Effect of Massage on Growth and Development Among

Low Birth Weight Babies

ملخص البحث باللغة الانجليزية:

Low birth weight (LBW) is defined as newborns weighing less than 2.500 grams, regardless of gestational age, birth weight is an important indicator of newborn health because of the close relationship between birth weight and newborn morbidity and mortality. Low birth weight newborn have a greater risk of poor health or death, require a longer period of hospitalization after birth, and are more likely to develop significant disabilities.

  Low birth weight infants may be more at risk for many health problems. Some babies may become sick in the first six days of life or develop infections. Other babies may even suffer from longer-term problems such as delayed motor and social development or learning disabilities.

    Research has shown that touch can also stimulate neurological development by promoting the growth of myelin, the substance that surrounds nerve cells. The adequate presence of myelin increases the speed and efficiency of the function of the nerve cells. The digestive system also seems to benefit from massage, by increasing the secretion of digestive hormones. This may be another source of improved growth in the baby, as well as a reduction in digestive disorders such as colic. Infant massage also seems to reduce day-time fussiness as well as improve night-time sleep habits

Aim: The study aims to evaluate the effect of massage on growth and development of low birth weight babies

Hypothesis

Improvement of growth and development for the study group of low birth weight babies after the application of massage

Design: A quasi experimental design was used in this study.

Setting The study conducted at the neonatal outpatient premature clinic of University hospitals at Abu EL- Reish pediatric hospitals, and El Manial University hospital in Kasr El Aini. Hospital.

Sample: A purposive sample of low birth weight babies and their mothers, their total number were (86), divided into two groups, study group (43) and control group (43), they are selected randomly.

<u>**Tools of data collection**</u>

I. low birth weight baby Assessment sheet

It consisted of three parts as follow:

Part (1): Physical growth measurement tool, to assess physical growth of the low birth weight baby: as, birth weight, height, chest and head circumferences, Follow up for the babies was done every month until 4 months

Part (2): Development assessment tool

It consists of four parts: Social/personal, Fine motor function, Language, Gross motor functions, this scale was used to assess the development of the low birth weight babies.

Part (3): Health problems assessment tools

It was used to assess low birth weight babies health problems as; respiratory, digestive, urinary, and neurological health problems and its recurrence for the baby.

II. Interviewing assessment sheet for the mothers has a low birth weight baby :
It consisted of two parts as follows:

Part (1) Socio-demographic assessment tool

to assess the socio-demographic characteristics of the study group as age, residence, family size, educational level, occupation, mode of delivery, gestational age.

Part (2): Mothers' knowledge assessment tool

It was used to assess mothers' knowledge related to definition of low birth weight, its causes and complications, technique of baby massage and effect of massage on babies.

<u>**Results**</u>:

the present study revealed that, nearly two thirds of the study group had less recurrence of health problems compared to more than one third of the control group, with a statistical significance difference between the two groups.

Also about two thirds of the study group compared to more than one tenth of the control group, had good growth rate, but the majority of the study group compared to about two

thirds of the control group, had normal development, with a statistical significant difference between the two groups.

The study show that there is a significant relation between mothers satisfactory level of knowledge & low birth weight growth, development & health problems in the two groups also there is a significant relation between low birth weight growth & development, health problems in the two groups.

Conclusion

after the application of massage for low birth weight babies of the study group, they had a higher rate of growth & development than the control group, and had less recurrence of health problems than the control group with a statistical significant difference between the two groups.

Recommendation

Based on the findings of the present research, the following recommendations are suggested:

- Conduct continuous various educational programs for the high risk pregnant mothers in the outpatient clinics to raise their awareness regarding causes, prevention & early detection of delivery for low birth weight.

- Design a simple illustrated guideline booklet in Arabic language for low birth weight babies' mothers about effect of massage on growth and development of low birth weight babies, technique of baby massage.

- Replication of this study on a larger sample, on a broad area and different settings of the study is recommended in order to generalize the results.