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# Integrated hospital facilities for sustainable future in Africa - Rwanda

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### Abstract

This paper analyzes the life of retired people and sustain elderly life, home life risks, pension fees, healthcare, transport risks for elderly people in Africa and especially in Rwanda. Sustainable solutions are discussed for public health protection for elderly people as well as biomedical engineering integration solutions for old people in Africa; no communication diseases that almost exist for this category of population. The presented solutions for elderly people at integrated hospital space protection are useful to save humanity of our parents, grandparent and human being and create new job categories for young people within integrated safe medical tourism infrastructures for elderly class. Useful presentations are made for integrated hospitals for future in Africa and especially in Rwanda.

**Keywords**: Integrated hospital, special biomedical equipment, elderly space, medical tourism, green cities space

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### 1. INTRODUCTION

Nowadays, integrated sustainable designed infrastructures for all are necessary not only in terms of sustainability for health protection at post COVID-19 era but also for the promotion of sustainable tourism, medical tourism within proper green sustainable space designs and integrated infrastructures [4, 8, 9]. In biochemistry cancer treatment hospital departments, the nurses team meet the challenge to take care of old patients[1, 2, 3], sanitary space, transport for elderly space to sustain old people, as well as in Rwanda medical tourism mission is green city and medical tourism. Old stage is part of the life where person become weak mentally and physically, in

## 2. INVESTIGATING STUDY - USEFUL FACILITIES AT HOSPITAL SPACES

Nowadays, is becoming necessary the need of trained nurses on how to treat the old people, including the planners for integrated hospitals' infrastructures that must design elderly space, to set specialized center for training about how to help old people, to help them for transport include medical equipment because most of that class of people have non communicable diseases, (NCDs), such as heart disease, cancer, chronic respiratory disease, and diabetes, which are the leading cause of death worldwide and represent an emerging global health threat.

However, this paper shows the algorithm

Africa as countries developed every day, the life is changed from traditional to the new modern way of city life [4].

For many hospitals for, patients exceeding capacity number for long queue and long hours where old people and grandsons waiting the special healthcare, some hospitals do not have good quality of medical care equipment[5]: life support care weakened the life of old people during treatment.

However, in Africa Loneliness and lack daily required treatment of old people in city area cause more unexpected deaths with unknown statistics so far [4].

methods to design elderly space with good healthcare within results of this studies. the old people in public hospital will use the advanced technology[6] biomedical equipment in figure 1.

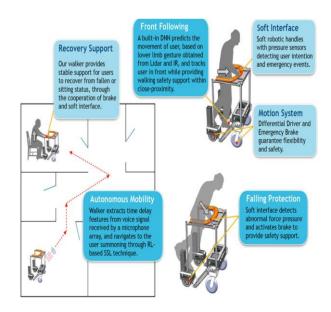


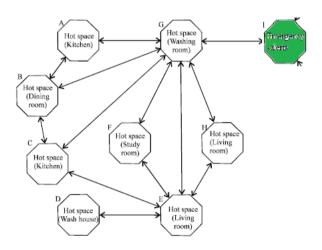
Figure 1. Robotic walker facility combined

with particular safe hospital designs for all [7].

In figure 1 are presented the particular semantics in the design of robotic walker [7].

### 2.1. Discussion

Proper design in emergencies should exist for integrated community health infrastructures, safe hospital facilities [babatsikou et al, kouloumbi, 22 3]. The proper green design facilities are key to facilitate the life for old people at integrated architecture hospital plan for old people. That must be a semantic key for well elderly diseases treatment, promoting safe medical tourism facilities within a travelling network of elderly in smart space next to hospitals that support proper smart medical equipment, biomedical robotic and relative web utilities and artificial intelligence [4, 8, 9].



**Figure 2.** A travelling network of elderly in smart space including, including emergency alerts.

In figure 2 are presented useful facilities that should be applied properly at smart spaces so as to promote safe medical tourism facilities and to support safe design for all in emergencies.

### 3. CONCLUSIONS

This study shows how elderly spaces must be improved for future hospital spaces. In this way that will help to improve the life and to reduce the death of old people at hospitals in Africa and especially in Rwanda.

According to the investigating study the artificial intelligence utilities (AI), will help to reduce the risks of accident for older people at indoors, outdoors at hospital infrastructures.

Moreover, the proper modern updates in robotics will improve the biomechanics for qualitative life of old people at particular hospital facilities.

The promotion and support hospitals at a green city, supporting proper green spaces for old people will promote sustainable medical tourism within a qualitative life. In this way, a proper health policy should be applied supporting proper designs, facilities, utilities that should be achieved so as to give a long life to elderly people as they have become the heroes of the society.

**Conflict of Interests:** The authors declare no conflict of interest.

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