ELACTA 2026 Conference

Robyn Leah Nalty and Vikki Kidd were fortunate to be funded to represent LCGB at the recent ELACTA 2026 Conference 'Breastfeeding Insights Shaping the Future' in Bucharest, Romania. We both attended the Pre-Conference Day when Robyn presented an abstract of the work she and Zurina Ali had been undertaking into Maternal Infant and Young Child Feeding in Emergencies (MIYFC). We both attended the ELACTA Presidents meeting representing LCGB who are Association members of ELACTA.

The conference was on the 14th & 15th May when Vikki hosted the LCGB stall to spread the word about our organisation. A number of our leaflets were available including our 'Recertification' and 'Self CERP' guides which were very well received. It was also good to have given away 200 of our pens and 200 sticky pads.

Conference Presentation Write Up

There were a number of very interesting presentations during the two days but we have chosen to write up the following:-



Beyond Suction: Exploring Pump Rhythms, Vacuum and Patterns to Navigate the Breast Pump Landscape
Presented by Micaela Notarangelo IBCLC PhD, Italy.

Vikki picked this topic because of all the new information regarding the benefits of breast pump flanges fitting the individual correctly, so she felt this information could develop ones knowledge further.

Micaela Notarangelo raised how the effectiveness of a breast pump will be different for each user due to the uniqueness of each individuals' situation and lactation. And with the explosion in the number of breast pumps available within the marketplace it is impossible to measure the effectiveness of an individual pump. She related the pump model design, type and price to be the mere tip of the iceberg when looking for effective pumping.

Micaela wanted to explore the pumping efficacy of a number of electric breast pumps by measuring the aptitude (vacuum strength in mmHg) at peak vacuum, frequency and duration over a set time scale to create and record a measurable vacuum curve. The "Boobie Barometer" (Breast Pump Vacuum Monitoring System) was the equipment she used to create the vacuum for each pump. And the pumps that she found to be more effective were; the Spectra and Symphony pumps while the Mommed S21 performed quite well for a portable pump.

- **Aptitude** – historically the vacuum strength of breast pumps has been set between 180-200mmHg but there is no consistence between brands. Often brands will apply different methods of measurements (mmHg and bars) making it difficult to compare.
  Micaela's study found that stronger aptitudes (suction pressure) did not equate to a greater collection of breastmilk. But that better collection was achieved when there was

maternal comfort and the average aptitude for comfort was found to be 190mmHg. However, this measurement alone was in sufficient to improve the amount of milk collected because of other variants.

- **Vacuum curve** – the line recorded on a graph as a pump when through its various pressure cycles.
  With the different pumps examined in the study there was found to be a great variety of vacuum curves. Resulting in the need for further research being required to know if the recorded shape of the vacuum curve actually has an impact on milk collection.
- **Vacuum cycle/minute** – this is the number of vacuums (sucks) that the pump makes in a one minute period. The majority of pumps have a range of 70 - 120 cycles/minute during the stimulation phase and 38 - 60 cycles/minute during the expression phase. The greater the noise of a pump has already been linked with reduced milk collection.
  When measuring the high verses low frequency vacuum cycles it was not surprising that the higher the frequencies were linked to higher noise levels.

Micaela's study theorised that neither the optimum aptitude (pressure) nor the frequency of the vacuum cycle alone were sufficient to effect a mother's optimum milk collection. However, an optimum aptitude of 190mmHg and a vacuum cycle of 40 – 60 cycles/minute was found to be most efficient during the expression phase but not good at stimulating a mother's milk supply.

These combined factors have highlighted a need for breast pumps to function at lower aptitudes and with a variety vacuum cycles.

It was also found that the duct's internal pressure created by the milk within the breast has an impact on maintaining duct patency, therefore:-

'Full' breasts = were found to collect more milk when there were longer lower vacuum cycles.

'Empty/soft' breasts = collect milk more efficiently when there was a shorter faster vacuum cycle.

Also mothers with more elastic breast tissue were found to have a tendency to collect less milk.

My learning to benefit my practice when supporting pumping mothers:-

- Confirmation that the mother's comfort is of premium importance.
- Having a pump a pressure of 190 mmHg can be beneficial for maternal comfort and milk collection.
- To have a vacuum cycle that is longer and slower at the start of pumping when the breast is fuller and then to change to a shorter faster cycle as the flow decreases.



Write up is by Vikki Kidd - IBCLC
LCGB volunteer Trustee & Membership Secretary