

World Health Day, April 7, 2013: Hypertension

This year's World Health Day theme is "Hypertension." From the World Health Organization (WHO):

High blood pressure – also known as raised blood pressure or hypertension – increases the risk of heart attacks, strokes, and kidney failure. If left uncontrolled, high blood pressure can also cause blindness, irregularities of the heartbeat and heart failure. The risk of developing these complications is higher in the presence of other cardiovascular risk factors such as diabetes. More than one in three adults worldwide has high blood pressure. The proportion increases with age, from 1 in 10 people in their 20s and 30s to 5 in 10 people in their 50s. Prevalence of high blood pressure is highest in some low-income countries in Africa, with over 40% of adults in many African countries thought to be affected.¹

Causes of Hypertension

Today's lifestyle for many people around the world includes a diet rich in fats and salt, which can lead to obesity, high cholesterol levels, and hypertension. If one-third of the world's adult population has high blood pressure, clearly there is need for a multidisciplinary approach to prevention.

Is it possible that breastfeeding might play a role in reducing the risk of hypertension in the mother, or her child, or both? What might be the mechanisms for such a benefit?

Breastfeeding and Risk Reduction for Children

That breastfeeding contributes to normal healthy development in children is well established. Does it also contribute to health in later life?

Studies of the relationship between feeding of infants and their health as adults are very difficult, because of the long time periods involved, and the multiplicity of other factors which can affect results along the way. However, a number of studies have looked at this possibility, and at least three possible mechanisms have been suggested^{2,3,4}:

1. The lower sodium content of human milk compared with formula, which might help to reduce blood pressure.
2. The long chain polyunsaturated fatty acids in human

MOHD SHAREEF©WABA 2012



milk. LCPUFAS are important for cardiovascular health in adults. In recent years, manufacturers have added LCPUFAS such as DHA to infant formula, with some benefit, but it is not certain that they are used by the body in the same way or that they are as effective as those in human milk.

3. Obesity in adults is a risk factor for hypertension. Many studies indicate that breastfeeding is protective against unhealthy weight gain in children, which could also contribute to healthy blood pressure.

The available evidence suggests that breastfeeding may have long-term benefits. Subjects who were breastfed experienced lower mean blood pressure and total cholesterol, as well as higher performance in intelligence tests. Furthermore, the prevalence of overweight/obesity and type-2 diabetes was lower among breastfed subjects. All effects were statistically significant. . . .

World Health Organization, 2007²

Breastfeeding and Risk Reduction for Mothers

Could breastfeeding protect mothers against hypertension? A 2011 study by Stuebe concluded:

... never or curtailed lactation was associated with an increased risk of incident maternal hypertension, compared with the recommended ≥ 6 months of exclusive or ≥ 12 months of total lactation per child, in a large cohort of parous women.⁵

One possible mechanism for this might be breastfeeding's effect on aiding maternal weight loss after delivery. Not only do breastfeeding mothers burn as many as 500 kcal a day more than formula-feeding mothers, but they also have enhanced metabolic efficiency. Because breastfeeding women make better use of the food they eat, they are able to consume less food than what is suggested to produce milk for the baby.⁶

Treatment

Because both hypertension and the drugs often used to treat it can both decrease a mother's milk supply, it makes even modest protection valuable.

Hypertension doesn't always require medication—lifestyle changes can reduce blood pressure. Weight control and healthy eating are key to healthy blood pressure.

Breastfeeding can help with weight control, and for the baby, his mother's milk is the healthiest food he can get! Many breastfeeding mothers also become committed to improving their nutrition and that of their families.

What about Stress?

It is commonly understood that stress can raise blood pressure. While health care professionals and the media continually urge stress reduction, it is not easily accomplished. Busy lives and complicated schedules are

difficult to change. Here again, breastfeeding can play a natural role in reducing stress in both mother and child. The breastfeeding hormones, prolactin and oxytocin, help calm the breastfeeding mother. Breastfeeding also appears to help the child. A 2006 study showed that formula-fed children react more negatively to stress.⁷

Prevention is Better than Cure

Will we ever truly understand all the ways that breastfeeding contributes to life-long health? It may take many more years, but we know enough now to realize its importance during the whole life cycle, and the need to protect, promote, and SUPPORT it throughout health care services at large. Prevention is much better than cure!



Take Action to Increase Breastfeeding!

To lay the foundation for life long health, the following policies must be implemented:

- Strengthen and expand the Baby Friendly Hospital Initiative;
- Make breastfeeding counselling and support available to all mothers through the health service and community; and
- Adopt and implement the Code of Marketing of Breastmilk Substitutes in all countries, to protect breastfeeding.

Author: Melissa Clark Vickers, IBCLC, LLL Leader.

References:

1. www.who.int/campaigns/world-health-day/2013/event/en/index.html
2. Horta BL et al. Evidence on the Long-Term Effects of Breast-feeding: Systematic Reviews and Meta-Analyses. World Health Organization, 2007.
3. Scott J et al. The relationship between breastfeeding and weight status in a national sample of Australian children and adolescents. *BMC Public Health* 2012, 12:107.
4. Stolzer JM. Breastfeeding and obesity: a meta-analysis. *Open Journal of Preventive Medicine*, 2011 Vol. 1, No. 3, 88-93.
5. Stuebe AM et al. Duration of lactation and incidence of maternal hypertension: A longitudinal cohort study. *American Journal of Epidemiology*, 2011, 174(10): 1147-1158.
6. Vickers MC. Breastfeeding and Obesity. La Leche League International, 2006.
7. Montgomery SM et al. Breastfeeding and resilience against psychological stress. *Arch Dis Child*, 2006, 91(12):990-994.

For More Information:

La Leche League International (LLL) is a non-profit organization founded in 1956 by seven women who wanted to help other mothers breastfeed their babies. LLLI, the world's largest resource for breastfeeding and related information, offers encouragement worldwide through mother-to-mother support and breastfeeding mother support groups in 70 countries. ♦ Address: 957 N. Plum Grove Road, Schaumburg, Illinois 60173 USA ♦ Tel: 1+847-519-7730 ♦ Fax: 1+847-969-0460 ♦ Website: www.llli.org ♦



The World Alliance for Breastfeeding Action (WABA) is a global network of individuals and organisations concerned with the protection, promotion, and support of breastfeeding worldwide based on the Innocenti Declarations, the Ten Links for Nurturing the Future, and the WHO/UNICEF Global Strategy for Infant and Young Child Feeding. Its core partners are International Baby Food Action Network (IBFAN), La Leche League International (LLL), International Lactation Consultant Association (ILCA), Wellstart International, and Academy of Breastfeeding Medicine (ABM). WABA is in consultative status with the United Nations Children's Fund (UNICEF) and an NGO in Special Consultative Status with the Economic and Social Council of the United Nations (ECOSOC). ♦ Address: P.O. Box 1200, 10850, Penang, Malaysia ♦ Tel: 604-6584816 ♦ Fax: 604-657 2655 ♦ Email: waba@waba.org.my ♦ Website: www.waba.org.my ♦