

*Discussie*

## **A micro-ecological approach to home care for AIDS patients**

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*In dit artikel wordt een conceptueel kader ontwikkeld om de relaties tussen de gezondheid van individuen enerzijds en de huishoudelijke productie van zorg en gezondheid anderzijds te onderzoeken. De ontwikkeling van een dergelijk kader, een 'micro-ecologische benadering van gezondheid', wordt gemotiveerd door het belang dat ik hecht aan het doorbreken van de scheidslijnen tussen de verschillende disciplines die zich met gezondheid van de mens bezighouden. In het eerste deel van het artikel worden de conceptuele lijnen uitgezet, gebruikmakend van bestaande theoretische benaderingen van huishoudelijke productie, zorg, en gezondheid. In het tweede deel van het artikel wordt de micro-ecologische benadering toegepast op de thuiszorg voor AIDS patiënten*

*[huishouden, gezondheid, zorg, HIV/AIDS, micro-ecologische benadering]*

### **The micro environment and agency of the household: a theoretical statement**

In the interdisciplinary field of household sciences, the household is seen as a unit of both consumption and production. The productive functions of households include providing for the primary needs of members, viz. livelihood and care. Households are 'care providers' (Gardiner 1997). With the decline of family farming, cottage industries and home-working in Europe, the image of the household as a productive unit faded, to give way to the image of the household as a unit of consumption. Household became increasingly synonymous with family in the sense of nuclear family. In the Western context the terms household and family are often used interchangeably. This shift in perspective obscures the view of the important productive functions of the household, even if it does not produce for the market. However, in the wake of population ageing, and the increasing care needs this entails, combined with the limits to the welfare state, households recapture their significance as care providers, also in (so-called) Western societies (Qureshi & Walker 1989, Luijckx 2001, Keasberry 2001, Niehof 2002).

The latter development is not only important for placing health needs and health care in a proper context but also paves the way for a comparative perspective on household functions and processes. Chant (1997: 281) observes that writers on developing

countries tend to use the term household rather than family. She adds that in developing countries “the members of individual residential units are often embedded within strong networks of wider family and kin and it accordingly makes little sense to confine ‘family’ to small domestic groups. Alternatively, people in Northern countries often have less contact with relatives beyond the immediate household or their natal families and so the concept of family becomes prioritised in a household setting.” The point of departure taken here is that “households represent to a large extent *the arena of everyday life* for a vast majority of the world’s people” (Clay and Schwartzweller 1991: 1, my italics). Rudie (1995: 248) describes this ‘arena of everyday life’ as a “co-residential unit, usually family-based in some way, which takes care of resource management and primary needs of its members”. Especially the last part of this description is important because health needs relate to primary needs and resources and resource management are needed to provide for them.

The vision of the household underlying this paper combines a systems approach with an actor or agency perspective. In a systems approach a system is considered an integrated whole working on inputs that are processed and managed (throughput), leading to outputs that are partly fed back into the system. It has boundaries and interfaces with other systems. The systems approach is the underlying paradigm of household models in the home economics and human ecology literature (Wingerd Bristor 1995). The household can be seen as a system insofar as it uses inputs (resources and assets) to produce outputs (care and well-being). The household organisation, including decision-making, management and developing and implementing strategies, can be seen as the system’s throughput. There is feedback as well; outcomes affect the resource base of the household and subsequent household production. However, when looking at household organisation, also a certain agency can be attributed to the household. As collectives households, like all enduring groups, have emergent properties that exist above the individual level (Anderson et al. 1994). Households have agency, in the sense of ‘reflexively monitored flows of conduct’ that are subject to social differentiation and are influenced by the political economy (Carter 1995). While, to a certain extent, the household can thus be seen as one actor, intra-household inequities and dynamics play a role in household production as well, particularly those related to gender. Kabeer (1991) rightly points to the importance of the gender-based division of labour within the household economy, and the internal distribution of resources and welfare outcomes.

Focusing on the micro-level of the household does not imply seeing households as closed and static systems; household boundaries are permeable and household composition changes over time. Household members are part of social networks beyond their own household, and the household interfaces with other institutions. Households can be seen as agencies mediating between the individual and society. Within households social norms and cultural values are given concrete form. Households adapt to changing external circumstances but by their internal dynamics they also generate change (Pennartz & Niehof 1999). This perspective is particularly important when studying health care practices and the norms underpinning them. In my opinion, for a sociological approach to health and health care one should start at the micro-level, viewing

micro-macro linkages from that perspective. In his plea for what he calls a micro reduction approach, Collins (1981: 93) puts it as follows: "Reduction produces an empirically stronger theory, on any level of analysis, by displaying the real-life situations and behaviours that make up its phenomena." Macro-level constraining or enabling factors, or opportunity structures (Pennartz & Niehof 1999), have to be analysed for the way they are experienced at the micro-level. As Collins notes, historical and structural patterns are empirically made up of long sequences and aggregates of micro-situations and interactions.

### Health needs and care

Providing for the primary needs that Rudie refers to in her description of household is essential for preserving health. When a person's needs for food, nutrition, shelter and protection are not adequately met, his or her health is at risk. The literature on food insecurity and the consequences of malnutrition for children's physical and mental development testifies to the importance of meeting food needs both in the short and the long term (Kennedy & Peters 1992; Van Esterik 1995; Leemhuis 1998; Smith & Haddad 2000; Balatibat 2004).

However, availability of the necessary means to provide care at the household level offers no guarantee that the needs of all household members, particularly the most vulnerable ones, are adequately met. The internal arrangements within households that organise care work and assign care tasks should provide basic security and effectuate individual members' right to care. This household production of care requires resources, both tangible and intangible, as well as inputs in terms of time. It is underpinned by moral values and is part of what Cheal (1989) has called the 'moral economy of the household'.

The question of the quality of care provided within the micro context of the household requires further elaboration, and for this purpose I shall use Tronto's theoretical framework. Tronto (1993: 103) defines care as "a species activity that includes everything we do to maintain, continue and repair our 'world' so that we can live in it as well as possible." She stipulates that for an activity to be called care it has to include both care practices and the disposition (or intention) to care. She sees care as consisting of four interconnected phases:

- 1 *Caring about*: The identification of the need for care, which requires *attentiveness*.
- 2 *Taking care of*: Determining how to respond to the identified care need, requiring agency and *responsibility*.
- 3 *Care-giving*: Directly meeting the need for care by physical work and face-to-face contact, requiring *competence* of the caregiver.
- 4 *Care-receiving*: Assessing the adequacy of care, calling for *responsiveness* on the part of the care receiver.

To the four requirements of good care – attentiveness, responsibility, competence, and responsiveness – Tronto adds a fifth one, namely integrity; implying that the four

phases should be linked into a well-integrated care process. Integrity is lacking when, for example, care needs are identified but no one is taking responsibility or when those who are taking responsibility subsequently delegate the problem to caregivers without bothering to check whether these are adequately equipped for their task.

All four phases of care and five requirements of good care play a role in the household production of care. As much as possible care-giving is done within the household. However, when the care need of a household member exceeds the capability of the household to meet it, somebody in the household has to take responsibility to find an alternative solution. There are basically two types of circumstances in which this may occur. The first is that the household lacks the competence to give adequate care, in which case the help of medical professionals or medical institutions has to be sought. The second is that there is a general lack of the necessary resources and capabilities. As discussed above, the household production of care requires the use and management of resources, including time. In this case as well, external help might be needed, perhaps to the extent that external agencies have to identify the care needs and take responsibility to do something about them. In the latter case we are talking about a household in distress, unable to meet even the minimum standards of care provision, in which the health of individual household members is at risk. Such households may be very resource-poor, with vulnerable livelihoods, or stricken by disaster, or just unable to cope with the crisis they are faced with. Tronto's framework provides the criteria for assessing the adequacy of care produced by households and the entry points for meaningful assistance by external agencies, medical or non-medical.

The concept of the 'therapy managing group', coined by Janzen (1978) for Zaire, fits particularly well in the second phase of Tronto's framework (taking care of). Janzen (1978: 4) describes it as follows. "A therapy managing group comes into being whenever an individual or set of individuals becomes ill or is confronted with overwhelming problems. Various maternal or paternal kinsmen, and occasionally their friends or associates, rally for the purpose of sifting information, lending moral support, making decisions, and arranging details of therapeutic consultation. The therapy managing group thus exercises a brokerage function between the sufferer and the specialist."

The contours of the micro-ecological approach to health and health care are now drawn. Before assessing the overlap with similar frameworks, two more elements that are part of the approach must be mentioned here. The first is gender. As has been convincingly demonstrated in the literature (Fisher and Tronto 1990, Tronto 1993, Taylor et al. 1996), care is gendered. In many societies actual care-giving is dominated by women, while 'taking care of' is usually done by persons in a position of authority with control over resources, in many societies predominantly men. Whatever the precise division of tasks and responsibilities, nowhere is care a gender-neutral activity. This means that the micro-ecological approach has to be a gender-sensitive one that takes into account prevailing gender roles and values, to relate these to health and care.

The second issue is that of the circular mode of care production. Tronto's framework includes the element of feedback (phase four). However, also in a more general sense the 'outputs' of domestic production have an impact – positive or negative – on

the subsequent use and allocation of the resources needed for adequate care. An example of negative feedback is provided by a research project in Sri Lanka (Hoogvorst 2003). In the study area, poverty-fuelled alcohol abuse by husbands leads to the depletion of household resources and their wives' loss of social esteem and social relations, affecting the care-giving ability of the household as a whole and of the wife in particular.

### **Alternative frameworks**

#### *The Household Production of Health (HHPH)-framework*

In 1994 a special issue of the journal *Social Science and Medicine* was devoted to an approach to health care called the household production of health (HHPH). In formulating their position, the authors (Berman et al. 1994) observe a gap between the multifaceted nature of sociological or anthropological studies of human behaviour and the focussed character of disease control programs. To bridge it they propose an approach aimed at understanding the "process by which inputs to households become outputs in terms of health improvement" (Berman et al. 1994: 206).

In relation to public health campaigns and programs, the HHPH framework emphasises that programs should focus on health enhancement and maintenance, rather than on the prevalence of specific diseases. In the framework, the household is seen as the locus of health production, without implying that households control all resources needed for health maintenance. The institutional environment of the household includes formal health services. These are seen as external resources which households can use to maintain and promote health. To which I would add that the extent to which households can use these external resources will differ according to a) the value they attach to them and b) the household's capabilities and entitlements to access them. Berman et al. distinguish the following domains of intra-household health behaviours: infant and child-feeding practices; child care; home diagnosis and treatment and utilisation of home-based services; home hygiene and sanitation behaviour; and ante-natal and post-partum care of women. In addition, they subsume a wide range of health- and treatment-seeking behaviours under household production of health, such as the use of external health services, financial investments in health, like home improvements and purchasing health-related capital goods.

In its emphasis on households as a context for health-producing behaviours, for which inputs (resources) are needed, the HHPH framework is similar to our approach. However, there are some gaps as well as matters that are not entirely clear in the HHPH framework and need to be remedied.

First, as an external resource, the institutional environment relevant for health production should not be limited to formal health services. It has to include the informal health sector, like the services of indigenous healers and providers of indigenous medicine. If one sees the household as a 'soft' system that interfaces with other systems and is embedded in a certain environment, the argument may be extended even further. A

household's external resources are located in its natural environment, its material and man-made environment, and its socio-cultural and institutional environment. The household's ability to produce health will depend on the availability of these external resources as well as on the capability of households to access them. For example, the availability of fresh water in the natural environment constitutes an important external resource. When this is unavailable, the conditions for producing health, i.e. safe water, hygiene and sanitation, can hardly (or not at all) be met, which will result in specific morbidity patterns.

The second issue concerns the word *to* in the description of the HHPH approach cited above. By seeing outputs in terms of health primarily as processed inputs *to* households, the agency of the household in generating and managing resources itself is glossed over. The household is treated again as a black box; something is put in and something comes out, but what happens inside remains invisible. Berman et al. list the types of activities that are part of the household production of health, but we are left without a clue as to how this production takes place. Inputs are not just there but have to be acquired. Resources have to be generated or accessed, allocated, used and managed. The way this is done will determine the outputs, also those concerning health. The HHPH approach is not specific enough about a crucial component: the P of production.

The last point I would like to make concerning the HHPH approach, is that it does not distinguish between intended health behaviour and behaviour having no health purposes, but leading to certain health outcomes. No use is made of the concepts of etic and emic that played such an important part in the theoretical development of medical anthropology, and led to the useful distinction between illness and disease. By 'emic' we mean classifications that refer to a "logico-empirical system whose phenomenal distinctions [...] are built up out of contrasts and discriminations, significant, meaningful, real, accurate, or in some other fashion regarded as appropriate by the actors themselves" (Harris 1968: 571). Such an emic classification can be contrasted to an 'etic' one, defined by Harris (1968: 575) as depending upon "phenomenal distinctions judged appropriate by the community of scientific observers". In short, disease is an etic category and illness an emic one. In spite of the considerable discussion in the literature about the relevance of the emic-etic distinction (e.g. Feleppa 1986, Headland et al. 1990), we think that it is relevant and useful for the approach proposed here. Because Tronto sees care as practice *and* as disposition, calling behaviour 'care' only when it is intended as such – whether or not medical professionals (etic perspective) see it as care, her model also contains an emic perspective. When the emic-etic distinction is applied to the household production of health, the following matrix emerges.

**Table 1** Classification of health care practices in the household production of health (HHPH) according to the emic and etic perspectives

<i>Etic perspective</i>	<i>Emic perspective</i>	
	<i>No health care intentions</i>	<i>Health care intentions</i>
No measurable health effects	(1) Not a relevant category	(2) HHPH practices intended as health care but not yielding measurable health effects
Measurable health effects (positive or negative)	(3) HHPH practices not intended as health care but yielding measurable health effects	(4) HHPH practices intended as health care and yielding measurable health effects

‘Measurable health effects’ can include both positive and negative ones. An example of a practice intended as health care but, actually, yielding measurable negative health effects (fourth category) is what I could observe myself during my fieldwork in Madura, Indonesia. The practice I am referring to is the following. Persons clearly suffering from tuberculosis would consult an indigenous healer, who would soak in a glass of water a piece of paper inscribed with a text from the Koran, give the glass to the client to drink, and promise recovery from the disease. Because tuberculosis is a deadly disease when not treated properly, and a highly contagious one, and because the treatment does not address its (etic) causes, this practice obviously has measurable negative health effects. It fits within the HHPH framework because the decision to go to the healer is not an individual action. It is taken within the household and the means for paying the healer are provided and allocated by the household. As pointed out above, traditional healers are part of the institutional environment of the household, which includes not only health services in the formal sector but also those within the so-called informal sector.

*A critical ecological model for medical anthropology (CEMMA)*

In developing the critical-ecological-medical-anthropology framework Young (2002) combines ecological approaches to health with critical medical anthropology. She then uses the resulting framework of critical ecological medical anthropology to analyse the problem of anaemia during pregnancy in Pemba (Zanzibar).

Young sees the strength of medical ecology in its comprehensive treatment of biotic, non-biotic and social environments, making it possible to relate the biological, the social and the cultural in the analysis. However, ecological anthropologists are often reproached for being too materialistic and for failing to give proper consideration to the role of social relations and cultural factors. They tend to focus on people’s adaptation to the physical ecosystem, treating the latter as given, rather than considering the role of social, cultural, and political factors in shaping people’s responses and shaping the environment. The opposite is the case with critical medical anthropology, because

“critical medical anthropologists prefer to examine the social and historical forces of the political economy as dominant determinants of health and disease” (Young 2002: 335). The latter are the very factors ecological anthropology is accused of as neglecting, while critical medical anthropologists are accused of paying scant attention to the biological environment and physical factors.

Young’s deconstruction of the concept of *adaptation* is particularly relevant for our purposes. While warning against the risk of using the concept in a tautological manner (illness as a failure to adapt) or in a functionalistic way (adaptation as a way to preserve the balance of the system), she wants to retain it. She sees adaptation as the ability to respond to or to seize opportunities, and this ability as being circumscribed by the resources available to the individual or group. Included in her conceptualisation of adaptation is ‘cognitive adaptation’, meaning that we can change the way we think about things, such as health, in order to put ourselves at ease. When phrased in this way, cognitive adaptation bears close resemblance to what sociologists have always referred to as solving the problem of cognitive dissonance. If you cannot change an unwanted situation, you can adjust your description or perception of it to bring it more in line with the desired situation.

On the basis of the theoretical discussions summarised above, Young presents her critical ecological model for medical anthropology (CEMMA). Its interesting characteristics are a broader definition of the environment to include historical, political, economic, biological and symbolic forces, and an expanded definition of adaptation to include the notions of tactical adaptations and cognitive adaptation. The model is visualised in a figure (Young 2002: 342) in which five boxes are placed in a field that bears the text ‘ideational setting’. The mental and physical needs of individuals are in the central box. It is linked to four other boxes that contain the micro-level social setting (the household), the meso- and macro-level social setting (history, economics, and politics), the physical setting, and medical technology. When the model is applied to the case of anaemia during pregnancy, the boxes and the field are filled in with specifications (‘ethnographic flesh’) that fill almost an entire page. The connections between the boxes and between the boxes and the field are formed by adaptations.

Young’s framework has a number of attractive features. It comprises the material and the immaterial environment, both tangible and intangible factors that influence, or even determine, people’s health, both directly and indirectly. In the way adaptation is conceptualised the constraining or facilitating role of resources is acknowledged. Furthermore, the notion of cognitive adaptation can be related to the emic-etic distinction. However, while acknowledging these plusses, I do object to the central position of the individual’s mental and physical needs in the model, because – at the end of the day – providing for those needs is not done individually but in the context of the household. The emphasis should be not on the needs themselves but on the manner in which they are met. The provision for basic mental and physical needs on a daily basis requires allocation and management of household resources, which is why the household is the fitting level of analysis. The authors of an article on household strategies to cope with the economic costs of illness in Burkina Faso conclude that “the household, rather than the individual ill person, was the appropriate unit of analysis” (Sauerborn et al. 2000:

291). This is because households and not individuals bear the costs. They affect the household resource base and are allocated by household decision-making.

In the next section we will formulate the micro-ecological approach as an alternative framework by making a synthesis of the contours outlined in the first section and the building blocks provided by the frameworks of HHPH and CEMMA.

### **Summarising the micro-ecological approach to health (MEAH)**

The approach presented here will be referred to as the micro-ecological approach to health, abbreviated as MEAH. Its key elements are the following:

- (i) As in the HHPH approach, for the production of health the household is taken as the level of analysis. Household characteristics, such as size, composition, dependency ratio, phase in the household life course, and household headship, are assumed to affect the capability of households to produce health and provide adequate care.
- (ii) Within households resources are allocated and managed to provide for basic needs, including the mental and physical care needs of its members. Likewise, assets are saved, kept, enhanced, or – if unavoidable – cashed-in and depleted, to provide for basic needs, including care needs. The way this is done can be more or less sustainable or strategic, reflecting the degree of vulnerability of the household's livelihood system.
- (iii) Vulnerable households have a structural lack of resources, assets and capabilities. When confronted with a crisis or a shock such households can only try to cope, using the few options they have. Coping is short-term responsive behaviour directed at day-to-day survival, because the actors are incapable of structurally improving the situation.
- (iv) The household is embedded in an environment that comprises physical components, institutional structures and cultural and normative frameworks. Both formal and informal health care institutions are part of the institutional environment of households. Such institutions constitute an environmental resource that households will use if they perceive them as valuable and also have the means to access them.
- (v) The institutional structures also include kinship networks and other social networks as well as institutionalised inter-household support relationships. These have a two-fold significance. First, they represent a resource or asset (in the sense of claims) that can be of immediate support, such as labour and support. Second, they have an intermediary function by providing access to other resources and assets. The institutional structures can also be a liability instead of an asset, when they constrain households and individuals by making excessive claims on them or by draining their resources. This is a matter of perspective as well. To needy family members the kinship network is a resource, but to the households appealed to for help the relatives becomes a burden.
- (vi) The adequacy of care is judged by the extent to which care needs are properly identified, are taken responsibility for, are addressed by competent care-giving

practices, are positively appreciated by the person to whom care is given, and are communicated and integrated. At the same time, the adequacy of care is to be judged 'objectively' by assessing the measurable health effects.

- (vii) Care is not just disposition or intention to care or practice but a combination of both. Care can yield measurable health effects or not, which can be positive or negative.
- (viii) The normative frameworks that households are embedded in and interface with, are part of religious, ideological, and cultural structures that largely determine the legitimacy of care needs and claims and the social acceptability and emic efficacy of care practices.
- (ix) Gender plays an important role in all these processes. The phases in the process of care are gendered, as are access to and control of the resources and assets required.

To sum up: MEAH stands for a gendered approach to health and health care that looks at the adequacy of the way and the extent to which care needs of individuals are met by the disposal, allocation and management of internal and external resources of the household they live in.

### **AIDS and society**

The AIDS pandemic is much more than a series of personal and family tragedies. AIDS' deaths have depleted the workforce, lowered life expectancies, and are likely to shred the already torn social fabric of numerous countries (Schoepf 2001). Against this background I intend to show how the micro-ecological approach to health can be applied to home care for AIDS patients. This requires some preliminary reflections on AIDS as illness.

The disastrous ramifications of the AIDS pandemic are becoming increasingly felt, visible, and – though according to some authors rather belatedly – acknowledged. Schoepf (2001: 351) says the following on WHO's health-for-all objectives: "With public health systems a shambles, even in countries with little HIV/AIDS, however, the goal of 'Health for All by the Year 2000', agreed upon by world leaders at Alma Ata in 1978, is a farce today." In their book, Barnett and Whiteside (2002) comment sharply on the absence of AIDS statistics and the lack of a systematic inclusion of AIDS effects on development in World Bank and UNDP reports. To go thoroughly into the reasons for this neglect is beyond the scope of this article. However, some aspects need to be highlighted here. The first is the nature of the pandemic, described by Barnett in a paper as a slowly moving disaster. "The AIDS pandemic differs from other disaster events in two ways. It is slow-acting and almost surreptitious with no clear trigger mechanisms. Thus the incremental rate of increased mortality associated with AIDS may mean that communities are not aware of the extent and novelty of the crisis until well into the pandemic" (Barnett 1992: 9).

The second aspect is that of the insufficiency of biomedical models alone to explain and describe the pandemic in combination with the moral overtones of alternative so-

cial and cultural explanations. Regarding the impact of the pandemic in Sub-Saharan Africa, sweeping statements have been made about 'African sexuality'. This can lead to misplaced attitudes of moral superiority, resembling the way homosexuals suffering from AIDS were stigmatised in the United States and Europe (and in some corners still are). The fact that the AIDS discussion is fraught with moral and cultural sensitivities might be a reason to avoid or ignore it. Still, sexual behaviour is a key variable in the spread of HIV/AIDS, which is why Caldwell et al. (1989) in their early paper on the social context of AIDS in Sub-Saharan Africa make a plea for the analysis of sexual networking practices. However, this behaviour takes place in a certain context or environment. Barnett and Whiteside (2002: 81) see risky behaviour as "a characteristic of the environment rather than of the individuals or the individual practices".

A profile of AIDS as illness has to include a brief discussion of its temporal ramifications. Barnett and Whiteside (2002) wonder what AIDS will do to people's lives over many years and decades. In their article on AIDS-orphans Deininger et al. (2003: 1217) note that "even if the immediate impact of AIDS on mortality is in decline, the legacy of longer-term negative welfare impacts will constitute a formidable challenge for the foreseeable future." They cite Uganda as a case, where a dramatic increase of AIDS-orphaned foster children and households hosting them can be observed. This phenomenon belongs to the fourth of the long-wave events that Barnett and Whiteside associate with AIDS. The four waves are that of HIV infection, spread of tuberculosis because it is the most common opportunistic infection, spread of AIDS illness and death, and, finally, the wave of impact, which includes household poverty and orphaning (Barnett and Whiteside 2002: 23).

At the micro-level of households and individuals HIV/AIDS also follows a distinctive, non-reversible time path, mirroring that of the macro-level sequences. At the individual level, once an individual is infected, there is a time lapse of several years before the illness becomes manifest. This period of clinical latency seems to last for about seven years. The first sign of AIDS is the affliction by opportunistic diseases. Then, the symptoms become aggravated until the patient dies. Barnett and Whiteside (2003) cite a study in which it was found that the time from falling ill to death was shorter for untreated patients in Uganda than for patients in rich countries, but that the period from infection to illness did not seem to differ. At the level of the household the impact of the disease becomes gradually visible. In a case pictured by Barnett and Blaikie (1992: 89) a relatively prosperous household in the Rakai district in Uganda is gradually reduced to destitution in eight years. The adults die and the surviving children try to cope by growing food crops for their own consumption and selling their labour to neighbours.

Barnett and Whiteside (2003) point out two household-level phenomena induced by AIDS. The first one is the clustering of impacts within and between households that is a consequence of intra-household infection and households sharing the same risky environment. In such an environment, relations of proximity and neighbourhood, sexual relationships, kinship relations and other social relations within and between households make them share impacts, whether they want to or not. In a certain area, AIDS impacts are not just randomly distributed over persons and households, they are clustered. The second phenomenon is the total collapse of households. Households un-

able to cope because they sold all their assets have no social capital left to fall back on and are part of a severely afflicted cluster of households, collapse and disappear. Traditional household surveys are inadequate tools for detecting these vanished households, which results in a positively biased picture of the ability of households to cope.

### **Applying the MEAH framework to home care for AIDS patients**

#### *A case*

Bos et al. (1996) documented the following case, placed in Zimbabwe:

Sam (42) is married to Liza (38). They have six children. The eldest (15) is at school in Bulawayo. The youngest is Pinkie, at the time of the first visit by the researchers, a baby of three months old. Up till October 1994, the household had a solid resource base. Sam worked in a factory in Bulawayo. At home in the rural area, Liza cultivates maize and beans. They have ten cows. The homestead comprises two buildings.

Sam began to feel ill in October 1994. At first he tried to keep working, with Liza visiting him as often as possible to provide care. This arrangement lasted only for a few months. Sam becomes too ill to work at all and returns home, bringing three months salary from his employer. The employer also arranges for a visit to a doctor and pays for the medicines. At the Bulawayo hospital Sam is diagnosed as sero-positive, indicated by the 'NS+' on his card (NS standing for New Serology, euphemism). Sam knows he has AIDS but does not acknowledge it. He claims Liza has bewitched him and pays frequent visits to the traditional healer.

Soon his condition begins to deteriorate. He is bed-ridden, emaciated, and is plagued by diarrhoea, tuberculosis, and ulcers. Because the homestead lacks a toilet, Sam has to use that of the neighbours. Liza has to support him when he goes there, because he is too weak to go by himself. Sam's parents have persuaded him to hand over his savings to them. This means Liza no longer has the money for medical costs, including the visits to the traditional healer, and for the children's school fees. Sam's parents share their son's view that his wife bewitches him. The accusations make Liza feel depressed and angry, but there is nothing she can do about it.

When Sam dies, baby Pinkie soon follows. Liza, who is feeling increasingly ill herself, asks her mother to come over and help. Meanwhile, unpaid bills, including those of the funeral, pile up. Then, Liza decides to go back to her parental home, about 60 kilometres away. She is only allowed to bring the youngest children with her. The elder ones have to stay behind at the homestead of their deceased father's family. At the home of Liza's parents, her daughter has to leave school because she has to help her grandmother run the household, Liza being too ill for that.

The case presents a depressing picture of the burden on a caregiver looking after a household member suffering from AIDS in a situation of increasing vulnerability. It shows how assets are depleted and resources have to be re-allocated. The clustering effect at household level is clearly visible; the household of Sam and Liza comprises

three persons (including the baby) who are – in varying degrees – suffering from the disease. Accusations of witchcraft express the ruptures in relationships once based on trust and support. Kinship becomes a divisive force instead of a form of social capital. There is no longer a functioning ‘therapy management group’.

#### *Phases and adequacy of care*

Returning to Tronto’s framework (see above) and using it to judge the adequacy of home care for AIDS patients, we can see that the first phase, that of *caring about*, is already problematic. Bos et al. (1996) describe the uneasy silence surrounding AIDS, at least at that time, in rural Zimbabwe. Such a situation inspires fear, ambiguity and denial, rather than attentiveness and responsibility (Radstake 2000). Euphemistic names and labels are devised, even by the hospital (allegedly to avoid stigmatising patients). In their article, they report on the existence of volunteer groups who visit patients at home. Though religiously inspired and boosting morale by organising praying sessions at afflicted homes, they are not insensitive to the practical problems of home care for AIDS patients. They report back to the hospital and try to provide practical support to the afflicted families whenever possible. They are attentive and take responsibility, but their means and capabilities are severely limited, however important they are for identifying critical cases.

Liza was attentive. She went to town to care for her sick husband and, later, cared for him at home. She had picked up the signs and took her responsibility (phase two). The same goes for Sam’s employer who did what he could within the limited means at his disposal and given the boundaries of his responsibility as an employer. Liza’s care-giving (phase three) is severely constrained by lack of means. The main resource is her own labour, but because of her failing health this resource is also under stress. Much to Liza’s distress, Sam frequently invokes the help of a traditional healer, thereby depleting whatever is left of their dwindling savings. In the matrix (Table 1) this behaviour can be placed in box 2 (HHPH practices intended as health care but not yielding measurable health effects). In the patrilineal setting Liza lives in, the household’s assets belong to the husband’s family, and, at some point, she is denied access to them. This undermines Liza’s agency and capabilities as a caregiver, not only for Sam but also for the family as a whole, including baby Pinkie. In Tronto’s framework competence is an important requirement for adequate care-giving. But, although Liza might not be a sufficiently competent caregiver, she is the only one Sam has. Medical competence is located outside the household. The medical institutions in the area neither have the resources to do their care work properly, nor do Sam and Liza have the means to avail themselves of competent medical assistance.

The fourth phase of Tronto’s framework is that of receiving care, which requires responsiveness on the part of the recipient. This too, is problematic in the case of Sam and Liza, and, presumably in similar cases as well (cf. Radstake 2000).

In the case outlined above, the care provided cannot be called adequate. It does not yield measurable positive health effects. In the case of AIDS we cannot expect the patient to be cured, but it is possible to do more about the opportunistic infections and

make the patient feel more comfortable, mitigating the effects of the disease. Even if Liza is aware of this, there is not much she can do about it. In the institutional context there is denial rather than attentiveness and support. The hospital does not or cannot take its responsibility, being deprived of the necessary means and governmental support. The patrilineal kingroup leaves the couple to their own devices, while trying to save whatever assets are left. For competent and adequate care-giving, the primary caregiver is ill-equipped. The household lacks the resources and facilities to ease the caregiver's work. The recipient lacks positive responsiveness. The care process is not well integrated. While Liza tries desperately to give care in spite of her own ill health, Sam – equally desperate – seeks the help of a traditional healer, thereby further depleting household resources needed for him but also for the other members of the family. Sam and Liza differ in the way they perceive the illness and in their belief in the efficacy of traditional medicine, at least for this illness. The conclusion has to be that quality of care in cases like that of Sam and Liza leaves much to be desired. It is a situation of a household in distress, unable to meet even the minimum standards of care provision, in which the health of individual household members is at risk. This works in two ways. First, the household's resource base deteriorates to the extent that, increasingly, basic needs for all household members cannot be sufficiently met. Second, there is a lack of additional resources needed for adequate caring for ill household members. Clearly, in such a case the external relationships of the household concerned and its access to resources in the environment become crucial.

In a study on home care for people living with AIDS in Ghana (Radstake 2000) similar patterns as those displayed in the case of Sam and Liza can be discerned. The care for AIDS patients is hampered by poverty (lack of material resources) and by secrecy and ambiguity. Additionally, Radstake (2000: 50) points to the phenomenon that patients and care givers alike perceive care as contributing to cure, which goes against prevalent medical opinion. One might see this as an example of Young's cognitive adaptation.

#### *The societal context and community support*

In outlining the MEAH framework it was said that households are embedded in an environment with which they interface. In the case of HIV/AIDS the political economy of AIDS (Lugalla 2001) exerts a profound influence on the quality of care for AIDS patients because it is a determining factor in the availability of resources and support at community and household level. The 'moral economy' of a household (Cheal 1989) always functions within a given political economy.

Gendered normative and cultural frameworks further impact on the agency of the predominantly female caregivers. In a patrilineal rural society where virilocal residence prevails, women's capability to provide care is constrained by their lack of entitlements. In the end, women caregivers not only lose their husband but, in addition, often have no other choice than to go back to their own family and leave their children behind. But also in non-patrilineal societies women may lack the entitlements and resources to carry out their culturally and socially assigned role as caregivers (Taylor et

al. 1996). For most people in poor societies, home care for AIDS patients is the only option, since they cannot afford hospital fees, even if hospitals were sufficiently equipped to deal with the problem. This home care becomes the duty of women. In the case of the AIDS pandemic in Sub-Saharan Africa, it seems as though the nature of the political economy and prevailing cultural and social systems conspire to place an unbearable burden on female caregivers.

The problematic situation sketched above has given rise to initiatives aimed at community-based care for AIDS patients. The volunteer groups in the case of Sam and Liza were already mentioned. It has to be noted that these groups consist mainly of women and find it difficult to enlist the participation of men (Bos et al. 1996). For several reasons, however, one must not expect too much from community-based care towards providing sustainable solutions, even though it may be affordable in economic terms (Msobi and Msumi 2000). It is important to look critically at the concept of community that inspires such initiatives. Neither the household nor the community is a unified actor. Community structures may be based on values of solidarity and reciprocity, but there are inequalities as well. Furthermore, the same pressure that the AIDS pandemic exerts on the household's resource-base and capabilities, it also places on the community. As Taylor et al. (1996: 55) note: "Demand for valuable resources will also increase as members of a kinship group or community are affected by the same event. In turn this may precipitate the breakdown of the traditional household and community reciprocal relations on which Africa has relied for so long." AIDS depletes the potential for therapy managing groups (Janzen 1978). Schoepf (2001) observes that the AIDS pandemic has caused anthropologists to argue against the reification of the ideas of community, clan, and extended family. Instead, they are now more alert to the social, economic, and religious differences that divide local actors.

While community-based care for AIDS patients may be the only recourse and resource left to overburdened, desperate, and – often – ill caregivers at home, it can only function when the community itself is not deprived of nearly all of its material and social resources. The social capital embodied by communities is not infinite, and can be eroded and depleted in a situation of scarce resources where social relationships are stretched to breaking point and trust degenerates into accusations of witchcraft. The effects on the community of the clustering of the illness (Barnett and Whiteside 2002), both within and between households, should be kept in mind as well. Initiatives of community-based care for AIDS patients that are based on a naïve conception of community, will fail.

#### *Limits to coping*

Recently, several authors have questioned the application of the concept of coping. If a household slowly recovers from the strain on its resources caused by a household member being ill and eventually dying from AIDS, one might say that it was able to cope. However, "coping might turn out to be another way of saying 'desperate poverty, social exclusion and marginalisation'" (Barnett and Whiteside 2002: 190). Rugalema (1999) also claims that the concept of coping tends to mask poverty and desperation,

calling it an ideological notion. Loevinsohn and Gillespie (2003: 15) talk about the 'illusion of coping' and call the word 'coping' a misnomer. In the case of Sam and Liza described above, Liza evidently could *not* cope. In the end, she lost nearly all she had and could not keep her own family together. Whether or not a household was able to cope can only be determined in retrospect. Households that cannot cope dissolve and become invisible. They are the vanished households that Barnett and Whiteside (2002) talk about. Hence, the picture of households' ability to cope becomes positively biased.

In their article on household strategies to cope with the economic costs of illness, Sauerborn et al. (1996) point to the incremental nature of coping. While coping can be 'successful' in the short run, it often reduces the household's ability to cope with future adverse events. As noted above, the household production of health and care proceeds in a cyclical manner. In many cases, the resources needed for the provision of care, cannot be regenerated and are lost as inputs for future household production. Assets may have been cashed-in, which affects the ability of the household to acquire new ones. Another point made by Sauerborn et al. (1996) is that poor households have less access to inter-household support networks (a form of social capital) than households that are better off, while the former need it more desperately. In their study "both kin and community support (loans, gifts) were generally not available to poor households" (Sauerborn et al. 1996: 298). This confirms the claim by Barnett and Whiteside that coping may be another word for social exclusion and marginalisation.

The conclusion has to be that the concept of coping should be applied cautiously. Coping has a price tag. When people (try to) cope they do so at the expense of their resources and assets, including the claims they have to the support of others, which further increases their vulnerability. If they cannot cope, they disappear from sight. For these reasons, Loevinsohn and Gillespie (2003) prefer the word 'responding' to that of 'coping'.

## Conclusion

In this article a micro-ecological approach to health (MEAH) was developed and applied to the subject of home care for AIDS patients in Sub-Saharan Africa. The application of the micro-ecological approach to the subject of home care for AIDS-patients reveals several crucial issues, which will be briefly discussed.

The predominantly female caregivers are severely constrained in their care-giving. They lack the necessary resources, are often ill themselves, and are insufficiently supported by the relevant institutions in their environment. When applying Tronto's criteria for good care, all phases in the care process seem to be flawed. On the part of the caregiver there is the intention to provide care, but competence and the necessary means are lacking. The problems posed by AIDS exceed the capability of the household. Even if responsibility is taken there, it is too heavy a burden. Therapy managing groups are no longer emerging or fall apart. When applying the micro-ecological approach this becomes painfully clear. Poor households trapped in a situation of having to care for one or more persons suffering from AIDS can hardly do more than try to

cope. Their efforts at coping are often futile, resulting in the dissolution of the household.

The emic and etic descriptions of AIDS are phrased in widely differing terms. The emic perspective is the one most difficult to elicit. AIDS as illness represents a complex of complaints and symptoms that the people do not call AIDS. AIDS is hushed-up rather than talked about. In the case of Sam and Liza discussed above, the patient (Sam) does not want to know he has AIDS and constructs an alternative explanation for his afflictions (witchcraft), while the caregiver (Liza) knows but keeps silent. The patient seeks recourse to a traditional healer, while the caregiver worries about how to pay for these expenses. We categorised Sam's visits to the traditional healer as 'intended as health care but not yielding measurable health effects' (see Table 1). This is, of course, debatable. To Sam these visits might constitute proper care and have positive psychological effects that may help him endure his suffering, amounting to what Young calls 'cognitive adaptation'. For a proper emic analysis of Sam's behaviour, Sam himself would have to be interviewed, which was not done. To Liza the costs of these visits are expenses that threaten the already fragile resource-base of the household, impede her capability to provide care, and, in this way, have a negative health effect.

The role of traditional healers in treating persons suffering from AIDS is a problematic issue. Schoepf (2001: 351) notes that it is problematic for anthropologists as well: "The role of healers in hastening the death of lingering AIDS sufferers is spoken of by anthropologists *en coulisse* (offstage) but is not reported in the literature." Of course one may wonder, as Schoepf does, whether persons like Sam would go to a healer if the social conditions were different and the household would have had access to good medicine and competent medical care. In this respect as well, we are reminded of the fact that the capability of households to provide care is affected by the political economy in which they are embedded.

The approach outlined in this article is, because of its household focus, poorly applicable to persons not living in households. It is applicable to one-person households, the percentage of which is steadily increasing in Western societies like the Netherlands (Van Nimwegen & Esveldt 2003). However, for such households the limits of their care-taking and care-giving potential are quickly reached and it is essential for them to be embedded in formal support structures and informal support networks that can play a role in all four phases of care. The MEAH framework is less applicable to individuals living alone in marginal conditions or in unstable groups, such as street children. The absence of a household context makes them vulnerable. Others will have to be alert to their care needs, will have to take responsibility and provide care-giving when needed. Lugalla & Kibassa (2002) point to the importance of networking by street children as a way of creating a fall-back position that – to a certain extent – can function as a health management group. Obviously, the lack of resources and capabilities will severely constrain the production of health and the adequacy of care.

The MEAH framework proposed in this article provides a tool for identifying care needs of individuals and households and assessing the constraints in meeting them. In this article the framework has been applied to home care for AIDS patients, but it can likewise be applied to children's nutrition, elderly care, chronically ill patients, and so

on. Using it will always entail looking into household resources and capabilities as well as mapping the social and institutional environment of the households concerned.

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### Note

Anke Niehof is a full professor at Wageningen University for the chair of Sociology of Consumers and Households. At present, her main research interests are household food security, ageing, and issues of care. She is the co-ordinator for the AWLAE project, in the framework of which twenty women from various African countries are doing their PhD in Wageningen. The research in the AWLAE Project is directed at the role of women in food systems in Africa and impacts of HIV/AIDS. Her e-mail address is: anke.niehof@wur.nl

### References

- Anderson, M.F. Bechhofer & S. Kendrick  
1994 Individual and household strategies. *In*: M. Anderson, F. Bechhofer, & J. Gershuny (eds.), *The Social and Political Economy of the Household*. Oxford: Oxford University Press, pp. 19-68.
- Balatibat, E.M.  
2004 *The Linkages between Food and Nutrition Security in Lowland and Coastal Villages in the Philippines*. PhD Thesis Wageningen University.
- Barnett, T.  
1992 *On ignoring the wider picture: AIDS research and the jobbing social scientist*. The Hague: Institute of Social Studies.
- Barnett, T. & P. Blaikie  
1992 *AIDS in Africa: Its Present and Future Impact*. London: Belhaven Press.
- Barnett, T. & A. Whiteside  
2002 *AIDS in the Twenty-First Century: Disease and Globalization*. New York: Palgrave Macmillan.
- Berman, P., C. Kendall & K. Bhattacharya  
1994 The household production of health: Integrating social science perspectives on micro-level health determinants. *Social Science & Medicine* 38(2): 205-215.
- Bos, F., M. Leutscher & A. Niehof  
1996 Aids in Afrika: Rampspoed en aanzet tot sociale verandering. *Medische Antropologie* 8: 169-185.
- Caldwell, J., P. Caldwell & P. Quiggin  
1989 The social context of AIDS in sub-Saharan Africa. *Population and Development Review* 15(2): 409-447.

- Carter, A.T.  
 1995 Agency and fertility: For an ethnography of practice. In: S. Greenhalgh (ed.), *Situating Fertility: Anthropology and Demographic Inquiry*. Cambridge: Cambridge University Press, pp. 55-86.
- Chant, S.  
 1997 *Women-headed Households: Diversity and Dynamics in the Developing World*. London: Macmillan Press.
- Cheal, D.  
 1989 Strategies of resource management in household economics: Moral economy or political economy? In: R.R. Wilk (ed.), *The Household Economy. Reconsidering the Domestic Mode of Production*. Boulder, San Francisco, London: Westview Press, pp.11-23.
- Clay, C.D. & H.K. Schwartzweller  
 1991 Introduction: Researching household strategies. *Research in Rural Sociology and Development* 5: 1-11.
- Collins, R.  
 1981 Micro-translation as a theory-building strategy. In: K. Knorr-Cetina & A.V. Cicourel (eds.), *Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro-Sociologies*. London: Routledge and Kegan Paul, pp. 81-109.
- Deininger, K., M. Garcia, & K. Subbarao  
 2003 AIDS-induced orphanhood as a systematic shock: Magnitude, impact, and program interventions in Africa. *World Development* 31(7): 1201-1220.
- Feleppa, R.  
 1986 Emics, etics and social objectivity. *Current Anthropology* 27(3): 243-251.
- Fisher, B. & J. Tronto  
 1990 Toward a feminist theory of caring. In: E.K. Abel & M.K. Nelson (eds.), *Circles of Care: Work and Identity in Women's Lives*. Albany: State University of New York Press, pp. 35-61.
- Gardiner, J.  
 1997 *Gender, Care and Economics*. London: Macmillan Press.
- Headland, T.N., K.L. Pike & M. Harris  
 1990 *Emics and Etics: The Insider/Outsider Debate*. London, New Delhi: Sage.
- Harris, M.  
 1968 *The Rise of Anthropological Theory*. New York: Thomas Y. Crowell Company.
- Hoogvorst, A.  
 2003 *Survival Strategies of People in a Sri Lankan Wetland: Livelihood, Health and Nature Conservation in Muthurajawela*. PhD Thesis Wageningen University.
- Janzen, J.M.  
 1978 *The Quest for Therapy in Lower Zaire*. Berkeley, Los Angeles, London: University of California Press.
- Kabeer, N.  
 1991 *Gender, Production and Well-Being: Rethinking the Household Economy*. Discussion Paper 288. Brighton: Institute of Development Studies.
- Keasberry, I.N.  
 2001 Elder care and intergenerational relationships in rural Yogyakarta, Indonesia. *Ageing and Society* 21: 641-665.

- Kennedy, E. & P. Peters  
 1992 Household food security and child nutrition: the interaction of income and gender of household head. *World Development* 20: 1077-1085.
- Leemhuis, E. (ed.)  
 1998 *Nutrition: Interaction of Food, Health and Care*. Sectoral and Theme Policy Document of Development Cooperation. The Hague: Ministry of Foreign Affairs.
- Loevinsohn, M. & S. Gillespie  
 2003 *HIV/AIDS, Food Security and Rural Livelihoods: Understanding and Responding*. RENEWAL Working Paper No. 2. The Hague: ISNAR, Washington DC: IFPRI.
- Lugalla, J.L.P.  
 2001 Political Economy of AIDS in Sub-Saharan Africa. Paper presented at "The Distinguished Morse Lecture", Boston University, 15th March 2001.
- Lugalla, J.L.P. & C.G. Kibassa (eds.)  
 2002 *Poverty, AIDS, and Street Children in East Africa*. Lewiston, New York: The Edwin Mellen Press.
- Luijkx, K.G.  
 2001 *Zorg; Wie doet er wat aan? Een Studie naar Zorg Arrangementen van Ouderen*. PhD Thesis Wageningen University.
- Msobi, N. & Z. Msumi  
 2000 HIV/AIDS and other chronic conditions: Home-based care cost study, Bagamoyo district – Tanzania. Paper presented at the *International AIDS Economics Network (IAEN) Symposium on the Economic Challenges of HIV/AIDS in Developing Countries*. Durban, South Africa, July 7-8, 2000.
- Niehof, A.  
 2002 The household production of care. In: C.A.A. Butijn, J.P. Groot-Marcus, M. van der Linden, L.P.A. Steenbekkers & P.M.J. Terpstra (eds.), *Changes at the Other End of the Chain*. Wageningen: Wageningen UR, Maastricht: Shaker Publishing, pp. 179-89.
- Pennartz, P. & A. Niehof  
 1999 *The Domestic Domain: Chances, Choices and Strategies of Family Households*. Aldershot, Brookfield USA, Singapore, Sydney: Ashgate.
- Qureshi, H. & A. Walker  
 1989 *The Caring relationship: Elderly People and their Families*. London: MacMillan.
- Radstake, M.  
 2000 *Secrecy and ambiguity: Home care for people living with HIV/AIDS in Ghana*. Research report 59/2000. Leiden: Africa Studies Centre.
- Rudie, I.  
 1995 The significance of eating: Cooperation, support and reputation in Kelantan Malay households. In: W.J. Karim (ed.), *'Male' and 'Female' in Developing Southeast Asia*. Oxford, Washington DC: Berg Publishers, pp. 227-247.
- Rugalema, G.H.R.  
 1999 *Adult Mortality as Entitlement Failure: AIDS and the Crisis of Rural Livelihoods in a Tanzanian Village*. PhD Thesis. The Hague: Institute of Social Studies.
- Sauerborn, R., A. Adams & M. Hien  
 1996 Household strategies to cope with the economic costs of illness. *Social Science & Medicine* 43(3): 291-301.
- Schoepf, B.G.  
 2001 International AIDS Research in Anthropology: Taking a Critical Perspective on the Crisis. *Annual Review of Anthropology* 30: 335-361.

- Taylor, L., J. Seeley & E. Kajur  
1996 Informal care for illness in rural southwest Uganda: The central role that women play. *Health Transition Review* 6: 49-56.
- Tronto, J.C.  
1993 *Moral Boundaries: A Political Argument for an Ethic of Care*. New York, London: Routledge.
- Van Esterik, P.  
1994 Care, care giving, and caregivers. *Food and Nutrition Bulletin* 16(4): 378-396.
- Van Nimwegen, N. & I. Esveldt  
2003 *Bevolkingsvraagstukken in Nederland anno 2003*. Den Haag: NIDI.
- Wingerd Bristor, M.  
1995 *Individuals and Family Systems in their Environments*. Dubuque, Iowa: Kendall/Hunt Publishing Company. [2nd Edition].
- Young, S.L.  
2002 Critical ecological medical anthropology: Selecting and applying theory to anemia during pregnancy on Pemba, Zanzibar. *Medische Antropologie* 14(2): 321-52.

## Care, power and macro-level/micro-level analysis

### Some suggestions for linking Niehof's "Micro-Ecological Approach" with other compatible models

Gretel H. Pelto

Anke Niehof has contributed a welcome, lively and thoughtful analysis to the on-going discussion of conceptual models that can be used to link individual health and socio-cultural conditions. The significance of the household as the essential lynchpin between health and society still fails to receive central attention, either from scientists and scholars or from program planners and implementers. The lack of serious attention to household dynamics and conditions is difficult to explain. The inclusion of household demographic and economic characteristics in epidemiological, sociological and econometric studies is evidence of tacit recognition, but these are typically treated as "control" variables, rather than being seen as central to understanding social-health relationships. Implicit in Niehof's paper is the idea that at least part of the neglect of the household, as a fundamental locus or unit of analysis, is due to a lack of strong conceptual models that can serve to guide both research and program activities.

Niehof's skillful introduction of "care" into the conceptual model for health-society linkages is an important contribution. In nutrition there is a growing literature on the role of care for understanding the determinants of malnutrition in children in developing countries. UNICEF (1990) published and widely disseminated "The UNICEF Conceptual Framework for Determinants of Nutritional Status" in which the underlying causes of childhood malnutrition were categorized as "insufficient household food security," "inadequate health services and unhealthy environments," and "inadequate maternal and child care." These, in turn, are seen as the result of basic causes, which rest on fundamental economic, social and political structures. The framework is now so widely cited and accepted in nutrition that it has taken on iconic status. More recent work on care and caregiving has ranged from efforts to synthesize the methodological and theoretical support for the concept (Engle et al. 1996), to examination of its role in young child feeding (Pelto et al. 2003), to empirical studies (Leroy 2005). To reach out to the public health nutrition audience, it will be useful if Niehof explicitly links her model to the nutrition and care framework so that the value of the household focus can be more directed highlighted for that audience.

Niehof's model draws attention to the range of societal-household-individual dynamics that can be subsumed under the general heading of 'macro-level/micro-level linkages.' In the present version of her model these are implicit, but they are not actu-

ally specified with the same level of attention that she gives to intra-household dynamics. Empirical studies to trace macro-level/micro-level relationships in health have been surprisingly slow to develop, particularly given the clear recognition of such relationships in the theoretical perspectives of critical medical anthropologists. Susan Scrimshaw's paper on induced abortion in Ecuador, prepared for a conference on "Micro and Macro Levels of Analysis in Anthropology" provides an example of the insights that can be gained by explicit attention to these linkages (Scrimshaw 1985). I hope that in the next iteration of her model, Niehof will develop her discussion of macro-micro linkages more fully.

I fully agree with Niehof's decision to make explicit the role of gender in all of the processes of concern in a micro-ecological analysis. Without in any way diminishing its significance I think it is also useful to conceptualize it at a more fundamental level, which can be characterized as the analysis of "power." Introducing the concept of power into the micro-ecological model has the advantage of calling attention to its role at all levels from the household to the broadest levels of global political economy. In a recent discussion, designed to reach a multi-disciplinary nutrition audience, Jeffrey Backstrand and I used the concept of power "as a proxy for a large set of factors that reflect material, economic and political factors in human behavior..." We suggest that power-related features need to be examined together with belief-related factors, which we defined as including "ideational, cultural and psychological features of human experience" (Pelto & Backstrand 2003: 297S). A central theme of our paper is that the tendency to focus exclusively on one or the other of these two broad domains has been a major barrier to collaborative research, within and across disciplines that are concerned with understanding the determinants and consequences of health and nutrition for individuals and societies. We strongly agree with Niehof's contention that "...traditional disciplinary boundaries, such as those between medical anthropology, medical sociology, public health and nutrition sciences, not only stand in the way of understanding the processes involved, but also obstruct finding comprehensive solutions to major health problems." In addition to building better conceptual models, for which Niehof's presentation of a micro-ecological focus is a thoughtful contribution, integrating power-related and belief-related constructs into our research designs and careful attention to operationalizing them in our studies will also further the goal of breaking down barriers that constrain the applicability of our research.

### Note

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## References

- Engle, P.L., P. Menon & L. Haddad  
1996 *Care and nutrition: Concepts and measurement*. Food Consumption and Nutrition Division Discussion Paper #18. 1996. International Food Policy Research Institute. Washington, DC.
- Leroy, J.L.J.  
2005 Childcare in developing countries: The Importance of distinguishing between behaviors, resources, and agents of disease in health and nutrition. Unpublished Ph.D. Dissertation. Division of Nutritional Sciences. Cornell University. Ithaca, NY.
- Pelto G.H. & J. Backstrand  
2003 Interrelationships between power-related and belief-related factors determine nutrition in populations. *Journal of Nutrition* 133: 297S-300S.
- Pelto G.H., E. Levitt & L. Thairu  
2003 Improving feeding practices: Current patterns, common constraints and the design of interventions. *Food and Nutrition Bulletin* 24 (1): 45-82.
- Scrimshaw, S.C.M.  
1985 Bringing the period down: Government and squatter settlement confront induced abortion in Ecuador. In: B.R. DeWalt & P.J. Pelto (eds.), *Micro and macro levels of analysis in anthropology: Issues in theory and research*. Boulder & London: Westview Press, pp. 121-46.
- UNICEF  
1990 *Strategy for improved nutrition of children and women in developing countries*. New York: UNICEF.

## **Moving beyond the household**

### **Some comments on the theoretical underpinnings of Anke Niehof's 'micro-ecological approach to health'**

Tanja R. Müller

In her article Anke Niehof eloquently criticises the shortcomings of two social science approaches for analysing home care for AIDS patients in the geographical context of rural sub-Saharan Africa and proposes as an alternative the 'micro-ecological approach to health' (MEAH). The MEAH allows for the inclusion of important aspects of care giving neglected by both of the other approaches. But it also raises some questions.

The most important of those, in particular when looking at care issues in relation to AIDS, centres on the household as unit of analysis and main building block of the micro-ecological context.

Within the broader HIV/AIDS impact literature the prevailing emphasis on the individual household has been called into question (Topouzis 2000) and 'cluster analysis' – for want of a better term – has been proposed to better understand the social dynamics unleashed by the epidemic (Drinkwater 2003). A 'cluster' is defined as a group of producers between whom multiple resource exchanges, usually based on kinship, labour, and possibly common access to resources, are taking place (Drinkwater 1994). Referring to livelihood analyses conducted in Zambia and Zimbabwe, Drinkwater (2003) argues that 'cluster analysis' techniques allow to consider the intimate interconnections between urban residents and rural households, something that household based analysis often overlooks. In addition, such techniques show HIV/AIDS impact being experienced in terms of the deterioration of household economies as well as in the unravelling of the wider social fabric of the lives of those affected or afflicted by AIDS (Drinkwater 2003, Waller 1997).

When we look at the case study presented by Anke Niehof, the need to move beyond or redefine the household becomes obvious, for the following reasons: Firstly, when applying her definition of household as a "co-residential unit", Sam is, strictly speaking, not a member of the household. He works in the town of Bulawayo, where he also seems to live (we learn that as he falls ill Liza has to go to visit him there). From what we know about such (semi-migratory) relationships in the wider context of sub-Saharan Africa, there is near certainty that Sam has other sexual partners in Bulawayo, either on an occasional basis or as a 'permanent' girlfriend (in all likelihood he con-

tracted the HIV virus in such sexual encounters and in due course infected Liza). This leads to the second problem with the definition of household advanced here: the extent to which Sam takes care of “resource management and primary needs” of the rural household (and its members), whose de-facto head is Liza, is open to question. Instead of focusing on the household, it is thus suggested to consider Liza as the “primary producer” (Waller 1997) within a ‘cluster’. The rationale for a ‘cluster’ based analysis becomes even more pronounced when AIDS induced illness hits Sam. Upon falling ill, he is entitled to return to the family household within the rural homestead and to receive care from Liza. As AIDS induced illness and death further progress within Liza and Sam’s family, other specific relationships between individuals and households based on gender, wealth and generational status which can be captured by the concept of ‘cluster’ (Waller 1997) come to the fore: Liza has a claim to her mother’s help who joins Liza’s household temporarily. Liza is also affected by the claims of her parents-in-law. They take away savings she might be entitled to by law, and retain custody of some of her children, undermining her capabilities as primary producer and provider of care. In fact, the analysis provided by Anke Niehof centres exactly on this inability of Liza (and not that of her household) to cope, an inability embedded into multiple social relationships within and outside the household.

The case presented here thus provides, in my opinion, a strong argument in favour of looking for alternatives to the focus on the household as unit of analysis, and the ‘cluster’ seems a promising way forwards. It has to be said, though, that to date, cluster based analysis has only been used in very few studies. Its wider usefulness and practicality thus needs to be tested more thoroughly (Müller 2004).

Moving beyond the household also sheds new light on the debate around ‘coping’. While households that dissolve do not ‘cope’ as households, their members might still be ‘coping’ (or adapting or responding), and arguably be better off than they would be without the dissolution of the household. In the case presented here we do not know much about what happens to surviving family members, in particular those of Liza’s children who stay behind at their deceased father’s homestead. We learn from the text that the eldest son is at school in Bulawayo, presumably in boarding arrangements or staying with extended family. AIDS induced morbidity and eventual mortality within his family might, apart from the psychological effect of having lost his father, not have any further negative consequences for him. Liza herself could evidently not ‘cope’, a fact to a large extent related to herself having fallen ill. But dissolving her household (we do not know whether due to pressure from her diseased husband’s family or by choice) and returning to her parental home might give her the opportunity to ‘cope’ with her own illness in terms of being taken care off – however inadequately – by her mother and be able to die with some dignity. One of Liza’s daughters has to leave school to assume a productive role within the new household arrangements, making her the only person in this case scenario with a potentially destructive ‘coping’ strategy. Taken together, the dissolution of Liza’s household and the integration into other social units allows some of its members to ‘cope’. Such tendencies are confirmed by a number of studies on AIDS orphans in which it is argued that while households might dissolve or disintegrate, surviving orphans not necessarily face destitution but

are often not worse off than before in terms of nutritional status and school attainment (Ainsworth & Filmer 2002, Monasch & Boerma 2004). Viable 'coping' strategies seem to depend on 'cluster' relationships rather than on 'coping' strategies exercised by individual households.

## Note

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## References

- Ainsworth, M. & D. Filmer  
2002 *Poverty, AIDS and children's schooling: A targeting dilemma*. Washington DC: World Bank.
- Drinkwater, M.  
1994 Developing interaction and understanding: RRA and farmer research groups in Zambia. In: I. Scoones and J. Thompson (eds.), *Beyond farmer first. Rural people's knowledge, agricultural research and extension practice*. London: Intermediate Technology Publications, pp. 133-39.  
2003 HIV/AIDS and agrarian change in Southern Africa. Presentation for the United Nations Regional Inter-Agency Coordination and Support Office Technical Consultation on Vulnerability in the light of an HIV/AIDS pandemic. Johannesburg, South Africa, 9-11 September 2003.
- Monasch, R. & J. Boerma  
2004 Orphanhood and childcare patterns in sub-Saharan Africa: an analysis of national surveys from 40 countries. *AIDS* 18 (suppl 2): S55-S65.
- Müller, T.  
2004 *HIV/AIDS and agriculture in sub-Saharan Africa. Impact on farming systems, agricultural practices and rural livelihoods – an overview and annotated bibliography*. Wageningen: Wageningen Academic Publishers.
- Topouzis, D.  
2000 *Measuring the impact of HIV/AIDS on the agricultural sector in Africa*. Geneva: UNAIDS Best Practice Collection.
- Waller, K.  
1997 *The impact of HIV/AIDS on farming households in the Monze District of Zambia*. Bath: University of Bath.

## **The micro-ecological approach to home care**

### **Can it contribute to the promotion of health?**

Maria A. Koelen

In her article, Niehof attempts to reformulate some of the conceptual linkages between health status and health behaviour of individuals on the one hand, and the domestic production of health care on the other. The attempt is motivated by the idea that traditional disciplinary models do not really contribute to finding comprehensive solutions to major health problems. Indeed, disciplinary models generally deal with only one part of reality, and they often disregard the processes that lead to (ill) health. Health is complicated and therefore I am a strong advocate of interdisciplinary approaches towards health and health care.

I have no background in sociology or medical anthropology. I am a social psychologist working in the field of health education and health promotion. Health promotion is defined as “the process of enabling people to increase control over, and to improve their health” (WHO, 1986). One of the key principles of health promotion is that it actively involves the people in the settings of every day life (cf. Ashton & Seymour 1988; Koelen & van den Ban 2004). Nutbeam (1998) defines ‘settings’ as the places or social contexts in which people engage in daily activities, in which environmental, organisational and personal factors interact to affect health and wellbeing. Settings generally are considered to be places like school, workplace, hospital or neighbourhood. Reading Niehof’s article, I realised that the household is an essential setting for health promotion as well. Indeed, as Niehof states, households represent to a large extent the ‘arena of everyday life’. Households take care of resource management and the primary needs of its members, which is essential for preserving health. Before I comment upon (the building blocks of) the framework, I want to state that, in my opinion, Niehof has made a valuable contribution to the understanding of health and health improvement with the MEAH model.

### **Strengths and weaknesses of MEAH**

In building up the model, Niehof first outlines the contours of the micro ecological approach by combining theoretical concepts about households and about care. The household is seen as a system. Resources and assets are inputs the household organisa-

tion are the systems throughput and care and well being are the outputs. The author further describes and critically assesses two alternative frameworks, the framework of the household production of health (HHPH) and the critical ecological model for medical anthropology (CEMMA). Each of these frameworks, however, have a different focus. The first one is made for examining the role or function of household in health improvement. The second model is an approach to health and factors influencing health. Niehof includes essential aspects of both frameworks to include in her new model.

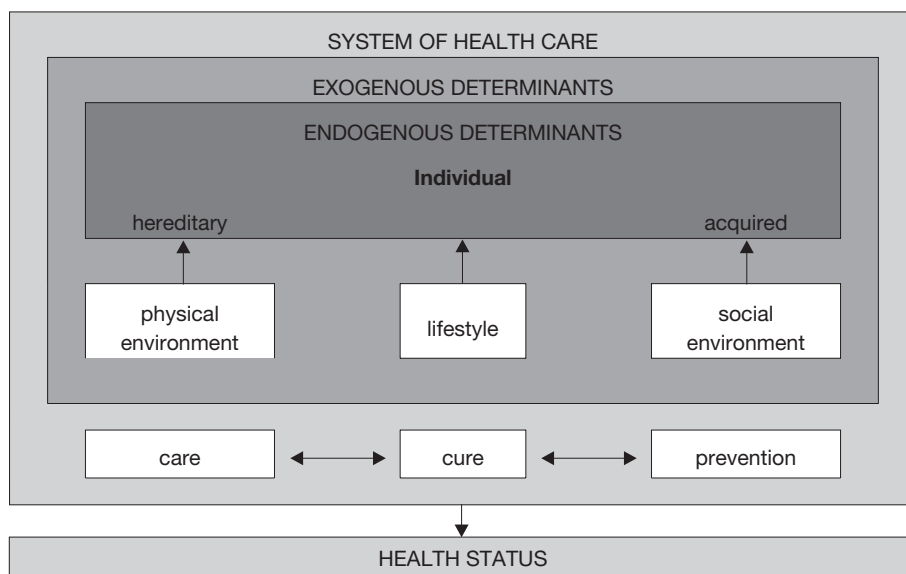
Niehof's choices are well argued, but in my opinion, some choices need further consideration. I will address five topics: the use of CEMMA as a model for health, the household as a level of analysis, the use of the HHPH model, the role of integrity in care, and the concept of coping.

### **The CEMMA framework or is there a better alternative?**

If we study the role of households in the production of health it is necessary to conceptualise health. Since the constitution of the WHO in 1948, 'health' has been defined in terms of physical, mental and social wellbeing. Nonetheless, for several decades the biological perspective has persisted. The influential work "A new perspective on the health of Canadians" by Lalonde (1974) set an agenda for a broader perspective. Lalonde argued that health and illness not only depend on medical conditions but also on the environment and conditions of living. He pointed out four distinct elements: human biology, environment, lifestyle or behavioural factors, and the health care organisation. Based on this work, attempts to clarify the forces that affect health gathered momentum and several frameworks were developed.

The framework that I find useful for understanding the multifaceted character of health is based on the model which is used by Ruwaard et al (1994) for the Public Health Status and Forecasts of the Dutch population. In this model, a distinction is made between endogenous and exogenous determinants of health. The endogenous determinants affect health from the inside and thus include the biological factors. The exogenous determinants refer to the external influences and relate to the physical environment, lifestyle factors and social environment. The social environment typically also includes the household. The endogenous and exogenous determinants are influenced by the third determinant, the health services in relation to care, cure and prevention.

The framework is based on the notion that health results from the *interaction* between an individual's personal needs and possibilities and the influences of environmental factors (see Figure 1). The advantage of this model is that it comprises the attractive features of Young's CEMMA, but also provides a solution for Niehof's objection towards the central position of the individual's mental and physical needs in Young's model. Niehof takes the position that ... "at the end of the day, providing such needs is not done individually, but in the context of the household. The emphasis should not be on the needs themselves but on the manner in which they are met" (p. 252).



**Figure 1** Overview of determinants influencing health (based on Ruwaard et al. 1994)

If I understand it well, Niehof thereby postulates that it is the *interaction between needs and provision of needs* which is decisive (if there are no needs, there is nothing to be met). I agree with this position and therefore think that the framework presented here would fit better in the MEAH approach than CEMMA.

### **The household as a level of analysis**

Based on the notion that the provision for mental and physical needs on a daily basis requires allocation and management of household resources, Niehof argues that the household, and not the individual, is the unit of analysis. I can agree with that position to a large extent, but not fully. Driven by arguments provided in the article, my major concern involves the illustrated collapse of households who are unable to cope with the impact of dreadful life events and non-reversible diseases like AIDS. Niehof is not clear about this problem, and in fact argues herself that "...traditional household surveys are inadequate tools for detecting these vanished households, which results in a positively biased picture of the ability of households to cope" (p. 256). The unanswered question, therefore, is how to deal with this problem if the household is the unit of analysis?

### **Criticism on the HHPH model**

Niehof criticises the HHPH framework in that it limits the institutional environment of households, relevant for health production, to the formal health services. The author

strongly advocates the position to include the informal health care services (e.g. the services of indigenous healers) in the institutional environment. The necessity of this is clearly illustrated and supported by the analysis of the case of Sam and Liza. It is easy to imagine other examples. Even if formal health services are available and affordable, people may seek informal help, either as a stand-alone service or in combination with the formal health services.

Another criticism of Niehof on the HHPH is that no distinction is made between intended health behaviour and behaviour having no health purposes but leading to certain health outcomes. This is an omission we often find in domain specific health (care) models, where the focus is on the production of health, thereby overlooking all other aspects of life with a health impact. It is a pity though that this extension does not return in Niehof's summary of the MEAH.

### **The integrity of care**

The four interconnected phases of care as described by Tronto and its five requirements of good care: attentiveness, responsibility, competence, responsiveness and integrity are rather interesting. The case of Sam and Liza accurately shows that indeed these phases and requirements play a role in the household production of health. In my opinion, the fifth requirement of good care, integrity, is the most essential one. Integrity means that, in order to be successful the four phases should be linked. As Niehof states "integrity is lacking when, for example, care needs are identified but no one is taking responsibility or when those taking responsibility subsequently delegate the problem to caregivers without bothering to check whether these are adequately equipped for their task" (p. 248). But even if the requirements of attentiveness, responsibility and competence are adequate, if the responsiveness of the care receiver is inadequate, the impact of the provided care is poor. Therefore I would consider integrity not just a fifth requirement but as a precondition for adequate care.

### **The concept of coping**

A problematic concept in Niehof's article is that of coping. Generally, when a situation is perceived to be stressful, people try to master (or to reduce or tolerate) the situation. In the areas of psychology and health education coping is defined as "constantly changing cognitive and behavioural efforts to manage specific external and/or internal demands, that are appraised as taxing or exceeding the resources of the person (Lazarus & Folkman 1984: 141). Niehof uses 'coping' in different ways: On page 255 she writes "... the surviving children try to cope by growing food crops for their own consumption and selling their labour to neighbours". Here she uses coping in the sense of 'survival'. Also we find "... households unable to cope because they sold all their assets have no social capital left (...) collapse and disappear" (p. 256), and ... dissolve and become invisible" (p. 260). Again here, coping is considered to be a strategy for

survival. However, in her conclusion about using the concept of coping, Niehof mentions that “when people cope they do so at the expense of their assets...which further increases their vulnerability”. So, in fact, if people cope they ‘lose’, if they do not cope, they lose too. For this reason, it is likely interesting to further unravel the concept of coping and to link it to the variety of strategies (see for example Stroebe 2000) people use to cope.

## Conclusion

As I wrote in the introduction, the micro-ecological approach to home care offers a valuable contribution to conceptualising the promotion of health. Households are the primary community to which individuals belong and within which they develop lifestyles and interact with the social and physical environment. Households are settings of everyday life. In health promotion ‘settings’ are usually referred to as ‘organised institutions’, like school or workplace. As Nutbeam (1998) mentions, settings can normally be identified as having physical boundaries, a range of people with defined roles, and an organisational structure. In my opinion these characteristics apply to households as well. Households are essential entities for the production of health and the provision of health care. The MEAH framework provides a tool for identifying care needs of individuals and households and for assessing the constraints in meeting them. Consequently it also contributes to finding comprehensive solutions.

## Note

Maria Koelen is Associate Professor at Wageningen University, Group Communication Science. Her research focuses on determinants of (health related) behaviour, and on the development of new methodologies for research and practice in the field of community-based health education and health promotion.

## References

- Ashton, J. & H. Seymour  
1988 *The new public health*. Milton Keynes: Open University Press.
- Koelen, M.A. & A.W. van den Ban  
2004 *Health education and health promotion*. Wageningen: Wageningen Academic Publishers.
- Lalonde, M.  
1974 *A new perspective on the health of Canadians*. Ottawa: Government of Canada.
- Lazarus, R.S. & S. Folkman  
1984 *Stress, appraisal, and coping*. New York: Springer.
- Nutbeam, D.  
1998 *Health promotion glossary*. WHO/HPR/HEP/98.1. Geneva: World Health Organisation.

Ruwaard, D. et al. (eds.)

1994 *Public health status and forecast: The health status of the Dutch population over the period 1950 – 2010*. RIVM. Den Haag: SDU-Uitgeverij.

Stroebe, W.

2000 *Social psychology and health*. Buckingham: Open University Press, 2nd edition.

World Health Organisation

1986 *Ottawa Charter of Health Promotion*. Copenhagen: WHO.

## Critical reflections on the micro-ecological approach to home care for people with HIV/AIDS

Robert Pool

While much of the more general social science literature on HIV/AIDS related behaviour (particularly in the more medically oriented journals) is still dominated by simplistic models that assume that the individual is the locus of rational decision-making, anthropologists have insisted that broader structural issues of inequality, poverty and exploitation are really the key to understanding 'risk'. Although there are notable exceptions, the middle ground between individual agency and constraining structure, has remained relatively neglected. This is remarkable, given that it is here that agency meets constraint and that people negotiate actions and meanings in the praxis of everyday life. It is also here that any effective intervention needs to be focused. Anke Niehof's paper focuses on this important level of analysis by looking at the role of the household in home care for those with HIV/AIDS. In order to do this she develops a 'micro-ecological' model (MEAH), built up from a number of other models and ideas (Tronto's phases of care, the HHPH framework, the CEMMA model).

My main problem with this new model is not that it is not interesting or relevant – because it is both – but that it is not new. It is not any more than the sum of its parts, and does not give us more understanding or explanatory power than we already had with the separate originals. For example, the section on applying the MEAH model to a case study relies to a large extent on Tronto's framework, and the wider constraints of politics and gender inequality on HIV/AIDS that are also invoked have already been analysed in great detail by Paul Farmer (1992, 1997, 1999) and more recently by Cathrine Campbell (2003), though neither is mentioned here.

The concept of household – the central element in the model – is also problematic. What is a household? Niehof says that while her model is poorly applicable to people not living in households, it does apply to those in one-person households. But how are they different? How, in the situations of rural-urban and international migration, political disruption and social disintegration that characterise large parts of Africa, do we delineate the 'household'? To be fair, Niehof does acknowledge that the concept is problematic, but nevertheless goes on to use it as though it were not. She does critically – if only briefly – reflect on the shortcomings of the concepts of 'coping' and 'community' that are so often uncritically used when discussing the care of those with AIDS, so it is a pity that this critical reflection does not extend to 'the household' as well. Part of the problem may be an over-reliance on the recent book by Barnett and Whiteside (2002).

Perhaps reference to the wider literature would have given more scope to develop a critical approach to this central concept.

But there are other problematic and unexamined concepts at the heart of this model as well. For example the “*adequacy of care* is judged by the extent to which *care needs* are *properly identified*, are *positively appreciated* by the person to whom the care is given, and are *communicated and integrated*. At the same time, the *adequacy of care* is to be judged ‘*objectively*’ by assessing the *measurable health effects*” (I have italicised the problematic concepts: as ambiguous and loaded with assumptions as they come). Adequate for whom? Measurable by which standards? Niehof discusses the importance of the emic/etic distinction, but seems to uncritically assume that etic is the objective (presumably biomedical) perspective. For example in Table 1 the etic perspective has to do with *measurable effects*, while the emic is all about *intentions*. It could easily be argued that ‘measurable health effects’ is every bit as emic as ‘health care intentions,’ just as it could be argued that the etic perspective could also be seen, from another vantage point, as the biomedical emic.

I fully agree that disciplinary boundaries tend to impede understanding of various aspects of HIV/AIDS and obstruct the development of solutions to the problems it generates, but what a particularly anthropological perspective could perhaps contribute to this interdisciplinary mix more than any other, is a critical reflection on those central concepts that are taken so much for granted.

## Note

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## References

- Barnett, T. & A. Whiteside  
2002 *AIDS in the Twenty-First Century*. Houndsmills & New York: Palgrave Macmillan.
- Campbell, C.  
2003 *Letting them die. Why HIV/AIDS programmes fail*. London: James Currey.
- Farmer, P.  
1992 *AIDS and accusation. Haiti and the geography of blame*. Berkeley: University of California Press.
- 1997 Social scientists and the new tuberculosis. *Social Science & Medicine* 44: 347-58.
- 1999 *Infections and inequalities. The modern plagues*. Berkeley: University of California Press.

## On the role of the individual in the MEAH framework

Sera L. Young

Medical anthropology is a field that is concerned, either directly or indirectly, with the improvement of health conditions. A first step to ameliorating circumstances that cause poor health is to understand them. For those conditions to be understood, analytic frameworks that help us to deconstruct the environments in which health is maintained, or not, are needed. Dr. Anke Niehof has presented us with one such framework here, and successfully applied it to help elucidate the context of a compelling health and social problem: the AIDS pandemic.

As her analysis of a case is intended to document the utility of her framework, this article would have been even more instructive if Niehof had more closely matched her discussion of Sam and Liza to the summary points presented in the theoretical part of the article. Her analysis was strongest when she did closely follow them, e.g. in the discussion of care. Had she more precisely followed those points, the utility of the model would have emerged more sharply. Furthermore, this procedure might have also revealed, more clearly, the importance of identifying the locus of action in the nexus of households, individual members of households, and the larger political and social contexts within which they live. Households do not act, individuals do, albeit in the context of a household, a family, a political economy and society at-large. It is for this reason that I disagree with the decision to focus on the household as the “ultimate level of analysis”. I will try to illustrate this with two examples from her paper.

The example from her fieldwork in Madura, Indonesia, in which a person with tuberculosis goes to see a traditional healer, requires further substantiation to make the case that the appropriate level of analysis is the household. Niehof writes, “the decision is not an individual action. It is taken within the household...” Because we are not presented with the description of the decision making process, the reader is left in a quandary, since it is ultimately the individual who goes to see a traditional healer, not a household.

In Niehof’s description of Liza’s decision-making process, it appears to be the case that Liza’s individual actions played the central role that affected the household structure. Thus, it might be more accurate to conclude that the household setting mediated what Liza could do, but she is the primary and pivotal actor. The future of the household was severely constrained by her husband’s (also an individual) decision to block her access to his financial resources, which thereby deprived her of the means to sustain the household after his death.

Thus, I believe that if a pathway analysis could be extended to the ties that bind the individual to households and to societies, her MEAH framework would be even more useful.

A second point with which I differ with Niehof is the position of the individual in the CEMMA framework. Niehof writes that she “objects to the central position of the individual’s mental and physical needs” in the CEMMA model because “the emphasis should be not on the needs themselves but on the manner in which they are met”. Putting these needs in the middle of the diagram does not imply that this is primary emphasis. To the contrary, it draws attention to the fact that the boxes that surround these needs and their interactions are fundamental to understanding survival. In other words, the model does exactly what Niehof calls for – it focuses attention on the manner in which these needs are met. If they were not placed in the middle, these needs would have to be placed to the side with all of the arrows leading to and from them. This, however, would give them undue prominence and imply a causal model that fails to take into account the fact that the biological conditions of individuals (including being infected with HIV and being malnourished) are also affecting, as well as being affected by, all of the social and physical systems that are indicated in the rest of the model.

In short, Niehof has successfully engaged with and applied an ecological model to help understand the ways that AIDS has affected a family. I look forward to observing how other researchers will apply this useful framework to facilitate an understanding of other complex health-related decision-making processes of both individuals and households.

#### **Note**

Sera Young received her Master’s degree in Medical Anthropology from the University of Amsterdam. She is currently working on her PhD in International Nutrition at Cornell University, where her research interests include cravings and anemia during pregnancy (E-mail: sly3@cornell.edu).

## Why should households care?

### A rejoinder

Anke Niehof

*This rejoinder addresses the comments on the article "A micro-ecological approach to home care for AIDS patients". The key issue of my reply is the rationale for choosing the household as a level of analysis in the MEAH framework, since critical questions were asked about this in the comments. Furthermore, the rejoinder discusses the methodological implications of applying the model and attempts to provide further clarification on the significance of external linkages for households and the concepts of vulnerability and coping.*

*[household, care, HIV/AIDS, coping]*

### The concept of household

The validity of the central position of the household as a unit of analysis in the MEAH framework is questioned in the reviews. The critique of Tanja Müller is especially focused on this point. She wonders whether it would not have been better to replace the concept of 'household' with that of 'cluster'. However, I am not convinced that this will solve the problems of boundary and control over resources, even in a situation in which HIV/AIDS is pandemic and households dissolve and disappear. I will try to argue my position below.

Müller and Pool are not the first and will not be the last to question the applicability of the concept of household to rural communities in sub-Saharan Africa. Burch et al. (1993: 20) note the following: "We assume that census concepts of household are generally comparable from one time and place to another. This assumption is valid for the vast majority of population censuses, although problems arise for particular cases [...]; the assumption may be most problematic for Tropical Africa." Goody (1990: 130) comments in the same vein: "One of the simplest variables from which to obtain information on African families is mean household size, which forms a constant of most census records. But the results are frequently difficult to use, since they are usually based on the concept of hearth (cooking unit), which may be embedded in wider groupings, namely the farming group, and on the concept of household or dwelling group." In a well-known paper Bruce and Lloyd (1992) point to the importance for households

of kinship networks and other support networks in which they are embedded. In her research in rural Kwa-Zulu Natal (South Africa) Mtshali (2002) comes to the conclusion that in that area, 'household' can be equated with 'homestead' because the latter is the effective unit for resource management and decision-making (under the patriarchal leadership of the eldest man). Russell (1993) sketches a census enumerator's nightmare in an area with a high level of labour migration in rural Swaziland. The patrilineal farmstead (*umuti*) encompasses groups of women with children who have their own kitchen. Sometimes the men join these groups, at other times they are away, working as migrant labourers. Male labour migration but also polygamy causes these 'kitchen units' to be flexible in size and composition and even to overlap at times. In my own research in Madura, Indonesia (Niehof 1985), I refrained from using the term household but, instead, used the terms 'kitchen units' (using separate kitchens) and 'cooking units' (sharing a kitchen but budgeting and cooking separately) for the group sharing resources and food on a daily basis.

The examples testify to the universality of primary groups within which daily life is organized, daily needs are attended, and shelter and care are provided, whether such groups are called household, homestead, kitchen unit, or anything else. Their boundaries may be permeable and shifting, their composition changing over time, the capabilities they comprise may be more or less adequate, but still such groups or units represent empirical manifestations of household. Kabeer puts this well in her summary of her rationale for retaining the concept of household: "The empirical significance of household relationships in the daily management of resource entitlements, and as the routine context of people's lives, suggests that it has a certain facticity, despite its shifting guises" (1994: 114). I also agree with Davidson (1991) that we do not need to establish a rigid and all-purpose definition of household but that we can agree on a working definition, as long as we take into consideration the fluid and dynamic nature of households. For the household base underlying the MEAH framework I find the working definition of household by Rudie the most suitable one. Rudie (1995: 228) describes the household as "a co-residential unit, usually family-based in some way, which takes care of resource management and primary needs of its members." At the same time I fully endorse the warning note of Davidson (1991: 13) that "household as an entity represents but a moment in the dynamic process of its continual formation and reformation."

In a situation of high HIV/AIDS prevalence, as in Southern Africa, this reformation may be very drastic. In such circumstances households may change fundamentally with regard to the gendered division of reproductive and productive labour, allocation of care-giving and care-receiving roles, access to entitlements, and even power structures and decision-making. The Zulu household might lose its patriarchal character, for example. But if we do not keep the concept of household, however much deconstructed, we will not be able to see those changes. The argument above to justify sticking to the concept of household in the MEAH framework does not imply turning a blind eye to the problems of its delineation (Pool), intra-household inequities, and beyond-household linkages (Müller, Pelto, Young). However, these are problems at the level of application of the concept and validity of its operationalisation, rather than at the conceptual level.

### **The dynamic nature of households and its methodological implications**

Maria Koelen is much more positive about taking the household as the unit of analysis. She even sees this as a strength of the model, because it fills a gap that is left open in much health promotion research. However, she raises a relevant methodological issue. If, as in a situation of HIV/AIDS, households tend to break up and dissolve because they could not cope and therefore cannot be traced with traditional household surveys, then how can one apply a model in which the household is the unit of analysis? The answer is that we can only trace the history of such households and former members who have become part of other households or have founded new households (orphan-headed households, for example), when we insert a temporal dimension in the study design. This can be done by including retrospective questions in the survey, conducting case studies and life histories to supplement the survey data, or use longitudinal (panel) data. The latter will be done in a Wageningen PhD project on care for AIDS patients, which is to be carried out in the province of Kwa-Zulu Natal, South Africa. For a large number of households in Kwa-Zulu Natal, such panel data were collected by a research organization for the last five years at three-months intervals. This research project, which has just begun, is intended to shed light on the processes whereby AIDS-afflicted households dissolve and their members become part of other or new households. It will also examine what implications for care these shifts entail. In short, this project will attempt to capture the mechanisms of the flux.

When households are viewed as a set of social relationships geared towards a common purpose and jointly managing resources to this end, it follows that the intra-household bonds will loosen when the members no longer experience or perceive this commonality of purpose. I agree with Müller that in such cases individual members may be better off just fending for themselves, as in the case of Liza. Then, the external ties of the household (including the social relationships in the cluster) become more meaningful to the individuals. As a result, the household cannot be kept together anymore and falls apart. I agree, therefore, with Gretel Pelto about the significance of external linkages, which she says I leave rather implicit. However, unlike Pelto, I believe that a distinction should be made between micro-meso linkages (visible in the case of Liza and relating to community structures and beyond-household support networks) and micro-macro linkages (the relation of the household to the political economy in which it embedded, for example).

### **Vulnerability, coping, care and inequality**

The problem with an individual focus for explaining coping behaviour, as Müller proposes, is that it ignores the functioning of the asymmetric support relations within households. Because of its family base, the household is a context of generalized reciprocity in which some give more and others take more; the balance shifts through time. Very vulnerable persons cannot take care of themselves and cannot give care to others. Households are expected to provide care to their most vulnerable members, such as

AIDS patients or infants, and this care provision is part of the household's resource allocation and management. It is true that Sam no longer take part in joint resource management and does not contribute to the resources of the household, but that is also true of infants, children or frail elderly in households. Managing these asymmetries for the benefit of all is part of the morally and culturally underpinned mission of the household. This only works if the common benefit and the right to care of the most vulnerable are acknowledged and the demands for care and support do not exceed the capacity of the household and its caregivers to provide it. In the case of Sam and Liza, and in the case of many households with members suffering from AIDS, those two conditions no longer hold true.

Maria Koelen raises questions about the concept of coping. I agree with her conclusion: If households cope they lose (because they have to cash in their assets and use the last resources they have) and if they cannot cope they lose as well (they are lost). I see coping as a short-term non-premeditated response to a crisis. The point is that households may be able to cope for a short period, after which external support or a change of circumstances may come to their help and may enable them to survive. Elsewhere I phrased this in relationship to livelihood systems as follows. Extremely vulnerable livelihood systems break down in a situation of stress because of lack of assets and an inability to develop effective coping strategies, and are dependent upon external support for survival (Niehof & Price 2001). The same applies to households that are vulnerable as a consequence of living with HIV/AIDS. They can only cope *and* survive with external assistance. Such assistance may be provided by NGOs or by new organizations especially formed to help households cope with AIDS in areas where prevalence is high (Lwihula 1998).

Gretel Peltó rightly points to the importance of care for child nutrition, and refers to the famous UNICEF framework. I am glad that she raises the issue of nutrition because originally I had planned to use nutrition as a second example that the MEAH framework could be applied to. But since the format of one article was too short for this to be feasible, I restricted its application to AIDS. In a recent PhD thesis at Wageningen University (Balatibat 2004) a model was used in which the UNICEF framework was combined with a livelihood approach, to look at household food security and child nutrition in the Philippines. The model proved useful for eliciting the underlying causes, at household level and beyond, of child malnutrition. To explain why even in food secure households children may be malnourished it is essential to look at patterns of child care within households.

Sera Young questions the role of the household in the Madura example in my article. Yes, of course, it is the individual who goes to the healer because it is the individual who is ill, just as individuals and not households are admitted to hospitals. But the household has to bear the costs and, if needed, make the arrangements. This is also a form of care, belonging to Tronto's second phase of care: 'taking care of'. In decision-making about the treatment of ill household members, cost is an important factor. Another factor in the choice for treatment is the prevailing folk etiology of illness and disease. It is not only this individual with these symptoms who goes to this kind of healer, but other individuals in the same community and in the same situation will likely do the

same. This is where Pelto's belief-related factors come in. The issue of the household allocating the means for treatment of ill household members also touches on the power issue that Gretel Pelto would like me to have paid more explicit attention to. In societies with a high degree of gender inequality such resources are reserved for men rather than women, and for boys rather than girls; women are unable to do much about it. The literature on the poor state of women's reproductive health and the continuing high rates of maternal morbidity and mortality in many countries, testify to the unequal distribution of power and care between the sexes both within and beyond households.

For the conceptualization of care in the MEAH model the work of Tronto (1993) was used. Maria Koelen's question about the status of the fifth requirement of good care in the MEAH model can be answered very briefly. Yes, absolutely, integrity is a condition for good care, not just a requirement. If I did not make that clear in the article I hope I have done so now. In countries where care involves several specialized actors apart from those at the household level, this is exactly where care may not be good care, in spite of all the efforts put into it.

### **Pathway analysis?**

The suggestion of Young to apply pathway analysis to care-giving and care-receiving relations is an interesting one, but its application would have to cover the broad definition of care that I used in the MEAH framework. It should also be able to make visible the patterns of 'caring about' and 'taking care of', as well as the degree of integrity of the care process. Perhaps this is possible. It is certainly worth trying. For such an analysis it is helpful to see the household as a condensed web of particularistic, many-stranded and more or less ascribed relationships within which care is provided. When moving beyond the household along the nexus described by Young, the web widens and unfolds and the relationships become less particularistic and more single-stranded. The different phases of care may be located at different positions on this nexus, and the same may apply to different types of care, like daily care, emotional care, instrumental care, medical care, and so on. Furthermore, the location on the nexus may vary according to the magnitude and nature of the care demand. It might well be that by using pathway analysis these patterns can be captured and visualized. Even so, I still think that the household should be the starting point for the analysis, not the needy individual. I agree with Koelen that the core of the MEAH model is about the interaction of needs and their provision and patterns of care emerging from this.

### **Emic-etic and adequacy of care**

In his criticism of my use of the emic-etic distinction Robert Pool touches upon a crucial issue, namely the problem of judging the adequacy of care. He is right that a value-free objective assessment is impossible. However, the whole point of applying the MEAH framework is to be able to assess adequacy according to the different phases of care and

their specific requirements, the way and the extent to which these phases are integrated, and the adequacy of the resources that are available and mobilized to address care needs. For all these components valid indicators have to be found. In this way, the concept of care becomes better amenable to investigation, and judging the adequacy of care will be based on comprehensive conceptualization and transparent operationalisation. Pool is right that in the table the emic-etic distinction seems to be more or less narrowed down to intentions and measurable health effects and that the latter can be emic as well. Indeed, the crux of the distinction lies in the vantage point, the etic one being that of the “community of scientific observers” (Harris 1968: 575) – for judging measurable health effects the bio-medical scientist – and the emic one, being that of the “actors [care givers and care receivers] themselves” (Harris 1968: 571). Of course, the MEAH framework also represents the etic vantage point of the social sciences, which is why it is an interdisciplinary one. The interdisciplinarity and different perspectives make the framework far from simple, but care is about complex and resilient empirical realities, the understanding of which offers no easy shortcuts. While Pool questions the validity of the table referred to above, Koelen underlines its usefulness. She points to the fact that the third category in the table, namely that of ‘HHPH practices not intended as health care but yielding measurable health effects’, is one that is often overlooked in domain-specific models with a focus on health production.

### **Other points of criticism**

Pool suggests that I “over-rely” on the book by Barnett and Whiteside (2002). If he were right it would not be such a bad thing, given the comprehensive nature of the book and the broad scope of recent literature reviewed in it. There is a strong body of literature on AIDS and rural livelihood, which connects easily to the household resources perspective in my framework (e.g. Barnett 1995; Haddad & Gillespie 2001; Loevinsohn & Gillespie 2003; Müller 2004) and there is the anthropological synthesis by Schoepf (2001), but theoretical work that highlights the care angle is much more difficult to find, which is why I am grateful for the references to the work of Farmer.

Then there is the pertinent question of Pool about what is ‘new’ about the MEAH model. I would respond to that by saying that every invention builds on pre-existing building blocks but makes new combinations of these. Even in the physical sciences, inventions did not descend like thunderbolts from a clear sky. Arthur Koestler has written a beautiful book about this, called “The Sleepwalkers”, which I highly recommend. I leave the evaluation of the novelty of the framework, and of the relevance of posing the question, to the community of scientific peers. I hope to have contributed a heuristic and applicable framework for the analysis of care that takes the level of the household as its point of departure.

## Why should households care?

“Why should households care?” is the title I gave to this rejoinder. The framework makes clear that households should *and* do care because for most people they provide the context and the resources for meeting daily needs, including care needs. In a situation in which there is a lack of alternatives to institutional care, where can AIDS patients seek refuge other than in the households of their families or relatives? If they don’t find it there they will be ‘socially dead’, such as the case of Judy in an article on the access to anti-retroviral medicine in Uganda (Meinert et al. 2004) tells us. After losing her husband and being separated from her son, she is ostracized by her brothers and sisters-in-law and the rest of the community, and has only her mother to turn to. Judy’s main concern is not medical treatment – she has access to ARV medicine but she is lax in taking it – but food. She worries about who will cook for her and find her the only food that she is able to eat. Once she is denied this care, she stops eating and dies. It is a sad example of what happens to people when they are no longer part of a household that duly fulfills its most important function: taking care of the primary needs of its members.

## References

- Balatibat, Emelita M.  
2004 *The linkages between food and nutrition security in lowland and coastal villages in the Philippines*. PhD Thesis Wageningen University.
- Barnett, et al.  
1995 The social and economic impact of HIV/AIDS on farming systems and livelihoods in rural Africa: Some experiences and lessons from Uganda, Tanzania, and Zambia. *Journal of International Development* 7: 163-76.
- Barnett, T. & A. Whiteside  
2002 *AIDS in the Twenty-First Century: Disease and globalization*. New York: Palgrave Macmillan.
- Bruce, J. & C. Lloyd  
1992 *Finding the ties that bind: Beyond headship and household*. Working Paper 41. New York: The Population Council.
- Burch, T.K. et al.  
1993 Measures of household composition and headship based on aggregate routine census data. In: J. Bongaarts et al. (eds.), *Population research methodology*, Vol. 4, Chapter 15. Chicago, Illinois: UNFPA Social Development Center.
- Davidson, A.P.  
1991 Rethinking household strategies. *Research in Rural Sociology and Development* 5: 11-29.
- Goody, J.  
1990 Futures of the family in rural Africa. In: G. McNicoll & M. Chain (eds.), *Rural development and population*. New York: Oxford University Press, pp. 119-47.
- Haddad, L. & S. Gillespie  
2001 Effective food and nutrition policy responses to HIV/AIDS: What we know and what we need to know. *Journal of International Development* 13: 487-511.

- Harris, M.  
1968 *The rise of anthropological theory*. New York: Thomas Y. Crowell Company.
- Lwihula, G.  
1998 Coping with the AIDS pandemic: The experience of peasant communities of the Kagera region, Tanzania. In: G. Mutangadura, H. Jackson & D. Mukurazita (eds.), *AIDS and African small-holder agriculture*. Harare: SAfAIDS.
- Kabeer, N.  
1994 *Reversed realities: Gender hierarchies in development thought*. London: Verso.
- Meinert, L., M. Whyte, S. Reynolds Whyte & B. Kyaddondo  
2004 Faces of globalization: AIDS and ARV medicine in Uganda. *Folk* 45: 105-23.
- Mtshali, S.M.  
2002 *Household livelihood security in rural KwaZulu-Natal, South Africa*. PhD Thesis Wageningen University.
- Loevinsohn, M. & S. Gillespie  
2003 HIV/AIDS, food security and rural livelihoods: Understanding and responding. *RENEWAL Working Paper No. 2*.
- Müller, T.R.  
2004 *HIV/AIDS and agriculture in sub-Saharan Africa*. AWLAE Series No. 1. Wageningen: Wageningen Academic Publishers.
- Niehof, A.  
1985 *Women and fertility in Madura, Indonesia*. PhD Thesis, Leiden University.
- Niehof, A. & L.L. Price  
2001 *Rural livelihood system: A conceptual framework*. UPWARD Working Paper Series No. 5. Wageningen: WU-UPWARD.
- Rudie, I.  
1995 The significance of eating: Cooperation, support and reputation in Kelantan Malay households. In: W.J. Karim (ed.), *'Male' and 'female' in developing Southeast Asia*. Oxford, Washington DC: Berg Publishers, pp. 227-47.
- Russell, M.  
1993 Are households universal? On misunderstanding domestic groups in Swaziland. *Development and Change* 24(4): 755-87.
- Schoepf, B.G.  
2001 International AIDS research in anthropology: Taking a critical perspective on the crisis. *Annual Review of Anthropology* 30: 335-61.
- Tronto, J.C.  
1993 *Moral boundaries: A political argument for an ethic of care*. New York, London: Routledge.

