INTRODUCTION

At the core of the human nervous system, the body control system is the central nervous system (CNS), which consists of the brain and spinal cord physiological responses “requested” by the brain. The meaning of Neuron Healing is the process of the restoration of health to an unbalanced, diseased or damaged organism. With physical damage or disease suffered by an organism, healing involves the repair of living tissue, organs and the biological system as a whole and resumption of normal functioning. Middle Ages hospice quarters were available as a part religious or for monastic hospitals.

“Parkinson’s disease (PD) is one of the most prevalent neurologic disorders, leading to progressive disability that can be slowed but not stopped by treatment. It is characterized by tremors, slow movements, stiffness in arms and legs, and balance impairment. Despite advancement in treatment, diagnosis, and care of PD patients, lack of adequate knowledge and associated beliefs among the community might have a key role in limiting access to proper treatment and care” [1].

The prevalence of multiple sclerosis is high in the Arabian Gulf region and Saudi Arabia [2]. In addition, the prevalence of Spinal muscular atrophy (SMA) cases in the Kingdom of Saudi Arabia (KSA) is much higher than the European and North American population [3].

The population of KSA is over 28 million, and the prevalence of ASD is one per 167, suggesting that the total number of individuals with ASD is over 167,000 [4]. Therefore, this study proposes a project to create a medical care with energy form of generation to make it become comfort place and organic place for the patients.

CASE STUDIES

This study considered three case studies related to hospice and care centers from three countries namely Kuwait, United States and Australia. The chosen hospice and care centers are carefully designed and equipped with new trend facilities. The case studies can provide a deeper understanding of the project new trends and philosophy of design. The chosen case studies are:

a. Kuwait Children’s Hospital, Kuwait city, Kuwait
b. Hospital and medical center and the Specialty pediatric center, Omaha, US
c. Bear Cottage Children’s Hospice, New South Wales Sydney, Australia

Keywords: Neuron Brain Center, Hospice, Care Center, Palliative Care Centers

© 2020 by Advance Scientific Research. This is an open-access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/)
DOI: http://dx.doi.org/10.31838/jcr.07.08.51
The new Children's Specialty Paediatric Center in Omaha, Neb is an impressive example of a building inspired by the developmental stages of all children, from one to 18 years of age (Figure 3). The new eight-story center is attached to the HDR-designed Omaha Children's Hospital and Medical Center that was completed in 2000, and houses more than 30 outpatient clinics in 155,000 square feet of space[6].

The center includes many family-friendly features starting with a child safety seat fitting station in the multi-level parking garage which adds nearly 300 parking stalls to the Children's campus. Families can park beneath the center and take the elevator directly to their clinic floor. Electronic screens offer daily schedule updates and aid in navigation[6].

Also important in the design were family-friendly features like family restrooms, a staffed kid's camp area for siblings of patients, consult rooms for families, and exam rooms with adequate space for multiple family members. In the physical therapy or occupational exam rooms, parents can sit in a space attached to the room which is unseen to the child, where parents can watch interaction through one-sided glass while listening through headphones(Figure 4).

An electronic medical record is utilized by every clinic - giving real time, comprehensive access to important medical information. Additional workspace and conference rooms facilitate collaboration among multi-disciplinary teams."Kids' Camp" can be found on the main level, just off the elevators from the parking garage. The parents can focus on their time with the doctor by providing a supervised play area and activity space for siblings of patients.

Bear Cottage Children's Hospice, New South Wales, Sydney, Australia
The main concept of this project is to design and create an inpatient beach house located in a sloping site of a coastal resort area of Manly (Figure 5). The project contains ten used inpatient bedrooms in which each bedroom is named after a local beach. The space is designed used the idea of cluster. This project aims to provide a childhood experience that any child should have by creating innovative facilities such as a tree house and children's garden[7].

This project has presented several interesting new trends that played a prime role in providing suitable spaces for dying children to have the opportunity to experience as much as possible a normal childhood. These trends are tree house and children's scaled restorative garden. The tree house is accessible by patients and family through the outdoor bridge terrace from the second level. It is mainly used for meditation and counselling (Figure 6). The tree house gives the children a sense of playful sanctuary where they can feel free to open up through the process of counselling because the tree house is a fresh casual space where children can get over their fear of doctors. The children's scaled restorative garden is a fascinating new trend located in the back of the house as a backyard which includes multisensory equipment such as light, sound and smell-based therapy amenities. This trend allows the children to interact with nature and be part of it[7].
The first noticeable thing in the ground floor plan is the separation between patient’s facilities, the entrance and administration facilities into two zones. The patient’s zone contains private zones which are the patient zones that host the common facilities of the patients. The entrance and administration zone is combined of public zones such as the entry area and reception area, lobby and administration offices. It also consists of private spaces which are used for overnight staying staff and family member.

The spaces of this project are related to each other in to complement each other serve the users of the building. The entrance area is located near to the administration offices in order for the staff to have a direct relation to the reception desk. The overnight accommodations for staff and family members are located next to it, so staying staff can be close to their work area. Also the administration has two parts and each part located in an area near the patient room for easy supervision. In patient area the common are scattered around the patient’s rooms. Different types of facilities between the rooms to allow easy access such as game room are located in for all the to use all the rooms and to give them the sense of home unlike the hospital where all the patients are located in one space without any facilities which they can access to it easily.

**SITE SELECTION AND ANALYSIS**

Site A is located at the north side of Jeddah city in Obhour, with the site area of 750m X 200m. This site can be accessed from Obhour and King Saud Roads. This site has two direct accesses to the sea with two private beaches, one access to the open sea (Figure 8). Site B is located in resort area in Obhour, with site area of 800m X 150m. This site can be accessed from corniche and King Roads. The site has an organic shape which can play a unique role in the design on the project (Figure 9). Site C is in a resort area in north of Obhour, with site area of 257m X 170m. It has a direct front view to the sea with a beach overlooking the surrounded resorts and residential areas. It is surrounded by Al-Sa’ada resort from the left side and Makarim Annakhell village from the right. This site has a nearby medical facility named Puskesmas hospital (Figure 10). Site C is adjacent to the Mile tower site which will be a very active area to come in the future. The site has a curvy beach completed with straight angles from the other side’s shaping a unique triangular land.

There are eleven site evaluation criteria are considered based on the case studies analysis. The considered criteria that used for selecting a proper site to locate the hospice and care center are accessibility for patients and family members, accessibility for staff and volunteers, security, views, existing natural elements (Greenery-Water features), interaction with community, opportunities for good landscape design, near to medical facilities, close to amenities, environmental quality and adaptability with the surroundings as well as privacy. Table 2 tabulated the site evaluation result, whereas the weight factor of 1 represents not very important, 2 represents somewhat important and 3 represents very important.
According to the results of sites evaluation shown in Table 2, site A is considered to be the preferable site to locate the hospice and care center. It is located in Obhour in Jeddah, has unique shape and the total gross area of the site is 750 X 200 meter. This site can be accessed from Obhour Road as well as from King Saud road. This has a resort area adjacent to it from the south east side. On the west and east side's it has two direct accesses to the sea with two private beaches, one access to the open sea and another overlooking surrounding resorts. This site can be easily adapted to accommodate private and public zones for activates. The site is surrounded by a residential area, resorts area and amenities area. The site has excellent views to the sea and good views to the resort areas surrounding the site. The noise levels in the site vary according to the surroundings of the site.

### Table 2. Site Evaluations

| No. | Criteria (Weight factor) | Site A | Site B | Site C |
|-----|--------------------------|--------|--------|--------|
| 1   | Accessibility for patients and family members (2) | 4      | 6      | 6      |
| 2   | Accessibility for staff and volunteers (1) | 3      | 3      | 3      |
| 3   | Security (2) | 8      | 6      | 6      |
| 4   | Views (3) | 15     | 12     | 15     |
| 5   | Existing natural elements (Greenery-Water features) (3) | 9      | 9      | 9      |
| 6   | Interaction with community (2) | 6      | 4      | 4      |
| 7   | Opportunities for good landscape design (3) | 9      | 9      | 9      |
| 8   | Near to medical facilities (3) | 6      | 6      | 6      |
| 9   | Close to amenities (1) | 3      | 3      | 3      |
| 10  | Environmental quality and adaptability with the surroundings (3) | 12     | 15     | 12     |
| 11  | Privacy (3) | 12     | 9      | 9      |
|     | Total Score | 87     | 82     | 82     |

### SITE ZONING AND PROJECT DESIGN

The zone of this project is allocated carefully according to the topography of the site location. Figure 11 shows the main entrance of the project is on east side. The admin zone is located close to the entrance in order to provide fast and continent support for the visitors. The neuron frame is the main zone of this project, thus located at the center of the site location. The residential zone and spiritual zone would have a great landscape view as it located beside the beach. Figure 12 shows the site plan of the project. Figure 13, 14, 15 and 16 demonstrate the exterior view, marina view, main entrance and interior view of the project respectively.
CONCLUSION
The complete form of neuron healing frame consists of medical zone to accommodate both patients and staff members with Residential very high standard of space quality. Second is major clinic and health care facilities zone which facilitates the urgent need such as emergency. Next is entertainment and amenities zone which provide a variety and different kind of activities and facilities. Lastly are parks and green spaces zones, which are highly in demand for Fung Shui energy form generation.

Based on the site evaluation criteria, Site A is selected to become the site location for the project which is in Obhour, Jeddah with an excellent beach view. The site zoning and complex are designed carefully based on the site analysis and site topography.

REFERENCES
1. Alyamani A, Alarifi J, Alfadhel A, Alfarawi F, Alshamardl K, Alassaf F et al. Public knowledge and awareness about Parkinson’s disease in Saudi Arabia. Journal of Family Medicine and Primary Care. 2018;7(6):1216.
2. Al Wutayd O, Mohamed A, Saedi J, Al Otaibi H, Al Jumah M. Environmental exposures and the risk of multiple sclerosis in Saudi Arabia. BMC Neurology. 2018;18(1).
3. Al-Jumah M, Majundar R, Al-Rajeh S, Awada A, Chaves-Carbello E, Salih M et al. Molecular analysis of the spinal muscular atrophy and neuronal apoptosis inhibitory protein genes in Saudi patients with spinal muscular...
atrophy. Saudi Med J. 2003;24(10):1052-1054.
4. Alnemary F, Aldhalaan H, Simon-Cereijido G, Alnemary F. Services for children with autism in the Kingdom of Saudi Arabia. Autism. 2016;21(5):592-602.
5. Welch A. Kuwait Children’s Hospital, Kuwait: Architecture Information [Internet]. e-architect. 2017 [cited 29 May 2019]. Available from: https://www.e-architect.co.uk/kuwait/kuwait-childrens-hospital
6. Children’s Hospital Specialty Pediatric Center [Internet]. Kiewit.com. [cited 29 May 2019]. Available from: https://www.kiewit.com/projects/building/healthcare/childrens-hospital-specialty-pediatric-center/
7. Rice C. Bear Cottage [Internet]. ArchitectureAU. 2002 [cited 29 May 2019]. Available from: https://architectureau.com/articles/bear-cottage/
8. Google Maps [Internet]. Google Maps. 2019 [cited 28 May 2019]. Available from: https://www.google.com/maps/place/21%C2%B048’17.8"%22N+39%C2%B001’50.6"%22E/@21.8049346,39.0295728,366m/data=!3m2!1e3!4b1!4m6!3m5!1s0x0:0x0!7e2!8m2!3d21.804932!4d39.0307304
9. Google Maps [Internet]. Google Maps. 2019 [cited 28 May 2019]. Available from: https://www.google.com/maps/place/21%C2%B044’36.9"%22N+39%C2%B007’49.6"%22E/@21.7435872,39.1298888,173m/data=!3m2!1e3!4b1!4m6!3m5!1s0x0:0x0!7e2!8m2!3d21.7435864!4d39.1304365
10. Google Maps [Internet]. Google Maps. 2019 [cited 28 May 2019]. Available from: https://www.google.com/maps/place/21%C2%B045’41.9"%22N+39%C2%B007’51.5"%22E/@21.761638,39.1301107,273m/data=!3m2!1e3!4b1!4m6!3m5!1s0x0:0x0!7e2!8m2!3d21.7616363!4d39.1309742