital activity treatments, such as improved mood, decreased readmission rates, stress reduction, improved communication, companion relief, and patient adaptation to the hospital (Bermúdez et al., 2019).

Recreational activities is regarded as an integral component of all-encompassing patient care aimed at preserving their mental and physical health of hospitalised patients (Clarke et al., 2018). Virginia Henderson proposed that leisure and recreation are basic needs that must be met when providing care (Henderson, 2021). The WHO therefore suggests giving this requirement more attention, especially in the European Union. To that end, it published the „Declaration on Promoting Patients' Rights in Europe" (Pre-max, 2016), which could serve as a model for other WHO areas. In the same way, the „American Hospital Association" (2021) shows how healthcare professionals must deliver high-quality treatment, and the „American Nurses Association" (2021) includes a commitment to meeting everyone's needs in its Code of Ethics. In order to improve patient-centered care and the hospital experience, healthcare workers must thereby encourage leisure promotion and resource management in the hospital (Van Rooyen & Janine, 2013). Because of the growing recognition of the benefits of recreational facilities in enhancing patient recovery, most hospitals around the world are implementing these approaches. However, in Southwest Nigeria, these facilities are often underdeveloped or underutilized. A survey by Adepoju (2022) found that less than 30% of hospitals in the region had recreational facilities, and those that existed were often poorly maintained and rarely used by patients. This can lead to longer hospital stays hypothetically contributing to the problem, as patients lack the necessary resources to engage in health-promoting activities leading to poorer health outcomes. There is a significant gap in the literature regarding the comprehensive assessment and recreational facilities' utilization for health promotion within hospitals in Southwest Nigeria. Most existing studies focus on general healthcare infrastructure or specific health outcomes but do not delve into the role of recreational facilities. The absence of the knowledge about the availability and effect of nonmedical/ recreational facilities interventions for promoting patient health in southwest, Nigeria form the premise of this study.

METHOD

The study area, situated in Southwest Nigeria, encompasses six states: Ekiti, Ondo, Osun, Ogun, Oyo, and Lagos. Within this region, numerous hospitals operate, including federal, state, and privately owned institutions offering tertiary and secondary healthcare services.

Research Design: The study adopted a mixed research design which combines quantitative and qualitative research methods. A mixed research method was well thought out for this study since quantitative methods cannot explore the personal views of the participants, explain their experiences, and give further meaning to the subject matter. This study required a key informant understanding of the descriptive accounts of the stakeholders (Ministry of Health) in respect of patient health promotion in Southwest Nigeria.

Sample Size and Sampling Techniques: Multi-stage cluster sampling with multiple stages was used. Using a stratified sample technique, states were categorised into strata according to certain attributes, such as the presence of hospitals providing secondary and tertiary healthcare and serving or being associated with universities. This approach is employed because of the heterogeneous nature of the population and the researcher's desire to guarantee that each attribute is accurately reflected in the sample. While the second step involved the use of purposive sampling. It entails deliberately choosing states based on which hospitals are owned by the federal government, the state government, or the private sector and which are connected to universities. As a result, two states and six hospitals in Southwest Nigeria that satisfy the researcher's requirements are included they include: ABUAD Multi System Hospital Ado EKITI (AMSH, Private); Bowen University Teaching Hospital Ogbomoso (BUTH, Private); Ekiti State University Teaching Hospital (EKSUTH, State); LAUTECH teaching Hospital (LAUTECH, State) and Federal Teaching Hospital Ido Ekiti (FETHI, Federal) University College Hospital Ibadan (UCH, Federal).

Population of the Study: As it relates to this study, the total population of this study is three thousand, nine hundred and fourteen (3,914) which comprises of all health care professionals (medical doctors, nurses, physiotherapists, radiographers, pharmacists and medical laboratory scientists) working in the selected hospitals in Southwest Nigeria. In the light of this study, the Taro Yamane formula for sample size which is given as follows was adopted: hence the sample size for the study is 362. The formula was employed because of the large number of the population and the financial cost to cover such number.

$$n = \frac{N}{1 + N(e)^2}$$

Qualitative: Purposive sampling method was employed in selecting key participants for key informant interview. This method was used because it will help in selecting appropriate participant that will provide adequate information to the study. In this case the position of a director and work experience of over twenty years are the criteria for the selection hence mostly three directors each from the Ministry of Health and Ministry of Tourism in Ekiti and Oyo states was selected because of their experience and expertise. At the end 12 participants was selected from the two Ministries.

Data Collection Procedure: Two research instruments was used to obtain information from respondents and they are: a self-structured questionnaire and a key informant interview (KII). Ethical approval was obtained before the distribution of questionnaires. This is a requirement for any research being conducted in hospitals. Data for this study was collected primarily by the researcher with the assistance of seven (7) trained research assistants and this was done for a period of July 2023– December 2023. For the distribution of questionnaire in each hospital, proportionality formula was used to get the sample size in each of them. Proportionate Formula: n_h = (N*h* / N) * n. This help in determining how many questionnaire should be distributed in each of the hospitals. For the collection of data from each of the healthcare sector, the sample size of each hospitals was divided by six. As it applies to this study, the researcher opted for snowball sampling technique which is a non-probability sampling method in the collection of data in the hospitals. Snowball sampling is a non-probability method for acquiring a sample that uses participants to recruit additional participants. The researcher made use of this; because, the hospital is made up of variant population making it difficult to differentiate various medical practitioners, patients and visitors. Some of the questionnaires were filled and collected at the spot, while some were collected at a later day. However, of the three hundred and sixty-two questionnaires (362) distributed, only three hundred and fifty-two (352) copies were properly filled correctly and returned. This gives 90% completeness rate which is reasonably good for the analysis.

Method of Data Analysis: The data collected was analyzed using descriptive and inferential statistics. Descriptive statistics of frequency count, percentage, mean, standard deviation, was used to analyse the demographic variables and research questions. The questionnaire which is designed in a five point Likert scale and the classification interpretation of Likert scale interval was use in decision making. The computation of the data was carried out with Statistical Package for Social Science (SPSS) package. Linear regression was used to test the hypotheses, all hypotheses was tested at 0.05 level of significance which aids the decision rule. Linear regression is used because this is an ordinal variable, secondly this will help to predict the cause and effect between the independent variables (Availability of recreational facilities) and the dependent variables (Patient Health Promotion). To determine the acceptance or rejection of the null hypothesis, a null hypothesis (H0) that states no significant relationship was rejected when ($P < 0.05$). Otherwise, the null hypothesis (H0) was accepted when ($P > 0.05$) and alternative hypothesis (H1) rejected.

Qualitative: The interviews was analysed using thematic analysis which is about organising the substantive content of the interview into themes.

Validity and Reliability Test: Construct validity of this study ensured that the major constructs of this study are in the research instrument where necessary and applicable. To this end, each of the major constructs was represented in each section in the research instrument. This was then subjected to exploratory factor analysis using Kasier-Meyer-Olkin (KMO). The Recreational Facilities Availability subscale consisted of 16 items and the Effect of Recreational facilities for Patient Health Promotion consist of ten items. The test of sphericity was statistically significant as the p value stands at 0.000 which support the factorability of the correlation matrix. For reliability tests, thirty five healthcare professionals were randomly selected form Obafemi Awolowo University Teaching Hospital Ife (OAUTCH). Hence with a Cronbah's Alpha $\alpha = 0.877$

and considering the rule of thumb, it is observed that there is a good internal consistency of the research instrument.

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.927
Bartlett's Test of Sphericity	Approx. Chi-Square	18114.913
	df	300
	Sig.	0.000

Table 2: Reliability Test Result

Reliability Statistics	
Cronbach's Alpha	N of Items
0.877	26

Ethical approvals was gotten from the six hospitals under study (BUTH/REC-818; LTH/OGB/EC/2023/396; UI/EC/23/0480; EKSUTH/A67/2023/07/003; ERC/2023/07/06/1006B and AMSH/REC/OCI/180) and research consent was gotten from the participants. There was no risk (s) involved.

RESULTS

Table 3: Socio-Demographic Variable

Variables	Frequency	Percentage	Mean ± SD
Gender			
Male	174	49.4	1.51 ± 0.501
Female	178	50.6	
Age (Years)			
20–29	110	31.3	
30–39	142	40.3	
40–49	81	23.0	2.03 ± 0.872
50–59	19	5.4	
Marital Status			
Single	150	42.6	
Married	193	54.8	1.60 ± 0.540
Divorced	9	2.6	

Variables	Frequency	Percentage	Mean ± SD
Religion			
Christianity	289	82.1	
Islam	53	15.1	1.21 ± 0.471
Others	10	2.8	
Educational Qualification			
ND	19	5.4	
HND/B.Sc./MBBS/PHARM	298	84.7	
PGD/M.Sc.	33	9.4	2.06 ± 0.439
Ph.D.	2	0.6	
Employment Duration			
1–5 Years	152	43.2	
6–10 Years	98	27.8	
11–15 Years	77	21.9	1.93 ± 0.966
16–20 Years	25	7.1	
***Profession**			
Doctor	74	21.0	
Nurse	84	23.9	
Radiographer	42	11.9	
Pharmacist	61	17.3	
Medical Lab. Scientist	50	14.2	3.15 ± 1.690
Physiotherapy	41	11.6	
***Hospital Name**			
AMSH	21	6.0	
BUTH	26	7.4	
EKSUTH	49	13.9	
FETHI	68	19.3	4.50 ± 1.600
LAUTECH	36	10.2	
UCH	152	43.2	

Source: Fieldwork 2023

Table 3 reveals the analysis of the respondents' socio-demographic variables with 178(50.6%) females over 174(49.4%) as majority, 142(40.3%) are within 30–39 years, 110(31.3%) within 20–29 years, 81(23.0%) within 40–49 Years and minority 19(5.4%) within 50–59 Years of age. Majority 193(54.6%) respondents were married, 150(42.6%) were single, while only 9(2.6%) were divorced. Christians were in the majority, 289(82.1%), 53(15.1%) were Muslims and other religions constitute just 10(2.8%). Almost all 298(84.7%) had their first degree HND/ B.Sc./MBBS, 33(9.4%) with PGD/M.Sc. 19(5.4%) with ND, and minority 2(.06%) has a doctorate degree. Employment duration has majority 152(43.2%) has spent 1–5 years, 98(27.8%) 6–10 years, 77(21.9%) 11–15 years while minority 25(7.1%) has 16–20 years working experience.

Table 4: Availability of Recreational Facilities in Selected Southwest Hospitals

Recreational Facilities	Frequency	Percentage	Mean ± SD	Ranking
Crosswords/puzzle games				
Yes	125	35.5	0.36 ± 0.479	Available
No	227	64.5		
Card games				
Yes	139	39.5	0.39 ± 0.490	Available
No	213	60.5		
Reading Rooms				
Yes	241	68.5	0.68 ± 0.465	Available
No	111	31.5		
Music Session: Active/ Passive				
Yes	126	35.8	0.36 ± 0.480	Available
No	226	64.2		
Gym facilities				
Yes	195	55.4	0.55 ± 0.498	Available
No	157	44.6		
Arts/crafts				
Yes	81	23.0	0.23 ± 0.422	NA
No	271	77.0		
Gardening				
Yes	78	22.2	0.22 ± 0.416	NA
No	274	77.8		
Table Tennis				
Yes	148	42.0	0.42 ± 0.494	Available
No	204	58.0		
Bead making/crocheting				
Yes	68	19.3	0.19 ± 0.395	NA
No	284	80.7		
Play for children				
Yes	145	41.2	0.41 ± 0.493	Available
No	207	58.8		
Television				
Yes	260	73.9	0.74 ± 0.440	Available
No	92	26.1		
Electronic games				
Yes	95	27.0	0.27 ± 0.445	NA
No	257	73.0		

Recreational Facilities	Frequency	Percentage	Mean ± SD	Ranking
Chess game				
Yes	106	30.1	0.30 ± 0.459	Available
No	246	69.9		
Ludo game				
Yes	119	33.8	0.34 ± 0.474	Available
No	233	66.2		
Scrabble				
Yes	118	33.5	0.34 ± 0.473	Available
No	234	66.5		
Religious facility				
Yes	228	64.8	0.65 ± 0.478	Available
No	124	35.2		
Criterion Mean: 3.0				
Grand Mean: 0.40				

Note: Fieldwork 2023.

This analysis is conducted in order to check the availability and non-availability of recreational facilities in hospitals under study that can be use to promote patient treatment. The various recreational facilities/ activities was compiled by the researcher after extensive literature reviews. The result will provide ground for discussion on the provision, maintenance and accessibility of this facilities in hospitals for patient utilization. Using the grand mean of (0.40) in decision making, the table show that facilities like; television, reading room, religions facility, gym facilities, table tennis, play for children, card games, music session which can either be passive or active, crossword/ puzzle games, ludo games, scrabble, chess games are facilities available across the six hospitals use for this study. Meanwhile, electronic games, gardens, bead making/crocheting and arts/crafts recreational facilities are rarely available in the hospitals use for the study.

Figure 1: Analysis of Respondents' Availability of different types of Recreational Facilities in Hospitals

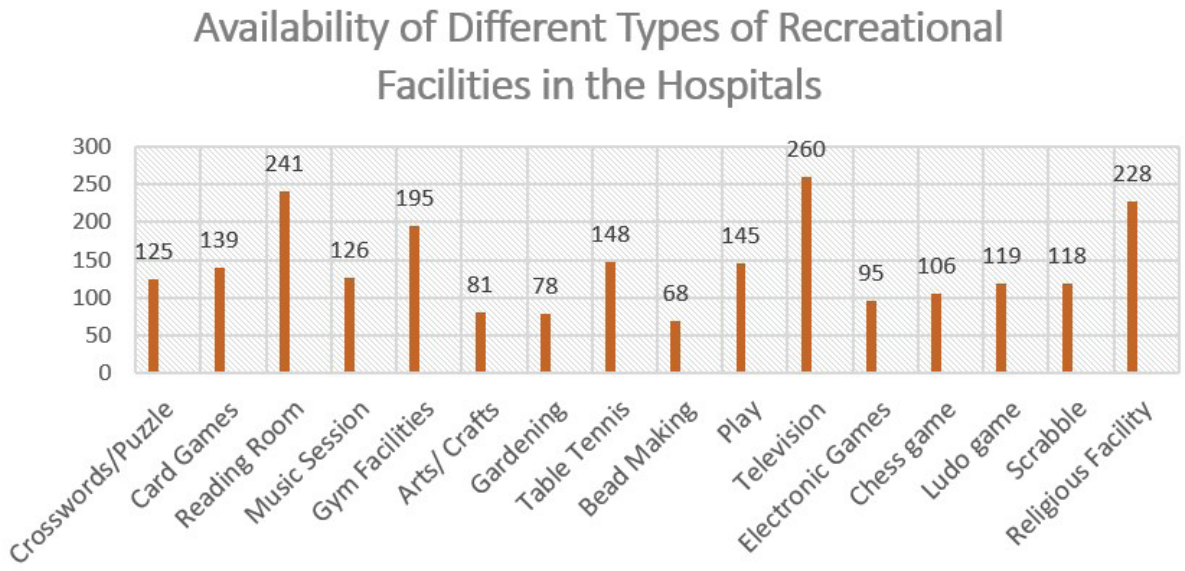

Table 5: Responses on the effect of recreational facilities for health promotion in hospitals

ITEMS		SD (%)	D (%)	N (%)	A (%)	SA (%)	Mean	SD
1	Access to recreational facilities positively impacts patients' mental health.	7 (2.0)	3 (8)	21 (5.9)	163 (46.2)	158 (44.8)	4.31	7.91
2	Recreational facilities can serve as a positive distraction from medical treatments and procedures.	20 (5.7)	44 (12.5)	20 (5.7)	166 (47.0)	102 (28.9)	3.81	1.152
3	Recreational facilities prevent patient boredom during hospitalisation.	1 (0.3)	6 (1.7)	11 (2.8)	190 (53.8)	144 (41.1)	4.34	.647
4	Recreational facilities in hospitals promote a sense of community among patients.	2 (0.6)	2 (0.6)	14 (3.1)	200 (56.7)	134 (38.8)	4.33	.622
5	The presence of recreational facilities positively influences patients' moods and emotions.	4 (1.1)	2 (0.6)	10 (2.8)	200 (56.7)	136 (38.5)	4.31	.666
6	Recreational facilities in hospitals encourage patients to engage in physical activity.	4 (1.1)	1 (0.3)	13 (3.7)	189 (53.5)	145 (41.1)	4.34	.672
7	Recreational facilities in hospitals can reduce stress and anxiety levels among patients.	5 (0.8)	2 (2.5)	8 (9.3)	199 (56.4)	133 (30.6)	4.14	.750
8	Patients will recover faster when they have access to recreational facilities.	3 (1.4)	9 (0.6)	33 (2.3)	199 (56.4)	108 (39.1)	4.32	.684
9	Patients will adhere to treatment plans when recreational facilities are available.	7 (2.0)	22 (6.2)	66 (18.7)	159 (45.0)	98 (27.8)	3.91	.943
10	Patients find it easier to cope with their medical conditions when they have access to recreational amenities in hospitals.	3 (0.8)	18 (5.1)	40 (11.3)	190 (53.8)	101 (28.6)	4.05	.826
	Criterion Mean: 0.30							
	***Grand mean:* 4.21**							

Source: Fieldwork 2023

The effect of recreational facilities on patient health promotion was conducted in order to know the extent in which their availability and utilization can affect patient health promotion; in areas of quick recovery, mental and emotional stability, physical fitness, short hospital stay and patient satisfaction. This attributes are some of the factors that contribute to patient health promotion according to most literatures reviewed. This is assessed with a ten item and rated on a 5-point Likert scale instrument to assess the operationalized variables. Using the classification interpretation of Likert scale interval in decision making, utilizing mean (x) values as follows: 1.00 -1.80=strongly disagree, 1.81-2.60=disagree, 2.61-3.4.0=neutral, 3.41-4.20=agree and 4.21-5.00=strongly agree. The data shows the following mean score of the 10 items. A value mean of 4.31, 3.81, 4.34, 4.33, 4.31, 4.34, 4.14, 4.32, 3.91 and 4.05 above the criterion mean 3.0 is a pointer that all items meets the decisive benchmark. This imply that recreational facilities have a positive effect on patient health promotion in Southwest Nigeria.

Qualitative Analysis and Results; This section is based on the analysis of the respondents' on the Availability of Recreational Facilities and its Influence for Medical Tourism Development in Southwest Nigeria, based on the interview conducted in the Ministry of Health and Ministry of Tourism in Ekiti and Oyo state Nigeria. Thematic analysis of the interviews, as recorded verbatim, revealed distinct themes.

Theme 1: Departmentalization

The interview revealed the opinion of the participants. Below are their responses;

"..... recreational facilities should be provided base on department, facilities provided for mental wards can't be given to surgery units" (Participant 1, Ministry of Health).

" it depend on the area of needs and should be unit guided, for example Orthopedic can have facilities to aid movement, mental health games for mental health, cardiovascular diseases facilities for exercise" (Participant 4 and 5, Ministry of Health).

"..... You should put recreational facilities base on the wards but most importantly it should not be strenuous" (Participant 2, Ministry of Health)

"..... This facilities are needed for over stay patients and the provision or availability should depend on the ward" (Participant 3, Ministry of Health).

Theme 2: Fast recuperation

As revealed in the interview, the participants opined that presence of recreational facilities can be associated with fast recuperation of health, some of their responses were shown below;

"..... It helps in fast recovery thereby saving cost for the patients. Take for example the presence of this facilities can make a patient that is meant to stay in hospital for long, to get well soon, so I will say it aid in recovery and add faster time in recovery " (Participant 1, Ministry of Health)

"..... recreational facilities can help the recuperation of our patients for example a patient lying on a bed daily basis but if this facilities are provided it will make the patient more lively by participating in it hence fast recovery" (Participant 2, Ministry of Health).

".....speaking of lying down, recreational facilities can help the recuperation of sickle cell patients, cancer patients and so on by making them more lively when they participate in this facilities hence aiding to fast recovery" (Participant 4, Ministry of Health).

Theme 3: Mental and Emotional Stability

As revealed in the interview, the participants opined that presence of recreational facilities aids the mental and emotional stability of patients, their responses were shown below;

".....I also advocate these facilities for mental health patients and people having psychotic disorder it will help increase their rise in mood" (Participant 4, Ministry of Health)

"..... It helps the mental status by decreasing depression and anxiety in patients with mental issues" (Participant 2, Ministry of Health)

Participant 3, and 1 in the Ministry of Health, agreed that *"..... It is very important in rehabilitation areas or mental ward, it will help compliment their healing and help them physically"*.

"..... It will help aid recovery and boost emotional stability" (Participant 5, Ministry of Health)

Theme 4: Lessen of severity of diseases

As transcribed from the interview held, some of the participants opined that there is lessen of severity of diseases when there is presence of recreational facilities in the healthcare settings, some of the responses are presented below:

".....it would help to lessen the severity of diseases, those who have what we call the syndrome X, which have to do with combination of diseases associated metabolic syndrome, diabetes, hypertension, other kinds of Associated Diseases such as obesity, will gain a lot for this facilities." It also helps in the drop of blood pressure. (Participant 4, Ministry of Health).

".....Well take for instance orthopedic patients who have encountered some shocks, this facilities when provided will help to lessen that like helping them in their traumatic survival by providing strength and hope to them. (Participant 1, Ministry of Health).

TEST OF HYPOTHESIS

To determine the acceptance or rejection of the null hypothesis, a null hypothesis (H0) that states no significant effect was rejected when ($P < 0.05$). Otherwise, the null hypothesis (H0) was accepted when ($P > 0.05$) and alternative hypothesis (H1) rejected. The hypothesis was conducted using (Availability of recreational facilities as the independent variable and Effect of Recreational facilities and Patient Health Promotion as dependent variable). This was done in order to test if the availability of recreational facilities will predict or affect patient health in Southwest Nigeria forming the basis of discussion on how best or possible ways to promote patient health in the country

H0: Recreational facilities have no significant effect on patient health promotion in Southwest Nigeria

Table 6: Model summary on Effect of Recreational facilities and Patient Health Promotion

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.672[a]	0.451	0.450	0.320	0.451	287.642	1	350	0.000

a. Predictors: (Constant), Availability of Recreational Facilities

This model summary in table 6 provides information about the overall fit and significance of the regression model, which includes the predictor variable „Availability of Recreational Facilities and patient Health Promotion. The table shows the analysis of the hypothesis which was analyzed using linear regression. Confidence level interval of 95% was used and the model summary show a good fit of F; (1,350) = 287.642, the large F Change value of 287.642 suggests that the addition of Availability of Recreational Facilities significantly improves the model fit. Adj. R^2 0.450, R2=0.451 and a P value of <.001 which is less than 0.05. According to the analysis, it have a calculated value of (β=0.672, t=16.960 and P<.001).

Table 7: Coefficients for Test of Hypothesis

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
	B	Std. Error	Beta			Lower Bound	Upper Bound	
1	(Constant)	3.160	0.063		50.362	0.000	3.037	3.284
	Availability of Recreational Facilities	2.405	0.142	0.672	16.960	0.000	2.126	2.684

a. Dependent Variable: Patient Health Promotion

The regression analysis in table 7 suggests that both the constant term and the Availability of Recreational Facilities have significant effects on Patient Health Promotion. Additionally, for each unit increase in the availability of recreational facilities, the Patient Health Promotion is expected to increase by approximately 2.405 units. The standardized coefficient (Beta) of 0.672 indicates that the availability of recreational facilities has a relatively strong effect on Patient Health Promotion compared to other variables. The statistical significance of the coefficient is supported by the p-value (< 0.001). In summary, the table indicates that the availability of recreational facilities significantly contributes to explaining the variance in the dependent variable. The strong positive correlation suggests that areas with greater availability of recreational facilities tend to have higher values of the dependent variable hence the null hypothesis is rejected.

DISCUSSION

The findings show that majority strongly agree that access to recreational facilities positively impacts patients' mental health. This is line with the study by Jagannathan et al., (2021), which focused on the need and benefits of general recreation activities for persons with Mental Health Disorders (MHD). The study show that recreation is an important need of clients with MHDs as it helps them to be engaged, be happy and provides a platform for socialization; irrespective of whether it is conducted online or offline. The healthcare professionals noted that providing games in mental health ward help them in keeping alert and rise in mood. Recreational facilities such as exercise rooms, outdoor spaces, gardens can have a positive impact on the physical and mental health of hospitalised patients (Smith, Jones & Williams, 2021). Some of the participants "advocate these facilities for mental health patients and people having psychotic disorder because

it will help increase their rise in mood" (Participant 4, KII). Others noted that it helps the mental status by decreasing depression and anxiety in patients with mental issues" (Participant 2, KII). Participant 3, and 1 in the Ministry of Health, agreed that "It is very important in rehabilitation areas or mental ward, because it will help compliment their healing and help them physically" and also it will help aid recovery and boost emotional stability" (Participant 5, KII). This is consistent with Maras et al., (2015) study which noted that recreational activities are a powerful advocacy tool for mental health. Participants' identification of psychological advantages aligns with policies that support patient-centered treatment and emphasise the significance of treating mental health in addition to physical health (Park et al., 2013).

The study findings show that recreational facilities in hospitals can reduce stress and anxiety levels among patients. Chen, et al., (2022), also agree to this, that recreational facilities interventions reduced anxiety and depression symptoms. In line with this, recreational facilities like music therapy has shown to be significant in treating depression and anxiety disorders in patients especially those with cancer (Eseadi & Ngwu 2023). Recreational facilities prevent patient boredom during hospitalisation as shown in the findings. This is consistent with Lorraine, et al., (2019) that a quality improvement (QI) of a recreational space-is beneficial to the overall patient experience during their lengthy stay in the hospital and enhanced their stay. Meanwhile study by Smith, Jones and Williams (2021) also show that availability of recreational facilities can equally improve patient satisfaction, reduce the length of hospital stay and even lead to better outcomes.

Healthcare providers noted that patients will recover faster when they have access to recreational facilities as seen in the result. The participants interviewed opined that presence of recreational facilities can be associated with fast recuperation of health, "It helps in fast recovery thereby saving cost for the patients. Take for example the presence of this facilities can make a patient that is meant to stay in hospital for long, to get well soon, so I will say it aid in recovery and add faster time in recovery " (Participant 1, KII). "Recreational facilities can help the recuperation of our patients for example a patient lying on a bed daily basis but if this facilities are provided it will make the patient more lively by participating in it hence fast recovery" (Participant 2, KII). "Speaking of lying down, recreational facilities can help the recuperation of sickle cell patients, cancer patients and so on by making them more lively when they participate in this facilities hence aiding to fast recovery" (Participant 4, KII). To understand the role of recreation in shaping the reality of hospitalsized patients, Pinto and Gomes (2013), results show that leisure activities can improve the health status of hospitalised patients which is consistent with the findings of the study. The idea that recreational facilities might hasten healing by reducing anxiety and sadness is consistent with the increasing amount of research highlighting the psychological advantages of leisure pursuits (Smith & Forrester, 2021). Provision of this facilities result in successful discharges, short length of stay, increase hope and confidence, facilitate healing (Pinto, et al., 2017; Blinderman & Billings, 2015). The value of these facilities in boosting patient happiness and supplementing continuing care aligns with patient-centered care strategies supported by writers like Bartels et al., (2015).

Some of the participants opined that there is lessen of severity of diseases when there is presence of recreational facilities in the healthcare settings, "it would help to lessen the severity of diseases, those who have what we call the syndrome X, which have to do with combination of diseases

associated metabolic syndrome, diabetes, hypertension, other kinds of Associated Diseases such as obesity, will gain a lot for this facilities." It also helps in the drop of blood pressure. (Participant 4, KII). "Well take for instance orthopedic patients who have encountered some shocks, this facilities when provided will help to lessen that like helping them in their traumatic survival by providing strength and hope to them. (Participant 1, KII). Regular physical exercise has been linked to significant health advantages, such as lowered risks of metabolic syndrome, diabetes, hypertension, and obesity (Li, et al., 2020; Tasnim, et al., 2021). The participants' emphasis on weight loss as a possible result is consistent with research showing how exercise helps control weight and avoid related medical disorders (Tasnim, et al., 2021).

In the process of participating either individually or group session in recreational activities, respondents agree that it can serve as a positive distraction from medical treatments and procedures. This is supported in the study by Bungay and Hughes (2020) with findings showing an emotional impact through taking part in dance; happiness from engaging with the group and the release of pent up emotions through the triggering of memories by the music and conversations within the group. It can also be said that this group participation can promote a sense of community among patients which participants noted that patients will also adhere to treatment plans when recreational facilities are available. Patients find it easier to cope with their medical conditions when they have access to recreational amenities in hospitals. All this items were agreed in majority by the respondents as part of the effect of recreational facilities in health promotion. Gjærde et al., (2021) study show that recreational interventions served different roles within four clinical contexts: procedures and diagnostic tests, patient education, treatment and recovery and adaptation. This is in support with findings of this research that hospital recreational interventions have a significant potential benefit for patient, family health and had positive reported effects on pain, stress, and anxiety.

The hypothesis test also rejected the null hypothesis and the alternate hypothesis is accepted due to the strong effect of presence of recreational facilities, as evidenced by the significance level (β=0.672, t=7.717 and P<.001) and the correlation coefficient of 0.005. Additionally, for each unit increase in the availability of recreational facilities, the health promotion outcome is expected to increase by approximately 2.405 units. This indicates a strong positive effect between the availability of recreational facilities and health promotion. This finding implies that recreational facilities' presence have a significant effect on health promotion in Southwest Nigerian hospitals. This result's relevance is consistent with a larger body of literature that highlights the beneficial effect between recreational facilities and the promotion of health. Research conducted by Lorraine, et al., (2019) has repeatedly demonstrated that hospital patients' increased physical activity, reduced stress levels, and general well-being are all positively impacted by the presence of recreational amenities. The results are consistent with health promotion theories that stress the need of incorporating physical exercise into everyday living to improve health outcomes (Zhou, et al., 2016). The consistency of the results when also compared to previous research strengthens the general consensus that offering recreational facilities in hospital settings is essential to promoting health. A significant, positive relationship between the perceived health outcomes of recreation and happiness was found in individuals participating in recreational activities in the study by Yüzgenç, et al., (2023) which

support the findings of this study. This is also in consistent with Adam-Castelló, et al., (2023) findings that leisure interventions carried out during leisure time positively impact and promote the wellbeing of hospitalised patients. The result is also in agreement with the comfort theory which is specific and are targeted to addressing the anxiety and pain of patient so that they can be able to deal with the care they need and aid quick recovery, reduce the length of stay in hospital and result in successful discharge (Kolcaba, et al., 2004). The incorporation of recreational amenities into hospital environments aligns with optimal methodologies that promote a comprehensive approach to patient welfare (WHO, 2010).

CONCLUSION

The research's conclusion presents a picture of the Southwest area of Nigeria's recreational facilities and healthcare system. The study advances our knowledge on the effect of recreational facilities on patient health promotion. It also challenges conventional beliefs that health promotion is only driven by clinical competence by demonstrating the potential of these nonmedical facilities/ intervention within the health institution and their consequential influence on patient health. Implying that hospitals that prioritize nonmedical facilities, help in creating an environment that positively impact patient mental health, reduce stress and anxiety levels among patients, prevent boredom, influences patients emotions and aid quick recovery are going to attract patients who value these initiatives. All things considered, this study fills in a great deal of knowledge gaps by offering insights that might guide theory and practice. Policymakers, healthcare administrators, and academics who are interested in improving healthcare delivery, and improving the general well-being of people in the South West area of Nigeria should take note of the results.

Theoretical contributions: The research contribute to the diverse understanding of the theory of comfort. Additionally understanding the theory would help direct healthcare professionals towards those issues that patient care most about and do so in a manner that is based on a sound analysis of consumer choice. In this way, gaps between what patients want and what medical suppliers provide can be better evaluated and addressed. In doing so, healthcare professionals will be able to more effectively align their medical care offerings to patient needs.

Limitations: Funding represents a significant limitation to this study. Insufficient funds restricted the geographical coverage and sample size of the study. Ideally, a larger budget would have enabled more extensive data collection across a broader range of locations, providing a more comprehensive understanding of the availability and effect of recreational facilities on health promotion and medical tourism development. While small sample sizes can yield preliminary findings, but they frequently lack the robustness needed to make meaningful generalisations.

Further study: New researchers investigate the specific types of recreational activities that offer the most significant health benefits. Understanding which activities are most effective can guide the development of targeted programs that maximize health promotion efforts.

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APPENDIX

Interview Questions

MINISTRY OF HEALTH/HOSPITAL MANAGEMENT BOARD

1. How does the Ministry of Health view the integration of recreational facilities within the hospitals?
2. In your opinion is there any factors that determine whether a hospital should have recreational facilities or not?
3. What do you think of a possible collaboration between tourism industry and hospitals in order to provide this facilities for hospitals that do not have them?
4. What other recreational facilities can you recommend for patients in hospitals?

Research Question 2:

1. What potential advantages do you see in the establishment of recreational facilities within hospitals for patient?
2. Can you explain any circumstances under which recreational facilities would not be beneficial for patient health promotion?
3. What do you think would be the most effective way to promote the use of recreational facilities in hospitals?
4. What other benefits do you think hospitals will get from having this facilities?