

Dear Editor:

I have a couple questions regarding the study

Gouchon, S., Gregori, D., Picotto, A., & Patrucco, G. (2010). Skin-to-Skin Contact After Cesarean Delivery: An Experimental Study. *Nursing Research*, 59(2), 78 - 84. Retrieved from http://journals.lww.com/nursingresearchonline/Abstract/2010/03000/Skin_to_Skin_Contact_After_Cesarean_Delivery_An.2.aspx.

My questions are regarding the analysis that was used and the claims made in the researchers. The researchers highlight concerns over potential mild hypothermia as reasons why skin-to-skin is not used more often after caesarean deliveries. The researchers define mild hypothermia as a skin temperature ranging from 36 – 36.4 degrees C. After presenting the results of their study the authors claim, “Cesarean-delivered newborns exposed to SSC within 1 hr from deliver are not at risk for hypothermia.” (p. 83) In Table 3 the researchers report means and standard deviations of infants and mothers in both skin-to-skin and control groups at several time points after delivery. It appears the mean temperatures for all infants in both groups fall within the provided range given for mild hypothermia. Given this fact I am unable to see how the researchers can make the claim that the infants are not at risk for hypothermia. Granted the provided data place the infants temperatures in the mild hypothermia range and the statement that infants are not at risk for hypothermia may be strictly justified if the researcher were referring to hypothermia in the strict sense being lower than mild hypothermia. If that is the case I find the rhetorical device of beginning the paper with a focus on mild hypothermia and ending with a statement about hypothermia somewhat misleading. If the researchers’ intended meaning was that the infants were not at risk for mild hypothermia, I am unable to see how that statement can be justified given the data that were provided. As seen in the attached spreadsheet 95% confidence intervals for the skin-to-skin group fall clearly below the range for normothermia. Some of the confidence intervals dip into the hypothermia range. It seems to me this would show the opposite of what the researchers claim. Not only is there a risk of hypothermia for the skin-to-skin group, but it seems the control group seems also to be at risk when evaluating the confidence intervals. I report the results of one-sample t-tests in the second sheet of my attached workbook. All of the reported temperatures of the skin-to-skin group are shown to be significantly lower than normothermia.

I have a further question regarding a statement in the Sample section of their paper. The researchers state that the null hypothesis can be rejected or accepted with a Student’s t test for paired samples. I could understand the use of a paired t-test if the difference of interest was between mother and child pairs, however the difference of interest seems to be difference between the skin-to-skin and the control groups. It seems independent-samples t-tests would be more appropriate, or even better ANOVA which would avoid the problem of inflated alpha values due to performing multiple t-tests. If the intervention and control groups were indeed matched samples, that would justify the use of paired t-tests however the researchers made a significant omission in not reporting matching procedures.

In conclusion, I am unable to see how the researchers are able to justify their claims that infants are not at risk for hypothermia. It appears the data show otherwise.

Respectfully,

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