Fasciatherapy and Reflexology compared to Hypnosis and Music Therapy in Daily Stress Management

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Background: **Patients suffering from stress symptoms due to every-day life who are looking for a non-pharmacological response to their relief expectation are many. Furthermore, early reckoning of the day-to-day stress which may lead to clinical diagnosis is the best way of preventing the stress-related diseases. Among the many alternative medicinal options, there is little evidence that fasciatherapy (Fs) and reflexology (Rf) are effective in this field.**

Purpose: **assess incidence of fasciatherapy Danis Bois Method (DBM) and of reflexology on patients' stress level in everyday-life, and provide a more informed choice among the numerous mind and body techniques by comparing them with hypnosis (Hp) and music therapy (Mt).**

Settings: **Specialized Complementary and Alternative Medicine (CAM) centres for outpatients.**

Participants: **308 individuals (average age = 50.53 SD 14.37, 93 males, 215 females) going to the centres for health care, but free from serious diseases and not heavily medicated respecting the inclusion criteria and providing valid forms.**

Research Design: **Four armed, non-randomized observational pragmatic trial with pretest–posttest repeated measures, on separate samples of natural groups.**

Intervention: **According to the centre participants where they used to be treated, they were exposed to a single semi-standardized session of a technique of their choice: Fs, Rf, Hp, Mt. Volunteers had a controlled non-intervention resting (Rt) session.**

Main Outcome Measures: **Mean STAI-Y assessing anxiety as reflecting the stress level: MANCOVA and ANCOVA performed with Tukey's HSD.**

Results: **MANCOVA indicates a significant reduction of anxiety ($p < .01$) in each condition, resting included. ANCOVA performance adjusting on stress level in T0 (41.73) and on the mean sum-score of the trait (44.89), Fs (-13.92), Rf (-15.92), and Hp (-15.88) were equally effective on the stress level decrease. Mt (-10.0) and Rt (-6.38) showed the same level of effectiveness.**

Conclusions: The results suggest fasciatherapy DBM, hypnosis, and reflexology could be used as non-pharmacological and safe interventions in stress management. Though showing a lesser efficiency, music therapy could be useful in different circumstances.

KEY WORDS: fasciatherapy; reflexology; hypnosis; music therapy; single session; daily stress; STAI-Y

INTRODUCTION

Hans Selye quite relevantly said: "Life without stress is death".[1] Anyone can be afflicted by stress which is both a social and an individual issue. On the one hand, individuals with stress brought on by daily life who are looking for a response to their expectation of relief are many. It has been estimated that 75%–90% of all visits to primary care physicians are for stress-related problems.[2] And of all the names more or less satisfactorily given to the response to this request for mind and body adaptation, in other words for resilience,[3] due to its very generic meaning, stress management is the name we came up with. On the other hand, from a medical point of view, an early reckoning of the day-to-day stress which may lead to a clinical diagnosis is the best way of preventing the stress-related diseases. These two concerns illustrate that stress management is a public health issue.

In our experience, after undertaking a session of manual therapy such as fasciatherapy (Fs) or reflexology (Rf), patients usually relay how relaxed and relieved they feel—even when the purpose for which they came was far from the stress concern. The research question is based on this iterative report in the everyday practice. Thus, the question is: Do these techniques have de-stressing inherent properties? The aim being their rational assessment.

Assessing CAMs in stress management is the subject of many previous studies.[4] They were run in

medical contexts well known to be stressing,[5] such as surgery[6] or in pain inducing medical procedures.[7] This new study aims at assessing the incidence of Fs and of Rf on patients' stress levels in everyday life. This study assumes a de-stressing effect produced by the Fs and the Rf processes, and is expected to demonstrate the latter in concrete and measurable outcomes.

As noticed in practice, this relaxing and alleviating effect would spread during the session given to all outpatients going to manual therapists to be relieved of non-heavy diseases and disorders. The main objective of this study is the measurement of a difference in the stress level of these patients immediately before and after treatment in Fs and in Rf. The secondary objectives belong to the field of comparison. Their purpose is to look for a difference of efficacy between Fs and Rf. These two methods are both mind and body therapies of bottom-up mechanism, initiated by stimulation of peripheral receptors as somato-, viscero- or chemosensory receptors that influence central neural processing and mental activities from the periphery to the brain system and cerebral cortex.[8] To compare them to others but of top-down mechanism (initiated via mental processing at the level of cerebral cortex), two more arms are implemented with, respectively, Hp and Mt. A non-intervention resting arm is the control group.

The effects of Fs and Rf on stress have been previously studied. In this study, among the various methods of Fs, the Danis Bois Method (DBM),[9,10,11] was applied (further described in the Methods section). The status of evidence for this type of fasciatherapy in stress management results in qualitative studies on well-being, self-consciousness, and health.[12,13,14,15,16] Pilot quantitative studies assessing the stress level using the STAI instrument have also been conducted (see Discussion section). Despite these very pertinent studies, quantitative research on a large scale remained to be carried out to provide stronger evidence. Like Fs, Rf has a status of evidence in stress management, shown to be useful for relaxation, stress reduction, or anxiety relief.[17] The level of evidence results in methodologic[18] and basic research,[19] and in both qualitative[20,21] and quantitative clinical trials. But the latter, contributing to the edification of arguments, focused interest on stress and anxiety in seriously ill people. Thus, to our knowledge, Fs and Rf have not yet significantly shown their capability in stress management among the general population.

METHODS

This study is a four-armed, pragmatic, repeated measures observational trial of pretest–posttest design assessing Fs, Rf, Hp, and Mt. The study was carried out in multiple specialized centres in which the practitioners operated with their own technique. Thus, sessions were given at the physicians' surgery and at manual therapists' practices. Depending on which centre the participants attended, they were exposed to a single session of the technique of their choice; thus the study was a non-randomized trial (NRT) on separate samples of natural groups. A non-intervention resting control group, consisting of volunteers resting on their own, was enrolled among the clients of these centres.

Being a non-interventional study involving no modification in the management of patients, local IRB approval was not required[22] at the baseline date of inclusion (January 2013). Given that the created database collected no information on critical subjects such as ethnic group, religion, opinions or morals,[23] the study is exempted of written consent.[24] The study participants gave their oral informed consent, and coded IDs were implemented for data anonymization and privacy protection.

Participants and Inclusion Criteria

The participants of this study are adults of 18 years or older. The outpatients were non-naive in the method, free from serious diseases, and not heavily medicated. Women were not in the 3rd trimester of pregnancy, known to increase the level of anxiety.

Outcome Measures

As reflecting the stress level, anxiety[25] was measured using the self-administrated Spielberger State-Trait Inventory[26,27] in its French adaptation.[28] Being robust and valid, this instrument is seen to be by far the most widely used "questionnaire" to measure anxiety. This feeling of worry, nervousness, or fear about an event or a situation is a normal response to stress[29] and considered as the best clinical indicator of stress at time *t*.

The nature of the anxiety is emotion, a negative emotion connected to anticipation and apprehension. In this study, this instrument was also chosen for its sensitivity and capability in measuring anxiety variation.[30] The STAI is made of two separate sub-scales of 20 items each, one evaluating how anxious a person is feeling at a particular moment, the second being dedicated to the trait anxiety of the personality—how dispositionally anxious a person is across time and situations. The State-STAI was administrated immediately prior to (T_0) and following (T_1) treatment, to assess changes in transitory anxiety experienced by patients. The Trait-STAI was recorded only before the session, in continuation of the state evaluation, in order to produce a referent and usual level of anxiety to be compared with the initial and terminal states. The sum of the 20 items score spans from 20 to 80. These scores increase in response to psychological stresses, and are categorized as very high (> 65), high (56 to 65), medium (46 to 55), low (36 to 45), and very low

(< 35).[28] A cut point of 39–40 has been suggested to detect clinically significant symptoms.[31]

Protocol

The protocol was established on the following pattern (Table 1). When arriving in each centre, the persons were provided with a brief description of the purpose and value of the study and, if needed, were given clarification. After receiving their acceptation, the persons were provided with instructions for using the French validated and full-length version of the STAI inventory. It was recommended to be completed in a first reaction, the person being left alone to complete the form. Beyond giving the session, the practitioner's role was restricted to giving and collecting the forms only, while the assessor's role was scoring the scales and recording the scores. The assessment of the stress level at the baseline and at the end of the session depends on the sole responsibility and the subjectivity of the patients reflecting their feeling, which is the subject of the study.

Interventions

We will provide a short description of the four techniques carried out. A short intake is gathered at the beginning of every session in order to collect information about how the individual feels on the moment, about the important events of the recent past, and expectations for the session. Since these patients were outpatients, the general health data had already been recorded. Time session of Fs, Rf, and of Hp is not totally calibrated and depends on circumstances and on what emerges during each session, but the minimum duration is 40 min.

Fasciatherapy

The patient being usually in a supine position, Fs practitioner's first touch is an evaluation which aims at taking stock of the consequences of the dysfunction in the body. Its therapeutic side is an application of gentle, superficial or deep pressure and stretching on the tissues, in accordance with the initial perception of the additive tensions[32] and of the perturbations of the rhythms of the "sensorial movement". As unfolding and stretching of the tissue reaches its maximum amplitude, a stop of the therapeutic movement accompanied by the hand, or provided to the tissues if the inherent movement is lacking, gives the occurrence of the phase of regulation. This supporting point is held, until tensions are released and as a result, spreads a tangible reduction in muscle and tissue tone,[33] restoring the body's balance.

Table 1. The Sequence of the Protocol

1. Information of the person about the study and receiving his acceptation
2. Assessment for eligibility (Excluded due to not meeting inclusion criteria = 3)
3. State-STAI administration immediately prior to the session
4. Trait-STAI recorded in continuation of the initial state evaluation
5. The person takes the convenient position for receiving the care session
6. The given session
7. State-STAI administration following immediately the session when becoming clear minded enough for it.
8. Anonymization and collection of forms
9. Scoring the scales, exclusion of incorrectly completed forms (4), recording the scores

Reflexology

With the person in a comfortable supine or a sitting position, the reflexologist provides a foot, palm, back, or head relaxing care, for a better stimulation.[34] Reflexologists select the reflex zones for the problem and, depending on the sensitivity of the individual and his symptoms, target some of them which are to be treated to increase the well-being of the person. Then they stimulate the interacting regions by specific pressures for about 3 to 5 min.[34] At the beginning of the first session, the reflexologist had adjusted with the person the type of Rf to be carried out—foot, palm, head or facial stimulation—[35] but throughout the series of sessions, adaptation of the protocol may be decided.

Hypnosis[36]

First the person settles comfortably in a relaxing armchair, then the hypnotherapist starts the session with a relaxing induction. Afterwards, the practitioner motivates him to search in thought for a place to relax in. Then, according to the personal concerns the patient expressed during the preliminary discussion, a metaphorical tailored work is proposed. Before proceeding with the return to the ordinary state of consciousness, the patient's work is orientated in mobilizing personal resources, by the means of some suggestions motivating him. Time session is not totally calibrated and depends on circumstances and on what emerges during the hypnotic stage, a longer post-session talk time being sometimes requested.

Music Therapy

To the people who wished relaxation with the support of Mt, according to the recommendations,[37,38,39] a choice was offered between three different musical programs[40] (instrumental classical music, jazz program of Bossa Nova, relaxing electro-acoustic music). In order to get a full immersion in the music and an absence of questioning during the listening of the musical program, printed listed sequences of each program were declared to be available at the end of the session. Having opted for a musical program and

being instructed not to fall asleep, the person could settle down in the position of relaxation and comfort of choice for a period of about 30 min, according to the chosen program.

Resting

The resting condition excluded any activity of any sort, even mental concentration or meditation. It was performed in the same positions as in the Mt group. Duration of this condition was 30 min.

Analysis

A five group (technique as an intersubject variable) × 2 (State Anxiety pre–post measures) multivariate analysis of covariance (MANCOVA) with Trait Anxiety as a covariate was performed to assess stress reduction in each technique group. A second analysis of covariance (ANCOVA) was performed on stress reduction (difference between pre- and post-measures of Anxiety state) with State Anxiety at pre-session and Trait Anxiety as covariates, to compare effectiveness of each technique with one another. Means comparisons were tested with Tukey's Honestly Significant Difference (HSD) test. All differences are considered significant at a threshold of $p < .05$. Statistical analysis was performed using Statistica V.6.0.

RESULTS

Sample Description

308 participants respecting the inclusion criteria and providing valid forms were collected from the different centres. The total is composed of 93 males and 215 females, with the following distribution (Table 2): Fs 26 males/60 females, Rf 22 males/53 females, Hp 9 males/33 females, Mt 19 males/44 females, non-intervention Rt 17 males/25 females. The mean age of participants (Table 3) is 50.53 (σ = 14.37), with an average of 52.06 (σ = 13.31) for males, and of 49.87 (σ = 14.80) for females. There is no significant difference in mean age between the Fs 44.13 (σ = 14.16), Rf 45.35 (σ = 13.23), and Hp 47.81 (σ = 12.84) groups. Mt 55.79 (σ = 14.16) and Rt 60.09 (σ = 12.25) groups are significantly older. The STAI-Trait of the participants in the study (Table 4) reveals a mean trait sumscore of 44.89 (σ = 10.32), which can be categorized in the high part of the low stress level (36 to 45). In males mean sumscore is 42.79 (σ = 10.63) and 45.80 (σ = 10.07) in females, being significantly different ($p = .02$), and very close to the French standards (M/F).[28] In the different groups the mean trait level of anxiety is shown to be equivalent, except in the Hp condition which scored significantly higher than in all the others but remained lower than in the psychiatric French patients.[28] The mean baseline STAI-State sumscore across the participants of this study (Table 4) is 41.73 vs. 37.91 in the French standard and 52.1 in French population of outpatients with adjustment disorders,[41] thus showing globally values at baseline above the French standards but under symptomatic anxiety. A difference of 3.16 between trait level of anxiety (44.89) and state at baseline (41.73) is observed, the latter being the lower. Such a difference is common in the French standards due to a usual state underscoring in French people.[28]

Table 2. Participants: Distribution by Gender across Technique Groups in Study

Technique	*Males*	*Females*	*Total*
Fasciatherapy	26	60	86
Reflexology	22	53	75
Hypnosis	9	33	42
Music Therapy	19	44	63
Resting	17	25	42
Total Group	93	215	308

Table 3. Mean Participants' Age across Gender and Technique Groups in Study

Participants of Study	*Technique*	*Number*	*Mean*	*SD*
Total		308	50.53	14.37
Males		93	52.06	13.31
Females		215	49.87	14.80
Participants of Groups	Fasciatherapy	86	47.13	14.16
	Reflexology	75	45.35	13.23
	Hypnosis	42	47.81	12.84
	Music Therapy	63	*55.79*	14.16
	Resting	42	*60.09*	12.25

Pairwise comparisons among each mean were assessed using Tukey's HSD test. There is no significant difference in mean age between the Fasciatherapy, Reflexology and Hypnosis groups. Music Therapy and Resting groups are significantly older and do not differentiate one from each other (using the 0.05 significance level).

Table 4. Participants' STAI Trait & State: Sample at Baseline vs. French Standards

		STAI Trait		*STAI State*	
		Mean	*SD*	*Mean*	*SD*
Males	French Standard	41.86	9.48	35.73	10.34
	Study at Baseline	42.79	10.63	42.78	10.62
Females	French Standard	45.09	11.11	40.75	10.32
	Study at Baseline	45.80	10.07	42.15	11.62

State Anxiety Level Changes in the Different Groups

A five group (Fs, Rf, Hp, Mt, Rt) × 2 (session: pre-treatment, post-treatment) repeated measures MANCOVA (with baseline STAI Trait score as a covariate, M = 44.89) using STAI State score as the dependent variable, produced a significant interaction, $F(4,302) = 6.73$, $p < .00004$. A post hoc Tukey's HSD comparison test indicated a significant reduction of anxiety state score in each condition ($p < 0.0002$) (Table 5). The extent of change is not significantly different in any technique between genders or ages.

A five group (Fs, Rf, Hp, Mt, Rt) ANCOVA (with baseline STAI Trait score M = 44.89 and baseline STAI State at pretreatment M = 41.73) using STAI difference State score between pre- and post-treatment as the dependent variable produced a significant main effect of STAI State at pretreatment $F(1,301) = 205.01$; $p < .0000001$ (the more people stressed at pre-treatment, the more decrease in state anxiety is observed), and a significant main group effect, $F(4,301) = 9.07$, $p < .00001$. Post hoc HSD comparison test (Table 6) shows that the decrease in the Fs, Rf, and Hp groups is not significantly different from each other, but significantly greater than that observed in the Mt and in the resting conditions.

Table 5. Mean STAI State Score at T_0 and T_1 in Each Technique Group

Technique Group	T_0	T_1	*p*
Fasciatherapy	40.57	26.65	.00002
Reflexology	44.20	28.16	.00002
Hypnosis	44.12	31.24	.00002
Music Therapy	38.92	28.87	.00002
Resting	38.50	31.74	.00002

Using a post hoc Tukey's HSD test, p indicates the significance level of difference between mean STAI state score at T_0 (pre-session) and T_1 (post-session) in each Technique Group.

Table 6. Difference on Mean STAI State Scores Between T_0 and T_1 in each Technique and Intergroups Comparison, Adjusted on Anxiety Trait at T_0 (M = 44.89) and Baseline State at T_0 (M = 41.73).

Technique Group	*Mean State Score Difference*
(a) Fasciatherapy	13.92
(b) Reflexology	15.92
(c) Hypnosis	15.88
(d) Music Therapy	10.10 (abc)
(e) Resting	6.38 (abc)

T_0 is the mean state score at pre session and T_1 at post session. Pairwise comparisons among each mean were assessed using Tukey HSD test. Significantly differentiating comparisons between each other (using the 0.05 significance level) are indicated by the same letter.

The Clinical Effects of the Different Conditions Is an Important Issue

How many people benefited from the session? Evaluation of the clinical effects can be based on the cut point of 39–40, and show how many people can be considered as having a high state level of anxiety and being symptomatic before and after session. At T_0, among the participants of the study, 159 individuals (51.62%) were considered as symptomatic, only 34 of them (11.04%) remained after session. In other words, 78.62% of the symptomatic people at T_0 became asymptomatic and benefited of the chosen technique. Through the 5 conditions, the percentage of symptomatic people at T_0, scoring < 40 after session, is respectively: 92.86% after Fs, 80.85% after Rf, 75.00% after Hp, 70.37% after Mt, and 60.00% under resting (Figure 1).

Based on the ANCOVA method of comparison adjusted to Trait 44.89 and T_0 State 41.73, the gain in state sumscore, expressed as the ratio of the magnitude of the gain obtained (T_0-T_1) to the maximum potential gain (41.73 - 20 = 21.73) can be considered as the efficacy rate (or success rate) in each technique. It shows the percentage of the maximum expected improvement reached. The results are: Fs 64.06%, Rf 73.26%, Hp 73.08%, Mt 46.48%, and Rt 29.36% (Figure 2).

Resting being a non-intervention control group, the last question is: Which amount of additional gain is provided by the four techniques? Over the 6.38 resting gain the additional benefit is: Fs + 7.54, Rf + 9.54, Hp + 9.50, and Mt + 3.72 (Figure 3).

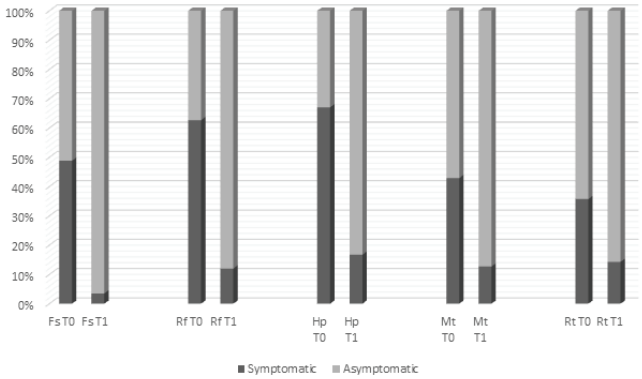

Figure 1. Symptomatic and asymptomatic participants at T_0 and T_1 who benefited from the session. According to STAI-state evaluation, symptomatic people score > 39, asymptomatic score < 40. The percentage of symptomatic participants at baseline (T_0) becoming asymptomatic after session (T_1) is respectively: 92.86% in the Fasciatherapy, 80.85% in the Reflexology, 75.0% in the Hypnosis, 70.37% in the Music Therapy, 60.0% in the non-intervention Resting groups.

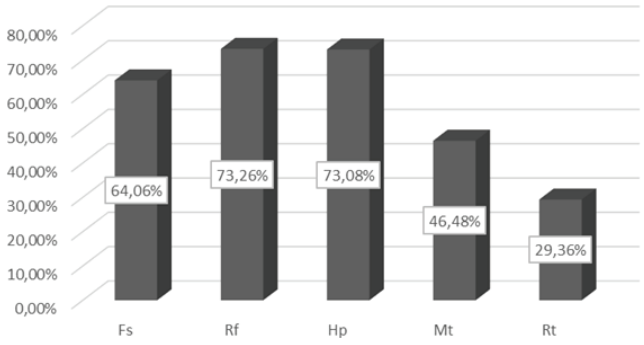

Figure 2. Efficacy rate (or success rate) in each technique can be expressed as the ratio of the magnitude of the gain obtained T_0-T_1 (difference between T_0 at pre-session and T_1 at post-session state sumscore) to the maximum potential gain. It shows the percentage of the maximum expected improvement reached. T_0 state being adjusted with the ANCOVA to 41.73, the maximum potential gain in each technique is 41.73-20 = 21.73. Thus, efficacy rate of each technique is: Fs 13.92/21.73, Rf 15.92/21.73, Hp 15.88/21.73, Mt 10.10/21.73, Rt 6.38/21.73.

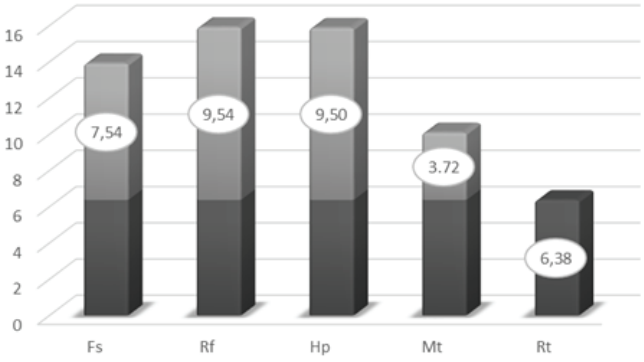

Figure 3. Over rest gain. Since resting is a common condition to the five groups, we considered what amount of additional over rest gain is provided by the four interventions. Adjusted with the ANCOVA to T_0 State 41.73 and Trait 44.89, over the 6.38 resting gain, the additional benefit of each technique is: Fs: + 7.54, Rf: + 9.54, Hp: + 9.50 and Mt: + 3.72.

DISCUSSION

This community CAMs practitioners' practice-based research is carried out on the fieldwork among all and sundry in the French population. It aims at participating in building knowledge about the clinical features of the two manual therapies that are Fs and Rf, with the goal of contributing to the development of quantitative assessment of their de-stressing effect. The resulting data tend to indicate a significant de-stressing component in the process of each of these two methods, hence confirming the clinical impression.

Beyond the search for evidence of efficacy, the study aims to compare their efficacy and accurately reflect their purpose within other CAMs for a better choice by people and caregivers. This comparative study between Fs and Rf is supplemented by Hp and Mt so that two manual therapies of top-down mechanism can be compared to two bottom-up therapies in stress management. In the condition of the study, the performances are not significantly different from each other in the bottom-up Fs and Rf and the top-down Hp groups.

This study aimed at assessing the de-stressing effect of a unique session of Fs DBM and Rf. The collected data are along these lines. But as suggested by our data showing its efficacy on the STAI-S score, rest may be beneficial in stress and this fact is fairly consistent with the overall observation. Thus, participants in the four interventions being encouraged to rest and relax benefited from this dimension of the care. Nevertheless, significantly higher scores of pre–post test than in the resting group suggest a significant main effect on anxiety of Fs, Rf, and Hp in the condition of this study. Inherent in Fs and Rf, the touch of these two manual therapies first aims at decreasing the excessive body strain, so that the strained body and the feeling of tension are expected to be lowered. Thus, being items of the STAI-State, a decrease of the level of anxiety is expected. Moreover, several researches previously showed the implication of these techniques on the stress process (e.g., the role of fascia on interoception[42,43] and stress,[44,45] the relationship between reflexological points and homeostatic regulation[18] or cortical activity.[19]) In the Hp domain, which is out of the field of this study, literature about the therapeutic mechanisms on anxiety is also available.[8]

Previous studies have already been carried out on the management of psychosocial stress with CAMs, but few of them have been with people in reasonably good health. A study reviewing intervention trials on maternal anxiety in pregnancy[46] measured by the STAI showed that scores appear amenable to change after a single session of CAMs interventions, but neither Fs nor Rf were assessed. So, to our knowledge, our study is the first to be interested in a current population of adults and their daily life stress. It provides a first idea of which magnitude of decrease can be approximately expected from the assessed techniques.

The status of evidence for Fs DBM in stress management primitively results in an expanded qualitative research from which useful clinical features emerged for a better centred quantitative research. It consists in pilot studies with small samples (2 to 16) which achieved encouraging outcomes. These pilot studies related to stress are centred on methodology[47] or on hemodynamics.[32] And in the pathological field, studies related to stress were carried out in anorexia nervosa,[48] fibromyalgia,[49] or high blood pressure.[50] In healthy people two studies focused on high-performance athletes.[51,52] Rf has a status of evidence in anxiety relief and stress management. In this domain, qualitative studies also opened up avenues for pilot quantitative trials. Quantitative clinical research

ranges from case reports[53,54] to large significant randomized studies on stress and anxiety in the domain of oncology[55] or in cardiology.[38] Differentiating from them a pilot study on 20 enrolled healthy subjects evaluating Rf in stress with the STAI-S as clinical parameter and biological indicators[56] is by far the closest to our field of study.

This work is proceeding along the lines of the previous studies quoted above, such as the continuation of the efforts in providing evidence of efficacy in anxiety relief and stress management. It differs from them in being a field survey within the manual practitioners' community and in collecting more than 70 participants in each of the two assessed methods. It also differs in being a four concurrent design with a control group. But, as a practice-based study, it differs from more recent ones which are larger dimensioned and more strictly organized on the current model of pragmatic trials.[57]

This nonrandomized pragmatic study possesses the strengths and limitations (Tables 7 and 8) inherent in its nature of field study. Moreover, the two main arms being hands-on techniques in non-naïve population choosing their health care impacts heavily the design of the study (e.g., no randomized allocation, no blinding). So, if it contributes to the first steps towards a clarification for selecting a CAM in the everyday life stress management, it leaves many issues pending.

Future pragmatic research based on the same principle of field work could be pursued in various directions. For stronger evidence or distinguishing subgroups of hyper and hyporesponsive people or gender and personality characteristics, one might undertake a study with more participants which could be carried out, for example, with the cooperation of a professional organization such as a practitioners' association working with the same technique. By contrast, assessing one or two techniques with a control group could be run in a randomized monocentric study. The study could be extended in a temporal dimension measuring the stress level in the immediate post-session and after a period of time, or assess the effects of a series of sessions. For practical application, appraisal of the proportion of the population who will benefit is a key issue which could be refined. Broadening the base of the indicators of stress like blood pressure, heart rate or biological parameters could also be a path for further research. Another research path could be to compare other methods following a similar design.

This study leads to suggesting that a unique session of Fs, Rf, as well as Hp, is capable of significantly lowering the day-to-day level of anxiety in people waiting for health care from CAMs practitioners, whether the patients came for stress management or not. Thus, the day-to-day stress seems amenable to be managed with these methods in a substantive action and an implicit action on the general stress level of the population can be expected. Various practices, in particular meditation programs, provided evidence of this.[58] Efficacy no longer being a selection criterion for a choice between Fs, Rf, and Hp is another emerging issue of the study. May selection criterion emerge from these techniques? The first two techniques are hands-on, the third involves the mind. And technique type is significant for patients, some being reluctant to being touched, others to lower their vigilance. Mt shows a modest efficacy on stress and anxiety in this study, whereas it conversely gave a stronger evidence of efficacy in others under different conditions.[59,60,61] The optimal practical procedures for the receptive Mt implementation could be different. Listening to music remains possible during the activity, on the spot whenever the person decided, and repeat it on demand, in contrast with the methods shown to be more effective in this study's condition. This fact stresses the variety of possibilities for stress management responding to the many diverse circumstances of the request for

Table 7. Highlights of the Study

1. Assessing non-pharmacological methods for managing the daily stress level in the general population
2. People representative of the main part of the population, free from serious diseases and not heavily medicated
3. Study carried out in real-world conditions, avoiding (for instance) the laboratory-induced stress bias
4. Larger samples than previous pilot studies
5. No "win/lose scenario" induced among participants by randomized allocation
6. From the criterion of the stress level, acceptable representativeness of the population of the study
7. A unique session of fasciatherapy (DBM) and of reflexology seems beneficial for anxiety and stress
8. The results are similar to previous data and confirm the usual clinical individual post-session report
9. Comparison of Fasciatherapy DBM and Reflexology shows an equivalent efficacy
10. Concurrent controls made of four arms, leading to a first comparison of several methods of stress management between each another
11. A control resting group showing the obtained part of recovery from resting in the assessed methods
12. Semi-standardization of the interventions processed by a provider, very relevant for individualized care

Table 8. The most important Limitations of the Study

1. The population of interest is made up of people used to have health care from CAMs caregivers
2. No randomized allocation, the samples are natural groups
3. The sample size remains too small in a pragmatic design
4. No blinding
5. Time dimension not assessed
6. Security not assessed

relief. As a conclusion of this discussion about the implications of the study's findings for clinical practice, rest or activity for an *ad hoc* stress management on an appropriate basis could appear as an issue. While this study shows the significant action of rest, we should be reminded of the following selection bias. The people in the resting group were volunteers, thus people having a greatest affinity for action did not enroll. Some studies could be of a great interest, especially designed for discriminating high- and low-responders in resting and in acting circumstances, thus allowing to help them in choosing the best method for their stress management, such as jogging or dancing.

CONCLUSION

The data of this study suggests a de-stressing action of both Fs DBM and Rf. It contributes to support the idea of their capability in the everyday stress management throughout the population. These first results remain to be confirmed and also to widen the knowledge on their time scope. The research field is vast, but the subject is of a key importance because it relates to the issue of a healthy population seeking to alleviate the burden of daily stress and avoid the chronic stress-related diseases by means of such a preventive action.

CONFLICT OF INTEREST NOTIFICATION

The investigators have no conflicts of interest to disclose. The authors had full access to all the data in this study, and take complete responsibility for the integrity of the data and the accuracy of the data analysis

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