

Integrated Rheumatology-Dermatology Care in Kuwait: A Model for Enhanced Outcomes and Streamlined Management

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Abstract

Introduction: Patients with concurrent rheumatological and dermatological conditions often face fragmented care due to traditional healthcare systems operating in silos. Integrated multidisciplinary team (MDT) clinics offer a potential solution. This review examines the implementation and impact of combined rheumatology-dermatology clinics in Kuwait, the first of its kind in the Middle East. **Aim and Methods:** An anonymous online survey was conducted from May 1 to 31, 2025, targeting 19 rheumatologists and dermatologists working in combined clinics across four government hospitals in Kuwait. The survey assessed perceptions of care, perceived benefits, challenges faced, and future directions. **Results:** Seventeen physicians responded (89.5% response rate). Most respondents perceived MDT clinics as highly effective, with 47.1% rating them as “very effective” and 35.3% as “extremely effective”. A majority (94.1%) agreed that diagnostic accuracy was improved, and 58.8% felt treatment plans were “very well” coordinated. All responders agreed that MDT clinics reduced referrals and testing. Key benefits included reduced need for multiple appointments (82.4%), enhanced care coordination (76.5%), earlier diagnosis (64.7%), and improved patient satisfaction (70.6%). The most cited challenges were limited clinic time (64.7%) and follow-up opportunities (35.3%). An overwhelming majority (94.1%) supported increasing the number and scope of MDT clinics. **Conclusion:** Integrated rheumatology-dermatology MDT clinics demonstrate potential to improve care coordination, diagnostic accuracy, and resource utilization for patients with overlapping rheumatological and dermatological conditions in Kuwait. Addressing identified challenges and expanding this model may enhance disease outcomes and establish

Kuwait as a leader in integrated care.

Keywords

Multidisciplinary Team, Integrated Care, Rheumatology-Dermatology, Kuwait

1. Introduction

Many skin conditions are linked to, or can even precede, the development of various rheumatic diseases. These skin features may appear before, alongside, or after the onset of the underlying rheumatic condition [1]-[3]. The management of patients with conditions that involve both the joints and the skin, such as psoriatic arthritis, lupus, and other connective tissue diseases, often presents a complex challenge. These patients typically require care from both rheumatologists and dermatologists, which can sometimes result in fragmented care and delays in diagnosis and treatment. Despite increased awareness of these issues, providing high-quality care for patients with overlapping rheumatological and dermatological conditions remains a difficult task, as traditional healthcare systems often operate in silos, with specialists focusing on specific organ systems or disease categories. That is why integrated care models, such as multidisciplinary team (MDT) clinics, including combined rheumatology-dermatology clinics, are gaining recognition [1] [4]-[9]. These models offer a patient-centred approach by bringing together specialists from different disciplines to provide comprehensive, coordinated care. Ultimately, they hold promise for improving care coordination, patient outcomes [4] [6]-[8].

There are multiple benefits of MDT clinics and care, including educational and research opportunities, which can enhance the learning of trainees in both disciplines. These clinics facilitate earlier diagnosis and treatment, leading to improved clinical and patient-reported outcomes and satisfaction. Additionally, they optimize medication regimens and foster better collaboration among physicians, resulting in more efficient and effective care. MDT care can also reduce unnecessary referrals.

On the other hand, challenges include the need for effective communication and coordination among team members, as well as managing time efficiently. Furthermore, the availability of providers with the necessary expertise can be limited, and there is often restricted physical shared space or limited clinic space. Managing patient emails and messages between clinics can also present logistical difficulties [8] [9].

The first rheumatology-dermatology clinic in Kuwait was launched at Farwaniya Hospital on May 23rd, 2023, marking a significant step towards integrated care. Since then, the number of these clinics has increased, and as of May 2025, additional clinics have been established at Amiri, Jahra, and Jaber Hospitals, with

plans to open another clinic shortly at Mubarak Al-Kabeer Hospital. These clinics are held monthly, with rheumatologists and dermatologists jointly assessing patients with complex rheumatological and/or dermatological conditions, including psoriasis/psoriatic arthritis, systemic lupus erythematosus, rheumatoid arthritis, dermatomyositis, vasculitis and undifferentiated connective tissue disease. The goal is to reach a definitive diagnosis and optimize treatment plans through collaborative expertise.

This study aims to share the experiences and evaluate the impact of implementing combined rheumatology-dermatology clinics in Kuwait. We hope to highlight the perceived benefits, identify the challenges faced, and explore future directions for these clinics within the Kuwaiti healthcare system. Notably, this is the first model of its kind in the Middle East, making it a significant step toward advancing MDT management of complex rheumatological and dermatological conditions.

2. Aim and Methods

An anonymous online survey was conducted from 1st to 31st May 2025 among rheumatologists and dermatologists involved in the combined rheumatology-dermatology clinics across four government hospitals in Kuwait (Farwaniya, Jahra, Jaber, and Amiri). The survey consisted of 10 questions structured into three sections: the first assessed clinicians' perceptions of the care provided and the benefits of these clinics; the second evaluated challenges and barriers faced; and the third gathered suggestions for future improvements. The questions included Likert-scale items to measure perceptions of clinic effectiveness, diagnostic accuracy, and care coordination, with options ranging from strong disagreement or low effectiveness to strong agreement or high effectiveness. Additionally, open-ended questions were included to capture detailed insights into benefits, challenges, and potential improvements.

The questions were developed through consultation of current literature and expert input from rheumatologists and dermatologists to ensure content relevance and comprehensiveness. Hosted on Google Forms, the survey ensured secure, confidential, and anonymous data collection. No formal pilot testing of the survey was performed before distribution. The collected data were analyzed using descriptive statistics. Frequencies and percentages were calculated for categorical variables, such as perceptions of clinic effectiveness and identified challenges. Responses from open-ended questions were reviewed thematically to identify common themes and insights related to benefits, challenges, and suggested improvements. All analyses were conducted using Microsoft Excel 2019. Ethical approval was not required under local regulations for provider-only surveys.

3. Results

Seventeen out of nineteen physicians responded (89.5% response rate), of whom 8 were dermatologists (47.1%) and 9 were rheumatologists (52.9%).

The survey data revealed strong positive perceptions of MDT rheumatology-

dermatology clinics (**Figure 1**). Most respondents perceived MDT clinics as highly effective, with 8 (47.1%) rating them as “very effective,” and 6 (35.3%) considering them “extremely effective” in managing patients with overlapping conditions. A majority of participants, 10 (58.8%), strongly agreed that MDT care clinics improved their diagnostic accuracy for complex cases, with an additional 6 (35.3%) agreeing. Furthermore, 10 (58.8%) felt that MDT clinics facilitated “very well” coordinated treatment plans. All responders agreed that MDT clinics reduced the number of referrals and testing. Respondents also highlighted benefits, including reduced need for multiple appointments with different subspecialties (14; 82.4%), enhanced care coordination (13; 76.5%), earlier diagnosis (11; 64.7%), and improved patient satisfaction (12; 70.6%).

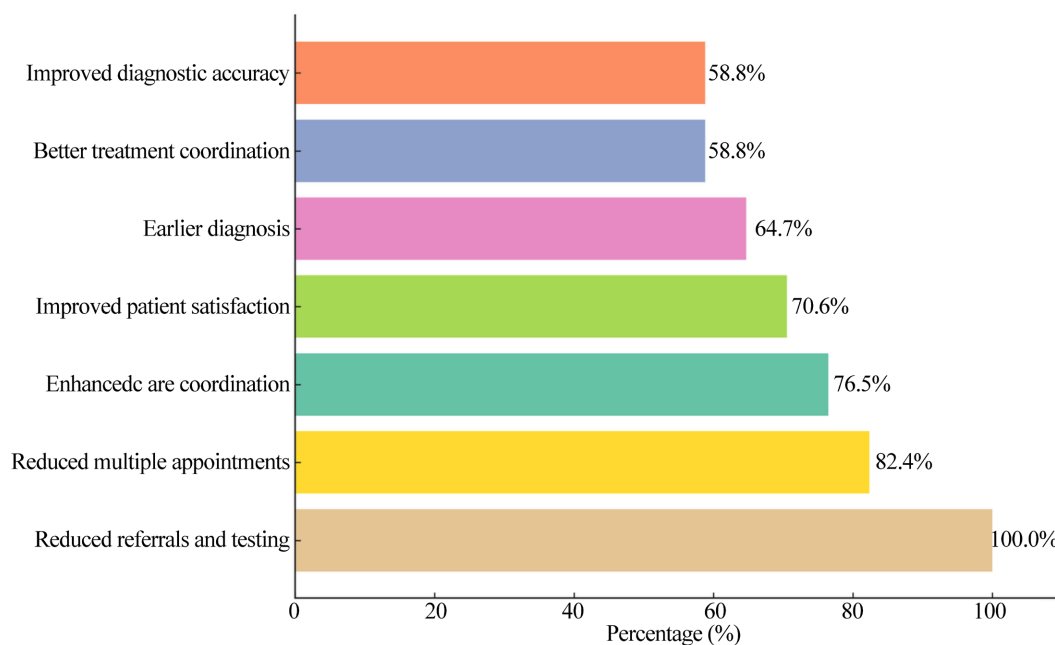


Figure 1. Perceived benefits of rheumatology-dermatology clinics in Kuwait.

Despite generally positive perceptions of the MDT rheumatology-dermatology clinics, the survey also identified key challenges in coordinating patient care (**Figure 2**). Over a third of responders, 7 (41.2%), indicated experiencing coordination challenges “rarely,” while 6 (35.3%) reported experiencing them “sometimes.” The most frequently cited barrier was limited clinic time, noted by 11 (64.7%), and limited patient follow-up opportunities were noted by 6 (35.3%) of respondents. Other challenges, such as limited physical space, were cited by 2 (11.8%).

Finally, the survey showed that 16 (94.1%) of the responders supported increasing the frequency and number of combined rheumatology-dermatology clinics in Kuwait to accommodate more patients and further improve patient outcomes. Other proposed future directions included raising awareness and understanding of the benefits of combined rheumatology-dermatology care, developing and implementing standardized evidence-based protocols for managing diseases that

overlap rheumatological and dermatological diseases, and emphasizing ongoing research efforts to drive continuous improvements in care quality.

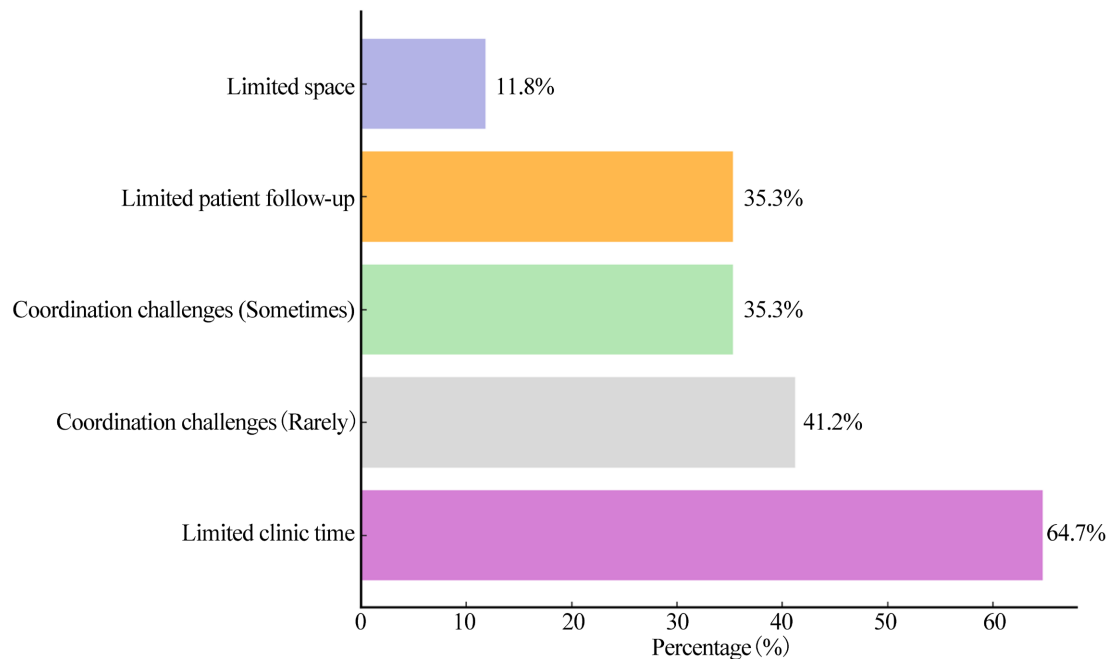


Figure 2. Challenges faced in rheumatology-dermatology clinics in Kuwait.

4. Discussion

The survey findings strongly support the integration of rheumatology and dermatology services through MDT clinics as an effective model for managing complex patients in Kuwait. The majority of both dermatologists and rheumatologists involved in these clinics perceive benefits, including improved diagnostic accuracy, earlier diagnosis, and facilitated better care and treatment coordination. These findings align with many recent studies [10]-[13] and demonstrate the potential of MDT clinics to improve care for patients with complex rheumatological and dermatological conditions while streamlining healthcare processes. This further reinforces the argument for future expansion and continued investment in this integrated care model in Kuwait.

Over time, these clinics are likely to further enhance diagnostic accuracy and improve disease management, potentially reducing misdiagnoses and enabling timely interventions that result in better health outcomes. Sustained MDT involvement may also boost treatment adherence, slow disease progression, decrease complications, and ultimately enhance patients' quality of life [6] [7] [11].

Moreover, long-term benefits include more efficient resource utilization within healthcare systems, as highlighted by the majority of respondents who believed that MDT clinics reduced the number of appointments and referrals and decreased unnecessary testing. Additionally, these clinics can reduce hospitalizations and minimize the need for intensive treatments. This model also fosters the

consolidation of medical knowledge and enhances clinical skills, enabling specialists to learn from each other while caring for patients affected by both skin and joint diseases [5] [13].

Identifying the barriers and challenges faced by the rheumatology-dermatology clinics is crucial for improving the quality of care. The primary challenges identified, namely limited clinic time and difficulties with patient follow-up, require attention to further optimize the model's efficiency and effectiveness. Strategies such as increasing the number and frequency of these clinics, expanding staffing resources, and incorporating telemedicine consultations could help to mitigate these challenges and maximize the benefits of this integrated care [14]-[17]. Future research should focus on long-term patient outcomes, patient stratification and cost-effectiveness to further validate the value of the rheumatology-dermatology clinic model in Kuwait.

Further steps are needed to improve this model, including increasing awareness and understanding of MDT care benefits in Kuwait, developing and implementing standardized, evidence-based protocols for managing overlapping diseases, and emphasizing ongoing research efforts. While our data provide valuable insights into physicians' perceptions and the efficiency of this model, it is important to note that it is not based on a randomized controlled trial, and the information was gathered solely from doctors in the facilities. Future research should involve larger sample sizes and incorporate patient data to better evaluate outcomes, as well as include patient perspectives on this type of care.

This initiative is the first of its kind in the region, and it is hoped that it will encourage other countries to adopt similar models. The collaboration between rheumatologists and dermatologists should also extend beyond clinics to include patient awareness activities and public education campaigns. Additionally, it can pave the way for integrated care involving other specialties, recognizing that rheumatologic diseases are generally multisystemic and require an MDT approach across different fields of medicine.

5. Conclusion

This pioneering effort to establish integrated rheumatology-dermatology clinics in Kuwait shows great promise in improving the diagnosis, treatment, and management of patients with complex, overlapping health conditions. The positive feedback and shared benefits from doctors involved in these clinics highlight the value of working together across specialties, which not only boosts medical knowledge and professional growth but also leads to better outcomes for patients. To make this model even more effective, we need to address current challenges like limited clinic time and follow-up opportunities by expanding clinics and incorporating telemedicine. As the first model of its kind in the Middle East, this initiative sets an example for other regions to follow, promoting a team-based, patient-focused approach to care for multisystem diseases. Moving forward, ongoing research focusing on patient outcomes and cost-effectiveness will be key to

refining and strengthening this model, ultimately helping to provide more coordinated, effective healthcare and improve quality of life for those with rheumatological and dermatological conditions.

Authorship Contributions

All authors contributed equally to formulating the survey questions, analyzing the survey results, conducting the literature review, and preparing this manuscript.

Agreement to Conditions

All authors have read and agreed to the manuscript's content and are accountable for its accuracy and integrity. The submitted article is an original work that has not been considered or reviewed by any other publication and has not been published elsewhere in the same or similar form.

Ethical Approval

Ethical approval was not required under local regulations for provider-only surveys.

Conflicts of Interest

The authors declare no conflicts of interest.

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