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# The Effects of Relocation on Nubian Women's Health

Hanna Paesler

“[U]prooting or resettling people is a dramatic human event that creates stress, produces stress reaction, and requires the use of strategies to cope with a wide range of pressures. [...] forced migration or resettlement constitutes an abrupt form of social change. It is disruptive, occasionally tragic, and in many cases generates irreversible problems.”<sup>1</sup>

## Introduction

Community relocation schemes have become a worldwide phenomenon. This quote shows their dramatic effects and some of its problems. No matter how much governments campaign for the people affected, this political decision always entails an abrupt change to their living environment, their habits and lifestyle and their whole culture. This was the situation of the Nubians in southern Egypt and northern Sudan when the Egyptian government decided to build a high dam south of Aswan and to relocate the Nubians.

In the literature on Nubian relocation in 1963 and 1964, it is striking that there were many promises made to the Nubians concerning their quality of life. The governments of Egypt and Sudan established committees with the objective of considering cultural aspects in planning the relocation, with an expected improvement in living standards.<sup>2</sup> This means that several studies on Nubian culture were incorporated into the planning. Ethnologists advised the commit-

1 FAHIM, *Egyptian Nubians*, p. vii.

2 Ibid, p. 35 and FAHIM, *Nubian Resettlement in the Sudan*, pp. 3–4. Though reckoning their approach in retrospect, one is tempted to suspect that they pursued the goal of “optimizing” Nubian culture to their own agenda.

tees on kin relationships, village structures and architecture, agriculture, climate conditions, infrastructure, etcetera.<sup>3</sup>

Some of these things were adopted in the new villages but most did not receive any attention. Thus, the ideas of the planning committees for quality of life were often considered for the Nubians, but in reality the Nubians' standard of living was frequently subordinated to the general good of the country. In all the considerations, however, I have not found any data on the scaling of healthcare issues. Most probably it was assumed that improved health conditions would automatically occur because of planned medical facilities and good infrastructure, but concerns arise if that is the case. Especially in the area of women's health, the data available from the Middle East and North Africa (the MENA region) is alarming.

Unfortunately, in general few considerations regarding Nubian women were taken into account during the planning. Important cultural aspects were considered only from a male perspective, as the advising Nubian delegations were composed of men only.<sup>4</sup>

In a culture that is characterized by gender segregation, such counsel is one-sided and incomplete. Resettlement meant a much bigger culture shock for a Nubian woman than for a man. It was expected that a 15-year-old young man would leave the village and look for work in one of the big cities or another country. In contrast, it was expected that a woman would not leave her village, so women's culture shock should have been expected and considered with much greater attention.

Against this background is the question of how this major lifestyle change affected the health of women. Traditions, lifestyle habits and conditions all have an influence on the health conditions of a population. The World Health Organization constitution states that "The enjoyment of the highest attainable standard of health is one of the fundamental rights of every human being." Political decisions and international projects should particularly include women's health, as it has an effect on the wellbeing of a whole society. Nevertheless, this point does not seem to have been taken into consideration concerning the relocation of the Nubians.

Health or illness changes are influenced through transculturation. Transculturation is a process that happens in every culture all the time but never implies the entire culture, only subareas.<sup>5</sup> But in the case of relocation, all factors influencing a culture are subjected to an abrupt transformation. In any case, it is important to work toward a long-range improvement of health conditions. On the one

3 FAHIM, *Egyptian Nubians*, p. 34.

4 Ibid., p. 36 and ABDALLA, "The Choice of Khashm al-Girba Area for the Resettlement of the Halfawis," p. 56.

5 SPLETT, *Bedürfnis und Bedürfnisbefriedigung als Motivation im Prozess des Kulturwandels*, p. 74.

hand, good medical supplies are needed for this, and, on the other hand, practices and traditions within a culture which support health and well-being need to be emphasized. Cultural aspects that impair them need to be called into attention. Especially in a case such as resettlement, where drastic cultural changes are anticipated, this change should be influenced in a positive way

Therefore, the purpose of this paper is a comparison of Nubian culture before the High Dam was built and of the situation and its development after relocation. Its aim is to verify to what extent the assumption of the government – that through relocation into “civilization,” with all its medical facilities, the health conditions of the entire Nubian society would improve – was legitimate. For this purpose, the paper focuses on health conditions before and after the relocation, noting areas of improvement and deterioration in the state of Nubian women's health. Also, this paper explores how far this could have been foreseen and to what extent the retention of the culture should have been supported for the good of Nubian women's health due to transculturation.

As this article is an excerpt from an extensive paper,<sup>6</sup> some topics were selected and will serve this task as an example.

### **The Nubian Relocation 1963/1964**

The construction of the Aswan High Dam started in 1960. Rebuilding the villages on higher terrain was impossible, as all cultivable land would disappear and the water level would vary greatly. Instead the governments planned a relocation of over 100,000 people in Egypt and Sudan. Affected were most of the Nubian villages in Egypt and Sudan. The water was dammed for 105 miles, and flooded the Wadi Halfa district.<sup>7</sup>

In both countries, benefits of the resettlement were extolled. The Egyptian president said in his speech to the Nubians in 1960: “The benefits which the Nubian people will enjoy are very great. They will be brought together on a proper basis to build a strong and healthy community.”<sup>8</sup>

In Sudan the government promised a strong improvement of living standards through increasing productivity, leading to a higher income and better infrastructure, with improved education and access to medical treatment. The chairman of the relocation commis-

6 PAESLER, *Wandel der nubischen Kultur im Hinblick auf die Gesundheit der nubischen Frau*.

7 FAHIM, *Nubian Resettlement in the Sudan*, p. 1.

8 Quoted from FAHIM, *Egyptian Nubians*, p. 36.

sion explained: "Our major aim is resettlement of a healthy society and doubling the income of the family within five years."<sup>9</sup>

However, both countries hoped for additional economic profit out of the relocation besides the advantages of the dam lake. The Egyptian government planned to expand agriculture, especially the cultivation of sugar cane, and located the area for New Nubia with this expectation in mind.<sup>10</sup> The Sudanese government was convinced that the Khashim el Girba Scheme, the new living environment for the Sudanese Nubians, would bring economic progress for the whole country.<sup>11</sup> It expected New Nubia to become a main earner of foreign currency on the exchange market through extensive agriculture and the cultivation of cotton and peanuts while making the country more independent of imported merchandise through cultivation of sugar cane and wheat.<sup>12</sup> In both cases it becomes apparent that the needs of the Nubians were not primary, but economic profit was the driving factor in deciding which region would be suitable for relocation. The governments of both countries created committees that were responsible for the planning and execution of the relocation, but no Nubian representatives were part of them, although there were Nubian delegations advising these committees.<sup>13</sup> Especially in Sudan it is clearly documented that relocation would not have taken place in this area if there had been a Nubian influence in the decision. Khashim el Girba has had a bad reputation for the highest crime rates in the country, whereas crime was almost non-existent in Wadi Halfa.<sup>14</sup> The Nubians feared for their safety in this multi-cultural area, and also feared the drastic change of climate. What they were facing was a transition from absolute dryness to a rainy climate where malaria was widespread. Resettlement to this area broke the prime minister of Sudan's promise to only relocate the Nubians with their agreement.

### Concepts of Illness and Health in Nubian Understanding

The Nubians understand illness as something that causes physical suffering. In my conversations and interviews with Nubians it became apparent that a disease without pain or feeling uncomfortable, as for example high blood pressure or diabetes, is not often acknowl-

9 Quoted from KRONENBERG & KRONENBERG, "Nubische Werte und der Wiederaufbau von Wadi Halfa," p. 21.

10 POESCHKE, *Nubians in Egypt and Sudan*, p. 37. The term "Nubia" in this paper does not describe a historical realm but the living area of the Nubians. The terms Old Nubia and New Nubia help define this living area as before or after resettlement.

11 KRONENBERG & KRONENBERG, "Nubische Werte und der Wiederaufbau von Wadi Halfa," p. 23.

12 POESCHKE, *Nubians in Egypt and Sudan*, p. 37.

13 FAHIM, *Nubian Resettlement in the Sudan*, pp. 3-4; FAHIM, *Egyptian Nubians*, p. 35.

14 FAHIM, *Nubian Resettlement in the Sudan*, p. 7.

edged to be an illness. Indeed, they now know about these diseases and their treatments through modern medicine, but still the idea lingers that these are not real illnesses. Only cancer was mentioned as an exception by my dialogue partners when I asked them if there are diseases without pain. Most answered: "No, there is nothing like this." Some added: "The only thing is cancer. You don't feel it. But this is a disease." Only a few considered unnoticeable bodily conditions to be an illness. Still many talked to me about their suffering from diabetes which seems to be a paradox. The fact that many Nubians do not take this disease seriously is demonstrated by the way many diabetics consume many spoons of sugar in their tea although they know the danger.

As the Nubians are Muslims, their understanding of illness, health and healing is affected by Islam. In the Koran references concerning medical questions are rare. It attests to God being the creator (Sura 3:190) who made man (Sura 4:1) and who forms men in the wombs however he wills (Sura 3:6). When doing so, he forms them sighted or hearing (Sura 67:23) or blind and deaf (Sura 6:46). And it is not possible for one to die except by permission of Allah at a decree determined (Sura 3:145). The Koran only broaches the issue of suffering and hardship of illness marginally. But in general the Koran itself is counted as the best cure.<sup>15</sup>

For a Muslim a central aspect of handling illness, suffering, and death is the idea of predetermination through the will of God. At the same time it is not easy to define the proportion of personal responsibility and predetermination through the will of God. Certainly man is not absolved from his duty to act through the predetermination of God but he cannot change anything when his time has come (Sura 7:36). Suffering has different functions in the Koran. It might be a test that brings blessing to the tested when passing it (Sura 2:155-156) or a punishment for disobedience to God's warnings (Sura 7:77-78). Indeed Sura 4:79 says: "What comes to you of good is from Allah, but what comes to you of evil is from yourself." But in Sura 6:17 it is written: "And if Allah should touch you with adversity, there is no remover of it except Him. And if He touches you with good - then He is over all things competent."<sup>16</sup> Here, both good and hardship are imputed to God and in the end the right reaction to it is to submit to the will of God.

This belief system was also often adopted by the Nubians. Thus it was common in the time before relocation to accept the condition of illness without putting any effort into receiving healing on the grounds that it is the will of God.<sup>17</sup> Bühler reported from Dakke:

15 AL-AZHARI & AL-AQDA, *Ath.Thib an-Nabawi*, p. 137.

16 The Koranic translation used here is the Sahih International.

17 HERZFELD, "...unter Mohammedanern," p. 143.

“The Egyptian eye disease is a plague. Almost everybody here has to go through it. Mothers are hardly troubled when the children are sitting around for days with swollen, ulcerous eyes. ‘By Allah’s will’ everyone needs to undergo it.”<sup>18</sup>

Nubians distinguish between pathogens coming from the outside and those which arise inside the body itself. The idea that illnesses are caused through the “evil eye,” magic or river spirits was widespread before relocation. The idea of the “evil eye” causing illness persists today and continues to have an impact on the Nubian woman’s everyday life. When they lived beside the river, Nubians believed river spirits caused illness and infertility, which continues to be one of the worst fates for a woman. Now however, river spirits are irrelevant. Another important unseen being was the *qarīna*. Nubians believed every person to have a double from birth on, the *qarīna*. When there was disunity with it, it became an enemy and would cause the death of a child during delivery, for instance.<sup>19</sup> These days, through modern medicine, it is known that bacteria and viruses can also be pathogens.

A pathogen that causes an illness from inside the body is mainly seen as a consequence of infringing a taboo. The concept *mušahara*<sup>20</sup> clarifies that disregarding certain rules or taboos endangers the health of oneself or others.

From the Nubian point of view, physical illnesses can be treated by folk medicine or drugs from clinics. But psychological illnesses need a complex combination of diagnoses and treatments that are identified and defined by ceremonies. With a psychological problem a Nubian would seldom go to a doctor.<sup>21</sup> Before resettlement, when doctors were hard to reach and the distrust towards them was bigger than it is today, herbs and other natural resources served as cures or a ceremony or a ritual were performed.<sup>22</sup> Fernea describes that a bad cough was treated with cumin tea, *karkade*, and date honey, the head was wrapped, newspaper was laid on the breast, cupping was done and parts of the Koran were copied.<sup>23</sup>

E. Herzfeld, a doctor who worked in Aswan and Nubia from 1926 to 1966, reported on a neighborhood boy who had a fever for weeks because of an abscess on his arm, but she had to wait for another ten

18 BÜHLER, “Meine Freunde die Nubier,” p. 10; quotes that are originally German are translated by myself.

19 HERZFELD, “Brief aus Oberägypten,” *Zeitschrift für ärztliche Fortbildung* 27, p. 373.

20 *Mušahara* in its complexity is explained by Kennedy. It is concerned mainly with taboos or rituals that protect a person from evil river spirits which threaten fertility and life during a phase of life in which one is sacredly vulnerable, such as birth, circumcision, marriage or death. Through not paying attention to certain rules or taboos, either one’s own or other people’s health is endangered. KENNEDY, *Nubian Ceremonial Life*, pp. 127ff.

21 FAHIM, “Community-Health Aspects of Nubian Resettlement in Egypt,” p. 86.

22 FERNEA & FERNEA, *Nubian Ethnographies*, p. 52.

23 *Ibid.*, pp. 102ff.

days after first seeing the sick boy until she was allowed to open the abscess and give medicine. Before this, the women present had tried to cure him with glowing nails and amulets.<sup>24</sup> She writes that nobody ever came to her without first seeking healing in incantations, amulets, pilgrimage to tombs of holy sheikhs, burning of aching body parts, smearing dung on wounds and inserting strange liquids into the eyes.<sup>25</sup> Fernea too documents burning and cupping as methods of cure.<sup>26</sup> At the same time Herzfeld describes the impact of western medicine on the people who have already put their trust in it. She writes: "Often sick people come with a lot of X-rays who have been seeking healing by many doctors. But many times a simple prescription for diet or the discontinuation of the many nonsensical drugs would help."<sup>27</sup> "Many infants and toddlers are brought to us, often they are just skin and bones, due to persistent diarrhea or where nutrition is totally insufficient. [...] When the mothers then ask for medication and one explains to them that far much more important is the right nutrition for the children they often smirk in an almost pitiful way and one knows everything will remain unaffected."<sup>28</sup>

Here a problem of modern medicine becomes obvious. Drugs are not only taken the wrong way but also are turned to as a kind of miracle cure which helps against everything. Once this attitude towards drugs has been established it becomes very difficult to communicate that certain behavior patterns cannot be counterbalanced through medicine. While the Nubians opened themselves to new medical concepts, they kept certain social structures. Herzfeld wrote that the whole village accompanied a sick person to hospital and 5–10 people joined for every examination.<sup>29</sup> Today as in the past the sick person is always attended by many relatives and through this is embedded in a social network of people who care for him.<sup>30</sup>

Illnesses caused by spirits in the Nubian belief system could only be helped by rituals. Thus for example when the *qarīna* was displeased, a donkey's foot was hung up in a woman's house or children were tattooed on the tip of the nose or the inside of the leg. Mothers took the first meconium of their child and drew a rider on the wall for a boy and a bride for a girl as protection and a sign of hope.<sup>31</sup>

24 HERZFELD, "Koschtamne, 12.-30. Oktober 1927," p. 158.

25 HERZFELD, *Als Ärztin am Nil*, 1st ed., p. 8.

26 FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, p. 52.

27 HERZFELD, "...unter Mohammedanern," p. 143.

28 HERZFELD, "Assuan, 30. November 1926," p. 12.

29 HERZFELD, "...unter Mohammedanern," p. 135.

30 Jennings writes about networks among Nubian women. Her explanations are not considered in this context as she reports about women in West Aswan which have not been relocated.

Yet it is to be mentioned that according to her surveys there is a strong cohesion among Nubian women which leads to a large social backup. Neighbors and relatives help each other particularly in times of hardship and illness. JENNINGS, *The Nubians of West Aswan*, 1995.

31 HERZFELD, "Brief aus Oberägypten," *Zeitschrift für ärztliche Fortbildung* 27, p. 373.



Today many Nubians go to see a doctor when they do not feel well, but there are still certain situations, infertility for example, where only a ritual or a ceremony can help. Besides this there are still illnesses that can be cured by homespun remedies from teas of various kinds. Amulets may help or a little cut in the leg or on the temple until some blood flows. Cupping and burning is still considered a cure today. I have seen legs and faces several times in different parts of Nubia that show scars from these forms of treatment and the people were convinced of their effectiveness. Saeed reports from Khashm el Girba of cutting the leg when having stomach problems.<sup>32</sup>

It seems that a medically diagnosed disease like diabetes is not acknowledged as illness, at least until physical discomfort appears. Bodily suffering is perceived as illness in the sense of "impaired by a pathogen of any kind." This means it can be caused by bacteria or viruses but also by a curse which has a negative effect on the body. Both need treatment. Stigmatization as a "sick person" had great consequences, especially for women. Herzfeld wrote:

The terms *sick woman* and *poor* and *disenfranchised woman* are absolutely synonymous. No Muslim man thinks of keeping a woman that is not fully able to work or has noticeable suffering. [...] So the women are not only worn out by their illnesses but also by the fear of repudiation.<sup>33</sup>

Geiser indicates that by the 1960 census in Egyptian Nubia over 40% of the women were divorced or widowed and this condition resulted in a multitude of problems.<sup>34</sup> Illness and infertility were the main reasons for divorce.<sup>35</sup>

It is interesting to see how resettlement left its mark on the Nubian's concept of illness. In research in Egyptian New Nubia, the people were asked which new illnesses appeared and which old ones disappeared. The informants answered that although health access had increased they were much healthier in their old home and became increasingly ill in their new living environment. According to them, old illnesses did not disappear, but instead new ones were added to it, e.g., heart attack, hypertension, diabetes, and psychological problems. "Old Nubia is 'health' while New Nubia is 'illness,'" said one informant.<sup>36</sup> This dichotomy is equally sensed by the Nubians in Khashm el Girba as evidenced by respondents in Saeed's interviews.<sup>37</sup> Yet this form of defining a pathogen equates

32 SAEED, *The Changing role of Nubian Women in Khashm El-Girba*, p. 82.

33 Herzfeld, "Assuan, Oktober 1929." p. 187.

34 GEISER, *The Egyptian Nubian*, pp. 41ff.

35 HERZFELD, "Brief aus Oberägypten," *Zeitschrift für ärztliche Fortbildung*, p. 372.

36 Quoted from FAHIM, "Community-Health Aspects of Nubian Resettlement in Egypt," p. 87.

37 SAEED, *The Changing Role of Nubian Women in Khashm El-Girba*, 1993.

with hopelessness since the old home is immersed in the floods beyond recall and the new living environment has become the only remaining home. If one now assumes that this new home causes illness the question is how one can then achieve health.

### The "Evil Eye" – One of the Most Frequent Pathogens

The "evil eye" will be looked at closely, as it is a crucial concept of illness and plays a large role in the lives of the Nubians. Grauer writes that "Nubian women feel pursued by the evil eye all their life; they ascribe illness and misfortune to its might and try to avert it in many different ways."<sup>38</sup> The seriousness of this threat can also be seen through the statement of Kriss and Kriss-Heinrich that by widespread opinion in the Middle East two-thirds of all people die because of the "evil eye."<sup>39</sup>

The Nubian's fear of the "evil eye" becomes obvious in manifold ways, e.g., a blue bead hung up near a sick child to protect it<sup>40</sup> or little twin boys dressed in girl's clothes and draped with amulets.<sup>41</sup> Scorpions embroidered from beads or small leather bags with Koran verses were very popular as well.<sup>42</sup> Herzog collects descriptions of different authors about protection from the "evil eye" and reports that midwives used to hang a Dinar on the newborn's forehead or a nose ring around their neck. Children were left dirty, uncombed and greasy purposely in the belief that ugliness would avert the "evil eye." Mothers used to sew a cross to the children's clothes or to draw a cross on the wall with a baby's first bowel movement.<sup>43</sup> Nubian women told me that if a nursing mother is disturbed and one sees her milk or her breast it might be that the milk cannot withstand the "evil eye," sours and harms the child.

Müller states that children's uncleanliness was a major health problem in Old Nubia because of eye diseases such as glaucoma, which brings about loss of sight in a short time, and trachoma, which leads to severe eye conditions. He describes how common it was to leave infants' faces covered with flies because of the belief

38 GRAUER, *Die Architektur und Wandmalerei der Nubier*, p. 76.

39 KRISS & KRISS-HEINRICH, *Volks Glaube im Bereich des Islam*, p. 17.

40 FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, p. 103; HERZFELD, "...unter Mohammedanern," p. 132.

41 FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, p. 58; it is conceivable that here the evil eye is associated especially with envy as sons were desired more than daughters. Due to the deception through the girl's dresses the parents did not await admiration for their sons but pity for their daughters. Saeed quotes a woman from Khashim al Girba: "for a boy people say [...] 'congratulation on having the knight', but for a girl people say [...] 'hope she will be one of those who are well-behaving.' This indicates how the birth of a boy adds to the family's pride and how the birth of a girl adds to the family's worries and anxiety." SAEED, *The Changing role of Nubian Women in Khashim El-Girba*, p. 64.

42 HERZFELD, "...unter Mohammedanern," p. 132.

43 HERZOG, *Die Nubier*, p. 99; MASSENBACH, *Nubien unter dem Kreuz*, p. 74.

that this would disempower the “evil eye.” In consequence, it was almost impossible to establish healthy development and effectively combat eye diseases.<sup>44</sup>

Very interesting is Herzfeld’s description of two girls who protected themselves from the “evil eye” with lots of jewelry. An eleven-year-old girl wore a big heart from green-black stone on a silver necklace, the hand of Fatima from green plastic and two little dried feet of a chameleon. The other young woman wore a lot of gold necklaces and among them a little golden hand with a blue bead, blue being the color against the “evil eye.”<sup>45</sup> It is astonishing that such a treasure of jewelry, gold and silver was worn as defense against the evil eye since it is closely connected to another person’s envy and it must be assumed that such a lot of jewelry would provoke envy. However, one can suspect that women could wear it because additional elements were included that would turn away another woman’s envy. At the same time a general protection against the “evil eye” was guaranteed.

### Reproductive Health Development

The ICPD (International Conference on Population and Development) stated in 1994 in its “Programme of Action” that “Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.”<sup>46</sup>

In the MENA region,<sup>47</sup> health conditions have improved clearly over the last four decades. Still, in a survey performed in 1998 in rural Lower Egypt, 509 married women were examined and it appeared that most of them suffered from gynecological problems.<sup>48</sup> Only 3% of the women had no afflictions related to reproductive health and about 30% suffered from four or more problems in this area at the same time. The 462 women who had been pregnant had had 249 miscarriages, 41 stillbirths, and 497 child deaths.<sup>49</sup> These numbers show

44 MÜLLER, *Grundzüge des christlich-islamischen Ägypten*, p. 254.

45 HERZFELD, “Ein letzter Besuch in Nubien,” p. 13.

46 UNITED NATIONS, “Programme of Action of the International Conference on Population and Development,” §7.2.

47 Countries belonging to this region are Egypt, Algeria, Bahrain, Iran, Iraq, Israel, Yemen, Jordan, Qatar, Kuwait, Lebanon, Libya, Morocco, Oman, Saudi Arabia, Syria, Tunisia, United Arab Emirates, West Bank, and Gaza. Although the area surveyed here does not completely belong to this region, data about numbers, facts and health problems are taken into consideration as there are no such surveys on Nubian women specifically and at least the Egyptian Nubians geographically belong to the MENA-region.

48 KHATTAB, YOUNIS & ZURAYK, *Women, Reproduction, and Health in Rural Egypt*, p. 2.

49 *Ibid.*, pp. 40ff; 44% had vaginal infections, over 50% suffered from uterus prolapse, 14% were found to have a urinary tract infection, and 63% were diagnosed as being anemic. 18% showed hypertension and 1% had syphilis.

how many problems there are in the field of reproductive health, although medical facilities are generally available. That these are not made use of is partly due to financial issues.<sup>50</sup> Other reasons are lack of education that leads to an absence of knowledge about health topics. Moreover, women in this region tend to downplay their health problems as they have to take care of the household or because they feel ashamed to speak about gynecological complaints, which usually lead to stigmatization. It was determined that "they also tend to perceive discharge and pelvic discomfort as part of their nature and lot in life."<sup>51</sup>

There is no study on the concrete reproductive health situation of Nubian women. Here there is a need for a detailed survey which would give information about which diseases women suffer from, how many are affected, what the reasons are and why medical care is not used or cannot help.

I start from the premise that the health problems reported from the region to a large extent also apply to Nubians. Herzfeld wrote around 1940 that just before the dam was heightened the conditions in the field of women's diseases and obstetrics were very bad. She says:

Women with their bleedings are almost always brought in too late and if in addition to fever, amebiasis is also often present, which complicates the situation and the hemoglobin sinks down to 25% and below, this means that anesthesia and an operation would become a life-threatening procedure. Childbed fever occurs alarmingly often.<sup>52</sup>

A year before, she had described how many of the women were pale, haggard, and weak, with severe heart dysfunctions because of anemia, with snow white mucous membranes as one finds them in the decline of tuberculosis.<sup>53</sup> Fernea reports from the time before the High Dam around 1960 that many women were suffering from abdominal pain and often died during delivery.<sup>54</sup>

In an interview with a Sudanese gynecologist in Dongola I was told that especially among Nubians in comparison to other Sudanese women many show a remarkable amount of gynecological problems. Particularly a prolapsed uterus occurs strikingly often.<sup>55</sup>

There are many reasons for problems in the field of reproductive health which are partly mutually dependent. Medical risk factors

<sup>50</sup> Ibid., p. 39.

<sup>51</sup> Ibid., p. 50.

<sup>52</sup> HERZFELD, *Als Ärztin am Nil*, 2nd edn., p. 11.

<sup>53</sup> HERZFELD, *Missionsärztin in Nubien*, p. 22.

<sup>54</sup> FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, pp. 11-12.

<sup>55</sup> Interview with Dr. Usam Jakuub 2007.

such as malnutrition or infections affect the general health condition of a woman, which correlates with her reproductive health. General health conditions are also influenced by behavior patterns during delivery, the usage of medical facilities or health-conscious behavior. But these behavior patterns in turn are dependent on the woman's personal background including her education, if she is from an urban or a rural area, what her housing situation is, etcetera.<sup>56</sup> In other words there are many aspects of everyday life that have an effect on reproductive health. Only a few of them will be considered in respect to Nubian women in the following.

### Delivery and Circumcision

Deliveries in Old Nubia took place under the care of the traditional midwife and of the women of the village. A doctor was normally only called for a delivery when it was "hopelessly protracted."<sup>57</sup> Because good obstetrics were not practiced, many women died by reason of complications caused by circumcision or unclean work by the midwives.<sup>58</sup> In addition, attending women had the right to examine the delivering woman gynecologically. This means unwashed hands were inserted into the woman. The midwife also made no attempt to protect the perineum.<sup>59</sup> After delivery, women with severe perineal lacerations had their legs bound together tightly for several weeks in hopes that the wounds would heal. Often, lacerations were very severe as a result of circumcision and infibulation, and it was hoped in that period that wounds would heal through this method.<sup>60</sup>

Even now, most Nubian women are circumcised. Before resettlement, circumcision of girls was performed between the ages of three and nine. Herzog recounted that north of Wadi Halfa the clitoris and the labia minora were removed, while south of Wadi-Halfa the labia majora were also removed, which is called the Sudanese or pharaonic circumcision. After cutting the aforementioned parts, the vagina was sewn up except for a little opening (infibulation), and the legs were bound together as described after delivery. El Guindi describes that before the legs were bound together, the midwife smeared egg yolk over the wound and laid henna leaves on top.<sup>61</sup> The adhesion was only opened on the wedding day and was partly sewed up again when the husband was gone for a longer time in order to be diffibulated at his homecoming.<sup>62</sup> Fernea states that

56 KHATTAB, YOUNIS & ZURAYK, *Women, Reproduction, and Health in Rural Egypt*, pp. 10–11.

57 HERZFELD, "Brief aus Oberägypten," *Zeitschrift für ärztliche Fortbildung* 28, p. 368.

58 FRÖHLICH, "Nubian Social Customs," p. 411.

59 HERZFELD, "Brief aus Oberägypten," *Zeitschrift für ärztliche Fortbildung* 28, p. 369.

60 HERZFELD, *Missionsärztin in Nubien*, p. 8.

61 EL GUINDI, "Had this been your face, would you leave it as is," p. 43.

62 HERZOG, *Die Nubier*, p. 100.

in Erd-Moz around 1960 only the clitoridectomy was performed because the pharaonic circumcision was forbidden by the government. The men explained that circumcision is necessary because it is good for the emotional and physical health of women and calms their sexual desires, whereby it becomes easier for them to be faithful to their husbands when they are gone because of labor migration. The women said circumcision makes them healthier and more feminine – that is to say, a real woman.<sup>63</sup> Kennedy writes: “there is a belief that without circumcision a degree of completeness of [...] womanhood is missing.”<sup>64</sup>

According to a study performed by Hussein in Egyptian New Nubia right after resettlement, only Kenuz women underwent pharaonic circumcision. Among Fadija and Alaqt women the labia majora was not removed. Only a few of the surveyed women considered circumcision to be religiously required but explained it to be hygienic and aesthetic. Furthermore they said “without the operation the sex organs are disgusting to the husband by sight and touch.”<sup>65</sup> El Guindi reports of a Kenuz woman saying: “circumcision makes a woman nice and tight. The man finds great pleasure in tight women.”<sup>66</sup> Yet she also states that among the Kenuz a shift from the pharaonic form of circumcision to a more moderate form had started taking place by the end of the 1950s or the beginning of the 1960s, right before resettlement. “Midwives said they supported this change because they had found infibulations to be a cause of complications when brides were deflowered and babies were delivered.”<sup>67</sup> Nevertheless this shift did not seem to have prevailed.

In Northern Sudan today 90% of the women are circumcised, and 64% have the pharaonic circumcision. In 1979 the prevalence of this form of circumcision was still 97 to 100%. The slight percentage downward movement is thought to be a result of better education.<sup>68</sup> Sudanese Nubian women hold on to traditional circumcision even after resettlement till today.<sup>69</sup> Yet it is striking that this number is so high since pharaonic circumcision was forbidden by law in Sudan 1946.<sup>70</sup> According to El Dareer's study in Northern Sudan both women and men indicated religion and tradition as the most common reasons for circumcision, but indicated cleanliness and purity as well.<sup>71</sup> Additionally, many proceeded on the assumption that the operation leads to better general health, and functions as a preven-

63 FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, p. 54.

64 KENNEDY, “Circumcision and Excision in Egyptian Nubia,” p. 181.

65 HUSSIEIN, *Anthropology of the Egyptian Nubian Women*, p. 57.

66 EL GUINDI, “Had this been your face, would you leave it as is,” p. 32.

67 *Ibid.*, p. 41.

68 EULER, *Genitale Verstümmelung von Mädchen und Frauen*, pp. 10–11.

69 SAEED, *The Changing Role of Nubian Women in Khashm El-Girba*, p. 42.

70 GORDON, “Female Circumcision and Genital Operations in Egypt and the Sudan,” p. 5.

71 EL DAREER, *Woman, Why Do You Weep?* pp. 67, 73.

tive measure against stillbirth.<sup>72</sup> Traditional midwives stated consistently that they saw a worm hatching out of the girls during circumcision, which is seen to be a sign of illness which is healed through the operation.<sup>73</sup>

In Egypt the circumcision rate is around 90% as well, but there clitoridectomy is generally conducted.<sup>74</sup> However, this is not true for the Nubians. Today Egyptian Nubian women mostly have pharaonic circumcision.<sup>75</sup> The Egyptian government passed a law in 2008 which forbids female circumcision. However it also says that it may still be conducted when there is a “medical need” for it; therefore the question arises as to how a medical need is defined. After all, the population’s general idea is that circumcision is important for the well-being of a woman.

This operation is a rite of passage performed before puberty and with that the physical coming of age which symbolizes a social transition from being a child to being an adult. Gordon writes: “Although a circumcised girl may still be a child biologically, her status becomes that of a woman after her operation. She is no longer permitted to play outside or to socialize with boys her age; in some areas even school is forbidden, as she begins the task of waiting for a husband.”<sup>76</sup>

As a woman she now must conform to a certain code of conduct that emphasizes her honor and modesty. Her behavior from now on is especially watched with respect to her sexual purity, as honor is the collective property of a family. If a single member of this family incurs dishonor on himself he brings shame on the whole family. This means that it is the duty of every man to pay attention to the fact that no family member becomes guilty of a deed that would affect all. Since Nubian men were absent from their families, they supported circumcision for their female family members. “An important object of the prevalent practice of clitoridectomy was the preservation of premarital chastity. [...] males were, by convention, required to assume a protective and paternal attitude toward women, thus making heterosexual misconduct less likely.”<sup>77</sup>

The older women were also concerned with the purity of their daughters and granddaughters. With respect to western women and their behaviour, the women of Erd-Moz said to Fernea: “And then

72 GORDON, “Female Circumcision and Genital Operations in Egypt and the Sudan,” p. 9.

73 EL DAREER, *Woman, Why Do You Weep?* p. 9.

74 ISMAIL & MAKKI, *Frauen im Sudan*, p. 34.

75 GORDON, “Female Circumcision and Genital Operations in Egypt and the Sudan,” p. 5; This was confirmed to me by the former director of the evangelical hospital in Aswan in December 2007.

76 *Ibid.*, p. 9.

77 GEISER, *The Egyptian Nubian*, p. 42.



they want to stop circumcising the girls [...] Can't they see that circumcision is the only way we can help our girls behave themselves?"<sup>78</sup>

This fear is likely to have increased through resettlement and the given proximity to strange men. Thus, it is not surprising that Nubians were practicing the more moderate way of circumcision before resettlement<sup>79</sup> yet after resettlement implemented pharaonic circumcision, or removing the labia minora. The Nubians always wanted their women to have the best protection possible. But as total seclusion of women was not viable in practice, circumcision gained in importance in the new villages. Gordon says that "genital operations, with the physical and symbolic barriers that they present, serve as a substitute for a more complete seclusion of women."<sup>80</sup> The idea is that the broader the circumcision conducted, the "safer" the woman. As pharaonic circumcision only leaves a little vaginal opening it is necessary to open the vulva before a woman's first sexual intercourse and before every delivery. After delivery the woman is sutured again.<sup>81</sup> This is not only a symbolic measure. The pharaonic circumcision is the guarantor that a girl will not have sexual intercourse before marriage; it stands sentinel over her sexuality.<sup>82</sup> Kennedy writes that "the Nubians argue that the only way to blunt the inherent sexual wildness of girls and to preserve their chastity is through this means."<sup>83</sup>

In the meantime there is a certain enlightenment about the consequences of circumcision, which include long-term severe complications from physical traumas to psychological problems. These include chronic infections of the uterus and the vagina, cysts, problems when urinating, painful menstruations, and complications during intercourse and deliveries.<sup>84</sup> Still, as surveyed by El Dareer, pain in the genital area was mainly ascribed to the evil eye and was treated with amulets and by magic formulas and a bath in the Nile.<sup>85</sup>

Often it is the mothers and grandmothers who insist on circumcising their daughters and granddaughters. Boddy describes that in the end the goal is not to preserve the girls' sexuality but to increase the perceived value of their womanhood. "In this society women do not achieve social recognition by becoming like men, but becom-

78 FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, p. 114.

79 Kennedy too reports about this development in 1970, although he mainly refers to a village that had not been resettled in 1963/64. KENNEDY, "Circumcision and Excision in Egyptian Nubia," p. 186.

80 GORDON, "Female Circumcision and Genital Operations in Egypt and the Sudan," p. 10.

81 ISMAIL & MAKKI, *Frauen im Sudan*, p. 35.

82 BODDY, "Womb as Oasis," p. 686.

83 KENNEDY, "Circumcision and Excision in Egyptian Nubia," p. 181.

84 ISMAIL & MAKKI, *Frauen im Sudan*, pp. 35–36.

85 EL DAREER, *Woman, Why Do You Weep?* p. 33.



ing less like men physically, sexually, and socially.”<sup>86</sup> While the circumcision of boys reveals the male organs, the organs of a girl are covered; she becomes “veiled.”<sup>87</sup> Moreover it is stated by Kennedy that “the operation is also believed magically to promote fertility.”<sup>88</sup> As infertility is so far-reaching for a woman this point is very important. Reproduction is held in safe custody through circumcision. Only through marriage does the husband gain access to the fertility of his wife and she obtains the means to activate it.<sup>89</sup>

It can be judged positively that deliveries in Egypt now take place in hospitals and clinics, and so qualified staff can react to complications due to circumcision, and women experience better hygienic conditions.

### Health-Conscious Behavior

Health-conscious behavior is an important factor that influences general health and also the reproductive health of a woman. Important factors influencing reproductive health are nutrition, health-care, hygiene and the workload of a woman, especially with respect to heavy physical labor. These are even more important in case of pregnancy.

In Old Nubia food was very limited. Access to groceries and clean water has improved a lot through resettlement, and some problems such as iron deficiency were stemmed. The water that people drank before resettlement was taken directly from the Nile and in general was not boiled.<sup>90</sup> Many pathogens were ingested from the water and passed on, and so amebiasis and ancylostomiasis were widespread. The synergy of an imbalanced nutrition, of strong tea-consumption and of diarrhea caused by hookworms led to a severe anemia in many Nubians.<sup>91</sup>

Herzfeld writes in 1931 that she had not seen cancer among the many patients she had treated in four years<sup>92</sup> but notes in 1957 in Aswan, just before relocation, the impact of a changing lifestyle and nutrition. The prevalence and incidence of especially breast, stomach, liver and lower abdominal cancer had increased strongly. She also observed goiters that arise through iodine deficiency. At the same time the willingness to undergo operations had increased. The typical diseases of civilization, diabetes mellitus and hypertension,

86 BODDY, “Womb as Oasis” p. 687; Also compare EL GUINDI, “Had this been your face, would you leave it as is?”

87 BODDY, “Womb as Oasis,” p. 688.

88 KENNEDY, “Circumcision and Excision in Egyptian Nubia,” p. 181.

89 BODDY, “Womb as Oasis,” p. 688.

90 HERZFELD, *Missionsärztin in Nubien*, p. 20.

91 HERZFELD, *Als Ärztin am Nil*, 1st edn., pp. 8–9.

92 HERZFELD, “Brief aus Oberägypten.” *Zeitschrift für ärztliche Fortbildung* 28, p. 368.

occurred more often, as well as liver and intestinal disorders.<sup>93</sup> After resettlement she writes that she now found a lot of dyspeptics and diabetics, even among young people, through overstraining of the carbohydrate and fat metabolism.<sup>94</sup>

This new, modern lifestyle which includes fast food and junk food also had its influence on the Nubians. Hypertension and diabetes mellitus are now widespread. In 1979, Fahim quotes from informants in Egypt that old diseases have not disappeared, but new ones have joined them. They list new medical conditions such as heart diseases, diabetes and hypertension.<sup>95</sup> Obesity exasperates these diseases and at the same time all of these medical conditions increase the risk of gestational and natal problems, such as maternal and perinatal diseases as well as maternal death. Moreover obesity is a risk factor for breast and uterine cancer. "High obesity prevalence among women may be partially due to the fact that women tend to avoid physical exercise."<sup>96</sup> In earlier times Nubian women had a lot of physical exercise through their physical labor but after relocation a radical change took place.

The social and demographic structure of the Nubian area was one of mainly women, children and old people. Men migrated due to the bad job situation and left agriculture to the women. Farming could only be conducted with cattle, and for that reason cattle breeding was inextricably linked with it. Nubian women showed great concern for the animals and invested a lot of time in animal care.<sup>97</sup> Fieldwork as well as responsibility for the animals resulted in great physical effort. Another of women's duties was bringing water up from the Nile. Many villages in northern Nubia were built high up the rocks because of the dam of 1902, and it required a great physical effort to take the water from the Nile to the village.

Through the loss of women's responsibility for farming and bringing water but also through generally decreasing distances, better infrastructure, and other factors, women have much less exercise than in earlier times.

Since the Nubian villages are no longer isolated, but located in a *foreign environment*, Nubian men do not often allow their wives and daughters to work on the fields. They want to have them separated from the Egyptian men of the vicinity. Thus, when Nubian men themselves decide to migrate abroad, they employ *Saedi* farmers to carry out the necessary agricultural work in order to "protect" the

93 HERZFELD, "...unter Mohammedanern," p. 143; BACHHUBER, *Dr. med. Elisabeth Herzfeld (1890-1966)*, p. 69.

94 HERZFELD, *Das Kreuz am Rande der Wüste*, p. 19.

95 FAHIM, "Community-Health Aspects of Nubian Resettlement in Egypt," p. 87.

96 AOYAMA, *Reproductive Health in the Middle East and North Africa*, p. 75.

97 FAHIM, *Egyptian Nubians*, p. 13.

female family members from “*getting into danger*,” as one Nubian migrant explained.<sup>98</sup>

As in Egypt also in the New Halfa Scheme women lost the leading role they formerly had in agriculture. Poeschke writes:

It is often a long way from the houses to the fields. Since women are predominantly responsible for housework, they have only little time for other activities at their disposal. The daily walk to the fields alone, however, would take up a great deal of time and therefore women have to refrain from it. Another aspect is that Nubian men – as in the Kom Ombo area – distrust members of the other ethnic groups and for that reason try to prevent their wives and daughters from leaving the home villages to work in remote fields.<sup>99</sup>

These reasons also become obvious in Saeed’s study. Conspicuously present is the development of new taboos triggered by the isolation. While women had previously run agriculture with success, Saeed now reports that husbands often forbid their wives to go on the fields out of fear that the woman might ruin the harvest through her presence especially during her menstruation.<sup>100</sup>

A woman’s family responsibilities are a very important aspect of her decision-making regarding the possibility of seeking out a physician’s help. For her, in Old Nubia there were few chances to visit health facilities. Herzfeld confirms this. She writes that for many women a longer treatment was required. She often tried to convince women to come to her clinic in Koshtamne or the hospital in Aswan but realized it was very difficult for them to leave the children, the house and the animals alone for a longer time and also to get the permission of their husbands.<sup>101</sup>

After resettlement the workload became less for women. As women often were not allowed to leave the village to work on the fields, which were far away, and water pipes made it needless to fetch water, women’s work was significantly lightened. But on the other hand, male work migration continued and men were absent from the new villages as well, which left the responsibility of taking care of the family on the women’s shoulders. Additionally, their freedom of movement was restricted because they now lived in a housing situation with strange neighbors. Relatives did not always live in the same house or neighborhood as in the past, so traditional

98 POESCHKE, *Nubians in Egypt and Sudan*, p. 61.

99 *Ibid.*, p. 64.

100 SAEED, *The Changing Role of Nubian Women in Khashm El-Girba*, p. 65; in the required behaviour of menstruating women Seligmann sees a fear of the evil eye in many different cultures. SELIGMANN, *Der Böse Blick und Verwandtes*, p. 94.

101 HERZFELD, *Missionsärztin in Nubien*, p. 22.

bilateral aid was restricted. So for some women even in New Nubia it remained difficult to make use of the new medical facilities.

The Nubians have always been known for their cleanliness and hygiene. They not only regularly made a thorough clean-up of their houses but also kept the streets neat and tidy. Garbage was picked up and collected at a place where it was burned. Also their clothes and the children were always clean.<sup>102</sup> Only with respect to the ritual performed after delivery there were medical concerns. The mother and the newborn had their first bath on the fortieth day after delivery. It was the day in which the mother became ritually pure again. The government's physicians moved in on this custom early with varying degrees of success. Today it is not performed anymore<sup>103</sup> and to the present day Nubians in their new environment are also known for their cleanliness.

### **Change in Living Environment and Its Effect on Health Conditions**

Nubian architecture was characteristic in that mud house construction created functional and aesthetic living spaces. Egyptian and Sudanese governments formulated the goal of raising the Nubian living standard through providing "modern" habitation. However, for residents, accommodation comprises much more than the pure constructive form. Indeed, good housing allows a social network to develop and strengthens cultural elements. "Traditional villages, sprawling, dirty, and overcrowded to such an extent that the outside observer sees little more than chaos, are often delicate and sensitive expressions of social organization. [...] However bad the physical housing itself may be, the villager derives some comfort and, indeed, some meaning from its pattern."<sup>104</sup>

Sadly these things were not given much importance in planning the resettlement. Although the new houses were built in a more "modern" way, living conditions became worse in several areas because they did not serve the cultural elements that were lived through housing and because social networks were destroyed. Nor were aesthetics given an important role, even though it is known that people who live in ugly, boring or uncreative environments tend to barrenness and dejection. The Sudanese Nubians even saw their relocation as a "setback" from a social and cultural perspective despite being provided by "modern" and "progressive" houses.<sup>105</sup>

<sup>102</sup> DAFALLA, *The Nubian Exodus*, p. 50; HERZFELD, *Als Ärztin am Nil*, 2nd edn., p. 3.

<sup>103</sup> VYICHL, "Ägypten und Nubien," p. 24; HERZOG, *Die Nubier*, p. 98; SAEED, *The Changing Role of Nubian Women in Khashm El-Girba*, p. 63.

<sup>104</sup> POLK, "Foreword," p. x.

<sup>105</sup> FAHIM, *Egyptian Nubians*, p. 161.

Houses in Old Nubia were located along the waterfront of the Nile, grouped in villages of about one hundred people each. The villages were separated from each other by dunes and hills, and there were no streets or trains connecting one with the other. The only method of locomotion was the river. This led to the relative isolation of each village, and meant that their inhabitants were largely related to each other. The homesteads hosted extended families and tended to be situated far apart to provide space for an extension in the case of family enlargement, e.g., by marriage. Such a family house was equipped with a guest area, one or more inner courtyards, a bridal room, with cooking, storing, sleeping and living rooms together with an open, roofed loggia or an open-air work area with various stables for the animals.<sup>106</sup>

In southern Nubia where the Nile washed up plenty of earth, houses were built from mudbricks or stone. A mixture of mud, sand and chaff was layered until the walls had a diameter of around sixteen inches to keep out the heat. In the Kenuz district this mixture was used as mortar for their stone walls. The wall was then plastered with a thin layer of clay and sand. The Nubians of the Mahas and the Arabic districts constructed their roofs by using palm stems, acacia wood beams, and braided palm branches in between. In the Kenuz area rooms had barrel-vaulted ceilings.<sup>107</sup>

The main entrance faced the Nile and the entrance area was heavily decorated. Often there were side entrances as well. In the inner courtyard, which was private and only open to the family and close friends, household chores were carried out, free time was shared by sitting together, and on hot nights it served as a sleeping area. Moreover, sometimes vegetables were grown, animals housed and through the entering sunrays the family even had their "private piece of sky."<sup>108</sup> The whole house was constructed in a way that enabled the seclusion of the families' women.<sup>109</sup> The courtyard worked as a ventilation system the effect of which was noticeable in all rooms of the house. The living area was partially or totally open towards the inner courtyard, which promoted air circulation. Windows were not fitted due to the heat, but little slots directly under the roof also provided for air circulation. In this way the warm air from the room could rise and escape through the little openings of the dome while fresh air advected from the inner courtyard. The toilet was not located inside the living area. The residents went to the stables or into the desert, away from the house, to relieve themselves. In the Kenuz area and the Wadi al Arab houses were white-

106 Ibid., p. 58.

107 ЕЛ-НАКИМ, *Nubian Architecture*, pp. 15–16.

108 Ibid., p. 18.

109 ФАНИМ, *Nubian Resettlement in the Sudan*, p. 10.

washed and then children and women painted the walls from the inside and outside by using colorful natural colors.<sup>110</sup> Additionally a wall-mounted bench (*mastaba*) was located on the exterior wall which helped the neighbors communicate in a socially accepted and informal way.<sup>111</sup>

### Living Under New Conditions in New Nubia

For the Egyptian Nubians the climate situation did not change as much as it did for the Sudanese Nubians. Despite relocation they remained in a hot arid climate, although without the amenities of the Nile, two to six miles away. There were no shade-providing palm trees anymore or the cool wind that came from the river. Instead the 553 villages which had before been located at a length of 220 miles were brought into an area of about 80 square miles (including all agricultural land) and condensed to a length of 30 miles.<sup>112</sup> Being close to upper Egyptians caused them to feel discomfort as they believed their women not to be safe anymore.<sup>113</sup>

In Sudan the Nubians were resettled to a region of subtropical climate with a rainy season in 25 new villages in a length of 20 miles. Proximity to the other ethnic groups of the area appeared threatening to Sudanese Nubians as well. The city of New Halfa was constructed to serve as an administrative center for the new living area.<sup>114</sup>

In both countries the new accommodations were built with one to four rooms and also had a small room that served as inner courtyard, a kitchen and a bathroom. By request of the Nubians, the new villages in Egypt received their old names and were arranged geographically largely in the same order as they had been in Old Nubia.<sup>115</sup>

Yet while Nubians used to live in extended families they were now split up. The houses were built for nuclear families only and after a stereotype, standardized in form and material.<sup>116</sup> The goal was to find a way to accommodate many people by choosing straight running streets and to minimize costs through the construction of row houses which share adjoining walls.<sup>117</sup>

Through these governmental measures and architectural conditions, old neighborhoods and villages were physically and socially

110 EL-HAKIM, *Nubian Architecture*, pp. 18ff.

111 FAHIM, *Egyptian Nubians*, p. 60.

112 EL-HAKIM, *Nubian Architecture*, p. 51.

113 SPLETT, *Bedürfnis und Bedürfnisbefriedigung als Motivation im Prozess des Kulturwandels*, p. 173.

114 FAHIM, *Nubian Resettlement in the Sudan*, p. 9.

115 FAHIM, *Egyptian Nubians*, pp. 55ff.

116 EL-HAKIM, *Nubian Architecture*, p. 9.

117 FAHIM, *Egyptian Nubians*, p. 59.

destroyed. The *mastaba* in front of the house is an example of the physical and social connection. While this bench was found in front of every house in Old Nubia, it was absent in the new villages. Already difficult social interactions were influenced negatively by this absence. Informal meetings became difficult, as it was unacceptable to sit on the floor because it was regarded as unclean, and because one did not want to be identified with a habit of Egyptian farmers.<sup>118</sup>

However, not only the village community suffered; especially staggering was the change in the extended family, which became even more obvious in Egypt. Through the division into nuclear families, relatives were scattered into different blocks<sup>119</sup> and most old people of the society were separated from the nuclear family. They were assigned to the smaller houses, where they were expected to live by themselves. Thus they were excluded from participating in everyday life. This problem became even bigger when the government forbade the transfer and disposal of these new houses.

The houses which were constructed in Kom Ombo were built from quarrystone and for heat protection ventilating-stones were laid on the reinforced concrete ceiling. But this construction proved to be a mistake. Instead of rejecting the heat the roof stored and led it into the house. The constant heating-up and cooling-down of the ceiling and the connected expansion and contraction induced the walls to tear which led to severe cracks in the houses. The consequence for the temperature in the house was extreme heat in summer and severe cold in winter. The construction of the toilets was also perceived as annoying. While it had never been inside the house, it was now built beside the guestroom. Often toilets were clogged or not even used at all.

As mentioned above, the aim was to minimize costs through this kind of architecture, but in the end it seems to have been a miscalculation. Nubian villages that had not been affected by resettlement and kept the old architecture prove that their traditional way of construction is much cheaper than the architecture of upper Egyptians. El-Hakim states that additionally in his opinion they look nicer, appear more spacious and act as cultural identifiers.<sup>120</sup>

### **Consequences of the Altered Living Environment for Health Conditions**

The loss of traditional Nubian houses brought about the loss of privacy, which resulted in psychological problems. In Old Nubia the distance between the homesteads and the high and thick outer wall

<sup>118</sup> Ibid., p. 60.

<sup>119</sup> SPLETT, *Bedürfnis und Bedürfnisbefriedigung als Motivation im Prozess des Kulturwandels*, p. 173.

<sup>120</sup> EL-HAKIM, *Nubian Architecture*, pp. 38ff.



ensured that one did not have to have contact with people if one did not want to. Also, the interior walls were thick and guarded privacy within the house. Guests did not necessarily witness what was happening in the house because the guestroom was directly beside the main entrance.<sup>121</sup>

Resettlement for the Nubians meant a shift from a private living environment to one more public with a dense population and many strangers. Housing units in the new villages were small and crowded together, with thin walls lacking soundproofing. At the same time these were the walls of the neighbors to the left and the right and thus enclosure became impossible. The sense of being observed arose and led to feelings of insecurity, especially as the extended family had been separated. In Egypt houses were distributed according to the size of the nuclear family and living space decreased from 0.7 persons per room before resettlement to 1.7 persons per room in 1966. This situation worsened because of family growth after relocation and the return of many labor migrants.<sup>122</sup>

In Sudan the living situation was even more difficult. Fahim writes: "Although the standards of the new houses are high under present Sudanese conditions, the settlers were unhappy with these houses which the government viewed as ideal."<sup>123</sup> The reason was that houses were not distributed according to the family size but according to the value of the old house. "Large families, whose old houses were estimated below 100 pounds received two-room houses and thus were unable to accommodate their members whose numbers ranged between seven and nine persons on the average. The addition of extra rooms was practically impossible."<sup>124</sup>

Moreover, guestrooms were often absent, which meant that guests had to be invited into the private space of the family. As it brings shame to the hospitable Nubian not to offer a separate room to the guest, families left their own house and went to their neighbors or relatives.

Nubians were used to having windows facing the inner courtyard, which had no openings to the outside except the ventilation slots. But the new houses were equipped with windows facing the street, which enabled passersby to see inside the private area or at least to hear life inside the house. This rapidly made for the increase of rumors and brought tensions between the villagers.

A Nubian headmaster expressed himself about these changes with the following words: "In old Nubia life was truly natural, sim-

121 FAHIM, *Egyptian Nubians*, p. 58.

122 FAHIM, "Community-Health Aspects of Nubian Resettlement in Egypt," p. 84; FAHIM, *Egyptian Nubians*, pp. 59-60.

123 FAHIM, *Nubian Resettlement in the Sudan*, p. 9.

124 *Ibid.*



ple, easygoing and particularly informal. These things have been changed a lot. One feels here that he lives in a whirlpool."<sup>125</sup> Fahim writes that this "whirlpool" feeling was widespread and added to the already growing tension and stress of relocation as well as the feeling of a lack of security. While Nubians felt very secure in their old native land and described it as "the land of security and peace,"<sup>126</sup> the number of crimes among young Nubians in Egypt as well as in Sudan had increased notably after resettlement. Raids and rapes now happened in their own villages among their own ethnic groups, which fueled fear and insecurity.<sup>127</sup>

A phenomenon that now occurred particularly among women was a change in their psychological condition. Female Egyptian informants reported in conducted surveys that the frequency of psychological disorders and depression had increased in Nubian women. The reasons mentioned were, among others, the lack of privacy and the loss of security.<sup>128</sup> Due to the even greater changes for relocated Nubians in Sudan, one can assume that depression existed there as well. There is proof that women and children displayed psychological problems because of the shift in climate. Fahim writes in 1972: "The Medical Officer at Halfa Hospital informed me that large numbers of Nubians are still suffering from emotional disturbances as a result of lightning and rain."<sup>129</sup> In my opinion this problem can also be ascribed to architecture. A people that used to live in a region where it did not rain at all now had to live in houses with tin roofs<sup>130</sup> that boost the sound of rain, so that every falling raindrop appears threatening.

Beside the psychological drains that appeared because of the new architecture, numerous negative effects on physical health were also displayed. The considerable increase in population density meant that infectious diseases could spread easily. In the first years after resettlement in Egypt an increased prevalence of diarrhea, measles and encephalitis was detected. As a solution for the space problem the Nubians resorted to a horizontal and a vertical expansion. Those who could afford it built another floor on their house at ground level. But this was very risky because of the poor foundation and walls. Additionally, neighbors were not happy because again they felt a decrease of privacy. So the Nubians expanded horizontally wherever it was possible. The new houses were constructed to shelter farm animals, as the upper Egyptians used to do. For the Nubians this was absurd. Fernea reports of a woman saying before

125 FAHIM, "Community-Health Aspects of Nubian Resettlement in Egypt," p. 84.

126 *Ibid.*, p. 87.

127 *Ibid.*; FAHIM, *Nubian Resettlement in the Sudan*, p. 19.

128 FAHIM, "Community-Health Aspects of Nubian Resettlement in Egypt," p. 87.

129 FAHIM, *Nubian Resettlement in the Sudan*, p. 9.

130 *Ibid.*

resettlement: "Have you seen any of the houses the government is building for us, madame? [...] there are only three small rooms and a court, isn't it? [...] And the animals are supposed to be in the same house with us. What a funny idea! Who thought of that?"<sup>131</sup> So the people built stables for their animals wherever there was space. Fahim writes: "They also built barns [...] in the middle of the street [...] During my 1975 visit to the area, I found some villages where streets were occupied by animal barns; as a result, animal waste and flies had become a health nuisance."<sup>132</sup>

Moreover water used for agriculture in Kom Ombo had become a severe problem. Some villages have a slight slope towards the Nile and swamp-like conditions emerged in and around 20% of the villages, a biotope for mosquitoes. One reason was that latrines filled up very quickly and constant sewage disposal would have been needed. The outcome was a bad smell, seepage and waste water being disposed of in the streets. Through these different water puddles the risk for malaria and bilharziosis went up and because of all these deficiencies, Fahim says, the strong Nubian quality of cleanliness disappeared in many villages.<sup>133</sup> Today the water problems are solved and in comparison to other upper Egyptian villages, cleanliness can still be noticed. Yet I believe it has diminished in comparison to what is known about Old Nubia.

Drawings and decorations were very important in building a house. The meaning of arts for the psyche should not be underestimated. This was the women's task, and the aesthetic factor identified the inhabitants and protected them from the evil eye.<sup>134</sup> The evil eye was the reason for embellishments, especially around the main entrance. Walls were painted with hands or eyes and provided with decorative supplements as protection against the evil eye or scorpions. This also expressed the bond to the local village community and affiliation to Islam, and gave information about the inhabitants e.g. embellishments that proclaimed that one of the family members had done the pilgrimage to Mecca. In Old Nubia these embellishments were not only artistic expressions but also showed a bond to their own society and culture and protected the residents.

By contrast, houses in the new villages were poorly constructed and stood in one row, one house looking like the other, built with the same stones, without any decorations or identifying features. Many families in the New Halfa Scheme exchanged their wooden doors for

131 FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, p. 114.

132 FAHIM, "Community-Health Aspects of Nubian Resettlement in Egypt," p. 84.

133 *Ibid.*, p. 85.

134 GRAUER, *Die Architektur und Wandmalerei der Nubier*, pp. 112ff.

colorful and embellished iron doors. These door designs had a socio-cultural meaning and defended against the evil eye.<sup>135</sup>

Although the Egyptian government in the beginning prohibited modification of the houses, Nubians in Kom Ombo soon after their arrival started to remodel them.<sup>136</sup> Women especially took the initiative “to change the government house to Nubian homes.”<sup>137</sup> Exterior walls were heightened, windows blocked up, air slots which one could look through were displaced and benches were affixed to the front of the houses. Many families rendered and decorated their walls with traditional means and symbols and tiled the inside floor, built new walls and provided them with protective characters.<sup>138</sup> One Nubian said: “If we want to maintain our old customs, we must maintain our Nubian architecture.”<sup>139</sup> Yet many elements of traditional Nubian architecture could not be restored and Nubian culture thereby experienced a lasting change.

In many villages of the New Halfa Scheme Sudanese Nubians, in contrast to Egyptian Nubians, have not changed anything about their houses. Saeed reports that village number 18 in comparison to other villages stands out because house designs have been changed, and entrances and walls redesigned and colorfully painted. It is notable that these changes could only be found in a village whose residents have a good education and a better financial situation.<sup>140</sup>

### Vitamin D Deficiency and Obesity

Vitamin D deficiency in children and women and obesity are the main nutritional problems of the MENA region.<sup>141</sup> It has not been determined if Nubians are affected similarly, but evidence of their lifestyle as well as descriptions of physical problems suggests that they are. It can be assumed that these problems only emerged after relocation and are related to the different living conditions.

Vitamin D (cholecalciferol) is necessary for forming bones and teeth, which to a large part are composed of phosphor and calcium. The incorporation of these minerals is assisted by vitamin D. Cholecalciferol can be taken with nutrition, but is built primarily by the cholesterol that is available in the skin, which is transformed to vitamin D by the ultraviolet radiation of the sun. Only 10–20% of a person’s vitamin D demand is covered through nutrition. The

135 FAHIM, *Nubian Resettlement in the Sudan*, p. 10.

136 FAHIM, *Egyptian Nubians*, p. 63.

137 FAHIM, “Community-Health Aspects of Nubian Resettlement in Egypt,” p. 84.

138 FAHIM, *Egyptian Nubians*, pp. 63–64. Armgard Goo-Grauer in a conversation hinted to me that the wallpaintings which were drawn after resettlement have now disappeared completely.

139 FAHIM, *Egyptian Nubians*, p. 84.

140 SAEED, *The Changing Role of Nubian Women in Khashm El-Girba*, p. 84.

141 AOYAMA, *Reproductive Health in the Middle East and North Africa*, p. 70.

ramifications of a lack of vitamin D are weakening of the bones, which causes rickets in children and bone softening in adults. A symptom of rickets is the deformation of bones, especially those of the leg. Bone softening does not lead to deformation but causes dull pain and a risk for bone fractures. But beside these well proven consequences, surveys have showed that vitamin D also protects from heart attack, cancer, diabetes and multiple sclerosis and has a positive effect on the psyche.

Aoyama states that young women in the MENA region often reported pain in the bones and many showed bone fractures. Many Nubian women complained to me about pain in their bones as well. Aoyama writes that a lack of Vitamin D is caused by their life style and the behavior pattern of women, who never or seldom go outside and thus stay away from the sun. As an example she mentions life in dark houses and veiling.<sup>142</sup>

This is also true for Nubian women today. In their native land the women were in the sun a lot for their daily tasks, while bringing water and caring for the animals, during field work, and in other activities. Because of the clothes they wore they were not totally blocked off from the sun. Head, face and neck, underarms, hands and feet partially up to the calves were uncovered by clothing, which allowed the skin exposure to the sun while working but also while sitting in the inner courtyard and on the benches in front of the houses. In some areas the women wore big white wrapping cloths when they left the house. In other areas they wore black, transparent *gargas* on top of printed cotton dresses and transparent veils on head and shoulders.<sup>143</sup>

Through resettlement and new living conditions women were considerably less exposed to the sun. Because of overcrowding in the villages, a close coexistence with nonrelated people, increasing crime and a general feeling of insecurity, female movement was limited to the house and a few outdoor activities.<sup>144</sup> But in contrast to Old Nubia, these houses were not constructed to facilitate a life behind closed doors, especially because of the absence of the big inner courtyard that guaranteed privacy in the open air.

In addition, Islam has had a much wider influence on Nubian women. Although Nubians have nominally belonged to Islam for roughly 400 years, their belief system mingled orthodox Islam, popular Islam and non-Islamic elements.<sup>145</sup> Attention should be paid to the fact that women and men had different belief systems in Old

142 Ibid., p. 74.

143 MASSENBACH, *Mohrenland wird seine Hände ausstrecken zu Gott*, p. 12; FERNEA & WARNOCK FERNEA, *Nubian Ethnographies*, p. 47.

144 FAHIM, *Egyptian Nubians*, p. 60.

145 FAHIM, "Change in Religion in a Resettled Nubian Community," p. 166.

Nubia. While men had a much wider knowledge about Islam and its content due to better education, knowledge of the Arabic language and their labor migration, the women, Grauer writes, knew less: "Knowledge about Islam in the women's mindscape is confined to a *Fatiha* that is garbled to an unrecognizable state [...] and simplified articles of faith."<sup>146</sup> On the other hand, in their world of faith a multitude of spirits, the evil eye and many commandments and taboos of the popular faith played an important part.

Fahim reports that soon after resettlement a demand for purification of the Nubian religion arose and the importance of orthodox Islam for everyday life was stressed. He says: "The closer and more intensive contact between New Nubia and urban centers, where the trend toward Islamization has been highly developed, has succeeded in gaining more support for orthodox-oriented Nubian groups. Support is provided also by promoters of the development of the new Nubian communities. This process of Islamization, then, appears to be closely interrelated with modernization."<sup>147</sup>

Moreover, the religion was propagandized to form a unified whole for the different Nubian and non-Nubian groups, and through this the integration of the Nubians into their new living environment was promoted on both sides.<sup>148</sup>

This empowerment of Islam among the Nubians brought about a change in the women's clothing. More and more clothing of the Egyptian women, that is their black over-dress and veil, was adopted. In recent years also a veiling of the face and a covering of hands and feet found its way into Nubian wear. While I saw this form of veiling in only a few instances thirteen years ago, now a large number of women dress this way. I assume fashion changed not only due to the promotion of Islam but also due to life in an environment with strange neighbors. So women's life has not only changed to be a life in the house but situations in which women leave the house are now characterized by the desire to protect oneself from the looks of strangers. This means that the skin is not exposed to sunlight anymore. The consequence from a medical point of view is a lack of vitamin D. Whether this thesis is true for Nubians still needs to be ascertained, but evidence for this is given by the fact that many Nubians in Egypt now show a severe calcium deficiency. This was reported to me by the director of the evangelical hospital in Aswan who has been working in New Nubia for many years. This lack of calcium leads him to presume an incidence of vitamin D deficiency as well, as this helps the body absorb calcium.

<sup>146</sup> GRAUER, *Die Architektur und Wandmalerei der Nubier*, p. 60.

<sup>147</sup> FAHIM, "Change in Religion in a Resettled Nubian Community," p. 175.

<sup>148</sup> *Ibid.*

It is also notable that through life in the house and the resulting lack of exercise, a large number of women are found to be overweight.

### **Conclusion**

Comparisons in different areas of life show that the authorities' expected improvement of Nubian health has been partially achieved. Health care has clearly improved due to the accessibility of numerous health centers. Many formerly common and sometimes severe illnesses can now easily be cured, and thus health in general is improved. A better education leads to a better understanding of the body and diseases. Through this, women are now better informed about different forms of therapy and the ways each one works, which is important for successful treatments. Access to fruits, vegetables and meat has improved a lot, which addresses previous deficiencies of vitamins. Through the facility of running water, hygiene was benefited, women were physically relieved, hookworms and bilharziosis were restricted and amebiasis could be controlled more. Concerning deliveries, medical facilities were a positive development through which mother and child have a higher life expectancy, lacerations can be prevented and infections can be avoided through better healthcare provider hygiene.

At the same time, through the new living environment and new lifestyle, new illnesses occurred which no one seemed to have expected nor the planning committees given thought to preventing. Through the offer of various new foods and incorporation into "civilization," diseases of civilization have now emerged. The high consumption of sugar and fat that has also been engendered by consumer goods finds expression in weight gain and obesity, high hypertension and diabetes. A lack of exercise contributes as well. In Khashimel Girba, malaria posed a new disease to the Nubians. The new living conditions had a strong effect on the psyche of women who suffered from feelings of unrest. Additionally the architecture reinforced the feeling of insecurity through lack of privacy and the perception that spirits could easily enter the unprotected. The efforts to maintain seclusion led to a lack of sunlight and thereby to a high risk of lack of vitamin D. With regard to female circumcision the feeling of threat which resulted in an emphasis on seclusion caused Nubian women to revert to the more extensive pharaonic form.

It becomes clear that new forms of diseases and health problems have occurred which could have been foreseen and partially prevented. Problems in the area of nutrition could particularly have

been expected. Nubians formerly always had to economize with their food and were never tempted to eat in a way that would have strained the body. But they lacked knowledge about the new food and its impact on the body. Nutrition programs for women should have been planned from the beginning to teach about balanced diet. In this way also an understanding could have grown about illnesses, such as diabetes, that cannot be felt immediately but are still diseases that have to be taken seriously.

Such an education program could potentially have counteracted seclusion and could have given the women a panel to speak about different topics, to stay socially involved and to influence society actively as they had been doing before. Moreover, old knowledge about herbs and traditional medicine could have been encouraged and conserved. This might have worked against the total reliance on modern medicine and the impulse to take drugs even for minor illnesses. Repeatedly I was told by physicians that a doctor is only considered a good physician if he prescribes a whole cocktail of different drugs that help immediately.<sup>149</sup> If they do not, they said, the patient would proceed to treatment from another doctor only few days later. The awareness that sometimes another lifestyle is needed and medicine cannot always help is often missing totally. This problem could also have been countered by a better understanding of the body.

Knowledge of the female body and its functions would have been important with regard to female circumcision. Creating true understanding that circumcision does not make girls and women pure and clean but brings along with it many complications, e.g. infections that have a negative effect on fertility, could have been promoted. Moreover, knowledge about body coherence in general serves families; for example knowledge of bodily functions reassures a woman who was not able to become pregnant in the first few months after marriage.<sup>150</sup>

That the crowded and narrow living space would have multiple negative effects could have been foreseen as well as the women's feeling of fear in living conditions totally new for them. The same is true of the feelings of insecurity and of being a foreigner owing to architectural features. In addition, it would not have been a large extra effort and expense to affix a bench in front of the house. This would have had the advantage of strengthening social fabric

149 Haddad describes the excessive use of medication, by the doctor as well as by the patients, as being generally widespread in the Arab world. Doctors prescribe medicine because patients demand it. Moreover, she states that mainly women are the consumers. HADDAD, "Women and Health in the Arab World," p. 95.

150 Cases in which women are panicking because they are not pregnant after two months of marriage were described to me by the former director of the evangelical hospital in Aswan in December 2007.



in the villages, maybe decreasing seclusion, and helping women get enough sunlight for adequate vitamin D production. Generally, consideration should have been made for which elements of the former Nubian architecture could have been borrowed, and which construction elements in the new villages should have been omitted, as they did not support Nubian living perceptions, such as e.g. the big windows to the street. Hygiene problems and the prevalence of diseases could have been limited through a more spacious living area.

It is not surprising that women especially had psychological problems after resettlement. In Old Nubia women had a widespread form of therapy to offset these problems, the *zār*-cult. As Kennedy says the *zār* was mainly an outlet for the women to relieve inner tensions by reflecting on their own low status, the exclusion from religious life, the gender segregation, isolation, and the fear of being divorced. Through this cult they had a way of getting attention for themselves and their problems. Surely at the same time the *zār* was a possibility to have one's wishes fulfilled and to bind the husband to oneself as he was obliged to take over the ceremony's often extensive costs. Many times this financial burden prevented him from being able to afford another marriage. But the *zār* lost its influence after resettlement.

The impression is created that the decline of this former outlet led to deteriorating psychological problems which led to visits to the doctor and modern medicine. Women go to see a doctor for minor reasons and complain about various problems. They expect the prescription of expensive medicine, the more costly the better. The husband has to pay for the treatment as well as the medicine. As the woman has to take drugs she clearly has a reason to complain about her situation when she is back at home and a possibility to point to it in daily life. The problem is that many physicians prescribe numerous medicines because they are expected to and not because the patient really needs them. The population needs to be educated about possible adverse effects, correct dosages, and the possibility of drug resistance or addiction. Only when patients do not call for so much medication but understand that the quality of a doctor does not depend on the amount of drugs he prescribes can they be treated in a more effective way. Until then iatrogenesis will keep increasing based on the growing utilization of modern medicine.

But on the other hand psychological problems often lead to physical problems as well. Toubia states that women in Sudan often suffer from psychosomatic diseases and this fact explains why women are found in clinics and hospitals disproportionately. She says "it is



an unconscious cry for help and a plea for sympathetic ear for their complaints which they are unable to express openly.”<sup>151</sup>

For future resettlements, male planning committees should be aware of a gender specific presentation of the problem. Socio-cultural shaping of the sexes' roles need to be determined, evaluated and considered in respect to resettlement plans. Ethnologists should lay a foundation for successful resettlement through gender studies.

It is important to plan for sufficient and easily accessible health facilities yet no hospital in the world is capable of curing illnesses evoked by bad behaviour patterns. Because of this, intense examination in advance of the culture of those going to be resettled is critical. There is a need at the beginning to consider which cultural aspects should be supported, which problems are to be expected, and how to counteract them. Care has to be taken that modern medicine does not become the cure for every problem; otherwise it will become more of a problem itself than help. Instead, effort should be put into insights derived from the careful consideration of the individual culture which would develop into concepts of prevention, enlightenment and health care.

151 TOUBIA, "Women and Health in Sudan," p. 104.

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