

WMP - FREEDOM TO MOVE

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ABSTRACT

The time has transmuted and everything is turning online, it may be shopping, virtuals inductively authorizing, visually examining tv shows, or even online medicines. The online method is very easy to inherit as it gives the facility to do the work at our own place without any difficulties. Everyone is calling their smartphones and hence online booking for anything is just one click apart. So we decided to engender a platform for patients with physical illness who require physiotherapy treatment for their betterment. This paper discusses sundry research made on online websites or portals which are running smoothly in the market.

Keywords: Online Website, Appointment Booking, Physiotherapy, Research.

I. INTRODUCTION

Everyone has described a drastic vicissitude in their personal and professional life during corona times. Many people lost their profoundly relished ones because of the science of the disease as well as the ebony marketing of medicines and injections. In the corona times, people bought one injection for thousands which can be preserved if the distribution system were online. For the past two and a moiety year online marketing and mazuma transactions had taken the charge on market due to the contactless exchange of goods and accommodations. The only thing which is still infrequent in the market is healthcare accommodations, that have to be online for patients and medicos.

The main aim of this project is to automate the manual or traditional process followed by most hospitals and clinics for booking appointments, asking for medicine prescriptions, etc. This system will not only avail the patients to book their appointments but will maintain the records for emergency use.



Fig 1: Online medical services features

We can visually perceive in the above image that most of the accommodations in healthcare can be provided online and this will authentically avail people to easily connect to the medical accommodations. Our solicitousness is to introduce physiotherapy techniques that are not commonly verbalized about the topic because not everyone knows about them. The person suffering from extreme pain after injury or surgery

should seek the avail of physiotherapy treatment. This treatment authentically avails people suffering from muscle strain, spasms, and additionally erroneous postures.

According to the research, we found that physiotherapy can enhance the quality of life, mitigate pain, renovate mobility, regain function, and ameliorate vigour and balance.

II. LITERATURE SURVEY

E Ernst et al.,[1], In stroke rehabilitation most of the members of the therapeutic team take the effectiveness of physical treatments after stroke for granted. published data represent that the evidence is not so easy to evaluate. The majority of the evidence, however, from rehabilitation with physiotherapy some stroke patients get the benefit of that. Statistically, these benefits may be small, but they could mean the difference between being in an institution or living at home. Until further evidence emerges, we should select therapies that are most cost-effective and that can be provided to a large number of stroke patients.

Justine Naylor et al.,[2], Due to scarcity of clinical research, After total knee replacement surgery evidence-based clinical guidelines are not available to physiotherapy rehabilitation guides. This is the fact that, annually, over 36,000 patients in the UK, over 3,00,000 patients in North America, and 20,000 patients in Australia to regain functional independence potentially require rehabilitation at this time and to resume recreational and work-related physical activities. In order to propagate evidence-based practice guidelines and uniformity in care, to identify cost-effective rehabilitation programmes after total knee replacement well-designed clinical trials are required.

Bocharnikov AA et al.,[3], the increasing effectiveness of prevention and treatment of postoperative complications in the patients with benign tumors of the parotid salivary gland through the combined use of acupuncture, medication, hirudotherapy, and a complex of physiotherapy. The exercises begin with the upper third of the face, gradually descending to the lower third. A series of exercises are performed every hour, the course is 14 days, the session duration is 20 minutes. In front of the mirror, exercises are performed by the patients, at a slow pace and gently.

Petya ParashkevovaORCID et al.,[4], One of the most common injuries of the musculoskeletal system is ankle fractures. And many studies show that their incidence is increasing. The main aim of the report is to monitor patients with surgically treated ankle fractures using AOFAS. METHODS: In the period 2019 - 2021 we conducted clinical work with patients. 34 patients with ankle fractures treated surgically were included in the study. The average age is 37-40 years. The monitored period of functional recovery rate for each patient was two months. RESULTS: To establish the functional condition and to objectify the treatment results, we applied to the American Orthopaedic Foot & Ankle Society (AOFAS). The test consists of 9 questions divided into 3 categories: pain (40 points), function (50 points) and alignment (10 points). Results are reported as standard deviations with 95% confidence intervals. We conducted the study, reporting the category "Pain" at rest and while moving. The initial data from AOFAS are 32.04(at rest) / 23.51 (when moving) points, which means a very limited function of the ankle joint. At the end of the follow-up period, the results were respectively 84.02 /77.84 points, which shows a significant improvement in the functional capabilities of patients.

Emma Dunphy et al.,[5], Physiotherapy rehabilitation following surgical reconstruction to the Anterior Cruciate Ligament (ACL) can take up to 12 months to complete. Given the lengthy rehabilitation process, a blended intervention can be used to complement face-to-face physiotherapy with a digital exercise intervention. The aim of this study was to evaluate the acceptability of TRAK-based blended intervention in post ACL reconstruction rehabilitation. In this study, we used TRAK, a web-based tool that has been developed to support knee rehabilitation, which provides individually tailored exercise programs with videos, instructions and progress logs for each exercise, relevant health information, and a contact option that allows a patient to email a physiotherapist for additional support.

P Neumann al.,[6], International guidelines recommend treatment for urinary incontinence by a health professional such as a pelvic floor or continence physiotherapist with specialised training in the management of pelvic floor disorders. OBJECTIVE: This article discusses the role of a physiotherapy program in treating women with urinary incontinence. DISCUSSION: Treatment usually involves five consultations with a pelvic floor physiotherapist over 4-6 months. After an assessment of bladder function and the pelvic floor muscles, an

individualised training program is prescribed. The focus of pelvic floor muscle training is to build strength, endurance, speed and the coordination of the pelvic floor muscles in different situations. Women may be offered an annual review by their physiotherapist in order to promote long-term continence. An effective program has been shown to increase contractile strength as well as the increased resting tone of the pelvic floor, which then provides improved support to the pelvic organs higher in the pelvis.

R. Lenné et al.,[7], Non-communicable diseases are increasing globally; however, a healthy lifestyle can prevent many diseases and premature death. Those who refrain from smoking, eat healthily, engage in moderate physical activity and avoid hazardous use of alcohol live an average of 14 years longer than those with unhealthy behaviors. Physiotherapists (PTs) have an important role in the prevention of lifestyle-related diseases, and integration of health promotion in practice should be encouraged. The Swedish National Board of Health and Welfare has provided National Guidelines for Methods of Preventing Disease (2011) based on the best available knowledge of behavior-change competencies concerning the four lifestyle behaviors above.

Helena Talasz et al.,[8], Reduced pelvic floor muscle (PFM) contraction strength is a common condition in elderly female patients with urinary incontinence (UI). However, little data exist to demonstrate the importance of appropriate PFM activation during exhaling and coughing. To analyse breathing and coughing patterns in elderly female inpatients with UI, and to assess PFM activation patterns during exhalation and coughing. Data from 177 elderly female inpatients with UI were analysed to determine voluntary PFM contraction strength, as well as PFM activation and displacement of the pelvic floor (PF) and abdominal wall during forced exhalation and coughing. Clinical data were obtained by means of inspection and digital palpation in the course of a routine clinical UI assessment. Data collected were correlated with age, body mass index, and a number of childbirths, and categorised by predominant UI symptoms, history of previous hysterectomy, and history of PFM training.

Kapel, Alen et al,[9], The main purpose of this study was to demonstrate the impact of COVID-19 patients with Parkinson disease in the absence of physiotherapy interventions. We analysed 42 patient surveys on mental and motor aspects in the neurological state. The survey was conducted in three primary care level clinics specialised in neurological rehabilitation during the 7 weeks of COVID-19 restrictions, which started on 13 March-, 2020. Worsening of disorder, a number of deteriorations, and emerging conditions were found. In COVID-19 restrictions the absence of physiotherapy interventions had a significant multidimensional impact on the neurological state of patients who are suffering from Parkinson disease.

Jake Gryphon et al,[10], For atraumatic shoulder instability (ASI) Optimal physiotherapy treatment is uncertain, The primary aims were to evaluate outcome measures used and to compare the effectiveness of these programmes. The Secondary aim of this systematic scoping review was to compare physiotherapy treatment programmes for people with ASI. Medline, CINAHL, and EMBASE databases were searched for studies, except single case studies, published between 1950 and July 2021. Three domains covered 12 critical appraisal items; transferability to a wider population and reporting, internal validity. There were 491 participants. Ten studies were included; 6 cohort studies, one randomised controlled trial, and 3 case series. Treatment programs included-, movement re-education, education, shoulder muscle, static posture correction, strengthening, functional training, and adjuncts. All studies used patient-reported outcome measures (PROMs), seven of which reported a statistically significant improvement ($p < 0.05$) post-treatment. There was no clear relationship between outcomes and programmes.

III. MATERIAL AND METHODS

Traditional technologies like HTML, CSS, bootstrap, PHP, and MySQL especially made for web development are no longer slaking the desideratum of users as the trend has transmuted it's an incipient world with incipient and updated technologies. Now the authoritative ordinances are transmuting with people's culls. To surmount all the anterior web development issues the proposed technologies are being utilised in much research and they are MEAN and MERN stack development with more integrated security measures. This study and paper show the advantages of utilising these trending technologies and a serviceable project made utilising them.

MongoDB:

It is an open-source NoSQL database management system and it is the best alternative to other options available. These databases are used and made for handling a large amount of data that can be used for storing and retrieving data. It is a type of database document that helps in building high-quality internet applications, with flexible system support.

ExpressJS:

It is a backend development node web framework that provides a number of popular node frameworks. It provides an accumulation of features for web and mobile apps.

ReactJS:

It is a popular front-end library of javascript and is utilised in engendering interfaces utilising GUI. It is utilised to develop single-page applications.

NodeJS:

It is a cross-platform and open-source back-end JS runtime environment. It runs on the V8 engine. It is used to generate dynamic page contents.



Fig 2: Online appointment

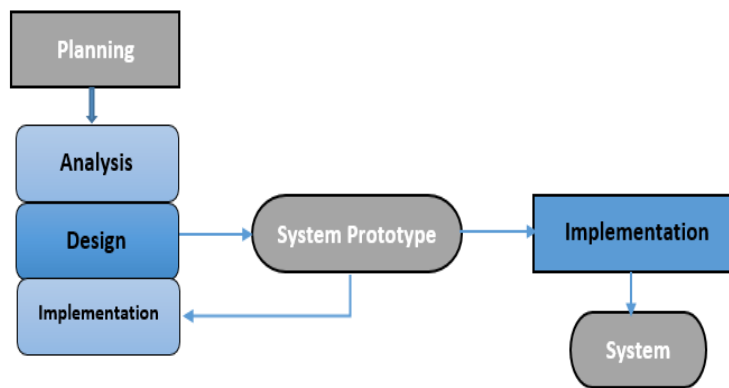


Fig 3: Project planning stages

IV. CONCLUSION

As a result of this research, a simple solution is obtained that an online appointment system should provide rudimentary facilities that a utilizer wants and can handle easily without any external avail or prior cognizance. Additionally, the vigilance of physiotherapy treatment should be spread so that no person will be in extreme pain and without a solution. Physiotherapy has a solution to all physical quandaries. Hence the proposed work of the project is aiming to provide facilities to users from booking appointments to taking exhortation from medicos as well as can consult with other patients too for recovery.

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