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The role of Technology-Assisted Interventions in Musculoskeletal Physiotherapy

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Abstract - Physiotherapy specialising on the musculoskeletal system offers non-invasive treatment options for many health issues. Due to poor self-efficacy and a lack of supervision, fitness programmes are currently not very popular. One potential answer to this issue might be the adoption of mHealth interventions, which would assist encourage self-management at home. On the other hand, musculoskeletal physiotherapy's best mHealth practices are not well-supported by research. The purpose of this PAER is to review the research on mobile health applications in musculoskeletal physical therapy and to provide conclusions based on those findings. In March 2022, researchers in Saudi Arabia performed a scoping study of six datasets that had been peer-reviewed. Only items published in English were chosen, and there were no restrictions on the dates. Data extraction followed article screening by two more researchers who randomly selected a subset of the papers. Despite high levels of patient satisfaction with mHealth, disengagement was seen due to issues such as slow internet and a lack of high-quality information. Short training periods and unfamiliarity with the technique were obstacles to its clinical acceptance. One area where mHealth shows promise is in improving treatment adherence; it has the ability to be both more cost-efficient and just as effective as traditional physiotherapy care. Currently, mHealth works best when a healthcare provider can provide continuous feedback.

Keywords - Physiotherapy, Musculoskeletal, mhealth, Exercise, Interventions.

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INTRODUCTION

The evaluation, diagnosis, and treatment of disorders involving the musculoskeletal system are areas in which physiotherapists excel [1]. The Saudi Arabian healthcare system has included advanced musculoskeletal physiotherapy positions for more than 30 years, and these professionals have been essential in providing musculoskeletal treatment to patients throughout the country [2]. When physiotherapists were accepted as the best professionals to handle most patients' ailments, their incorporation into orthopaedic and neurosurgery treatments marked the beginning of advanced practice recognition. Improved patient care via newly created positions that adapt to local needs and fill gaps in medical and surgical professionals [1,3,4], as well as through in-house training [5]. Through the utilisation of both full and extended scopes of practice, Advanced Physiotherapy Practitioners (APPs) have proven to be both clinically and financially beneficial in a variety of settings, including but not limited to: paediatrics, rheumatology, emergency, primary care, persistent pain, and therapy departments.

Educational courses have been designed and put into place to better equip and future-proof the workforce in response to the growth of advanced practice jobs within the rapidly expanding and continuously evolving scope of practice for physiotherapy [8]. For decades, the worldwide Federation of Orthopaedic Manipulative Physical Therapists (IFOMPT) has set worldwide musculoskeletal standards of practice [9] to guarantee the right degree of clinical practice, governance, and treatment quality. As the first specialist sub-group of the World Council of Physical Therapists (WCPT), MAPP has consultative status with the UN and an official relationship with the World Health Organisation. Many worldwide curriculum

match the requirements specified by IFOMPT for advanced musculoskeletal physiotherapy education and practice [4]. The rigorous postgraduate specialisation courses in musculoskeletal physiotherapy mirror the IFOMPT Educational Standards [9], which include ten aspects and forty-three learning objectives that are operationalized by the MACP for the Saudi. The ability to analyse, evaluate, and treat health issues originating from musculoskeletal diseases is a hallmark of advanced practice in thorough examination and conservative management, which physiotherapists achieving MACP membership eligibility requirements may show. Knowledge of evidence-based practice concepts and clinical reasoning processes at the master's level are foundational to effective work at the advanced practice level.

METHODOLOGY

Participants' characteristics

The age was recorded in 20 trials, with the experimental group having an average age of 46.6 ± 8.1 years and the control group at 46.8 ± 9.2 years. The majority of the studies failed to record participants' educational backgrounds. The proportion of participants with only a primary or no formal education was 28.8% in the group.

Stage 1: Identifying the Research Question

- **Objectives**

The main goal was to examine the results of musculoskeletal physiotherapy using mHealth, such as pain reduction and claimed increases in self-efficacy. The secondary goals were to ascertain the following: the history of mHealth applications, the conditions for which mHealth has been used, the interventions that have been developed and implemented with mHealth, the factors that have facilitated and hindered the use of mHealth, and the obstacles to clinical uptake.

- **Eligibility Criteria**

The studies that were considered for inclusion or exclusion were evaluated using the following criteria:

Inclusion criteria

- The articles are written in English.
- Articles that have been peer-reviewed and published in publications that make their entire texts accessible
- Let's hone in on how musculoskeletal physiotherapists and their patients may benefit from mobile health.
- It's possible to use mobile health in a home or outpatient environment.
- Research involving the use of mobile health either entirely or in conjunction with other treatment methods.

Exclusion criteria

- Research examining the use of mobile health in several medical fields (such as obesity and mental health))

Stage 2: Finding Appropriate Research

Important databases such as MEDLINE, Embase, CINAHL Plus, AMED, ProQuest Health and Medical Complete, and IEEE Xplore were used to find peer-reviewed papers. These databases were selected because they include extensive collections of physiotherapy research papers and health technology papers. In order to include other pertinent research that were not found via database searches, the grey literature was also reviewed. In March of 2022, the search was carried out in Saudi Arabia.

In order to acquire as much relevant material as possible, three researchers (JMRA, DK, and CH) searched databases without applying any date limits in order to find all relevant literature.

Stage 3: The Process of Study Selection

In order to eliminate any possibility of duplicate references, all relevant sources were imported into RefWorks (ProQuest). At least one researcher (JMRA) met the requirements for both the abstract and title reviews as well as the full-text reviews. In order to facilitate agreement on the qualifying criteria, two extra researchers (DK and CH) examined 10% of the chosen studies. Finally, three researchers (JMRA, DK, and CH) read and evaluated all of the included papers' entire texts.

Stage 4: Charting the Data

The data gathering process for the included studies was guided by a data-charting form. Along with more generic information like author and publication year, this form also asked for details that were pertinent to the review at hand. A random selection was made from the database search results to pilot the data-charting form. This gave us the go-ahead to make the necessary adjustments before plotting the data from the other trials. Three further researchers checked a subset of these experiments for additional rigour after one of them (JMRA) plotted the data from all the others.

Stage 5: Gathering Data, Consolidating It, and Sharing It

To assist in the synthesis of the literature about the use of mHealth in physiotherapy, a number of tables and infographics were used to summarise the quantitative aspects of the included research. This included things like who was using mHealth, what the intervention was, and the most prevalent medical issues treated with mHealth. The literature also included a narrative explanation of the final data extraction. Using the study question and data generated via an iterative approach, the research team established topics and categories.

RESULTS

Study Selection

There were 1,495 titles found in the first database search for mHealth literature. A total of 311 titles, or 20.8% of the total, were duplicates. After reviewing the titles, an extra 66.42%, or 993/1495 studies, were discarded because they did not satisfy the inclusion requirements. After abstracting 191 titles (12.78%), 99 articles (51.8%) were culled from the original 1495. Out of these, 21 articles (21% of the total) were discarded due to erroneous results, 32 articles (32% of the total) were discarded because they did not pertain to physiotherapy, 27 articles (14% of the total) were culled because mHealth was not a part of the study, 14 articles (14% of the total) were culled because they were not written in English, and 5 studies (5%) were discarded because they were carried out in settings not covered by this evaluation. Twenty articles, or 14.7%, were included in the final full-text review of the remaining 92 papers (48.2%). The reasons for exclusion included the following: seventeen (18%) papers did not have full-text available; sixteen (17%) papers did not focus on physiotherapy; ten (11% of the papers) did not include mHealth; and twenty-one (23% of the papers) studies were conducted in the incorrect setting, as mentioned earlier.

- **Research Features**

Outlined above are the study's features and its conclusions. The 25 essays that made it to the final round had a total of 1400 Saudi participants. From three to three hundred sixty-eight people took part in the trials.

Table 1. Research Features

Study	Study type	Setting
Adamse et al [10]	Review of the literature.	Adults are eligible to take part. Ailment: persistent discomfort anywhere in the body.
Adhikari et al [11]	Look back at the design process before and after.	House in the country as a medical facility.
Azma et al [12]	Clinical experiment that has been randomly assigned to participants.	Ages 50 to 60 were the target demographic. Whether in a home or office
Bini and Mahajan [13]	Research design: randomised controlled trial.	Health care environment: in-person or at-home.
Chen et al [14]	Conduct a preliminary evaluation to determine the viability.	The house is the site of health care.
Correia et al [15]	A prospective research examining the possibility of a parallel group.	The house is the site of health care.
Dunphy et al [16]	Interviews that are not fully structured.	• A healthcare facility's outpatient programme
Eriksson et al [17]	Interviews with a focus on quality.	The house is the site of health care.
Eriksson et al [18]	An experimental investigation.	The house is the site of health care.
Gialanella et al [19]	Prospective randomized controlled trial.	The house is the site of health care.
Irvine et al [20]	A study that used a random assignment design.	The house is the site of health care.
Jay et al [21]	Prospective, randomised study	Office-based health care
Lade et al [22]	Not clear.	A healthcare facility's outpatient programme
Lawford et al [23]	Interviews that are not fully structured.	Health care setting: —a
Lovo et al [24]	A mixed-methods approach was used to analyse semi-structured interviews.	Urban or home-based health care environment
Mani et al [25]	Review of the literature.	The house is the site of health care.
Mecklenburg et al [26]	A study that used a random assignment design.	Health care setting: home based
Nelson et al [27]	The experiment was conducted as a randomised controlled noninferiority study.	The house is the site of health care.
Piqueras et al [28]	A study that used a random assignment design.	The house is the site of health care.
Richardson et al [29]	Design using repeated measurements.	The house is the site of health care.

Table 2. Research methods and settings.

Study	Condition	Intervention
Adamse et al [10]	Arthritis, rheumatoid, and persistent low back pain are all examples of chronic pain.	The term "telemedicine" refers to the use of online communication tools to provide remote rehabilitation sessions with patients.
Adhikari et al [11]	Neck pain, mechanical low back pain, traumatic ankle pain, rheumatoid arthritis, tennis elbow, and prolapsed intervertebral discs are among the conditions that might cause discomfort.	Physiotherapist assisted with recovery; exercise booklets were sent by phone four times in four weeks.
Azma et al [12]	Arthritis of the knee.	Exercises for strength, stamina, flexibility, and range of motion assessed in the form of pamphlets. Continue workouts 3 times each week for 6 weeks. Weekly, patients were called remotely to discuss the development of their exercises.
Bini and Mahajan [13]	Replacement of the knee joint.	Included in the CaptureProof app's pool of 23 workout videos Narrated videos featuring on-screen instructions provided by a therapist The patient replies by providing evidence that they have completed the task. Treatment is reviewed and modified by the therapist as needed.
Chen et al [14]	Adhesive capsulitis of the shoulder.	Return on investment (ROM) is measured by MSDb. Two types of medical apps: one for patients and one for doctors. Utilising a patient and physician app to assess the efficacy of rehabilitation.
Correia et al [15]	Arthroplasty of the knee.	The patient or carer was instructed in the platform's usage by the physiotherapist. Sessions are completed for at least 30 minutes, five times weekly.
Dunphy et al [16]	Anterior cruciate ligament repair.	Patients and physiotherapists are interviewed.

Eriksson et al [17]	Shoulder joint replacement.	Individuals receiving physiotherapy supervision Videoconferencing allowed the physiotherapist to communicate with the patient
Gialanella et al [19]	My neck hurts all the time.	HBTd group, which consists of calls every two weeks Unanticipated phone calls about severe discomfort Provided guidance on physical activity, health state, discomfort, and impairment.
Irvine et al [20]	Sedentary behaviour in elderly persons.	Became active after 55–12 sessions, each lasting 10–15 minutes. Gradually introduced more difficult exercises. Utilised text and video messages via SMS to aid in goal setting.
Jay et al [21]	Stiffness in the muscles and joints of the upper limbs.	video-based workouts that demonstrate proper technique Exercises are accompanied by audio explanations, and there is additional web-based educational content available.
Lade et al [22]	Musculoskeletal elbow problems.	Both in-person and remote examinations and interviews were conducted with participants using a telerehabilitation system.
Lawford et al [23]	Arthritis of the knee.	Over the course of six months, participants got five to ten phone calls. About forty minutes elapsed during the first call, and another twenty minutes were devoted to the subsequent calls. A physical activity plan and a home strengthening exercise programme were developed as part of the action plan. As needed, programme and goal adjustments implemented.
Lovo et al [24]	Pain treatment for chronic back disorders.	Patients were given a summary of the results and answers to their queries after Urban PTe and NPf had a comprehensive evaluation of the neuromusculoskeletal lumbar spine via telehealth.
Mani et al [25]	Evaluations of musculoskeletal diseases	Assessing the reliability of physiotherapy interventions delivered by telerehabilitation in terms of both inter- and intrarater validity
Mecklenburg et al [26]	My knee hurts all the time.	To evaluate the methodology, two separate reviewers used QARELg and QUADASh.
Nelson et al [27]	Replacement of the hip joint.	In a 12-week trial, Hinge Health provided remote healthcare. We provide information on exercise treatment, education, cognitive behavioural intervention (CBT), weight reduction, and psychological support. Using an iPad app, technology-based HEPj may give remote telerehabilitation to the patient's home.
Nelson et al [27]	Replacement of the hip joint.	In a 12-week trial, Hinge Health provided remote healthcare. We provide information on exercise treatment, education, cognitive behavioural intervention (CBT), weight reduction, and psychological support. Using an iPad app, technology-based HEPj may give remote telerehabilitation to the patient's home.
Piqueras et al [28]	Arthroplasty of the knee.	IVTk is a 10-day programme that consists of 10-hour sessions, 5 of which are done in a supervised setting and 5 of which are done at home.
Richardson et al [29]	Musculoskeletal problems of the knee.	Evaluation of patients using online and in-person interviews conducted through a telerehabilitation system Participatory movements and functional activities, as well as self-applied modified orthopaedic tests and aided self-palpation, were part of the telerehabilitation evaluation process.
Eriksson et al [18]	Shoulder joint replacement.	Individuals receiving physiotherapy supervision Videoconferencing allowed the physiotherapist to communicate with the patient.

Comparing the two types of research, Table shows that quantitative studies predominated (23/20, 82% vs. 4/20, 14%). Mixed methods studies accounted for a meagre 4% (1/20). Ten out of twenty studies (36% of the total) were RCTs, whereas four out of twenty (14% of the total) were systematic reviews, one of which was a meta-analysis. Ranked controlled trials accounted for 7 out of 20 studies, or 25%; prospective randomised controlled trials for 2 out of 20, or 7%; and randomised controlled noninferiority trials for 1 out of 20, or 4%. There were a number of other quantitative designs that were considered, such as a retrospective pre-post design (4% of studies), a controlled study (4% of studies), a case series (4% of studies), a prospective single-group clinical study (4% of studies), a repeated measures design (7% of studies), a pilot study to assess feasibility (4% of studies), a prospective parallel-group feasibility study (4% of studies), a controlled study (4% of studies), and a nonrandomized controlled trial combining a single-arm intervention cohort with historical controls (4% of studies). Quarter of the interviews were semi-structured, accounting for 11% of the total. A qualitative interview was the only method used in just 4% (1/20) of the investigations. Among studies that analysed data using a mixed methods design, 4% (or one in twenty) used a mixed methods design. One out of twenty research designs, or 4%, were not clearly stated.

- **Features of the Intervention**

Even though mHealth was mentioned in every study, several of them didn't provide detailed enough descriptions of the input to make it replicable. There was a lack of specificity on the protocols used in the studies that claimed the intervention was a home exercise programme. Elements of stretching and strengthening were detailed in studies that offered sufficient depth. An intervention that comprised education, cognitive behavioural therapy, weight reduction, and psychological support was included in another trial, while one study detailed walking exercises. In order to determine the intra- and interreliability of remote assessments conducted by telerehabilitation technologies, further research investigated the use of mHealth in conjunction with physiotherapy evaluations.

- **Possible Past Uses of mHealth**

1. **Earlier Uses of mHealth in Rehabilitation**

Out of the 20 papers that were considered, 4 (or 20%) were systematic reviews and 1 (or 4% of the total) looked at alternative mHealth applications. The papers that were relevant to the systematic reviews were included in this review independently. The remaining research looked at how well and how practically certain applications work now and in the future. Four out of twenty reports (14%) of prior mHealth implementations used telephone-based treatments using internet-connected videoconferencing to reach patients' homes. The use of web-based telerehabilitation software in conjunction with videoconferencing was detailed in another study. This software included wireless sensors to track patients' motions, a programme to show them how to strengthen and increase their range of motion (ROM) after total knee arthroplasty, and a portal for clinician input. The distribution of mHealth using cellphones or the internet was mentioned in less depth in other approaches. According to this research, all home-based therapies included a personalised fitness programme and promoted self-management techniques including group workouts and talk sessions. Rehabilitation

games that are accessible on various platforms, like the Wii, PlayStation EyeToy, and Xbox Kinect, may also be used as a kind of mHealth application to help with recovery from soft tissue and bone injuries. Playing these Wii games was a great way to improve your balance and agility.

2. **Prior Mobile Health Apps for Clinical Implementation**

Physiotherapy evaluations of musculoskeletal diseases were documented in only 7% (2/20) of the research [58,61]. Comparing web-based evaluation with more conventional, in-person approaches was the overarching goal of this research. Patients were asked to self-palpate and complete modified self-administered special tests using videoconferencing, which was once again used as part of mHealth. Several objective parameters, including pain, range of motion, muscular strength, gait, and edoema, might be more precisely measured using mHealth, according to the findings. There was insufficient data to conclude that mHealth could effectively measure neurodynamic testing and spinal posture.

3. **Musculoskeletal Disorders That Have Made Use of mHealth**

Researchers have identified specific musculoskeletal disorders that have been treated with mHealth, but other studies have used a more general term that encompasses a variety of conditions. Arthroplasty, or complete knee replacement, accounted for 14% of the properly characterised musculoskeletal disorders (4/20). In addition to total hip replacement or arthroplasty (2/20, 7%), anterior cruciate ligament repair (2/20, 7%), shoulder joint replacement (2/20, 7%), and subacromial decompression (1/20, 4%), mHealth was also used in other surgical operations. Among the chronic conditions covered in various articles were: rheumatoid arthritis (2% of the total), adhesive capsulitis of the shoulder (4% of the total), mechanical low back pain (4% of the total), chronic neck pain (2% of the total), and chronic knee pain or osteoarthritis of the knee (11% of the total). Prolapsed intervertebral discs (1/20, 4% of cases) and tennis elbow (1/20, 4% of cases) were less prevalent.

- **Programmes That Have Used mHealth to Make a Difference**

When compared to earlier applications of mHealth, it seems like no new intervention is being put into place. The majority of research found that effective mHealth therapy relies on open lines of contact between the patient and treating therapist. Teleconferencing and videoconferencing, such as Skype (Microsoft Corporation), are two possible means of doing this. Most recent research has shown that mobile health (mHealth) is most effective when used in conjunction with standard treatment, which includes in-person physical therapy sessions that include both exercise and manual manipulation. Participating doctors made weekly teleconference calls to a number of trials that also contained pamphlets. A variety of web-based applications and smartphone-based apps were used in trials where teleconferencing was not an intervention. As part of these treatments, patients were given narrated videos of exercises and asked to record themselves doing them and send the footage back. With the use of physician comments, this would make exercise progression suitable. In one study, participants used a wearable motion sensor device in conjunction with a patient app and a physician app. Both the patient app and the physician app were designed to aid users in visualising the proper range of motion (ROM) for exercises, and the physician app also allowed users to submit text to track their progress.

- **Justifications for Participation or Nonparticipation in mHealth**

Ninety percent (18/20) of the articles explained why people participated in the intervention or didn't. In sum, their explanations were lacking in specificity. Participants rated the interactive elements and easily accessible help as very vital, leading to generally high patient satisfaction. Constant interaction with their doctor led to a decline in surgical interest, according to studies examining preoperative regimens. According to many studies, mHealth improves treatment adherence over the long term (defined as 6 months) due to the fact that specialised supervision helps keep patients motivated, confident, and establishing goals on a consistent basis. People said that technical issues, including slow internet or poorly designed applications, were to blame for their disengagement. Since the majority of users would likely have access to mobile devices with sufficient data capabilities, it was suggested that this may be mitigated by using a web-based platform on these devices. Researchers found that patients benefited best from video-based therapies, which taught them the proper form and boosted their self-assurance so that they could complete the exercises as prescribed.

- **Challenges in the Implementation of mHealth**

Among the studies that looked at mHealth, only 4% (1/20) focused on doctors' experiences. Physiotherapists' approval of a new telemonitoring technology was found to be mediocre at best, according to this research. Not having enough time to learn how to use the telemonitoring platform might be the reason for this. Physical therapists' major gripe with the intervention was the extra labour it required them to do, as they now had to enter patient information into yet another eHealth data log. Users wanted it to be more efficient, easier to use, and more aesthetically pleasing for future usage. [30] In order for digital health technology to more readily become ingrained in clinical practice, several therapists have suggested incorporating it into normal

therapy. There was also a preference for apps on smartphones rather than online apps, although the reasons behind this were not clearly stated. The research concluded that one last obstacle is the absence of formal training programmes for both present and future health care workers, which hinders their familiarity with emerging health care technology. More training and easier integration of new health care technology into professionals' practices are needed in the future.

Principal Findings

This research uncovers five themes of mHealth adoption, including facilitators and challenges to uptake, and gives a mapping of the range of evidence for mHealth usage in musculoskeletal physiotherapy. The primary objective of this scoping review was to examine the data pertaining to musculoskeletal physiotherapy's usage of mHealth and the results it generated. The primary results of this research indicate that patients prefer to communicate with their clinicians via phone conversations or videoconferencing because it allows them to provide continuous feedback, which may increase the likelihood that patients will stick to their rehabilitation programmes. Another research indicates that practitioners are not well trained to utilise mHealth, which is causing low adoption rates.

This research shows that mobile health has great promise as a future part of musculoskeletal physiotherapy. Because patients can now access information and take charge of their rehabilitation using their cellphones, mHealth treatments may be more successful than traditional physiotherapy care, according to recent research [69]. The evidence for this claim is limited, though, according to this review. Out of all the studies that were considered, just 11% (3/20) used smartphones, and even fewer compared mHealth to physiotherapy. Despite this, the review did find that a comprehensive digital care intervention, in conjunction with ongoing support from regular physiotherapy, greatly improves pain and function outcomes. Inadequately reported research prevented us from drawing any conclusions, whereas those that did suggest that mHealth may be at least as beneficial as PT.

When compared to in-person evaluations, there is little proof that mHealth can successfully replace them in musculoskeletal physiotherapy. Two investigations (representing 7% of the total) found this method to be valid and reliable; one study focused on elbow-specific evaluations (4% of the total) and the other on general musculoskeletal diseases (4% of the total). Since the patient was not competent to administer the neurodynamic tests in the same way that a professional would, the results were unreliable, indicating that this is not a suitable substitute. The most often used kind of mobile health in musculoskeletal physiotherapy were therapist-patient phone or video chat sessions. The fact that patients are more like to react favourably to an app that is easily accessible on their smartphone raises concerns about the lack of innovation in this area. The necessity for further improvement is further underscored by the fact that the majority of studies in other medical domains has shown that the most popular intervention is telephone or videoconferencing conversations. Patients may feel unsupported by the present crop of relevant, high-quality mHealth applications, thus it's crucial that development keeps going in this area.

This evaluation looked at a lot of different ailments, which means there isn't much data on using mHealth for specific musculoskeletal issues. In terms of mHealth research, the most common condition was postoperative rehabilitation following total knee replacement surgery. Out of all the research that looked at mHealth, only three percent examined its potential for treating chronic low back pain, while four percent dealt with shoulder pain . Hence, despite the widespread usage of mHealth, there is insufficient data to completely endorse its use for a variety of illnesses.

Reproducible descriptions of the mHealth intervention were lacking in a number of studies. It is reasonable to presume that physiotherapy treatment would be considered part of the intervention given that this study was carried out within the framework of musculoskeletal physiotherapy. The physiotherapy component was under-discussed by most authors, who instead framed the intervention as a home exercise programme with follow-up phone calls from a participating clinician, as though it were a specific treatment rather than a catch-all phrase for a variety of approaches. Based on the findings of 4% (1/20) of the research included in this analysis, it seems that physiotherapists do not have enough evidence to properly implement mHealth interventions.

Due to the preponderance of quantitative data, this study draws attention to the dearth of qualitative studies examining mHealth treatments. To improve the delivery of future treatments, it is crucial to understand the experiences of those providing and receiving these interventions. Qualitative research has a lot of value because it gives a deeper picture of the lived experience. This may help physicians and patients come up with new ideas for improving patient care and mHealth via increased involvement. The availability of high-quality resources, infrastructure, and time in Saudi Arabia allows for the development of more effective and engaging mHealth treatments, including elements like gamification.

CONCLUSIONS

It would suggest that mHealth may improve treatment adherence, be just as effective as traditional physiotherapy care, and even be more cost-effective. The most popular method of patient-clinician

communication right now seems to be videoconferencing or phone calls; patients love these methods because they allow them to get constant feedback on their progress during rehabilitation, which boosts their confidence. Because patients are more likely to stick to their rehabilitation programme when they get feedback from their doctor, this feedback loop has the ability to improve pain management and self-management.

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