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FULL PAPER

Evaluation of the quality of life of psoriasis patients: A systematic review and meta-analysis

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Psoriasis is one of the common chronic skin diseases resistant to treatment and often debilitating, which is characterized by the formation of erythematous plaques with white and silver scales on the skin of various parts of the body such as hands and feet. Therefore, this study was conducted to investigate the QOL status of patients with psoriasis using a systematic review and meta-analysis. In the initial search, 87 articles were extracted, and finally 9 articles were included in the systematic review stage and 4 articles were analyzed to perform meta-analysis analysis. The results showed that M(SD) quality of life score was 13.69 [CI=11.08-16.31]. Given that the effect of psoriasis on the patients' QOL, which led to its reduction, it is suggested to take preventive and supportive measures to increase the QOL score.

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KEYWORDS

Psoriasis; quality of life; systematic review; meta-analysis.

Introduction

In the world, the prevalence of chronic diseases has had significant statistics that this factor has had negative effects and complications on the quality of life of patients [1-4]. In fact, chronic diseases reduce the patient's quality of life due to the fact that the patient has no hope of curing them and only tries to alleviate the pain and symptoms of the disease [5-7].

Psoriasis is a chronic inflammatory disease that seems to be caused by genetic and immunological influences so that the role of hereditary environmental factors on its inflammatory process has been proven. Psoriasis is a chronic, autoimmune, non-contagious disease that affects approximately 2-3% of the population and is evident at any age and gender [8]. Although the cause of psoriasis has not been precisely discovered, it seems that its origin is multifactorial and is mostly influenced by genetic and immunological factors [9]. Indeed, psoriasis occurs when the body's immune system sends faulty messages that lead to an increase in the speed of the growth cycle of the body's cells. The prevalence of this disease is the same in men and women and its onset may occur at any age [10].

Psoriasis is one of the common chronic skin diseases resistant to treatment and often debilitating, which is characterized by the formation of erythematous plaques with white

and silver scales on the skin of various parts of the body such as hands and feet [11]. This disease can have alternating periods of activity and shutdown due to environmental and systemic factors such as stress and infection so that one of the characteristics of psoriasis is frequent periods of remission and recurrence of the disease [12]. The incidence and prevalence of psoriasis varies according to age, gender, geographic region, and genetic and ethnic characteristics of people in the world. It also seems that a combination of environmental and genetic factors influences these differences [13-14].

Currently, there are various treatments for psoriasis depending on the severity and type of the disease [15-17]. But despite the available treatments, this disease will leave various complications for patients. Among the complications caused by psoriasis, we can mention inflammatory diseases of the intestines and joints, cardiovascular diseases, obesity, diabetes, and metabolic syndrome, which increase the severity of these complications with the occurrence of this disease [18-20].

Among other complications of this disease, we can mention the psychological complications caused by it. In fact, this disease does not only affect the body, but also leaves important social and psychological disorders so that patients with psoriasis are more exposed to diseases related to mental health compared to the other patients. High depression and anxiety scores, lack of self-confidence, obsession, difficulty, or verbal expression of feelings, anger, embarrassment and other psychosocial disorders have been reported with psoriasis [21-23].

Quality of life (QOL) has two psychological and physical dimensions. The psychological dimension is very important [24-26]. Accordingly, the QOL of these patients is affected due to the physical and mental complications of psoriasis. Today, QOL is considered as an important part of the important criteria for the treatment of diseases. Currently, QOL is one of the major concerns of politicians and experts and is used as an important indicator to measure health status in research related to medical sciences. In fact, in addition to the discussion of the quantity of life and the length of life, what is important and necessary for the patient is the discussion of QOL [27-29].

QOL is a wide range of human experience, including daily needs such as food and housing, intra- and interpersonal responses to illness, and activities related to professional success and happiness [30,31]. The World Health Organization (WHO) defines QOL as "a person's understanding of his place in life, in the context of the culture and value systems in which he lives, and in relation to his goals, expectations, standards, and concerns." Also, in recent years, improving the QOL performance of patients with chronic diseases has become an important health priority [32-33].

Aim

Examining patients' QOL is very important and can provide complete and comprehensive information to researchers and health policy makers. Thus, this study was conducted to investigate the QOL status of patients with psoriasis using a systematic review and meta-analysis.

Experimental

Method

In this systematic review and meta-analysis study, the QOL status of patients with psoriasis was investigated. Data search was done using the keywords of quality of life, psoriasis, skin diseases, prevalence, evaluation, investigation, and complications. The search was carried out during 2000-2023 and all the steps of the search were carried out by two researchers. Likewise, if there was a difference of opinion in the number of observed articles, the quality of the articles, or their content, the search was

done by a third person and the final decision was made by the third person.

The search was conducted in Google Scholar, all domestic databases of Iran as well as international databases such as Scopous, PubMed, ISI, Embase and the results were extracted using the researcher's checklist.

Finally, data analysis was done by CMA software.

Result

In the initial search, 87 articles were extracted, and finally 9 articles were included in the systematic review stage and 4 articles were analyzed in order to perform meta-analysis analysis. The results showed that M(SD) quality of life score was 13.69 [CI= 11.0816.31] (Figure 1).

In various reports, the status of QOL in patients with psoriasis has been investigated, which are as follows:

In the study of Farahangiz *et al.*, where the QOL of psoriasis patients was evaluated using the SF-36 questionnaire, M(SD) Physical functioning score was 80.08(4.5), Role-physical score was 77.08(19.75), bodily pain was 67.05(18.77), vitality score equals 38.9(9.03), general health perception score equals 44.15(17.4), social functioning score equals 61.84(13.49), role-emotional score equals 53.47(20.22), general mental health score equals 51.83(8.86), general physical score health was equal to 52.03 (11.81), and the overall score of mental health was equal to 67.02 (12.2) [34].

In the study of Moradi *et al.*, in which QOL was examined in 71 patients using the DLQL questionnaire, the M(SD) score was 10.19 (6.46). Also, skin complications in Ankles equal to 24 (38.7%), in Armpits equal to 11 (17.7%), in Elbows equal to 24 (38.7%), in Face/forehead equal to 17 (27.4%), in Forearms equal to 21 (33.9%), in Hand/palm, it was equal to 15 (24.2%) [35].

In a study by Soltandehghan *et al.*, where 99 patients with psoriasis were examined with the DLQL questionnaire, the corresponding M(SD) score was 14.26 (9.41). Likewise, the severity of psoriasis in 18 (18.19%) of the patients was mild, 36 (36.36%) of the patients were moderate, and 45 (45.45%) of the patients were in severe [36].

In a study by Abedini *et al.*, where 100 patients were examined using the DLQL questionnaire, the corresponding M(SD) score was 12.1(5.9) in women and 9.2(6.6) in men. Similarly, in terms of severity, 67(67%) was equal to Mild, 25(25%) was equal to Moderate and 8(8%) was equal to severe [37].

In Eftekhari *et al.*'s study of 123 patients using the M(SD) score in the mild range was 10.21(8.25) and in the moderate range was 11.44(6.14). Likewise, the M(SD) score of the patients' age was 40.77(0.73) [38]. In Aghaei *et al.*'s study, where 125 patients were examined with the DLQL questionnaire, the M(SD) score was 10.3(5.2). Furthermore, M(SD) was equal to 34(13.4) [39]. In the study of Zandi *et al.*, where 97 patients with psoriasis were examined using the DLQL questionnaire, 55.7% of the patients were male and the average age of the patients was 35.3 years. The QOL status was at its lowest in the age range of 25-40 years and 40-50 years. Of course, this difference was not significant. Likewise, M(SD) was equal to 14.05(1.5) in all women, 15.02(1.4) in men and the overall average was equal to 14.1 [40].

In the study of Nabaei *et al.*, which compared the QOL of psoriasis and healthy individuals, the QOL status of the patients was evaluated using the SF-36 questionnaire. According to the findings, M(SD) mental health score was 46.82(25.88) and physical performance score was 80.36(22.85).

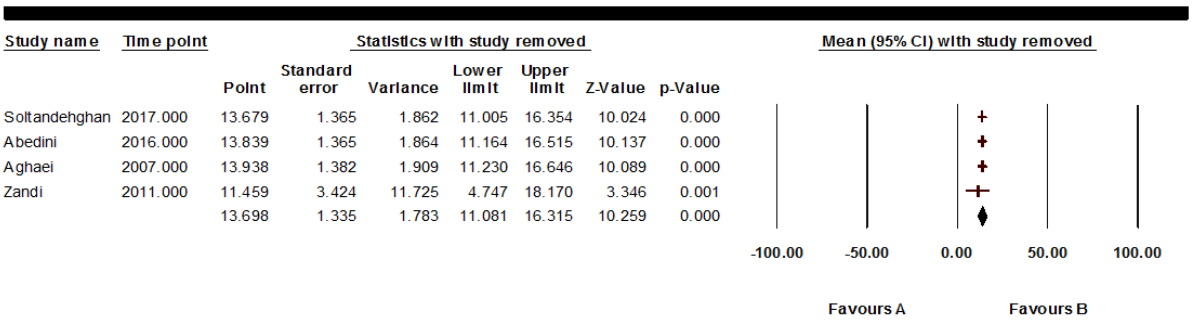

FIGURE 1 Investigating the average M (SD) of patients with psoriasis by meta-analysis

Discussion

This study was conducted to investigate the quality of life of patients with psoriasis. The results showed that psoriasis had led to a decrease in the quality of life in most patients. Also, in 4 original articles that specifically examined the QOL status of psoriasis patients using the DLQL questionnaire and entered the meta-analysis stage, they showed that the QOL status of patients is low.

In a study by Souza *et al.*, 118 patients with psoriasis were examined, and their QOL was lower than other people, and the mean QOL score was 6.5, which indicates that it is lower [41]. In the study of Purzycka-Bohdan *et al.*, the M(SD) score of the DLQL tool in 1080 patients included in the study was equal to 12.01 (7.41), which is lower than the results of the study [42]. In various studies, the status of QOL and the complications of psoriasis have been examined, and most of the relevant studies show a decrease in the quality of life in these patients, and it is consistent with the results of this study that psoriasis affects QOL [43-50].

In the study of Sendrasoa *et al.*, 38 patients had a score of less than 10 and 42 patients had a score of more than 10 in the field of quality of life, which indicates the impact of psoriasis on the quality of life of patients [51]. Likewise, in Belachew *et al.*'s study, which examined 422 psoriasis patients, the M(SD) QOL score was 13.05 (7.82) [52]. Psoriasis may lead to disability and will have an adverse effect on patients' lives and will be associated with pain and suffering. Also, due to problems related to the quality of life, these patients do not want to participate in social, family and work activities [53-56].

Conclusion

Concerning the effect of psoriasis on the patients' QOL, which led to its reduction, it is suggested to take preventive and supportive measures to increase the QOL score.

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Authors' Contributions

All authors contributed to all stages of preparing this article.

Conflict of Interest

The authors declare that there is no conflict of interests in this study.

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