

Figure 5. Dermatologist Survey Questionnaire- Survey Questions.

Results

With respect to the two variations of both distributed surveys, the results are as follows: The Patient Survey received 15 total participants, whereas the Dermatologist Survey received a total of 3. It is important to acknowledge that the dermatologist results produced were from a total of 3 doctors, 2 of which specialized in a field: in one rheumatology and the other in dermatology, and the other remaining doctor in general medicine. Despite differences in specialization, all doctors confirmed having treated patients with MF; thus, the potential disparities of these differences are of little to no significance with regards to the validity of the results.

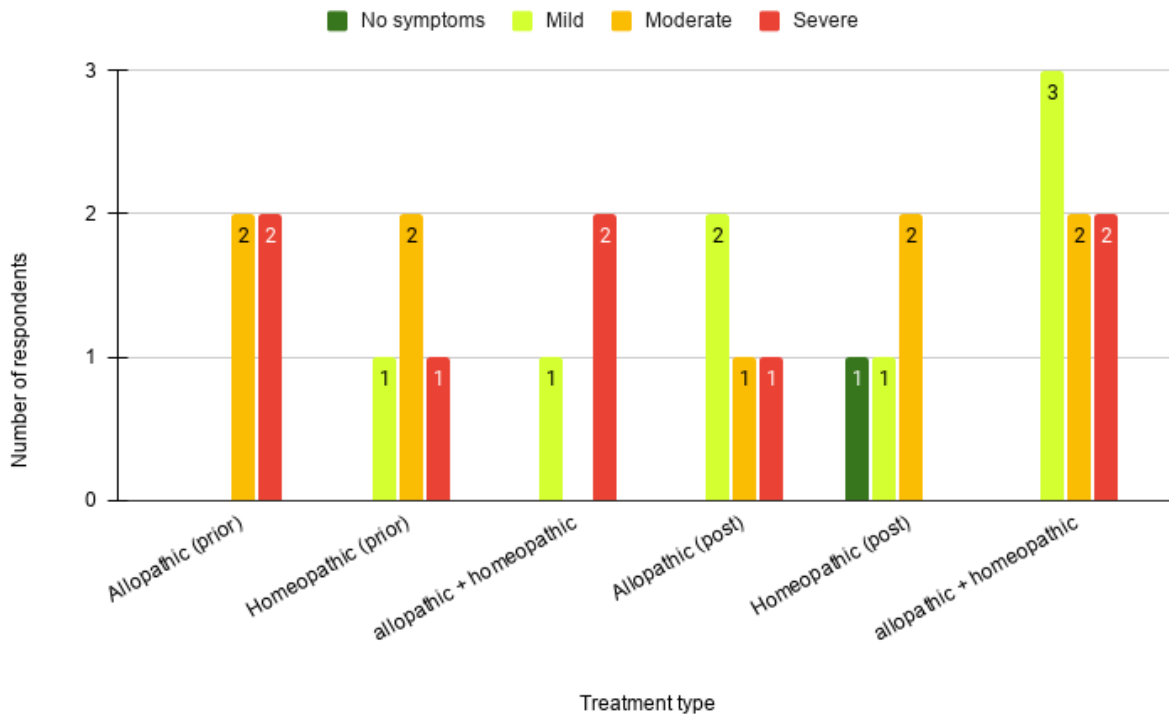
The Patient Survey received 16 total responses with the omission of one participant that reported having not received treatment for MF in the preliminary questions, which disqualified and removed them from participating in the survey questionnaire. Thus, the following data pertains to the 15 remaining participants who were able to respond. Again, the notations are of the following format: [Treatment type - Manner in which taken]. The participants generated data under 6 of the 9 treatment categories mentioned before: [Allopathic - Topical], [Allopathic - Oral and topical], [Homeopathic - Topical], [Homeopathic - topical and oral], a partial combination treatment [Allopathic + homeopathic - topical], and a complete combination treatment [Allopathic + homeopathic - topical + oral]. Overall, the Patient Survey received more feedback than the Dermatologist Survey.

For background, 6 out of 15 (40%) of the total participants reported having been on antibiotics at the time of treatment. It is important to note that antibiotics are notoriously known for, both empirically and anecdotally, interfering with the skin's naturally occurring microbiota and encouraging the proliferation of MF [9]. 7 out of 15 (46.66%) of the total participants were treated in continental areas, characterized by varying warm-cool summers and very cold winters, 6 out of 15 (40%) in temperate areas with warm, humid summers, thunderstorms and mild winters, 1 out of 15 (6.66%) in tropical (hot and humid with lots of precipitation) and 1 out of 15 (6.66%) in arid areas (dry, little precipitation). Temperate and tropical climates typically have higher humidity than their drier, cooler counterparts, which is known to be optimal for MF pathogenesis and the exacerbation of its symptoms [10]. Despite these apparent setbacks, results demonstrated progress, notably for the complete combination treatment of allopathic and homeopathic medicines taken both topically and orally [Allopathic + homeopathic - topical + oral].

With respect to the physiological tendencies of MF, the data documents that 14 out of 15 (93.33%) of total surveyed patients were affected on the face, 9 out of 15 (60%) on the chest, 8 out of 15 (53.3%) on the upper back, 6

out of 15 (40%) on the shoulders, and the remaining 3 (19.98%) participants entered a custom response for “trunk,” “legs and armpits,” and “scalp.” Prior to the administration of treatment, 12 out of 15 (80%) total participants reported having frequently dealt with abnormalities in skin texture, 13 out of 15 (86.66%) with inflammation (pimples, breakouts), and 14 out of 15 (93.33%) with irritation (itching, redness, pain). The remaining amount was represented by one participant who reported back a custom entry for “extreme itchiness.”

Thus, the data reflects that the most prominent MF- induced symptoms are irritation, inflammation, and grittiness of which have a tendency to concentrate on areas like the face and chest.

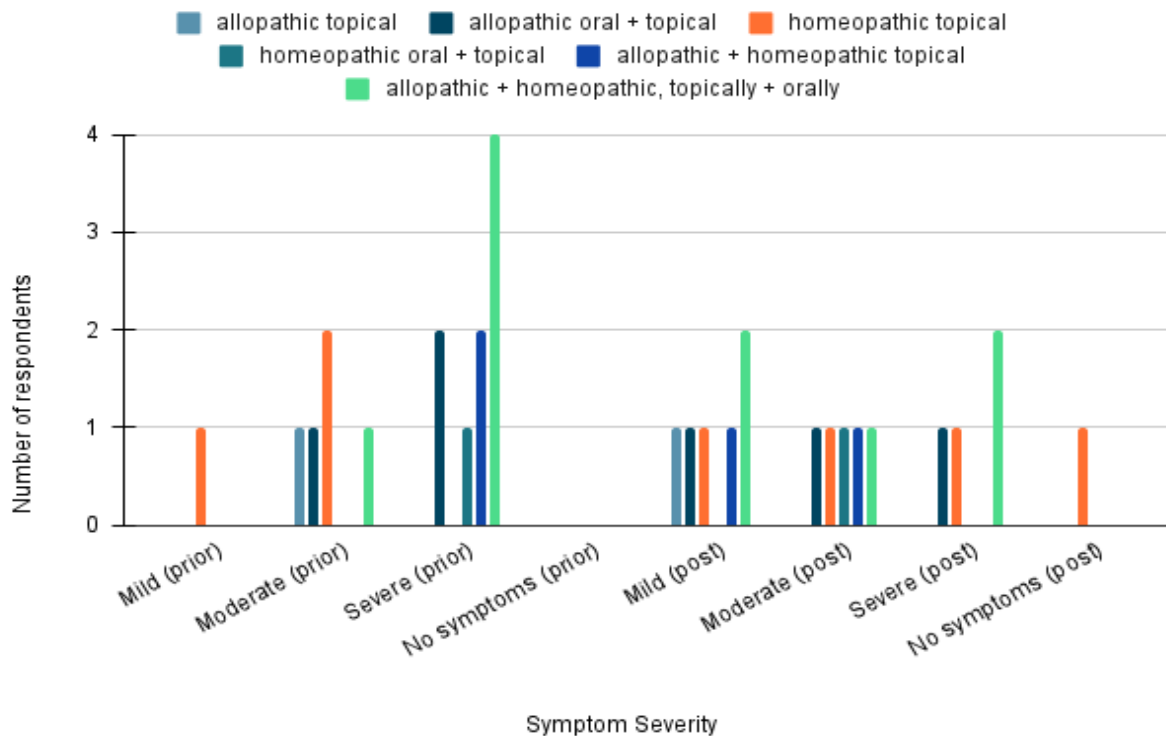


An abundance of patients experienced relief after treatment, with over 60% of the total participants experiencing improvement in the feel and texture of the skin, a visible reduction of inflammation and of irritation, with only 20% of participants reporting no improvement. Regarding skin severity, the data shows a significant shift in population percentage under different categories.

Prior to treatment, 50% of allopathic users experienced severe and moderate symptoms, but after treatment, that percentage has been reduced to 25%. Contrastingly, homeopathic users found no change: the ratios stayed the same prior and post treatment. The data produced from the Patient Survey reveals that allopathic medicine accomplishes a more significant decrease in MF amongst patients than does homeopathic medicine. However, the data pales in comparison to the partial combination treatment [allopathic + homeopathic], which shows the greatest range difference in data. These values will be visually compared in Graph 1. On the left of the graph, which shows skin severity prior to treatment, the combination treatment shows 1 response for mild, and 2 for severe. Post treatment, however, there was an increase in reports for mild symptoms, with 3 participants reporting back the change. Moreover, 2 more participants clustered under moderate symptoms, which demonstrates improvement from the previous reports under just mild and severe reports. This suggests that a combination of allopathic and homeopathic treatments can prove more efficacious than the two alone.

Interestingly enough, participants who had taken a *combination* treatment of *both* allopathic and homeopathic medicine had experienced a 50% decrease in the number of participants who reported experiencing severe symptoms and a 40% increase in the number who reported experiencing mild symptoms. This means that the data used to heavily cluster under “severe” symptoms, but after combination treatment, data began to cluster under “mild” and “moderate” symptoms- largely. This suggests the efficacy of combination treatment. This suggests that although allopathic medicine (especially when taken orally) *does* trump homeopathic medicine alone, a combination treatment may be most efficacious in delivering the most significant results in the reduction of MF.

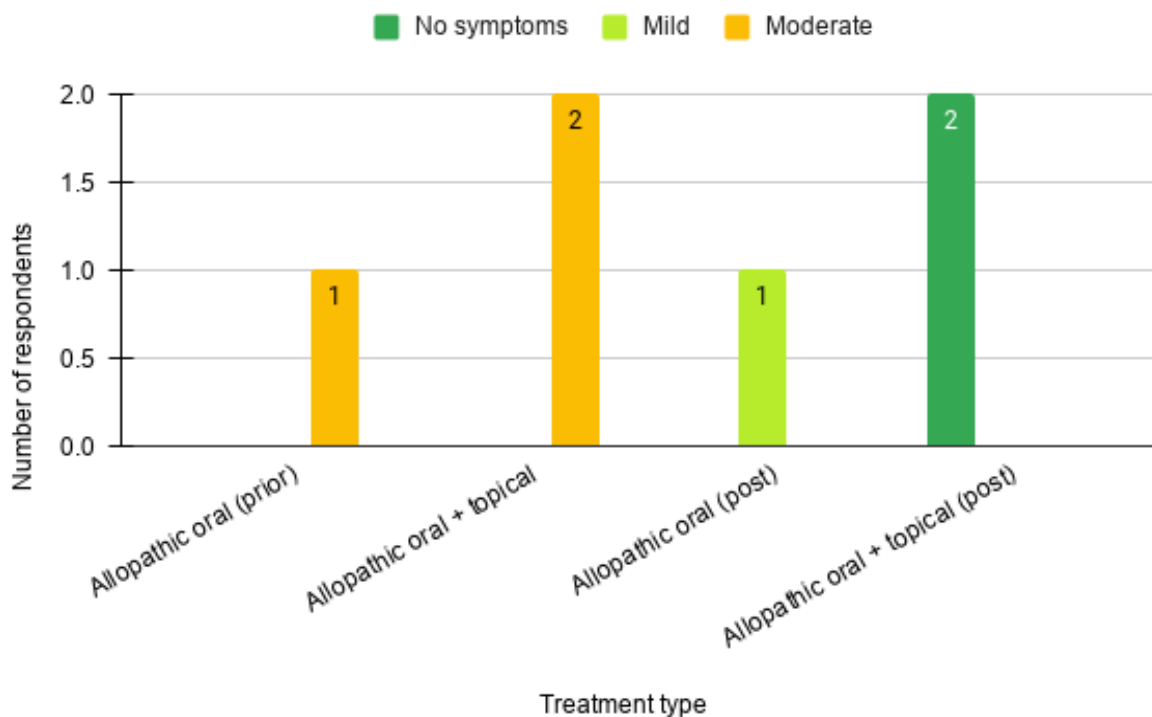
As a subset of the above conclusion, the Patient Survey also produced ancillary data that explored the most efficacious manner in which to take the combination treatment, represented below in Figure 7. Although it is established that a combination of allopathic and homeopathic treatments may be more efficacious than when given treatments independently, the survey data suggests that the manner in which the combination is taken can impact efficacy.



40% of respondents reported taking antibiotics at the time of treatment. Note that one specific report from a participant said that the “antibiotics worsened it,” with “it” in reference to MF. The average length of treatment was 22 days. The Dermatologist Survey showed that prior to the administration of treatment, 2 medical professionals reported that patients frequently dealt with abnormalities in skin texture as well as with inflammation and irritation, as shown below in Figure 8. Of those breakdowns, all who had been administered allopathic medicine orally had experienced inflammation and irritation prior to treatment, while all who were administered a combination of allopathic medicine both topically and orally had experienced abnormalities in skin texture, inflammation (pimples, breakouts) and irritation (itching, redness, pain) prior to treatment. The most frequently affected areas of the body were shown to be the upper back and shoulders (all doctors reported), followed by the chest (2 out of 3 doctors reported) and lastly, the face (1 out of 3 doctors reported), respectively. All 3 doctors reported that patients who were administered allopathic treatment reported moderate symptoms prior to treatment. In the follow-up visits, the medical professionals noted an egregious improvement in the skin of their patients, with a complete eradication of MF for those who were administered a

combination of allopathic medicine both topically and orally; whereas those who administered solely allopathic medicine orally, without combination, saw an incomplete, partial eradication. This shows that 2 out of 3 doctors who used a combination treatment found it to be completely successful, while those who did not employ a combination treatment, despite using allopathic medicine, did not encounter a complete success. The relief was characterized by an improvement in the feel and texture of the skin, a visible reduction of inflammation, and a reduction of irritation. More specifically, patients who were administered the combination of allopathic medicine topically and orally [allopathic - topical + oral] experienced a complete relief with all of their previous skin problems.

Furthermore, patients who were administered solely allopathic medicine orally [allopathic - oral] reduced their overall skin severity from “moderate” to “mild,” whereas those who were administered the combination of allopathic medicine both topically and orally [allopathic - topical + oral] reduced their overall skin severity from “moderate” to “no symptoms.” Thus, the data demonstrates a greater leap of improvement in skin severity in patients who were administered allopathic medicine both topically and orally than just orally alone, suggesting the greater efficacy of a combination treatment in eradicating MF. When compared with the data from the Patient Survey, the argument for the efficacy and versatility of a combination treatment for MF remains strongly evident, and specifically one that encompasses all combinations of the medicine types: An allopathic and homeopathic dosage used both topically and orally [allopathic + homeopathic - topical + oral]. To note, none of the total patient population experienced any severe side effects from treatment, and the average length of treatment was 22 days.



Discussion

Given that across both survey questionnaires, allopathic medicine taken orally [allopathic - oral] and homeopathic medicine applied topically [homeopathic - topical] delivered the most significant individual improvement, the data suggests that a combination administration: allopathic and homeopathic medicine taken in both topical and oral form [allopathic + homeopathic - topical + oral], is most promising in reducing MF. This is further exemplified through the 66% decrease in the number of participants who reported experiencing severe symptoms and the 42% increase in the number who experienced mild symptoms. These statistics are similar to the ones of the simple combination

treatment of allopathic and homeopathic medicine mentioned previously, though they are slightly higher, indicating more improvement. This rationalizes why addressing the manner in which medicine is taken is significant to the eradication of MF.

As all of its responses collected data only for “allopathic” treatment, the Dermatologist Survey produces no statistical standard of comparison independently, which renders it infeasible to have any independent conclusions drawn from it regarding the comparative efficacies of allopathic and homeopathic treatment types. To reconcile these disparities, the Dermatologist Survey was compared to the Patient Survey to identify underlying trends in data amongst both patient and medical professional populations and concluded that allopathic treatments often work better than homeopathic ones. It found further, however, that a complete combination treatment of allopathic and homeopathic medication taken topically and orally [allopathic + homeopathic - topical + oral] was most efficacious in reducing dermal *Malassezia* folliculitis. Such is represented by Table 1, below.

Table 1. Overlapping Data Trends between the Patient Survey and Dermatologist Survey.

	Patient Survey Results	Both	Dermatologist Survey Results
Allopathic treatment as a whole (taken either topically or orally)	From severe symptoms prior to treatment to mostly mild and moderate post treatment.		From all experiencing moderate severity prior to treatment, to mild and no symptoms post treatment.
Allopathic oral + topical	From all experiencing severe symptoms prior to treatment to an even distribution. of mild, moderate, and severe post treatment.	Significant improvement. Efficacious treatment.	All users saw a full eradication of MF. From moderate symptoms prior to treatment to no symptoms post treatment.
Allopathic oral alone			Incomplete but significant eradication of MF. From moderate symptoms to mild.

Conclusion and Implications

Evidently, the Dermatologist Survey reaffirms the efficacy of allopathic medicine over homeopathic medicine (holistically and generally, taken either orally or topically), as was demonstrated in the findings of the Patient Survey. The overlaps in the data also further the principle of using a combination treatment for the strongest eradication of MF, which is implementing allopathic and homeopathic treatment both topically and orally. Regarding the purpose of the research, the conclusion is that allopathic treatment is in fact wholly more effective than homeopathic treatment when compared independently. The study produced a further finding that closed unfinished hypotheses in previous dermatological studies that proposed that a combination treatment was most effective. The final finding from the study was that which further described the most efficacious form in which to take treatment, which is both topically and orally. The data holistically suggested that the combination treatment, [allopathic + homeopathic - topical + oral] could be most efficacious in eradicating MF.

Future Research

As the study suggested that homeopathic medicines do, in fact, have merit in the medical sphere, the usage of these medicines should be further researched in a setting that controls confounders such as diet and climate. The efficacious potentiality of the combination treatment [allopathic + homeopathic - topical + oral] across different regions should also be studied. Doing this will provide more clarity on the individual efficacy of the treatment unaffected by potential confounders, and can assist in reaching a more definite, thorough conclusion on the comparative efficacies of allopathic vs. homeopathic treatments in reducing MF. The aim of the study is then to encourage dermatologists and doctors to focus attention on and consider combination treatments that include homeopathic medicine as an improver of MF, since the inclusion of homeopathic medicines as part of combination treatments has proved to hold promise. In considering this, more research can be done in the dermatological sphere to reconcile the aforementioned limiting disparities of this study: climate, diet, COVID-19. The overarching aim is that, with more research, more attention is given to the potential relief and satisfaction of patients and dermatologists alike with respect to MF.

Limitations

Recall that in the Patient Survey, 40% of respondents reported taking antibiotics at the time of treatment. Antibiotics, as mentioned previously, can interfere with the skin's microbiome and tamper with MF growth. This could affect data relating to treatment efficacy, though, in this study, no significant impact was found.

The Dermatologist Survey received especially less participants than the Patient Survey which was due largely in part to COVID-19 and its restrictions on social activity. As it was holistically difficult to get responses from dermatology offices, the Dermatologist Survey results produced came from a total of 3 doctors, 2 of which specialized in a field: in one rheumatology, one in general medicine, and the other in dermatology. Furthermore, patients were in a tropical environment at the time of treatment, which, again, is characterized by high levels of precipitation and humidity known to be optimal for MF pathogenesis and the exacerbation of its symptoms [10]. This setback did not seem to be of much significance to the data in this survey, however, as different outcomes still persisted.

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