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Digitalization of Palliative Care

Ashitha VK^1 , Dhan vishnu S^2 , Hariramakrrishnan R^3 , Karthick M^4

^{1,2,3}UG Scholar, Department of Computer Science and Engineering, SNS College of Technology, Coimbatore, India.

⁴Assistant Professor, Department of Computer Science and Engineering, SNS College of Technology, Coimbatore, India.

 $ashimolbashakarapotta@gmail.com^{1}, dhanvishnudv@gmail.com^{2}, hariramakrrish@gmail.com^{3}, magukarthik@gmail.com^{4}.$

Abstract

Digitalization of Palliative Care is the way of digitalizing the system of palliative care through an web application. Palliative care is the system which provides medical care to the patients in their respective home or venue when they make an appointment to a doctor. This web application mainly focuses on three main treatments such as End of life care, Symptoms management and Emergency care. Initially the patient opens the web app in his browser and is allowed to select the services which is necessary to cure his disease. Then the patient chooses a particular doctor who is specialized in the treatment of the particular disease. After these steps the patient has to mention his mail id, venue and a preferrable timing for consulting with the particular doctor which he has already selected. After completion of all the above steps a confirmation mail is sent to the patient in his mentioned venue. In case when the doctor declines the consultation date or the timing of the patient then a refusal mail is sent to the patient. This process handles the patient requiring intensive care and end of life care effectively. The probability of handling symptoms management and curing the disease is very high. The patients can also mention their queries and their feedback after consulting the doctor through this web application. **Keywords: Palliative care, Web Application, Patient**.

1. Introduction

Palliative care is a form of medical treatment for people who are suffering from a terminal illness.This form of treatment focuses on alleviating the illness's symptoms and stress. The aim is to increase the patient's and family's quality of life. Palliative care helps to mitigate pain and provide patients and their families with the optimum quality of life. Palliative care is delivered by a team of physicians, nurses, and other professionals who collaborate with the patient's other doctors. It is important for society to properly use technology to enhance palliative care. Palliative care demand is expected to rise globally as a result of a variety of socioeconomic factors, so it's critical to look for ways to boost access and quality by innovating care services. Hence the web application for palliative care paves the way to improve the lives of several people.[1-5]

1.1 Web-App System

This web application will be very useful for the patients who requires end of the life care and the patients with serious illness. These patients are mostly dependent in the hospitals for getting the medical care. The patient first opens the web app in his browser and is given the option of selecting

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the services that are needed to cure his disease. The patient then selects a doctor who specialises in the treatment of the disease in question. Following these measures, the patient must include his email address, location, and a preferred time for consultation with the doctor he has already chosen. Following the completion of all of the preceding steps, a confirmation email is sent to the patient and the doctor, and the consultation takes place at the patient's specified location on the patient's chosen date and time.A rejection mail is sent to the patient if the doctor refuses the appointment date or time requested by the patient.

2. Literature Survey

1.Symptom relief, palliative care start time, and palliative care needs of patients and care partners were all characteristics of palliative care for patients with idiopathic pulmonary fibrosis. Patients' disease management education, including advanced care preparation and the creation of a **3. Block Diagram**

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palliative care strategy by the healthcare provider, which included multidisciplinary technical teams, was also established. A "treatment meeting" was held, and integrated palliative care was given in the patient's home.

2.An estimated 40 million people need palliative care per year, with 78 percent of them living in low- and middle-income countries. Just about 14% of people who need palliative care are actually receiving it.

3. The evidence shows that there is some progress toward agreement on the use of palliative sedation. However, evidence-based clinical recommendations, education, and research are also needed to promote the ethical use of palliative sedation at the end of life. Until then, physicians should follow an expert-driven policy or guideline to ensure consistent and ethical use of palliative sedation at the end of life. [4-7].



4. Proposed System

Fig.1. Digitalization of palliative care

This web application contains hospital information as well as experienced physicians and physiotherapists who can provide palliative care. (i.e., palliative care digitalization). Using this web application, patients can choose doctors and medical facilities from the appropriate hospitals. Patients with any disease should initially select any doctor who is experienced in treating the disease. This decision-making process is divided into three sections: symptom management, end-of-life treatment (EOLC), and emergency. The patient is then given the option of specifying the time that he or she would like to consult the doctor. The doctor

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is then emailed with the patient's unique appointment time, and a confirmation email is sent to the patient's email address. Patients can potentially be healed of their particular illness in this manner without ever having to visit a hospital. This successfully manages patients requiring endof-life treatment and intensive care. The chances of successfully managing symptoms and curing the disease are extremely high.

Conclusion

Through the web application of palliative care, this web system can be expanded to improve symptom management and treatment of people. It will provide faster emergency care and improve End of Life Care through the digitalization of palliative care, resulting in the future saving of a large number of lives. This is especially critical for patients who are suffering from a serious illness. The increasing use of digital technologies will change the entire healthcareincluding palliative care and is delivered over the next 20 years. Hence the chances of successfully managing symptoms and curing the disease are extremely high.

Future work

Electronic health records. telemedicine. smartphone apps, sensors and wearables for diagnostics and remote monitoring, speech recognition and natural language processing, virtual and augmented reality, automated image interpretation artificial intelligence, using interventional and rehabilitative robotics, and predictive analytics using artificial intelligence can also be linked with this web-app for making a drastic improving the digitalization of palliative care.

Application

1. It improves the quality of life of patients with lie threatening illness.

2. It also reduces unnecessary patient transport to the hospital, avoids unnecessary hospitalization and investigations, and reduces the cost and logistics of the care process.

3. It is very helpful for the patients who requires end of life care.

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