

COVID-19 Impact on Clients with Rheumatoid Arthritis: Literature Review

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Quantitative research involves measuring variables of interest and subsequent statistical data analysis (Houser, 2023). It provides the most substantial evidence for nursing practice because they enable the researchers to conclude the effectiveness of interventions (Houser, 2023). The COVID-19 pandemic forced the medical world into various uncertainties. It humbled the human race how a microscopic virus could swipe life off the Earth. The pandemic, with over 161 million confirmed cases and over three million deaths worldwide (Raiker et al., 2021), catapulted the medical world into researching the impact of COVID-19 to understand further the unexpected health threats to the whole human population with pre-existing risks factors worldwide. Twenty million people worldwide live with rheumatoid arthritis or RA (Zaccardelli et al., 2023). Most of these clients have been or will soon be infected with COVID-19 (Zaccardelli et al., 2023).

Outcomes of COVID-19 in Patients with Rheumatoid Arthritis: A Multicenter Research Network Study in the United States

The authors of the article, Raiker, DeYoung, Pakhchanian, Ahmed, Kavadiachanda, Gupta, and Kardes, investigate outcomes of the Coronavirus Disease-2019 (COVID-19) in clients with rheumatoid arthritis (RA) as compared to the general population (Raiker et al., 2021). Clients with RA share concerns about their potential heightened risk of acquiring COVID-19 infection and the worst outcomes (Raiker et al., 2021). When the authors did the research, only several studies addressed the implications of COVID-19 for clients with RA, with conflicting reports substantiating varying risks of severe COVID-19 (Raiker et al., 2021). A study conducted using US Veterans Affairs COVID-19 shared database found that RA is associated with a higher risk of hospitalization or mortality (Raiker et al., 2021). This article

explored different outcomes among clients with RA stratified by sex, race, and medication use through sub-cohort analyses (Raiker et al., 2021).

Key Points

This research was a retrospective comparative cohort study design informed by previous literature (Raiker et al., 2021). Data were collected using the TriNetX database, a federated health research network aggregating longitudinal electronic health records of 69 million clients from forty-nine US healthcare organizations with real-time updates (Raiker et al., 2021). A two-sided p-value less than 0.05 was considered statistically significant (Raiker et al., 2021). The TriNetX included a total of 9,730 RA clients with COVID-19 who are eighteen years of age or older, with a pre-existing diagnosis of RA, and were diagnosed with COVID-19 anytime from January 20, 2020, to April 11, 2021 (Raiker et al., 2021). The comparative cohort of 656,979 non-RA clients with COVID-19 was any adult without any history of documented RA diagnosed with COVID-19 at any time in the same period (Raiker et al., 2021). The study found that the risk of all COVID-19 outcomes was higher in RA compared to the non-RA cohort before matching (Raiker et al., 2021). However, the risk of the majority of outcomes, that is, mortality, hospitalization, Intensive Care Unit (ICU) admission, mechanical ventilation, severe COVID-19, acute kidney injury, KRT/hemodialysis, Acute Respiratory Distress Syndrome (ARDS), and ischemic stroke, did not significantly differ in both cohorts after matching, implying that the risk for the outcomes could be mainly attributed to age and comorbidities (Raiker et al., 2021).

Assumptions

The study expounded on the evidence of the relationship between RA and COVID-19 on clients during the pandemic. Present studies have established that the risk of all COVID-19 outcomes was higher in clients with RA than in those without RA (Raiker et al., 2021). Is there

truth to the question that if a client has RA, the outcomes are pretty bad, and they could have higher mortality when infected with COVID-19? When clients with RA get COVID-19 but take medications, will they likely survive? Is the risk factor of RA the only variable affecting the adverse outcome of the clients infected with COVID-19? The study's significant results and evaluations will help healthcare professionals understand and potentially expand future research if another pandemic arises.

Deficit/Conclusion

The authors' reasoning objectifies the correlation between clients diagnosed with RA infected with COVID-19.

It provided a richer insight into how the risk of having RA could affect outcomes when infected with COVID-19. Prior research findings show that clients with RA infected with COVID-19 have higher adverse outcomes than the general population (Raiker et al., 2021).

Through further evaluation, the risk of most outcomes did not significantly differ in both cohorts implying that the risk for these adverse outcomes could be mainly attributed to adjusted factors of age and comorbidities (Raiker et al., 2021). Furthermore, in-depth analyses are needed as the research study concluded that sub-cohort analyses among RA clients with COVID-19 showed that male sex, black race, and glucocorticoid use were associated with adverse outcomes (Raiker et al., 2021). The relationship between clients with RA and COVID-19 pandemic helps establish future research to further explore the impact of the pandemic not only on clients with RA but clients who suffer from other conditions prior to getting infected. Not accepting COVID-19's effect on RA clients would not show implications, but further research will improve nursing care practices in the future.

Telemedicine for Patients with Rheumatic and Musculoskeletal Diseases During the COVID-19 Pandemic; A Positive Experience in the Netherlands

In the Netherlands, March 2020 marked the start of social distancing and quarantine regulations due to the lack of vaccines or effective therapies (Bos et al., 2021). The article's authors, Bos, Tubergen, and Vonkeman, explored the impacts of technological methods of continuously delivering patient care for rheumatic and musculoskeletal diseases (RMDs) during the first months of the COVID-19 pandemic (Bos et al., 2021). In particular, telemedicine was the primary solution for providing patient health care, public health, and health education (Bos et al., 2021). Despite the available and appropriate technology, telemedicine was only used by 8% of the people in the United States in 2019 (Bos et al., 2021). This article explored the various facilitators and barriers that resulted in the increase of telemedicine from 10% to 90% of patient contacts in only the first week of lockdown (Bos et al., 2021).

Key Points

This research was a mixed-method design using quantitative and qualitative data from a cross-sectional survey sent to all the members of the Dutch Rheumatology Society (Bos et al., 2021). The study followed the CHERRIES checklist for reporting the results of Internet surveys (Bos et al., 2021). The survey was accessible from May 8 to May 22 through an announcement, plus a link provided in the bi-weekly e-mail newsletter of the Dutch Rheumatology Society (Bos et al., 2021). It also used a convenience sampling strategy (Bos et al., 2021). Data capture was automated via Google-forms (Bos et al., 2021). The article has never mentioned the p-value.

Seventy-five members of the Dutch Rheumatologist Society completed the survey corresponding to 17% of the total active members (Bos et al., 2021). The result of the study shows that 99% of the respondents were guaranteed continuity of care using the telephone, and

9% of the respondents were guaranteed continuity of care using video consultations (Bos et al., 2021). It also shows that the top three facilitators for telemedicine were less travel time, ease of system use, and shorter waiting period for patients (Bos et al., 2021). The survey also found three barriers: the possibility of performing physical examinations, difficulty estimating how the client is doing, and difficulty reaching the clients (Bos et al., 2021). The study also speculated that respondents were content with current solutions but felt insecure mainly because of the inability to perform physical examinations and missing nonverbal communication with clients (Bos et al., 2021).

Assumptions

The study dealt with evidence of the relationship between the increase in the use of telemedicine for RMD clients during the COVID-19 pandemic. The use of telemedicine during the COVID-19 pandemic might be a viable solution in the continuity of delivering care for RMD clients. Is it the only viable solution? Are there any other means or technological communication solutions available in this day and age? When RMD clients need care, is telemedicine the best option? The study will reveal several results and help understand and determine alternative solutions for delivering continuous care to RMD clients.

Deficit/Conclusion

The article's authors have proven that telemedicine helped deliver continuous care for RMD clients during the COVID-19 pandemic. It solidifies the results from the other two studies conducted in Italy, the report describing positive experiences with telemedicine consultations in Systemic Lupus Erythematosus (SLE) and psoriatic arthritis clients during the COVID-19 pandemic (Bos et al., 2021).

Telemedicine may be an efficient way to deliver care, but it may be more challenging than is often assumed (Bos et al., 2021). It entails new skills from clients and care providers, and the technical burdens can also play an integral role in a smooth conversation (Bos et al., 2021). Insurance coverage may also be an issue regarding this type of care delivery (Bos et al., 2021).

In conclusion, the COVID-19 pandemic rapidly evolved the care delivery for clients with RMDs (Bos et al., 2021). Telemedicine is a guaranteed form of continuity of care (Bos et al., 2021). It may be the future of delivering care for clients with RMDs, but it will only partially replace in-person consultations (Bos et al., 2021). Experts should conduct more research and studies for alternative solutions and care delivery.

Impact of COVID-19 Pandemic on the Management of Patients with RA: A Survey of Rheumatologists in Six European Countries

The article's authors investigated from the perspective of rheumatologists in Europe how the COVID-19 pandemic has impacted their management of clients with Rheumatoid Arthritis (RA) (Machado et al., 2022). The rheumatologists participated in the Adelphi RA Disease Specific Programme™ (DSP) in six European countries, including Belgium, France, Germany, Italy, Spain, and the United Kingdom, between August and September 2020 (Machado et al., 2022). This study explores the impact of the COVID-19 pandemic on how rheumatologists managed clients with RA amidst the challenges and how the clients reacted to the interventions. The article presented the changes from the six European countries in client management and the prescribing behaviors of rheumatologists during the pandemic (Machado et al., 2022). It also aims to educate the international rheumatology community to prepare better for future pandemics and to address the ongoing rheumatologist shortages (Machado et al., 2022).

Key Points

This research article is a telephone survey completed by 284 rheumatologists participating in the Adelphi RA Disease Specific Programme™ (DSP) from six European countries (Machado et al., 2022). DSP provided a cohort of providers to conduct a dedicated survey on how COVID-19 impacted client management and physicians' prescribing behavior (Machado et al., 2022). DSPs are large, multinational, observational studies of clinical practice for a range of common chronic diseases (Anderson et al., 2008). The DSP protocol used to collect the original sample and follow-up interview fulfills the definitions of market research as defined by European Pharmaceutical Market Research Association (EphMRA) guidance (Machado et al., 2022). The DSP methodology was then submitted to the Western Independent Review Board, which provided a letter of exemption from review (Machado et al., 2022). Ninety-six percent (96%), or 284 of the 316 rheumatologists, completed the supplemental survey (Machado et al., 2022). The reported changes in client management were summarized into increased utilization of video or telephone consultations (telemedicine), fewer visits, and limited physical contact (Machado et al., 2022). Furthermore, rheumatologists' prescribing behavior changed by switching their clients to self-administered medications and reported not starting clients on targeting biologics (Machado et al., 2022). Rheumatologists also reported that most clients expressed concerns about how the pandemic could impact treatment, access to treatment, and the risk of infection (Machado et al., 2022). There is no p-value found in the research article.

Assumptions

The authors of the research investigated the impact of the COVID-19 pandemic on the behaviors of rheumatologists from six European countries: Belgium, France, Germany, Italy, Spain, and the United Kingdom. It expounded on telemedicine and how effective this technology is as a quick solution during the pandemic. There were very few studies about telemedicine before the pandemic. Although studies are sparse, they indicate that video consultations are accurate, providing a valuable alternative to face-to-face visits when diagnosing, monitoring, and following up with clients with RA (Machado et al., 2022). As the researchers conduct this study in countries with stable and sound technological communication infrastructures, the research's viability does not include countries with mediocre technology and infrastructure. Does this study present an enduring solution throughout the world? Are the sentiments of other rheumatologists from other countries considered in the study? Could other possible solutions be available from other countries that researchers must explore?

Deficit/Conclusion

The authors' reasoning on the research objectifies the very viable and obvious solution of continuity of delivering client care during the COVID-19 pandemic.

As the world grapples with finding solutions to end and eradicate this threat, healthcare workers risk their lives as they fulfill their oath to humanity. The research presented the compounded sentiments of European rheumatologists on how the changes in their clinical practices caused by the COVID-19 pandemic (Machado et al., 2022). The research study summarized the themes as patient management, prescription behavior, continuing medical education, and client concerns (Machado et al., 2022).

Although telemedicine might be the obvious solution at the pandemic's peak, the researchers saw the differences between the sex European countries' responses (Machado et al., 2022). Given the potential benefits of remote consultations, it is vital to harmonize guidance on telemedicine so that issues with insurance reimbursement and to address client education around the risks of treatment and remote treatment devices (Machado et al., 2022). Furthermore, it is encouraged that researchers continue to search for more solutions to aid in anticipating a possible wave of pandemics in the future.

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