

Summarythe (vickers a. et al., p. 3).

[Nutrition](#)



SummaryThe research study addressed the growth progression of preterm infants by determining whether massage therapy would promote weight gain and decrease the number of hospitalized days.

The research implies that in addition to examining the risks and benefits of using massage therapy as a treatment, variables that needs to be carefully considered is that the cost-effective use of time and potential for harm to the sample population.

Research Question and Design of the StudyThe

researchers explained that since premature infants admitted to the NICU experiences an abrupt transition from their safe mother's womb to a highly stressful environment in which they lack tactile stimulation with regular interruptions for nursing treatment, they would physically benefit from gentle massage. The research questions were “ Do preterm and/or LBW infants exposed to massage, experience improved weight gain and earlier discharge compared to those infants receiving standard neonatal care?”

(Vickers A.

et al., p. 3). And “ Does massage have any other beneficial or harmful effects on this population?” (Vickers A. et al.

, p. 3). The design was a systematic review which critically analyzed multiple research studies that would answer their research questions using a structured methodology.

The methodological criterion used to approve each paper were the concealment of treatment allocation, performance bias, blinding of observers, and exclusions/withdrawals. Each paper was reviewed by three independent researchers and was given a rank of A, B, or C. Rank A meant

<https://assignbuster.com/summarythe-vickers-a-et-al-p-3/>

the least amount of bias, while rank C corresponded to the most amount of bias. Disagreements regarding paper inclusion were settled by committee.

Sample and SettingThe researchers included a random selection of LBW infants at a gestation of less than 37 weeks or a birth weight of less than 2500g.

The study used as many trials as possible. The infants were overall healthy and in a state of homeostasis, with no health conditions, and had been eligible to be transferred to intermediate care department of the NICU before the start of the intervention. “ Trials generally excluded infants with congenital abnormalities, serious pathology (eg. necrotising enterocolitis), histories of maternal drug abuse and those requiring ventilatory assistance or intravenous feeding” (Vickers A. et al., p.

4) to eliminate or limit the independent variables as much as possible. The parents of the subjects studied were generally of low socioeconomic status. The trial used two categories for interventions: “ gentle physical massage” and “ gentle, still touch”. Infants who received gentle physical massage were typically rubbed and stroked gently for about 15 minutes, three to four times a day.

Many massage interventions also included kinesthetic stimulation consisting of passive flexion/extension movements of the limbs. Still, gentle touch involved nurses placing their hands on the infants as they slept. After 15 to 20 minutes they removed their hands. No stroking or rubbing motions were used. Both types of therapy were performed for 5-10 days. The results

measured the advantages and disadvantages of massage on weight gain, length of hospital stay, and behavioral and developmental changes.

The length of massage therapy applied to the infants was based on the number of days they stayed at the hospital and the data that was recorded. We felt that although the selection criteria was pretty simple and the design of the selection made it easier to eliminate unexpected variables in the study, 5-10 days of therapy does not seem to be a significant amount of time in order to produce results. There was no evidence of a correlation between infants who got a shorter massage and the ones who received longer duration.

It is important to note that recording the data directly during the hospital stay of the infant, would eliminate many unknown variables that would otherwise affect the results of the study. Research MethodsThe significant data we focused on were weight gain and the number of days they stayed in the hospital. The study also recorded developmental and behavioural outcomes using the Brazleton 1983, which is a standard developmental measure. The weight was measured daily using the hospital scale. No trial described procedures to blind those taking weight measurements. Nonetheless, poor blinding of the main outcome measure might be considered to be a flaw of the research included in the review. Also, there is an independent variable of caloric intake by the infants that affects the weight gain directly. The kind of nutrition the infants received, whether or not the infants were breastfed, nor the type of formula they received, were documented within the research study.

The other significant value was the hospital stay, which was reported as significantly reduced to 4-5 days. But only one study (White Traut 1986) explicitly stated that physicians responsible for discharging infants were blind to group assignment, without any other information describing how this group was blind to the assignment. Study Findings and Limitations The findings show that massage interventions resulted in improved daily weight gain by 5 grams and reduced length of stay by 4.5 days. Although there were no negative effects shown, the benefits of massage on developmental outcome of preterm infants were insignificant. Researchers could not conclude that there is benefit in using massage as a treatment for preterm infants.

The limitations consist of methodological issues when analyzing the results. For example, performance bias was not thoroughly observed to ensure each treatment was similar for the infants. Thus, it is important to consider that there may be differences in care due to the difficulty of creating a blind study. It is clear that more research should be done, because there weren't any significant result specifying the effectiveness of massage therapy for LBW infants.

Also, data recording and performance bias affected the results. Because the results do not seem to be significant, there is question whether health care personnel should invest time in performing the therapy. Relevance of Study This study emphasizes the importance of a less invasive non-pharmaceutical treatment option to promote weight gain for LBW infants.

Massage therapy is a low-risk affordable therapy that is easy to implement in many settings in order to promote growth and health to at-risk infants. This <https://assignbuster.com/summarythe-vickers-a-et-al-p-3/>

therapy requires very little training and is able to be performed by non-licensed individuals such as caregivers. Based on the studies performed, there are no adverse effects of massage therapy for premature/LBW infants, nor are there significant benefits to massage therapy.