

A unique first aid device for obstetric bleeding

DR TAREQ SALAHUDDIN

The leading cause of maternal mortality (deaths from pregnancy and childbirth related complications) is obstetric haemorrhage in which a woman bleeds heavily, most often immediately after giving birth. A woman somewhere in the world dies every 4 minutes from this kind of complication. The LifeWrap (generic name: Non-pneumatic Anti-shock Garment or NASG) is a first-aid device used to stabilise women who are suffering from obstetric haemorrhage and shock. It is made of neoprene and Velcro™ and looks like the lower half of a wetsuit, cut into segments.

This simple device helps women survive delays in getting to a hospital and getting the treatment that they need. It can be applied by anyone after a short, simple training. To date, it has been used on over 6,000 women in 6 countries.

After a simple training session, anyone can put the garment on a bleeding woman. Once her bleeding is controlled, she can be safely transported to a referral hospital for emergency obstetrical care. The Lifewrap is light, flexible and comfortable for the wearer. It does not need to be removed for uterine massage, examinations or vaginal procedures, with the abdominal part only being opened for abdominal surgery. Upon application a patient's vital signs are often quickly restored and consciousness regained.

In the 1900s an inflatable pressure suit was developed by George Crile. It was used to maintain blood pressure during surgery. In the 1940s and after undergoing numerous modifications, the suit was refined for use as an anti-gravity suit (G-suit). Further modification led to its use in the Vietnam War for resuscitating and



PHOTO: DR TAREQ SALAHUDDIN

Demonstration of a non-pneumatic anti-shock garment (NASG) - also called a "lifewrap" - to stop post-partum haemorrhage at a seminar in the Women Deliver conference in Kuala Lumpur, Malaysia in May 2013.

stabilising soldiers with traumatic injuries before and during transportation. In the 1970s the G-suit was modified into a half-suit which became known as MAST (Military anti-shock trousers) or PASG (Pneumatic Anti-Shock Garment).

During the 1980s the PASG garment became used more and more by emergency rescue services to stabilise patients with shock due to lower body haemorrhage. During the 1990s the PASG was

added to the American College of Obstetrics and Gynecology.

From the 1970s, NASA/Ames was involved in developing a non-pneumatic version of the anti-shock garment. This was originally used for haemophilic children, but has since been developed into the garment known as the Non-pneumatic Anti-Shock Garment (NASG).

The non-pneumatic anti-shock garment is now off-patent and produced in several different locations.

The use of the garment for obstetrical haemorrhage in low-resource settings began in 2002 when Dr. Carol Brees and Dr. Paul Hensleigh introduced the garment into a hospital in Pakistan and reported on a case series of its use.

Dr. Suellen Miller and colleagues in Mexico, Egypt and Nigeria have completed studies of the NASG (also named the LifeWrap) for obstetric haemorrhage in hospitals in these countries with studies ongoing at primary health care centers in Zambia and Zimbabwe.

An implementation programme with the NASG as part of a Continuum of Care for Post-Partum Haemorrhage (CCPPH) has been underway since 2008 in India, Nigeria, Tanzania and Peru. The NGO Pathfinder International is the lead implementing organisation on the CCPPH project. Dr. Suellen Miller has done extensive clinical trials with the device as an obstetric first aid. The U.S. based non-profit organisation, Pathfinder International has worked on developing the Continuum of Care model.

The lifewrap is not designed as a final solution to save women, but only a stabilising measure to buy her time to be transferred to a health facility for surgery or blood transfusion.

It can be a great life-saving tool for the delivering mothers in remote communities of developing countries who give birth mostly at home.

A cost-effective analysis of results from the Nigeria and Egypt studies demonstrated markedly improved health outcomes with net savings or extremely low cost per disability-adjusted life years (DALYs). Cost per use is approximately \$1.50.

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GLOBAL PRIORITY

Family planning, higher education are priorities globally

Family planning, higher education and quality time with loved ones are priorities for people around the world, according to a new global Nielsen survey focusing on lifestyle values released recently.

The Nielsen poll of more than 29,000 people in 58 countries also showed that most people think women should have a say in important household issues, but opinions diverged on how the roles of wife and mother are perceived.

In Nielsen's first poll on lifestyle values, 80 percent of people surveyed said that spending time with family was most important, with the number rising to 88 percent in Latin America.

Family planning, or deciding on how many children to have, was a top issue, with 77 percent of people saying it was important, particularly in Latin America.

The rating for higher education was similar around the world, with 78 percent of people globally saying it was a priority.

Although 76 percent of people questioned thought women should have a say in household issues, only 43 percent agreed that the most important role for a woman was as a wife and mother, with ratings ranging from around 30 percent in North America and the Asia-Pacific region to 63 percent in Latin America.

Forty-six percent of men globally, compared to 39 percent of women, agreed about women's wife/mother role.

The survey also showed wide cultural differences about religion. In the Middle East and Africa, 71 percent thought it was a guiding source. But the number dropped to 20 percent in Europe and around 35 percent in the rest of the world.

Around the globe religion was more important to men than women.

Source: Reuters

HEALTH bulletin

Breastfeeding during fasting in Ramadan

PROF DR M KARIM KHAN

Breast milk is the best food for neonates and infants. Exclusive breastfeeding means feeding on breast milk only up to six months of life. Afterward, some complementary food should be started along with breast milk to minimise the energy gap.

Many people think that children do not get adequate breast milk from a mother who is fasting during the holy month of Ramadan. However, several studies have showed that temporary fasting as in Ramadan does not decrease the flow or volume of breast milk but only some minor changes in composition may occur.

Micronutrients like Zinc, Magnesium, Potassium may decrease in fasting but that do not impair the growth and development of babies. If a mother wishes to keep fasting having a small kid, may fast without any hesitation as this will not hamper breastfeeding of her baby. Even, no extra milk is necessary if the baby is less than six months old.

But diabetic mother or mother with serious illness need further advice from their respective physicians regarding exclusive breast-

feeding while fasting in Ramadan.

Muslim women who are pregnant or breastfeeding may be exempt from fasting if their health or the baby's health is affected by fasting. The mother may compensate for the missed fasting at a later time or pay some expiation for not fasting — whatever is appropriate according to Islamic rule.

So, mothers having small kids generally can continue fasting if they wish unless complicated by other conditions. Fasting will not hamper baby's nutrition if the baby is on breast milk only.

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Long term aspirin use tied to lower colon cancer risk

Low-dose aspirin, even if not taken daily, may reduce a woman's risk of colon cancer over the long term, according to a new study that did not find the same effect for other types of cancer. The study published in Annals of Internal Medicine revealed that women who took 100 mg of aspirin every other day for at least 10 years ended up with about a 20% lower risk of colon cancer after some 18 years of follow up, compared to women who took a placebo.

Shift work might affect women's periods, fertility

Shift work may raise a woman's risk of menstrual and fertility problems, and steady night shifts may boost the odds for miscarriage, according to a new study presented at the annual meeting of the European Society of Human Reproduction and Embryology, in London.

RAMADAN TIPS



Foods to consider, foods to avoid

PROF DR MD TAHMINUR RAHMAN

Foods healthy for Ramadan

- Drink plenty of water and fresh fruit juices
- Vegetable and fiber rich diet
- Dates in limited amount
- Whole grain food beans, boiled potatoes, rice, plain ruti, sea fish, baked or grilled chicken
- Soury fruits, Dai, Raita, Borhani
- Home-made sweets like pastry, kheer in limited amount according to BMI

Foods to be avoided

- excess oily, fatty, spicy Food
- Sweetened foods like sweets, pudding, ice-cream
- Red meat
- Excess tea, coffee, smoking and alcohol

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Knowing for better living

"Take meal a little before dawn, for there is a blessing in taking meal at that time."

Al-Hadith (Muslim, 2412)

- Take Sehri in time
- Avoid salty & fried foods in Sehri
- Take usual amount of meal in Sehri
- Drink at least half a liter of water in Sehri
- Consult your doctor



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