



# Clinical effect of training mothers with premature children: emotional coping capacity


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Dear editor,

Prematurity is defined by the World Health Organization as when a baby is born before 37 weeks. A subclassification can also be made, such as extremely premature when the birth occurs before 28 weeks of gestation, very premature when the birth occurs between 28 and 32 weeks of gestation and moderate to late premature when it occurs between 32 and 37 weeks of gestation.<sup>1</sup> Preterm birth is one of the main causes of neonatal morbidity and mortality, and can lead to short- and long-term complications, such as intellectual and growth problems and the early onset of chronic diseases, which is uncommon in babies born at term. The risks brought about by prematurity are inversely

proportional to the gestational age at which the birth occurred, making newborns considered extremely immature the most susceptible to problems related to the condition.<sup>2</sup>

A detailed analysis of the publication “Training in infant care and auriculotherapy techniques for mothers of premature newborns: a double-blind clinical trial”<sup>3</sup> reveals that important information about the results was not presented and that it deserves to be clarified for its usefulness as scientific evidence and in clinical practice.

In the Table below, we present the data from Table 3 of the study by Ghasempour *et al.*<sup>3</sup> with additional information on the clinical effect measure (Cohen’s d) for the significant outcomes.<sup>4</sup> First, it is noted that the training group produced a clinical effect classified as



large ( $d=0.99$ ), while the auriculotherapy group had a medium effect ( $d=0.78$ ) in reducing anxiety. Despite the relevant clinical effects, the training group performed better in this outcome. Similarly, in the stress outcome, the clinical effect is very similar, both being of large magnitude ( $d\geq 0.80$ ) (Table 1).

As for the depression outcome, a large and medium clinical effect was observed for the training and auriculotherapy groups, respectively, in reducing depressive symptoms. However, the control group showed worsening of depressive symptoms considered to be of almost medium effect, which highlights the importance of psychological support to avoid this outcome. This information was not presented in the results; they only showed the statistical difference without its real semantics (Table 1).

For the coping response outcome, it was observed that both the control, auriculotherapy and training groups had relevant clinical effects ( $d\geq 0.50$ ). However, the training group showed a very large clinical effect for coping responses ( $d\geq 1.20$ ), more than twice the effect of the auriculotherapy group. In addition, it is possible

to highlight that the natural history of the event itself produces strong improvements in coping responses (control:  $d=0.50$ ). This same pattern is observed for the problem-oriented outcome (Table 1).

This new information on clinical effect and direction of effect is useful in assessing the practical applicability of interventions, since statistical differences alone are not sufficient to use research findings. Therefore, the training group has been shown to be more efficient in improving symptoms of anxiety, depression, coping response and problem-oriented response than auriculotherapy. Furthermore, the absence of intervention worsens depressive symptoms and, on the contrary, helps in coping response and problem-oriented response.

### Author's contribution

All the authors participated in the drafting of the letter to the editor and approved the final version. The authors declare no conflict of interest.

**Table 1**

Measures of clinical effect based on Cohen's  $d$  between the control, training and auriculotherapy groups.

Variables	$x_1$	$x_2$	$SD_1$	$SD_2$	$x_1 - x_2$	$SD_m$	Cohen's $d$
<b>Anxiety</b>							
Training	10.8	15.3	4.07	4.96	-4.5	4.515	-0.97
Auriculotherapy	12.87	16.83	4.61	5.44	-3.96	5.025	-0.79
<b>Depression</b>							
Training	11.6	15.67	3.62	5.25	-4.07	4.435	-0.92
Auriculotherapy	12.13	16.77	5.47	6.23	-4.64	5.85	-0.79
Control	17.83	15.53	5.57	4.61	2.3	5.09	0.45
<b>Stress</b>							
Training	12.7	16.87	3.46	4.22	-4.17	3.84	-1.09
Auriculotherapy	13.03	17.87	3.99	5.96	-4.84	4.975	-0.97
<b>Coping responses</b>							
Training	58.83	43.87	6.92	10.4	14.96	8.66	1.73
Auriculotherapy	51.9	42.83	10.86	11.46	9.07	11.16	0.81
Control	47.37	43.73	8.91	5.59	3.64	7.25	0.50
<b>Problem-oriented</b>							
Training	19.27	14.9	2.2	3.43	4.37	2.815	1.55
Auriculotherapy	17.2	14.8	2.47	3.4	2.4	2.935	0.82
Control	16.87	15.0	2.93	3.16	1.87	3.045	0.61

$x$  = means;  $SD_m$  = mean standard deviation.

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