

**A Summary of Ethnographic Research
In Egypt with Respect to Diarrheal Disease**

Introduction:

Oral rehydration therapy (ORT) is a new concept in the treatment of diarrheal disease. Oral rehydration salts, in commercially made sachets or home-made, is a new product. Both concept and product will have to compete with other long-existing concepts and products for diarrhea therapy some, incompatible with ORT. If we wish to sell this new idea and new product we must first know what the competition is.

If we wish our sales message to be believable, relevant and accepted, we must know the language used by children's caretakers and what deeply held perceptions they possess when dealing with a sick child. We may then be able to choose the language and perceptions that most closely approximate what we are trying to get across, without having to promote a whole new set of constructs and words. For instance, a mother may worry about her child being "weakened" by diarrhea, and even use a specific word for this, but has no understanding of "dehydration". Since ORT prevents weakness or returns strength, the physiological explanations of volume depletion-repletion are immaterial. We can learn how to communicate effectively if we speak the same languages: verbal, cultural, and emotional.

We also wish to prepare messages and instructions that the mother feels secure in carrying out: to prepare a liter of water-clear fluid may seem ludicrous if we are promoting ORT as a food or as a medicine and she only prepares the food or medicine in small doses. We wish to make the new behavior as similar to existing behaviors as possible without damaging its effectiveness.

Finally we wish to bond the caretakers to our campaign by reinforcing the beneficial aspects of care, and acknowledging their good efforts and concern for the child. We can learn what to reinforce from an in-depth knowledge of what people do.

Our research is proceeding along four lines: a thorough review of existing information from Egypt; discovery in focus groups and through in-depth (one-on-one) interviews; by structured surveys; and by direct observation. To guide these researches we first prepared a list of questions whose answers are important for the definition of the concepts and products we wish to sell (Appendix A). The list is not yet complete and will be expanded or restated as we get more information and begin to monitor the effect of the campaign.

We have organized our research and report by the target audiences: primary caretakers (mother, father), and secondary sources of care (physician, pharmacist). Topic headings include diagnosis (that is, recognition of diarrhea and its effects), help-seeking behavior, treatment practices, preventive measures, and channels of communication. The current list has not yet included lay health workers such as dayas, or nurses. Research questions are now being developed for such persons. Appendix A is the list of ethnographic questions. Not every question has been answered (or answered definitively) and this report will indicate where more research is needed.

This report also summarizes how the research findings are relevant to decisions and strategies for the National Control of Diarrheal Disease Campaign. This report summarizes nearly 50 studies, some still in progress, on various aspects of diarrheal disease and health care in Egypt (Appendix B). Not all are rigorous scientific studies, but review of so many studies provides discernible patterns.

The studies tend to be biased to Lower Egypt, to urban settings, or to rural areas near the larger cities or to more cooperative respondents. Bias is mitigated since the populations over-represented are the majority of Egyptians. Also the differences in knowledge, attitudes and practice may be greater between urban and rural populations per se than between Upper and Lower Egypt populations. Nonetheless deaths are disproportionately represented among the poorest, rural, Upper Egypt residents. In any case, the overall pattern of data is sufficient to indicate initial strategies for mass education. Where implications for such strategies may be drawn, we will set them off in a box in the middle of the text.

(A glossary of commonly used words is attached as Appendix C.)

I. **Mothers:**

Two general themes emerged from our research:

- . A strong, positive and emotional response to themes of caring and nurturance of infants, in an atmosphere of tenderness and cleanliness, optimism and happiness. She will respond to these elements in a campaign.
- . A strong awareness of the responsibility of the mother, and her need to be practical, resourceful (or "clever") in the ongoing care of her child. She will like practical solutions, practical, understandable names and words.

Both themes should be stressed positively and praised linking these behaviors to better care of diarrhea.

1. **Diagnosis:**

Mothers have no difficulty determining diarrhea; it is simply any change from the usual in their child in consistency, frequency or color (green, most often cited) of stools. Diarrhea (ESHAAL) may become "strong" in which case it is watery, even flowing like water from a tap. As long as it has just begun, it does not attract much attention (not unreasonable: in the summer a child may have diarrhea one day out of three). It may be blamed on teething (whether the child is or not), or some "cold" on the abdomen. Blood in the stools, especially with fever, is considered more seriously.

When diarrhea becomes copious and watery especially if there is vomiting, the condition is serious - NAZLA MAAWIYA ; the relationship to ESHAAL is like bronchitis or pneumonia to a runny nose.

If diarrhea becomes chronic, especially with any loss of appetite or vigor, this also is a matter for worry; and plainly messy ("the stool burns the skin of the mother's lap".)

The word and concept of "Geffef", or dehydration, is understood by only a third of mothers even in urban areas (the figure, we believe is much lower in rural Upper Egypt). What is clearly understood are the following signs and symptoms of the child we call dehydrated: weakness, loss of appetite, fatigue or irritability, sunken eyes, and fever.

Reinforce the recognition of these signs and symptoms to link to the name "Geffef".

She clearly sees the connection between the diarrhea and these signs and believes that until diarrhea stops these signs cannot reverse (that is, there is no likelihood that one could still have severe diarrhea but have a lively alert baby ("whose face is like the moon").

Dr. Evelyn Early has written extensively about a cultural notion of illness as a body imbalance and restoration coming especially through "natural" (or folk) remedies. None of this emerged in discussions with mothers of diarrhea therapies (including interviews by Dr. Early) except possibly in mothers' desire to return their babies to vigor and liveliness.

2. Seeking Help:

A mother is likely to try home remedies first. These will include traditional fluid decoctions but also proprietary medicines she obtained from a pharmacist during some previous episode. If there is no improvement she is likely to visit a physician or a major hospital (the poorer women may go to a Ministry of Health facility). What is important is that her search for help is sequential, not simultaneous. She may wait 2-3 days to see if one physician's remedies work before going to another source of care. Criticism of mothers for poor care centers around waiting too long for a particular remedy to work. (The pharmacist, contrary to expectation, is consulted first in less than 20 per cent of instances.) A powerful bond exists between mother and physician. The first one to see her will try to administer a whole battery of drugs so as to impress her and perhaps hit on

one (to his/her thinking) that will stop the diarrhea so that she returns to him/her. If the mother has waited 2-3 days before seeing the physician the diarrhea may be about to end and his/her treatment will be seen effective, and her choice of him/her as correct. There is a strong acceptance of co-temporal events as being causal both in the origin of disease and in its treatment.

The rapidity with which ORT improves the wellbeing of a child should be stressed in visuals.

The exception to the sequential search paradigm is the urban mother who uses the Ministry of Health doctor to reassure herself that all is well. This is done usually in mild illness and perhaps also in the expectation of getting free medications.

When treatment fails, the fatalism, "it is God's will", comes after an ordered, persistent search for cure and not before. In two studies of diarrhea deaths in rural areas, 86 per cent and 95 per cent of children respectively saw one or more physicians before death.

The father plays a backup role in the care of the child, intervening only when a major decision is to be made (travel to a more distant hospital, major layout of cash). He considers the child's care the mother's responsibility. There is a hint that male babies may receive preference in referral to hospital for care. We do not know the extent to which friends, relatives, neighbors play a role in therapy. There is, of course, a strong tradition of the "therapeutic narrative", the mother's discussion during and long after of all the events leading up to an illness, its management and outcome; these stories tend to shift with time and perspective. How they affect immediate decision-making is uncertain. Also we do not know yet if one mother - successful with ORT at a rehydration center - is apt to tell or convince another to try the new remedy. The mother's own mother is a solid source of advice.

Traditional healers play a strong role especially in rural Egypt. How often do they treat infant diarrhea is unknown. The daya may not even be consulted since it is not her speciality. The custodian of a health center may be a new breed of village health worker. This area needs more research.

2. Treatment:

The overriding goal of treatment is to stop diarrhea. If breast-feeding is stopped it is because it is feared that it will promote diarrhea. The use of fluid decoctions such as helba, tea, starch or rice-water are as constipatives, not fluid replacements. There are no clear preferences among the decoctions. All are heavily sugared, and all given in very small amounts. (1/3 of cup 3-4 times a day, say.) There is a general sense of what babies can "tolerate": one under 3-months cannot tolerate rice water, a small child cannot tolerate a liter of fluid. It is commonplace to reduce a recommended volume dose: one glass becomes a half-glass; the liter "Oralyte" pack is used a spoonful at a time.

Medicines for diarrhea are potent to the degree that they stop diarrhea; even if a mother sees how ORT has restored her child's vigor she is apt also to commend it for stopping diarrhea (a coincidence, to be sure). But also their appearance is important: the brown tablet Enteroquin is popular currently. Some medicines, like Diapec, are liked because they look like flour (hence constipative). A medicine in a red box is preferred because the color attracts the child. Those who know about ORT are apt to discuss it as "Glucose" which is also the name given to intravenous fluids (the ultimate life saver used in large hospitals). ORT itself has some disadvantages: it is clear and watery (hence dilute, inferior). The ORT tablet with citrate has non-soluble binders and the milky white residue is actually preferred. It looks like milk which the child likes. While sugar is appropriate to put into a drink, salt is not (the citrate ORT formula is much preferred because it masks the salty taste). Mothers will most often stop ORT because the child "does not like it". This actually is

a reasonable end-point for rehydration and perhaps can be part of our messages.

The same basic fund of information about treatment of diarrhea is shared by Egyptian mothers across all class and economic lines irrespective of literacy.

"Let the child drink as much as it wishes", must be a theme with many illustrations of thirsty children avidly drinking cups of ORT.

4. Feeding:

Stopping breastfeeding is not universally agreed to. The debate is between making diarrhea worse (in fact, scientifically, the opposite is true) and not weakening the child. Even using soft, "light" foods, if the child's appetite can tolerate it, is acceptable (potato, yoghurt, rice pudding, chicken soup).

Stress the natural effect of ORT on restoring appetite.

5. Communications:

Who are the people who could influence a mother to change behavior with respect to care of diarrhea? One would think that other mothers play a role but this is yet unproved (research is now ongoing on this point). The mother's own mother is a regular source of advice. The husband is called in when major expenditures or travel are required but this seems not to be a barrier. Sheikhs and religious leaders are inappropriate - diarrhea and religion don't mix - and appealing to them is likely to rouse suspicions that the government is promoting yet more family planning. A famous personality - such as Fuad Mohandes - has been tried in a pilot campaign and may be very useful in promoting a new therapy but mothers strongly believe that a doctor must accompany such a personality.

Children would not be credible message bearers. What is clear is that there should not be an incongruence between the message and message bearer.

The one person who consistently influences the mother is the physician.

The channels of communication are changing rapidly. Television may now reach nearly a third of mothers with children at highest risk, and radio another substantial portion.

Folksongs, MAWAWIL (a sort of epic poem on life's travails and ailments set to melancholy music), and long drama are likely to be powerful formats to convey messages. Personalized messages (testimonials by mothers) are likely to be effective.

Cinema and newspapers will not be good channels.

The loving, responsible mother and competent physician are likely to be a powerful combination in media messages.

2. Prevention:

This area is poorly explored.

II. Physicians:

1. Diagnosis and treatment:

The young general practitioner, a recent graduate, is the norm in Egypt. He or she is very definite about diarrhea and its treatment. Severe diarrhea (one stool or more an hour, watery, green with vomiting) is likely to be "infective" (as opposed to mild "dietetic" diarrhea) which, they believe, requires antibiotics, antimotility agents, anti-emetics, constipatives. They absolutely believe they can and must stop diarrhea. If dehydration occurs, intravenous fluids are needed. ORT is merely a supportive, secondary approach not needed if there is no visible dehydration.

Breastfeeding is stopped until diarrhea is over as a further attempt to control stool output.

(All the above have been proved untrue.)

The tendency to polypharmacy is also fueled by pressure from the mother; if she is a regular patient, one who will return to them, there is a tendency to reduce the number of prescriptions. If it is a new patient the tendency is to throw the whole range of drugs in as a way of reducing the chance that the mother will go elsewhere for another type of drug. There may be direct economic motives in some physicians to prescribe many drugs and intravenous therapy.

Physicians trained in ORT centers are more certain to prescribe ORT, less likely to use a long list of drugs, less likely to eliminate breast-feeding; but the economic pressures are still there.

2. Communications:

GPs are more likely to obtain information from medical representatives of drug firms, or from a colleague, while those trained at ORT centers are more likely to read and believe scientific research. Both groups will believe an eminent professor only if they know that the professor practices what he/she preaches (with ORT, unfortunately, not always the case). What is convincing to many physicians is direct observation and hands-on experience with ORT in their own setting.

The professional syndicates and associations ought to be good channels for dissemination of information. We find, however, that mailing lists are seriously out of date and incomplete.

Although physicians strongly influence mothers, they have a universal disregard for mothers' intelligence, capacity to know about diarrhea, ability to follow directions; hence very little health education passes from physician to mother.

There are no data on television viewing habits of physicians. It is probable many are too busy with practice to attend to television seriously. We found none who regard it as a serious medium for physician education (but wish it were used more to educate mothers).

Physicians are favorably impressed by materials that are direct, simple, and clear.

How to reach physicians quickly with the message of ORT is a major objective of the media campaign. It will be a serious error to reach mothers ahead of the physician.

Finally, physicians have little faith in nurses, hakimas, dayas to be credible promoters of therapy for diarrhea.

III. Pharmacists:

1. Diagnosis and Treatment:

Pharmacists are popularly believed to be good merchants and good advisers to their customers. Of care of diarrheal disease the pharmacist's fund of knowledge is not much different from that of general practitioners. The pharmacist is often deficient in the ability to mix ORT in the proper proportions; nearly always they advise a far too concentrated solution.

The pharmacist is generally not used as a first source of care for children's diarrhea; but 85 per cent of drugs prescribed for diarrhea do come from the pharmacy although who actually obtains them is not known (see Appendix D). Their advice, if solicited, will be couched in terms of what will bring the customer back - trying to please the customer with whatever remedy is currently in vogue. There is little correlation between proportional or absolute profit, and sales.

2. Communications:

It is our impression that pharmacists, especially in more removed areas, are bereft of scientific or promotional materials; they may well appreciate a direct, tailored approach.

An in-depth investigation into the role of the pharmacist in care of diarrhea is critically needed.

APPENDIX A - RESEARCH QUESTIONS

I. Mothers

1. Diagnosis:

- . How do they decide if child has diarrhea?
- . What is it called?
- . Do they recognize other forms?
- . What do these other forms consist of?
- . Is there a connection between, or progression through the several forms?
- . What besides diarrhea does a mother notice (weakness, weight loss, irritability, decreased urine output, flat fontanelle, loss of appetite, dryness, thirst, sunken eyes, other?)
- . What words are used for any of these?
- . If mother notices diarrhea is it trivial unless accompanied by one or more of the other signs?
- . If a mother says she wants to "stop" diarrhea does she only want to stop loose stools or stop the other signs? That is will she prefer a vigorous health child with loose stools, or a weak, dry child with no diarrhea?
- . What, in fact, do mothers worry about with diarrhea in their children:
 - It leads to death?
 - It leads to weight loss?
 - It leads to weakness?
 - It is messy?
 - Child is in pain?
 - She will be criticized for child being ill?
 - She feels guilty?
- . When does a mild illness become severe?
- . What are the signs it did?
- . Is there a clear single turning point in becoming more severe?
In improving?
- . What causes diarrhea?
- . Does mother hold to idea that child with diarrhea has a body imbalance

and that QUWA or power must be expended to correct the depletion or imbalance?

- . Would ORT or any medicine ever be considered as giving or restoring power?

2. Seeking Help:

- . Does mother make numerous, persistent, multiple searches for help?
- . In what order, or is it simultaneous and by what stimulus or signal does she seek help: self care, family, informal healers, traditional healers, afrangi medicine pharmacies, doctors, hospitals?
- . Why is the hospital the last resort?
- . Is there a difference between going for advice, going for approval, going for direct care?
- . Is there any difference in seeking help for boys or girls? If near or far to medical care? Poor or well-off?
- . At what point does father approve or veto choice of therapy or therapist?
- . Does father have to approve "new" treatment?

3. Treatment:

- . When is fluid stopped?
- . When is food stopped?
- . Why is breast feeding stopped? How much influence is from doctors on this point?
- . If breast feeding transfers mothers' tenderness, is this valuable to have if child is ill?
- . If mother is distressed when child is ill, will she stop breast feeding so as not to pass on distress?
- . Conversely, if ORT makes breast feeding safe, or reduces her distress (and child's distress) will she restart (or continue)?
- . Why does she use:
 - Lemon starch
 - Helba water
 - Anise water

- Caraway water
- Cumin
- Tea
- Rice water
- Pomengranate peel (catichu)?
- . Any preferences? Why one, not another?
- . If medicine is dilute is it inferior?
- . Is ORT inferior (clear, slightly salty)?
- . When would mother consider it appropriate to add salt? To add sugar? Both together? To any of the above fluids? Could ORS be mixed into tea? Or helba?
- . How much is a mothers' pinch? Is mehalaby, the pinch to test a weaning food, a useful word for adding salt to a cup of fluid?
- . How much volume of fluid is safe or appropriate to make up at one time? To give over one hour? Over four hours?
- . What segments of a day do natural house rhythms dictate (to give concept of time)?
- . Should ORT be a food to nourish, a tonic to invigorate, or a medicine to cure?
- . Does she understand role of antibiotics? Antiemetics? Anti-diarrheals? What do these do?
- . Any preference in packaging: powder/tablet, vial/packet?
- . Can more than one medicine or treatment be used at once? Are there any incompatibilities?

4. Feeding:

- . Does the child need to display appetite in order to be fed?
- . Which of the following foods are acceptable during diarrhea?
Just after diarrhea?
 - Potato
 - Biscuits
 - Rice

- Youghurt
- Mahalabiya
- Belouza
- Medammes soup
- Chicken soup
- Banana
- Lentil soup
- Other?
- Vegetable soup?

- . Under what circumstances would mother give more food than normal?

5. Communications:

- . What folk forms of communication does mother attend to?
- . Is diarrhea too messy, trivial, serious a subject to be presented by entertainment media (songs, drama puppets, etc)?
- . Who would mothers believe most in presenting ORT messages (give ORT, breast feed, continue food):
 - Another mother who did it?
 - A doctor?
 - A nurse?
 - An older woman?
 - A sheikh?
 - Her husband?
 - Traditional healer?
 - T.V. announcer?
 - Famous personality?
 - A school child bringing home new information?
 - Other?

5. Prevention:

- . Is washing hands for ritual purpose only? or associated with cleansing after intercourse or menses? or can it be promoted for food preparation?
- . Will a nice soap make hand-washing more likely?
- . What is the total cost (time, effort, fuel) of boiling water?

II. Fathers:

1. Diagnosis:

- . When is father aware of child's diarrhea? When is he aware it is more serious? Who tells him?
- . Does he ever over-rule mothers estimate of severity?
- . What does he worry about when child is ill? (See list of possibilities under mother)?
- . Does he blame his wife?
- . Is he more worried about a sick son or a sick daughter?

2. Seeking Help:

- . Does he approve each source of help mother seeks? Which ones?
- . Does he differentiate between sons and daughters?
- . Is cost a factor? When?

3. Treatment:

- . What is the most effective treatment he knows? What least?
- . Is the cost a factor? When?
- . Is there any issue of loss of prestige for father if a child gets sick? Dies?

4. Feeding:

- . Why is breastfeeding (stopped)?
- . Should it be continued if it can be made safe during diarrhea?
- . What foods are appropriate in diarrhea?
- . Does father have any decision-making influence with respect to feeding? Feeding when ill?

5. Communications:

- . Would father accept new information from a school child? (See also list under mother.)

III. Physicians:

1. Treatment:

- . Antibiotics, constipating agents, antiemetics, how are they used?
- . Is it important to use several medicines in the treatment of infant diarrhea?
- . How about feeding during diarrhea?
- . What do they recommend to mothers about feeding: what foods, liquids?
- . What about breastfeeding, do they recommend stopping breastfeeding. Why?

Intravenous:

- . Experiences and impressions of I.V. therapy: amount of the personnel use, perceived benefits of the therapy, problems of the therapy, economic benefits, importance of therapy.

Oral Rehydration Therapy..:

- . Experiences and impressions of oral rehydration therapy.
- . Amount of personnel use.
- . Perceived benefits of the therapy.
- . Perceived problems of the therapy.
- . Economic benefits.
- . Importance of therapy.
- . What is the most important result of a treatment for infant diarrhea
- . Give quick results?
- . Inexpensive to the family?
- . Stop diarrhea, or prevent dehydration?
- . That a mother like and believe that it gives good results, or that physicians like it?
- . Easy to use?
- . More scientific?
- . How would they feel about a medicine for infant diarrhea, that could treat all symptoms involved in infant diarrhea, and danger of death from dehydration, but which permitted the diarrhea to stop on its own, would they accept to use it?
- . What type of proof would they require to believe this?

- . What would be best way of presenting this proof: seminars, magazines, T.V., radio.

2. Seeking Help:

- . Do they believe that health workers, other than physicians, are capable of diagnosing and treating dehydration with ORT?
- . Do they consider that mothers know about dehydration, about ORT?
- . Do they feel that a mother would be capable of diagnosing that her child is dehydrated?
- . Do they feel that a mother is capable of using ORT without a physicians or other health worker's supervision ?

3. Feeding:

- . What do they recommend to mothers about breastfeeding, and why?
- . What do they recommend to mothers about the use of supplementary feeding and why?
- . What do they recommend to mothers about breastfeeding during diarrhea episodes and why?

4. Communications:

- . In their views, what would be the best way to try and change physicians minds about treatment.
- . Where do they learn about new treatments, new information: professional journals? Magazines? Local professional journals? Drug companies direct mail? Radio? T.V.?
- . Have they changed treatments in the last years? What made them change treatments?

5. Other:

- . The project will entail the promotion of a new treatment for infant diarrhea. How would they feel about prescribing a medicine, with a colloquial name such as BELSHEFA.
- . This new treatment is a powder which comes in a pack and must be mixed in water. What size container is felt to be best if the mother is to mix the packet in the home?

IV. Pharmacists:

1. Diagnosis:

- . How commonly are they called upon to assess severity of illness?
- . Are they asked to confirm a doctor's diagnosis?

2. Seeking Help:

- . To what extent are pharmacists a first-line source of care?
- . Do they refer patients to physicians or hospitals?

3. Treatment:

- . Do they know about ORS?
- . Do they know how to prepare it?
- . Do they advise mothers on how to prepare it?
- . Do they compound oral solution on their own?
- . Do they advise on doctors' prescriptions? Especially if a long list is presented, do they help mother prioritize?
- . Do they give advice on feeding? What?
- . Is there an economic stake in recommending one form of diarrhea treatment over another?

4. Communications:

- . Where do they get their information from on drug use, new drugs?
- . Are there other media they would attend to if available for information?
- . Are pharmaceutical point-of-sale displays useful for bringing in new business, for public education?
- . What is the relationship between pharmacists and clients: friend, counselor, shopkeeper, therapist?

Appendix B lists the studies used for this report.

APPENDIX B

ETHNOGRAPHIC STUDIES

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Focus Group Sessions

Glossary of Commonly Used Vocabulary With
Respect to Diarrhea
Prepared By

Dr. Madiha El Safty

Condition of a Healthy Baby:Cries and plays
properlyEats feeds well
No diarrhea
No feverNo cough
Normal Bowell movements
No cold
Does not cry all the time
Does not vomit
Stool is as lenght as the moonCondition of an Unhealthy Baby:Does not run about play
No appetite for food
Does not breastfeed well
DiarrheaCries
Cries all the timeTransliterationBeyegree we Beyelaab
Beyakol Kewayess (or Helo)
Beyenam
Beyerdaa Helo
Meandoush Ishal
Meandoush Sokhouma
Beyedhak
Mabeykohash
Beyetsayar Helo
Meandoush Bard
Mabeyayatsh Tawaly
Mabeyestantaksh or Mabeyestafraghsh
Weshoh Zay El AmarMedarwakg
Mabeyelaabsh Wala Beyegree
Maloush Nefs Lelakl
Mabeyerdaash Helo
Beyeshel
Beykoh
Sokhn or Ando Sokhouma
Ando Nazla
Beyayat ala Toul or Beyesrokh TawalyArabic Translationبيجری وبيلعاب
بياكل كويس او حلو
بينام
بمريض حلو
معدوش اسهال
معدوش سخونة
بيضحك
ما بيكحش
بيتسيير حلو
معدوش يبرد
ما بيحيط على طول
ما بيستنطقش او ما بيسفرغش
وشة زى القمرمد روك
ما بيلعبش ولا بيجرى
ما لوض نفس كلاكل
ما بيمرضعش حلو
بيسهل
بيكح
سخن او عندة سخونة
عنده نزلة
بيحيط على طول او بيصرخ
طوالى20
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Description of an Unhealthy Baby:

unken eyes
le face
plices
es
hold his head up sticks
mother

Transliteration

Eneih Meaffelah
Washoh Asfar
Andon Maghas
Beysannen
Mesh Ader Yerfaa Rasoh Masek
Fe Omoh

Arabic Translation

عينه يفتالسه
وشه اصفر
عنده مخض
بيسنان
مش قادر يرفع راسه ماسك
فنى اسمه

Illnesses Among Babes:

ites
Bronchitis
entntis
ea
us
s
hes
roke

Leusez
Sokhoua, harara
Bard, Nazlet Bard
Nazla Shaabeya
Nazal Moaweya
Ishal
Taaneya
Hasba
Wedno Tewgao
Maghas
Darbed Shams

لوز
سخونه ، حرارة برد ، نزلة برد
نزلة برد
نزله شعبيه
نزله معويه
اسهال
تعنيه
حصبه
ودنه توجهه
مخص
ضربة شمس

ent Meanes given to Diarrhea:

ea
as
ntritis
y

Ishal
Taaneya
Nazla Maaweya but often refened to
as Nazla Dossontaria
Dossontaria

أسهال
تعنيه
نزله معويه
أو نزله داسنطاريا
دوسنطاريا

Symptoms of Diarrhea:

Frequent stools
Lignid stools
Fever
Lass of appetite
Thirsty
Colics
Cries
Weak
Tired
Greenish Stools

Causes of Diarrhea:

Cold
Soil eye
Teething
Dirty food or uncovered food

Treatment of Diarrhea:

Anise Water
Caraway Water
Tea
Lemon
Pills
Breastfeeding
Food
Pice Water
Cumin
MCH
Dehydration

Transliteration

Beyeshel
Tasyeera Layena (or Tareya)
Sokhoua or Harara
Mabeyakolsh or Maloush Neks Yakol
Atshan
Maghs
Beyayed
Daeef
Taanban
Tasyeero Khadra

Bard
Nefs
Tasneen
Akl Wesekh -- akl makshouf

Yansoune
Carawya
Shay
Lamoun
Bersham
Redaa
Akl
Mayet Roz
Camoun
El Reaya
Gaffaf

Arabic Translation

بيسهل
تسييرة ليهه أو طريه
سخونه أو جواره
ما بيگلش او مالوش نفس ياكل
عاشان
مغص
بيعيض
ضعيف
تعبان
تسييرة خضره

برد
نفس
تسنيين
اكل وسخ أو اكل مكشوف

ينسون
كراويه
شاي
ليسون
برشام
يضاعه
اكل
ميه رز
كمون
الرعايه
جفاف

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Improvement after Diarrhea:

fever
ld does not cry
regains his normal colour
eyes are clear and ofer
ols are solid
s not vomit
face is like a moon
ys around
bl one no longer green

Transliteration

Mafeesh Sokhoua
Mabeyayatsh
Loono Yergaa
Eneih Tefatah
El Tasyeerah Tebea Maska
Mabeyragaash Mayestantash
Meshoh Yebaa Zay El Amar
Beyelaab
El-Tasyeerah mesh Khadra

Arabic Translation

ما فيش سخونه
ما بيعيطش
لونه يرجع
عينه تفتح
التسييره تبقى ماسكه
ما بيرجعش ما يسطططش
وشه يبقى زى القمر
بيلاعب
التسييره مش خضره

APPENDIX D

**DO PARENTS USE THE PHARMACY AS THE FIRST SOURCE
OF CARE FOR THEIR CHILDREN'S DIARRHEA ?**

It is a "common knowledge" that the pharmacy is the source of much if not most first-contact care for many illnesses including diarrhea. On review of the several surveys with data on this matter we found generally much lower proportions of use than expected, but with tremendous variability. This range is due undoubtedly to how the surveys were designed and conducted; also people may respond to questions about sources of care with an eye to pleasing the interviewer. See table page 3.

Even if the pharmacist is not the predominant first source of care he/she is still important in diarrhea treatment. A large proportion of those using home remedies first may be using drugs obtained previously from the pharmacy, and the pharmacist certainly can influence customers about the value and use of various medicines.

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<u>Study</u>	<u>Locale</u>	<u>First-use of pharmacy as % of all sources of care for diarrhea in children</u>	<u>Comment</u>
Urban Health Project (1)	El-Maasara Helwan Tora	22% 0% 36%	{ 45% have no prescription but a specific request { 22% Consult Pharmacist { 21% Have old prescriptions { 34% Have no prescription but a specific request { 36% Consult Pharmacist { 13% Have an old prescription
DDP Media Survey (2)	Alexandria Urban	7.5% N=813	
IHD Initial Study on ORT (3)	Dakahlia Rural	17% N=60	About 25% use home remedy first
L Sayyad and Assouna	Alexandria Urban Assiut	11-14%	About 20% use home remedy first
IO study (4)	Rural	1%	About 40% use home remedy first

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<u>Study</u>	<u>Locale</u>	<u>First-use of pharmacy as % of all sources of care for diarrhea in children</u>	<u>Comment</u>
AUC Study in Delta (5)	Menoufia Rural	97%	
SRHD Followup studies on ORT (6)	Dakhalhia	12% N=100 0% N= 25	Control Areas
AUC/SRC Study in Menoufia (7)	Menoufia Rural	0%	First visit for severe cases (eventually died)
ECToR Study Health Sector Assessment (8)	Cairo Helwan	7%	66% use home remedy first