

## Nursing and Caretaker Application

Kashmira Patil<sup>1</sup>, Sanchira Mate<sup>2</sup>, Shivani Thakre<sup>3</sup>, Urvashi Roy<sup>4</sup>

<sup>1234</sup>B.E., Information Technology, Rajiv Gandhi College of Engineering and Research, Nagpur, Maharashtra

\*\*\*

**Abstract** - The aim of the study was to analyze healthcare paper from the viewpoint of the planning, implementation and evaluation of the paper. The aim of paper was to gather information about the work done in application that can be used in healthcare services and management. The application of nursing care plans within nursing process is to develop a more planned approach to human needs assessment. The care plan will advance practice modalities by meeting every need of a patient including physical, psychological, spiritual needs of patients resulting in quality nursing care. Illness is no new term in our society. Be it children, youngsters or senior citizens; people need someone to take care of them at some point of time. Times become tough when you're working all day and your parents/children stay alone at home all day. Finding someone to take professional care of the intended person is a tedious job to do. It comprises of checking the budget, duration, concerned illness, timings to match, etc. Once someone is found, we're worried about the security, professionalism, integrity, loyalty and quality of work the care taker could provide. To overcome this issue, we come up with an application, Caretaker and Nursing, which will enable the costumers to have easy access to the professional medical help that they opt for with wide range of flexibility.

**Key Words:** Healthcare, Nursing, Patient, Caretaker, Medical.

### 1. INTRODUCTION

Illness is no new term in our society. Be it children, youngsters or senior citizens; people need someone to take care of them at some point of time. Times become tough when you're working all day and your parents/children stay alone at home all day. Finding someone to take professional care of the intended person is a tedious job to do. It comprises of checking the budget, duration, concerned illness, timings to match, etc. Once someone is found, we're worried about the security, professionalism, integrity, loyalty and quality of work the care taker could provide. To overcome this issue, we come up with an application, Caretaker and Nursing, which will enable the costumers to have easy access to the professional medical help that they opt for with wide range of flexibility.

The advancements in the area of ambient intelligence are a Means to assist the aged persons by carefully supervising them at their homes. Ambient Assisted Living (AAL) technology provides a helping hand to the elderly to live independently for a longer period of time comfortably. Apart from providing these technological approaches, there are

several Environmental interventions taking place in the home Environment that can help people to age-in-place. The population in the world comprising of elderly people is rising at a faster rate. , the number of people in the Population having age over 65 years is expected to surpass the Younger people of population for the very first time Many governments are giving high priority to provide help To the elderly all over the world and extensive research is Taking place in the field of ambient intelligence. AAL is a sub-Division of the Ambient Intelligence. AAL can be explained as Monitoring the person's daily routine by making use of Information and communication technologies (ICT) to help the Aged people to live independently for a longer period of time

Family, friends, and other people who provide unpaid care for a loved one are considered Informal caretaker . Caretaker provide care to an individual with a related dementia; therefore, there are more than informal Caretaker for Individuals with related dementias in the United States These Caretakers provide an estimated of unpaid care each Year and the economic worth of the care they provide is valued at In Iowa alone, Caretaker who provide an estimated of unpaid care each year, which is valued around the number of care hours per week increases, Caretaker can be prone to feelings Bund stress Forty percent of Caretaker report that they Feel their Caretaker situation is highly stressful and an additional of Caretaker report a Moderately stressful care situation . Described caretaker burden as comprised of three main dimensions: impact of care on the Caretaker lives, guilt, and Frustration and embarrassment. In their study, depressive symptoms were related to two of the Dimensions of Caretaker burden, the direct impact of care upon Caretaker lives and guilt. In other work, Caretaker with increased social support from Family and friends reported lower levels of burden.

A large number of elderly patients who wind up in the hospital are often unable to return to their own homes following hospitalization. When senior patients are Medically stable and suitable for discharge and an alternative level of care , the cannot return to their original residential circumstances because they are unable to Cope on their own: there are safety issues, insufficient care, cognitive deficits, chronic Health conditions requiring care, and reduced mobility. Generally, elderly patients who are enable to take care of themselves should be considered for a long-term care. When a senior can no longer care for him or

herself, and when that senior cannot gain access to an facility, a Caretakers must step up and provide support In society today, older adults and their caretakers often face situations the increase Caretaker stress levels, such as the seniors difficulty with mobility, safety problems, falls, cognitive deficits, fecal and urinary incontinence, chronic health conditions, and psychosocial and/or behavior changes Many caretakers have few if any medical and nursing skills; they often need financial assistance to provide proper care In order to continue providing care, family Caretakers need assistance and support In order to continue providing care, family caretakers need assistance and support so that their own physical and mental health needs are met . Yet to date, there are no clear solutions A needs assessment is a systematic effort to gather evidence to determine the number of individuals in a community who require particular services.

## 2. LITERATURE SURVEY

Impact of Caretaker Role in the Quality of Life of family caregivers for Persons: The study is based on quality of life of family caregivers for persons. Family caregivers report poor quality of life after they take the role of caretaker and it May also lead to depression. The study describes impact on quality of life of family caretaker for persons and how caregivers' emotional health, physical health ,general health and depression are affected due to caretaker responsibilities. The study Received four statistically significant findings which indicate that caretaker duration and Depression has roles in caregivers' quality of life. The findings show that emotional Health and physical health have statistically significant relationship with each other. In The study sample, caretaker duration and depression have statistically significant Relationship with each other. The association of emotional health and physical health Show statistically significant relationship with depression.

Providing knowledge and support to caregivers of older adults: Caregivers and the situations they are caretaker in need to be assessed on multiple levels To provide a comprehensive picture of the caretaker experience and how to best provide help Across various types of caregivers. 1. There are many different contexts in which examining caretaker situations is possible. One context is an area or county-level, such as through the level of modularity the caregiver is residing in or the resources that are available in 2. the area. Another Context is a dyadic level, for instance examining the relationship between the caregiver and the 3. Care recipient. Another context that can be examined is a 4. personal level, such as looking at the Caregiver's perceived levels of support or age. 5. 6.

Achieving further research in these areas will ultimately help to shape programs that are Intelligent System for Health Monitoring Application:-context-specific to the various needs of caregivers. The age group of the elderly people in the World's population is rising continuously. Hence, there is a Need to provide better technological support to elderly. Objective and the purpose of providing Better help to the patient is seen where in a good deal of research has been taking place in the areas of ambient Intelligence. This proposed system ensures assistance to the elderly by alerting the person themselves or care taker. This Also helps old people to get to know about an abnormal condition immediately. In the situation of emergency, a message is sent to alert the friends, family and caretaker. There are several Environmental interventions taking place in the home Environment that can help people to age-in-place.

The Impact of Caring for seniors on the Caregiver stress level:- Caregivers typically struggle with more than one caretaker concern and the responsibilities associated with caretaker. A review of current literature demonstrates that caring for seniors the stress levels of the caregiver. Evidence from various literature and research reviews points to the fact that there are few current available supports and resources available for caregivers of seniors, and that many of these resources are either difficult to obtain or are limited. This paper set about to questions that are linked in scope. First, this paper sought to understand if caring for seniors predicts the level of stress a caregiver experiences. Second, this project sought to understand what resources would help senior caregivers who provide care to Ontario seniors cope with the stress they experience. The first research question, to understand if caring for seniors predicts the level of stress a caregiver experiences, was investigated via statistical means.

## 3. METHODOLOGY

The mega-project consists of two sections. In this application Care Taker and Customer modules has been presented. All the modules related to this application are as follows:

1. Caretaker Sign Up Module
2. Caretaker Login Module
3. Customer Sign Up Module
4. Customer Login Module
5. Caretaker Homepage
6. Customer Homepage

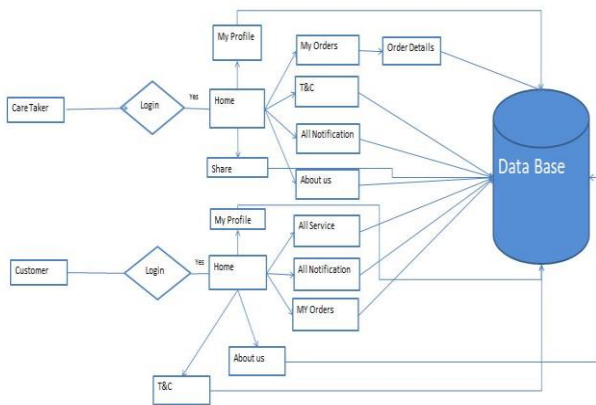


Fig 1: Flow Chart of System

Caretaker needs to add the following details like Full name, mobile number, password, email, hourly rate, daily rate, weekly rate, monthly rate, type of service, gender, city name, identity proof to sign up. Customer needs to add the following details like Full name, Mobile number, password, email, select gender, select city to sign up.

Both Modules once log in is linked with their Home pages. Caretaker Homepage is linked with My profile, My Orders, Order details, All notification, Share, About us. Customer Homepage is linked with My profile, All services required, My orders, All notification, about us, terms and conditions. All these modules are connected through database. Both Two main module's information are stored in a Database tables.

#### 4. IMPLEMENTATION

This Android Application has two module namely:

- Caretaker as Nurse
- Customer as patient

To access the two modules install the app from Play store. Open the app in android phone and fill up the registration form to login as Customer or caretaker. We can login by enter ID and password. Once the login has done, a homepage will be displayed which includes the following option as: My order, all notifications, My profile, About us. In My order sections, all the details of Order accepted and Completed related to customer/caretaker will be shown with their Order ID and Names. Notification Section includes all the updates of orders and notify you about the same. The caretaker needs to see the type of service which they want to apply as per their requirements. Once its done click on 'book' option. This will notify the caretaker about the booking done by the customer. The caretaker now needs to accept the same order. All the information will be stored in Database. Both module

caretaker and customer is linked with profile table with respect to Profile section. Whatever changes we will make in customer table or caretaker table will be updated with their profile. Profile section includes the basic details of caretaker and customer.

#### 5. RESULT

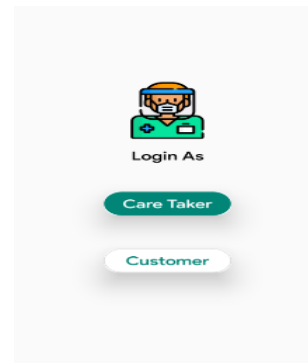


Fig 2: Login page

Here we have two Login Modules: 'The User' is our Qualified Nurse/Caretaker who will take care of our Customers/Patients Login as Customer: The user will have to Login to get access for the application who are in need of Caretakers.

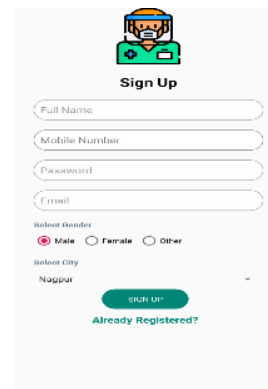


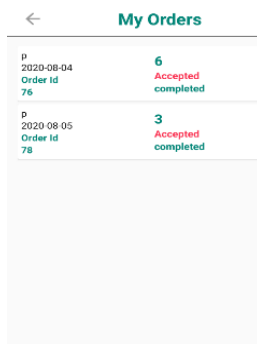
Fig 3: Sign up page

Login Screens as Caretaker and Customer: Once done with the registration process, LOGIN by entering mobile no. and password



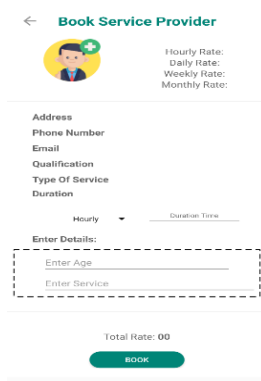
**Fig 4:** Home page

This is the Home screen which includes the options as: My Orders



**Fig 4:** My Orders Pages

My Order: Includes all the details of Order accepted and completed related to Customers with their order ID and Name.



**Fig 5:** Book Service Provider Pages

Service Provider: This helps customer to book and the type of service they need for their love ones

## 6. Conclusion

We have successfully developed an Android based “Caretaker and Nursing” Application using Android studio

and java. Overall we have created application in focus of customer requirements/services they need along with their privacy. The main two modules of the application i.e “Caretaker” and “customer” were well implemented through out the system. This application will helpful to many people as it will provide opportunity of employment for nurses and caretaker and also it will serve as a helpful agent for the current pandemic situation (Covid19) going around. It is easy to operate and user friendly. The main goal of this application is to provide professional caretaker service to all the age groups specially for the people who are unable to look after their loved ones due to their busy schedule.

## 7. References

[1] Intelligent System for Health Monitoring Applications. Ishita Parashar ; Pinky Kaushik; Vandana Niranjana 2019 International Conference on Computing, Communication, and Intelligent Systems (ICCCIS) Year: 2019 | Conference Paper | Publisher: IEEE

[2] CareBot: The automated caretaker system, V Vishal; Sayantan Gangopadhyay;D Vivek 2017 International Conference On Smart Technologies For Smart Nation (SmartTechCon) Year: 2017 | Conference Paper | Publisher: IEEE

[3] Medical professional end-device applications on Android for interacting with neuromotor disabled Patient. Robert Gabriel Bozomitu; Lucian Nitab;Andrei Romila; Alexandru Pasarica; Dragos Arotaritei; Cristian Rotariu Published in:2015 E-Health and Bioengineering Conference (EHB)Year: 2015 | Conference Paper | Publisher: IEEE

[4]Android App Development in Android Studio: Java+Android Edition for Beginners.

[5] SQL, the complete reference Book by James R. Groff.

[6] www.w3school.com

[7]www.javatpoint.com