Effectiveness of an educational intervention in primary care to maintain exclusive breast-feeding: Cluster randomised clinical trial; Prolact study

Maria Jesus Santamaria Martin1, S Martín Iglesias2 and Prolact group3

1Lucero Primary Care Center, Spain
2 South Primary Care Direction, Spain
3Professionals Madrid Health Service, Spain

Background: The World Health Organization recommends exclusive breast-feeding (EBF) until six months of life. The WHO leads a global strategy to promote the initiation and maintenance of breastfeeding. In Spain the rates of EBF at six months are 28.5%. More evidence is needed on the effectiveness of group interventions to maintenance EBF.

Methods: This study involves a community-based cluster randomized trial conducted at 10 Primary Healthcare Centres in the Community of Madrid (Spain). The project aims to evaluate the effectiveness of an educational group intervention performed by primary healthcare professionals in increasing the proportion of mother-infant pairs using exclusive breastfeeding at six months compared to routine practice. The number of patients required is 432 (216 in each arm). All mother-infant pairs using exclusive breastfeeding in the last 24 hours that seek care or information at Healthcare Centres are included to consecutive sampling, if the infant is not older than four weeks, and the mother gives consent to participate. The main response variable is mother-infant pairs using EBF at six months. Main effectiveness is analysed by comparing the proportion of mother-infant pairs (dyads) using exclusive breastfeeding at six months between the intervention group and the control group. All statistical tests are performed with intention-to-treat. The estimation is adjusted using an explanatory logistic regression model. A survival analysis is used to compare the two groups using the log-rank test to assess the effect of the intervention on the duration of breastfeeding. The control of potential confounding variables is performed through the construction of Cox regression models.

Results: 434 dyads were included, the mean age of the mother was 32.8 (5), 80% were Spanish nationality, 72.6% were active workers, Vaginal delivery 79.7%. Average weight at birth 3.303 (0.391), median gestational age 39.5 (RIQ 39-40). 226 dyads were assigned to the intervention and 208 control groups. The 6-month LME was higher in the experimental group RR=2.37 (1.45-3.89) than the control group, RAR 0.13 (0.06-0.19), NNT 8.0.

Discussion: We must implement strategies with scientific to improve the percentage of exclusive breast-feeding at six months in our environment as established by the WHO. Group education is an instrument used by professionals in Primary Care that favors the acquisition of skills and modification of already-acquired behavior, all making it a potential method of choice to improve rates of exclusive breast-feeding in this period. The Prolact intervention has been effective in primary care to maintain LME at 6 months.

Recent Publications

2. WHO. Global Strategy for Infant and Young Child Feeding. Geneva; WHO; 2003

Biography
I completed my nursing degree in 1993 in Autonoma University in Madrid. Between 1993 and 1995, I worked in a maternity hospital called “Nuevo Parque” in Madrid. During 1994, I worked in a nursing home in Cantoblanco, Madrid. I worked in Hospital Clínico San Carlos for two years in Internal Medicine from 1996-1998. I am currently working in Lucero Primary Health, where I have been since 1998. One of my main responsibilities here is to advise and spread awareness with regards to the importance of breastfeeding. I was a member of the Breastfeeding Committee of The Hospital Clínico San Carlos in Madrid between 2012 and 2017. I am the principal investigator of the study “Prolact”. It was funded by the Spanish Ministry of Science and Innovation via Instituto de Salud Carlos III (PI12/02020 and PI12/02609). I presented research at the congress for “E-Health and Nursing Knowledge for Patient Care” organised by ACENDIO in Switzerland (the association for common european nursing diagnosis, interventions and outcomes) in 2015 with the title of “Effectiveness of an educational group intervention in primary care to maintain exclusive breastfeeding (PROLACT Study). Using Electronic Data Capture System for a cluster randomised clinical trial.” I also presented research at the VII Spanish Congress of Breastfeeding in Madrid, in 2013, with the title of “Efectividad de una intervención educativa grupal en Atención Primaria para mantener la lactancia materna exclusiva. Ensayo clínico aleatorio por conglomerados. ESTUDIO PROLACT.”

mariajesus.santamaria@salud.madrid.org