


UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Relactation & Induced Lactation



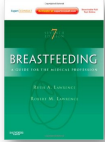
**Evelyne Ruf, MD, IBCLC**  
Lactation Clinic,  
Family Health Promotion Center,  
Sharjah

[http://2.bp.blogspot.com/-OmV2ze5Ry30/Tn0ck\\_SehAI/AAAAAAsA/O4XON5X\\_MKQ/s1160QJ25CF4486.JPG](http://2.bp.blogspot.com/-OmV2ze5Ry30/Tn0ck_SehAI/AAAAAAsA/O4XON5X_MKQ/s1160QJ25CF4486.JPG)

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Resources

- Muresan. Successful relactation – a case history. *Breastfeeding Medicine*. 6 (4). 2011.
- Alyssa Schnell. Breastfeeding without birthing. Gold International conference, 2014.
- Newman-Goldfarb Induced Lactation Protocols



Lawrence & Lawrence, 7<sup>th</sup> Ed.



Wambach, & Riordan Enhanced 5<sup>th</sup> Ed. (2016)



Newman & Pitman, Rev. Ed.

Dr Evelyne Ruf\_Relactation/induced lactation\_2020

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Objectives



- ✓ Define the terms 'relactation' and 'induced lactation'.
- ✓ Identify maternal/infant factors contributing to a good or poor prognosis.
- ✓ Offer strategies to initiate and manage relactation and induced lactation.
- ✓ Highlight the continuous need for mother support throughout.

Dr Evelyne Ruf\_Relactation/induced lactation\_2020

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Objectives



- ✓ Define the terms 'relactation' and 'induced lactation'.
- ✓ Identify maternal/infant factors contributing to a good or poor prognosis.
- ✓ Offer strategies to initiate and manage relactation and induced lactation.
- ✓ Highlight the continuous need for mother support throughout.

Dr Evelyne Ruf\_Relactation/induced lactation\_2020

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## PLAN



- **BACKGROUND**
- **DEFINITIONS**
- RELACTATION
- INDUCED LACTATION

<http://www.theadoptionmagazine.com/2012/04/05/clever-cleavage-adoptive-breastfeeding/>

Dr Evelyne Ruf\_Relactation/induced lactation\_2020

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Infant Feeding Priority Options (WHO & UNICEF)

- 1 • Breastfeeding by own mother
- 2 • Expressed mother's milk
- 3 • Breastfeeding by another woman\*
- 4 • Expressed milk from another woman\*
- 5 • Processed cow's milk (artificial formula)

\* Only if following infection control and Islamic milkship regulations

Dr Evelyne Ruf\_Relactation/induced lactation\_2020

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Definitions

- **Relactation:** process of re-stimulating lactation (after a delay of days, weeks, months or years) **after lactation initially ended** (after giving birth).
- **Induced lactation:** process of stimulating lactation **without pregnancy**.
- **Inappropriate, abnormal lactation, or galactorrhea:** milk secretion more than 3 – 6 months after an abortion, or more than 3 months after weaning, or in a nulliparous woman (with amenorrhea and hyperprolactinemia).

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 7

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Definitions (cont.)

- **Wet nursing:** breastfeeding by another woman.
- **Cross-nursing:** newer term for same phenomena (to disassociate from negative historical connotations).



https://s-media-cache-akd.pinimg.com/736x/d4/12/4c/d4124ce93d857e4e46586a50eaad070.jpg  
SOUTHERN HOSPITALITY


https://www.theoptionmagazine.com/2012/04/05/clever-cleavage-adoptive-breastfeeding/

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 8

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Definitions (cont.)

- **Co-feeding:** also breastfeeding by another woman, but this term suggests reciprocity (used for babysitting, or to help stimulate lactation...).
- **Milk sharing:** peer-to-peer practice, facilitated by Internet forums (e.g. *Human Milk 4 Human Babies*).
- **Milk kinship:** bond created by sharing the same milk (creating real kinship for Muslims).



https://codememama.com/2012/07/16/reqesting-cross-nursing-will/

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 9

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Definitions (cont.)

- **Tandem nursing:** breastfeeding simultaneously two siblings of different ages.



http://aابreastfeedinghelpinaz.com/tandem-nursing/

https://parenting.firstcry.com/articles/tandem-breastfeeding-nursing-your-newborn-with-toddler/

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 10

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Definitions (end)

- **Dry nursing:** comfort nursing on a dried up breast (e.g. grandmother).



http://diverlayer.com/img/grandmother%20breastfeeding%20grandchild%20/image?ab=1

https://www.popsugar.com/family/Photo-Grandmother-Breastfeeding-her-Granddaughter-45810965

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 11

**PLAN**

- BACKGROUND
- DEFINITIONS
- **RELACTATION**
- INDUCED LACTATION



http://www.theoptionmagazine.com/2012/04/05/clever-cleavage-adoptive-breastfeeding/

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 12

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Relactation

- Purposes
- Case report
- Data (from India, Philippines, USA...)
- Contributing factors

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 13

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## ➤ Purposes of Relactation

- For a sick or premature baby (not fed initially)  
e.g. centers for rehydration in developing countries
- After premature weaning (sickness baby or mother)
- Infant developing allergy or food intolerance
- To produce milk for an adopted infant (after weaning or while still breastfeeding her own biological child)



- During a disaster (BF: only safe clean food when clean water, sanitation, heat and light are not available)

<https://supportingbreastfeeding.files.wordpress.com/2013/11/permission-asked.jpg?w=630>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 14

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## ➤ A Case Report from Roumania


- Muresan M. Successful relactation – a case history. *Breastfeeding Medicine*. 6 (4). 2011




Dr Evelynne Ruf\_Relactation/induced lactation\_2020 15

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Relactation: A Case from Romania Background




- Healthy male term infant (3600 gr, 51 cm, Apgar 10)
- Mother: second-para, 27 years old, normal-sized and -shaped breasts and nipples
- Previous BF experience (6 months exclusive, total duration 18/12).
- Delivery by emergency C/S. First BF at 3 hours, continued exclusively until 10 days p.p.
- Sudden interruption on day 11 as mother had to be re-admitted for a severe skin condition: pyoderma gangrenosum.

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 16

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Relactation: A Case from Romania (cont.) Maternal Medical Condition




- Pyoderma gangrenosum: idiopathic, necrotizing, noninfective ulceration
- Develops spontaneously or at site of surgical wounds/injections.
- Began at day 4 (rapidly progressive). Admitted on day 11. Lactation was stopped.
- Misdiagnosed as necrotizing fasciitis → wound debridement and aggressive antibiotherapy.




Dr Evelynne Ruf\_Relactation/induced lactation\_2020 17

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Relactation: A Case from Romania (cont.) Maternal Medical condition




- Pyoderma gangrenosum diagnosed by a dermatologist.
- Improved quickly under aggressive therapy with corticosteroids.
- Abdominoplasty done after 24 hours.
- Full recovery and discharged after 7 weeks of hospitalization (i.e. 8.5 weeks/2 months post-partum)...



Dr Evelynne Ruf\_Relactation/induced lactation\_2020 18


UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

**Relactation:**  
**A Case from Romania (cont.)**  
How the infant was fed



During this time:


- **Mother's sister** (already tandem feeding her own 6-month and 2-year old babies) **breastfed** her nephew for a while.
- Mainly he received her **EBM or AM by bottle**.
- Mother's sister: "colostrum-like fluid (yellow, thick) was produced and lasted for 1 month". *[Atypical!]*



Dr. Evelynne Ruf\_Relactation/induced lactation\_2020 19

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

**Relactation:**  
**A Case from Romania (cont.)**  
Relactation Process




Relactation began at 9 weeks p-p:

- **Breast stimulation/emptying**
  - Breast massages (from 8 weeks)
  - Breast pumping (3-4 times/day from 9-11 weeks, then 7-8 times at 12 weeks)
  - Hand expression
  - Skin-to-skin, bedding-in
  - Giving aunt's EBM/formula by SNS
  - Frequent suckling on bare breast (from 13 weeks): every 30', then 60'.


Dr. Evelynne Ruf\_Relactation/induced lactation\_2020 20

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

**Relactation:**  
**A Case from Romania (cont.)**  
Relactation Process




- **Galactogogues** (9 to 15 weeks)
  - Domperidone (30 mg/day)
  - Herbal (anise, dill, royal jelly)
- **Intensive support and follow-up** by an IBCLC (relative): 3-4 times/week.
- Plus whole family support.






Dr. Evelynne Ruf\_Relactation/induced lactation\_2020 21

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

**Relactation:**  
**A Case from Romania (cont.)**  
Relactation Success




- ❖ Four days after relactation started, colostrum appeared (for 2 weeks).
- ❖ **Full breastfeeding resumed** by 13 weeks p-p (A), i.e. **1 month relactation**.
- ❖ Exclusive breastfeeding continued until 7 months (B),
- ❖ Continually breastfed until **2 years of age** (C).

Dr. Evelynne Ruf\_Relactation/induced lactation\_2020 22

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

**Relactation:**  
**A Case from Romania (cont.)**  
Analysis of Problems




Problems that occurred:

1. **Insufficient breast stimulation and bottle feeding**
  - Initially due to mother's weakness (9-11 weeks): EBM (from her or aunt), or AM given twice a day by bottle
  - Also when baby falling asleep too quickly on breast with SNS
  - And when baby refused SNS feedings (at 12 weeks)
2. **Breast refusal** (at 12 weeks + 3 days)
  - Had rhinopharyngitis
3. **Low milk supply:** after 3 weeks, only 250-300ml/day
4. **Slow weight gain** (went from 50<sup>th</sup> to 15<sup>th</sup> percentile):
  - No gain during 14<sup>th</sup> week (1<sup>st</sup> week exclusive BF)




Dr. Evelynne Ruf\_Relactation/induced lactation\_2020 23

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

**Relactation:**  
**A Case from Romania (cont.)**  
Growth Chart



Weight-for-age BOYS  
Birth to 2 years (percentiles)






WHO Child Growth Standards

Dr. Evelynne Ruf\_Relactation/induced lactation\_2020 24

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Relactation: A Case from Romania (cont.) Overcoming the Problems



**Solutions and interventions for these problems :**

- 1. For insufficient stimulation/emptying of the breast:**
  - Mother pumped after every breastfeeding (7-8 times at 12 weeks)
  - From 13<sup>th</sup> week: baby suckling more frequently (10-12 times)
- 2. For breast refusal:**
  - Used nipple shields (same latex as teats), during 3 days
- 3. For low milk supply:**
  - Cessation of supplementation at 13 weeks and frequent suckling
  - Cessation of taking weight before and after each feed
- 4. For growth (was it really a problem?):**
  - Baby following 15th percentile (even with normal amount)
  - Happy, contented, good development

*End of this case story*

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 25

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### ➤ Data on Relactation

- From USA
- From India
- From Philippines



Dr Evelynne Ruf\_Relactation/induced lactation\_2020 26

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Data on Relactation

Boose CL et al. Relactation by mothers of sick and premature infants. *Pediatrics*. 67:565 1981 [Lawrence 7<sup>th</sup> Edition, p.657]

- Prospective study of infants in NICU (Durham, North Carolina)
- Mothers and infants admitted in the clinical research unit.
- Assisted for relactation with Lact-Aid (L-A)
- Discharged when all feeding established at breast (BF +L-A)
- Transient nipple soreness.

<http://img.medscape.com/fullsize/migrated/540/786/jabfm540786.fig3.gif>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 27

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Data on Relactation (cont.)

Boose CL et al. Relactation by mothers of sick and premature infants. *Pediatrics*. 67:565 1981 [Table 19-4 in Lawrence 7<sup>th</sup> Edition]

Case no.	Gestational Age	Time From Delivery to Entry Into Study (days)	Time From Last Lactation to Entry Into Study (days)	Postpartum Breast Involution*	Time to First Breast Milk (days)	Time to Half Breast Milk Supply (days)	Time to Complete Relactation (days)
1	Term	10	10	None	1	4	8
2	Term	120	120	Incomplete	4	20	28
3 <sup>†</sup>	Twins, 31 wk	49	49	Complete	7	28	Never
4	32 wk	70	42	Complete	7	39	Never
5	28 wk	150	135	Complete	9	Never	Never
6	32 wk	30	16	None	4	17	58
7	Term (adopted)	5 yr	5 yr	Complete	21	Never	Never

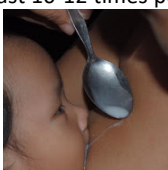
Dr Evelynne Ruf\_Relactation/induced lactation\_2020

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Data on Relactation (cont.)

Banapurmath CR et al. Initiation of relactation, *Indian Pediatrics*. 30:1329-1332 1993

- 15 mothers (Karnataka, India); [2 with premature infants and 2 surrogate mothers (last BF 16 yrs & 6 yrs)]
- Had stopped BF for 2 weeks of more (for low milk supply and supplements introduced)
- Management: infant put to the breast 10-12 times per day (for 10-15 minutes each side)
- While helper poured formula or donor milk over the breast (quantity was gradually reduced when mother's milk increased).



<https://chronicleofanurse.in/mom.wordpress.com/category/guest-post/>


Dr Evelynne Ruf\_Relactation/induced lactation\_2020 29

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Data on Relactation (cont.)

Banapurmath CR et al. Initiation of relactation, *Indian Pediatrics*. 30:1329-1332 1993

- Milk appeared at 7 and 8 days.
- Exclusive breastfeeding was accomplished in 45 and 40 days.
- Follow-up and support was intense. Babies were seen and weighed weekly.
- Ten from fifteen mothers reached exclusive BF, and five continued BF with some supplementation.



<http://rehydrate.org/images/f102.jpg>

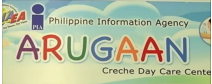
Dr Evelynne Ruf\_Relactation/induced lactation\_2020 30

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Data on Relactation (cont.)

From Philippines: Aarugaan Daycare Center *[to nurture fully]*  
<http://www.waba.org.my/whatwedo/old-womenandwork/seedgrants/arugaan.htm>

- Wet-nursing by peer counselors bringing their own babies to the center.
- Relactation encouraged for bottle-fed infants, fed on donor's breastmilk through cup.
- Above 6 months: nutritious homemade food every two hours (no bottle).
- Excellent results: babies health and development, and mothers' work performance...




<http://www.youtube.com/watch?v=Z8qL0ZaM4>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 31

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Data on Relactation (cont.)

From Philippines: 'Relactation is a journey from the Heart' by Velvet Escario-Roxas (Deputy Executive Director of Arugaan)

- 1-month old baby, fully bottle-fed (800 ml AM/day)
- Best help: an Arugaan-trained peer counselor and her 2 month old infant. Both dyads stayed together.
- First morning: breast refusal → fed EBM by spoon @ cup
- Noon: latched on the wet-nurse
- Late afternoon: back on mum's breast (with dripped milk)
- Cross nursing to accelerate: stimulation for new mother (by 2-month old baby), training for baby (full breast)

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 32

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Data on Relactation (cont.)

From Philippines: 'Relactation is a journey from the Heart' (end)

- Dripped milk: Arugaan version of the Supplementing Nursing System



**Time Tears**

- Relactation process completed within 3 days!
- And BF continued until 2 years!

<https://chroniclesofnursingmom.wordpress.com/2013/07/26/guest-post-relactation-is-a-journey-from-the-heart/>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 33

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Success of Relactation: Contributing Factors

Positive	Negative
<ul style="list-style-type: none"> <li>Strong motivation &amp; confidence</li> <li>Time allocated</li> <li>Previous successful BF</li> <li>Lactation initiated</li> <li>Short gap without BF</li> <li>Young infant (&lt; 3/12)</li> <li>Strong support (spouse, professional, peer)</li> </ul>	<ul style="list-style-type: none"> <li>Lack of awareness &amp; lack of confidence</li> <li>Busy schedule (working)</li> <li>Primary low milk supply</li> <li>Initiation blocked</li> <li>Long gap without BF</li> <li>Older infant</li> <li>Lack of support</li> </ul>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 34

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## PLAN



- BACKGROUND
- DEFINITIONS
- RELACTATION
- INDUCED LACTATION**

<http://www.theadoptionmagazine.com/2012/04/05/clever-cleavage-adoptive-breastfeeding/>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 35

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Induced Lactation


- Purposes
- Spectrum of options
- Physiology of induced lactation
- Different protocols
- A delicate balance and transition

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 36

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Purposes of Induced Lactation

- For adoptive mothers
  - Infant/young child
- For intended mothers
  - Through surrogacy → newborn
- For foster mothers
  - Long-term foster care,
  - Baby who was breastfed before, and/or required by the mother
- For non-gestational lesbian mothers (questions in the IBLCE exam...)

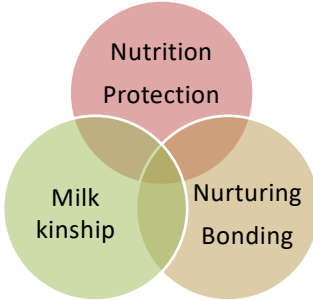


<http://onyababy.com/2014/03/adoptive-breastfeeding/>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 37

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

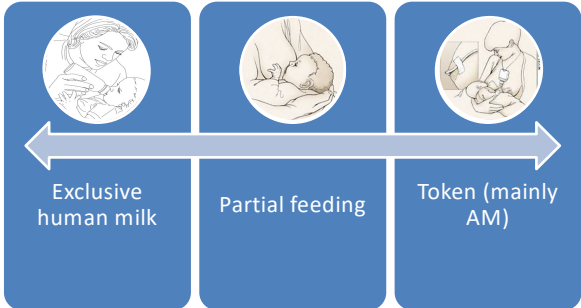
### Purposes of Induced Lactation (cont.)



Dr Evelynne Ruf\_Relactation/induced lactation\_2020 38

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Full Spectrum of Options

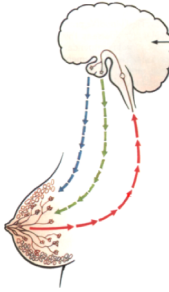


Dr Evelynne Ruf\_Relactation/induced lactation\_2020 39

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Physiology of Induced Lactation

- Stimulation of nipple/areola → prolactin and oxytocin (“supply and demand” basis).
- Not necessary to have been pregnant.
- But during pregnancy, increasing levels of progesterone and estrogen ready the breasts for lactation; **without this preparation, lactation is possible, but with less amount of milk.**



Dr Evelynne Ruf\_Relactation/induced lactation\_2020 40

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Induced Lactation: Is it ‘Normal Human Milk’?

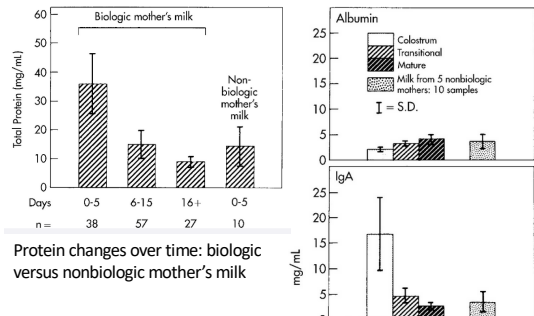
- Animal studies (bovine, rat): no difference between induced milk and puerperal milk
- Developing countries (refugee camps in India & Vietnam): normal growth and weight gain
- Several small studies about galactorrheal and induced milk: “the induced lactation milk did not differ from puerperal milk”. [Lawrence 7<sup>th</sup> edition, p. 652]
- Reports of colostrum-like secretion at the beginning, gradually changing to mature-appearing milk.
- Induced breast secretion: “close to the composition obtained from women during **established lactation**”\*.

\*Kulski et al. Am J Obst Gynecol 1981

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 41

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Induced Lactation: Is it ‘Normal Human Milk’? Yes, but Skipping the Colostral Phase



Protein changes over time: biologic versus nonbiologic mother's milk

mg/mL

Kleinman & et al. Protein values of milk samples from mothers without biologic pregnancies. J Pediatr 97:614, 1980.)

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 42

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## ➤ Protocols for Induced Lactation

- Steps 1, 2, 3
- Choices between the different protocols
- Traditional protocol
- Avery protocol
- Herbal protocol
- Newman-Goldfarb protocol
- A delicate balance and transition

Dr Evelynne Ruf\_Relactation/Induced lactation\_2020 43

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## ➤ Protocols for Inducing Lactation

Dr Evelynne Ruf\_Relactation/Induced lactation\_2020 44

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Choices between the Different Protocols

Many factors to consider:

- Goal (Nutrition? Bonding? Milk kinship?)
- Time available (before baby's arrival, working woman?)
- Baby's age and experience with breastfeeding
- Woman's breast/nipple challenges (Insufficient Glandular Tissue? Inverted nipples?)
- Adoption done because of male infertility? (better prognosis)
- Hormonal state (menopause? PCOS? H/O prolactinoma?)

Dr Evelynne Ruf\_Relactation/Induced lactation\_2020 45

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Choices between the Different Protocols (cont.)

Many factors to consider (end):

- Woman's health condition (diabetes? hypertension? obesity? smoking...) → contraindications to hormones
- Health professional's experience
- Support network
- Woman's and couple's preference
- Socio-economic context

<http://www.nursingbook.net/Consultations.html>

Dr Evelynne Ruf\_Relactation/Induced lactation\_2020 46

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Traditional Protocol In developing countries

- ✓ Survival tactic (refugee camps)
- ✓ By women who had been mothers and BF previously (e.g. grandmother)
- ✓ Culture where frequent BF is the norm
- ✓ No breast pumps, SNS or AM available

- Additional food for mother
- Breastfeed +++
- Supplement by cup (gruel, animal milk...)
- Traditional galactogogues (e.g. coconut milk)

[http://evesmama.com/wp-content/uploads/2011/06/CAR\\_woman-baby.jpg](http://evesmama.com/wp-content/uploads/2011/06/CAR_woman-baby.jpg)

Dr Evelynne Ruf\_Relactation/Induced lactation\_2020 47

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Avery Protocol Auerbach & Avery, 1981

- ✓ JL Avery, a pioneer in induced lactation (USA)
- ✓ Personal experience
- ✓ Inventor of Lact-Aid supplementer

- Breast massage
- Hand expression
- Partner suckling

- Breastfeed with an at-breast supplementer

Dr Evelynne Ruf\_Relactation/Induced lactation\_2020 48



UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Pumping Protocol

West & Maresco, 2009

Step 1: Preparing Breasts for Making Milk

- Breast massage > several weeks

Step 2: Start Making Milk Before Baby Arrives

- Pump > 6 weeks > with an hospital-grade double pump, > 8 times/24 hours (night)

Step 3: Breastfeeding and Making More Milk

- Breastfeed > with an at-breast supplementer
- Pump (many mothers choose not to)

www.mothersmilk.com

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 49

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Herbal Protocol

S. Cox (Australia), 2011

Step 1: Preparing Breasts for Making Milk

- Goat's rue > 1-2 months (builds breast tissue)

Step 2: Start Making Milk Before Baby Arrives

- Pump
- Herbal combination

Step 3: Breastfeeding and Making More Milk

- Breastfeed with an at-breast supplementer
- Pump
- Herbal combination

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 50

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Newman-Goldfarb Protocols

www.asklenore.info

- The most popular (the most effective)
- Step 1: mimicking pregnancy by giving 3 of 4 hormones
  - Progesterone
  - Estrogene
  - Prolactin
- Three different protocols:
  - Regular (at least 6 months)
  - Accelerated (if only 1-2 months for step 1)
  - Menopause (replacing HRT)

Combined contraceptive pill (Ethinylestradiol 35 µg + Norethindrone 1.0 mg), taken without interruption (progesterone alone if > 35 years or C-V risk factors).

Domperidone\*: 40 mg to 80 mg/day

960 ml/day

Lenore Goldfarb: never used a SNS

\* Safety checklist (as QT prolonging drug)

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 51

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Newman-Goldfarb Protocols

(Regular, Accelerated, Menopause)  
www.asklenore.info

Step 1: Preparing Breasts for Making Milk

- Combined contraceptive pill
- Domperidone (safety checklist!)

Step 2: Start Making Milk Before Baby Arrives

- STOP pill (1/12 before baby is due)
- Continue domperidone
- Pump

Step 3: Breastfeeding and Making More Milk

- Breastfeed +/- supplementer
- Pump
- Domperidone

https://www.parentmap.com/article/using-your-adopted-baby

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 52

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Supplementation: a Delicate Balance

Too much supplement

Less demand for breastfeeding

Not enough supplement

Not enough calories for baby

Alyssa Schnell, Gold International 2014

http://cliparts.cc/

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 53

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

### Understanding the Transition

- Detached Care (Institutionalized)
  - Minimal touch
  - Bottle propped
  - Nipple opening enlarged
- Attachment Care (Loving care)
  - Cradled in mother's arms
  - Held while being fed
  - Eye contact
  - Untampered bottle nipple

Alyssa Schnell, Gold International 2014

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 54

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Ready to Latch: Key Points

N-B: More in the session 'Not yet latching and Breast refusal'

Alyssa Schnell, Gold International 2014

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 55

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## At-Breast Supplementation

Practice makes perfect...

<https://s-media-cache-ak0.pinimg.com/236x/42/c1/ef/42c1efab344f511fcb77e40776f026f2.jpg>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 56

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Nice Quotes...

"Every [...] mother can define her own success, no longer thinking of breastfeeding as 'all or nothing', but rather knowing that any amount of human milk given to a child is valuable beyond measure and worth any effort it may take to produce it." Diana West, 2001

"Mothering success is not measured in ounces - or drops - of milk that flow from breast to mouth ; it's measured in the love that flows between mother and baby." Diana Cassar-Uhl, 2012

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 57

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## Conclusion

- Artificial milk: not a real substitute to mother's milk
- Relactation/induced lactation respond to this fact.
- Prognosis and plan should be individualized
- Role of IBCLCs: technical plus empowerment
- Role of mother-to-mother, family, society SUPPORT

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 58

UNITED ARAB EMIRATES  
MINISTRY OF HEALTH & PREVENTION

## The End... or the Beginning?

Thank You!

<http://www.nursingnook.net/Consultations.html>

Dr Evelynne Ruf\_Relactation/induced lactation\_2020 59