

# **WHO Euroregion Charter on Transport, Environment and Health**

## **Discussion On Its Actual Impact On Transport Policy**

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### **Summary**

WHO's Charter on Transport aims to reduce the need for motorised transport in favour of walking and cycling. It was raised into two Dutch transport policy processes. At local level (city of Alkmaar, transport sector), aiming at shorter distances to be cycled unless special circumstances occur. At national level (Public Health sector), aiming at Sustainable Development directed to much more eco-efficiency (in a size of a factor 20), to be reached in a 50-years period.

Cycling seems to evolve as a part of the mobility-hurry. There is a big threat for a further shift from cycle to car, and for longer cycle-distances in consequence of society wide scaling up. Cycling gradually becomes diminished into a simple link in the mobility-chain, and put aside for leisure time only.

The -very welcome- Charter had no perceptible impact. An erroneous health-concept seems to be part of the problem. For the human body is mainly regarded as a machine, to be repaired and maintained "evidence based", with predominant medical and health educational intervention. Admitting this error could give a change: the body as an organism, to be managed with precautionary intervention. This is on mobility-linked physical inactivity (to be considered as a non-personal, structural, component of behaviour), infrastructural and economic intervention.

Working this out for Charter's "D 1-4" (internalise external costs), there seems to be a need for the principle of the "diseaser pays" (which is in a direct line with the principle of the "polluter pays"), resulting in a health tax to be imposed on every motorised km. Internalising the tax could mean: lowering the premiums for health care and labeling to climate change linked foreign health aid.

### **Introduction.**

June 1999 the World Health Organisation (WHO) organised the Third Ministerial Conference on Environment & Health (E&H) for 52 WHO Euroregion countries. A Declaration was adopted including a Charter on Transport, Environment and Health plus a background document [ref. 1]. The plan of "action for moving towards transport sustainable for health and environment" agreed upon "promotion of modes of transport and land use planning which have the best public health impacts". That meant: "In particular we will promote safe and environmentally friendly cycling and walking and reduce the need for motorised transport".

In this paper we describe and discuss two processes of making transport policies in the Netherlands. One at local level in the city of Alkmaar (93.000 inhabitants) starts from the transport sector [note 1]. The other one, at national level, starts from the public health (PH) sector [note 2].

These different sectoral and scale level processes began to run in 1996/'97. In 1999 we actively introduced the Charter to influence the making of a local and a national Transport Plan.

We assess the Charter's impact on the plans, discuss some relevant factors and give considerations for Vélo Mondial.

### **Shorter Distances To Be Cycled Unless Special Circumstances**

For Ursula Lehner is looking to the future, looking to the present of that "self-evident Dutch cycling system" [ref. 2]. Her view, however, shows striking differences with "The Alkmaar Experience" [note 1]. In our long term vision: "Cycling, unless ...", we fear a further shift from cycle to car on distances of 15 km or less (50% of those shorter distances is car-driven

and 80% 15 km or less). Also there is the threat that those cyclable distances are getting longer in consequence of society wide scaling up. In the profit sector, where companies and stores grow larger due to take-overs, as well as in the non-profit sector, where schools, hospitals and local communities grow larger, distances from A to B get longer. To combine them becomes a problem, once more inducing mobility and a need for motorised transport. So “The Dutch Experience” is gradually evolving into a mobility-hurry, where “self-evident cycling” is reduced to a link in the mobility-chain and put aside for leisure time only.

We proposed 3 categories made up of 14 measures for our vision on “shorter distances to be cycled, unless special circumstances occur” for instance of elderly and handicapped people, for whom public traffic could be a primary option. The first category was meant to promote cycling, by improving the existing infrastructure, by realising a regional highway cycling infrastructure, by improving cycle-parking and by paying attention to “human powered technology” developments (for example to a nice designed cycle-cart as a shopping barrow). The second category aimed at reducing the need for motorised transport by spatial planning, by strong promotion of “cardating” for the longer distances and by a parking policy directed to less as well as paid parking. We were convinced that those measures would not succeed without help from other sectors. Thus, we proposed in the third category to gain support from the E&H sectors in order to direct the Economic into another way. From our side, we could offer E&H a perfect eco-efficient as well as remarkably silent and attractively healthy “sustainmobile”.

At national level the process started in the PH sector with questioning the meaning of Sustainable Development (SD) for Environment, Health and Health Services [note 2, 1]. An important point was a discussion on improving eco-efficiency with a factor 20, to be reached in a 50-years period. A necessary release of global environmental impact with a factor 2-5, a growth of the world population with a factor 2, and an increase of prosperity in developing countries with a factor 4-8, were taken into account. Also, the WHO report on Human Health and Climate Change was focused on [ref. 3], later for Europe outlined in a WHO Workshop report [ref. 4], indicating the possible direct, and indirect health effects due to economic regression by environmental degradation. The thesis was that, without a hygienic revival, SD based on the “factor 20 story”, was not feasible. Hence, for the next Dutch PH future-exploration a recommendation was given to a more complete health-determinants review. With regard to the consequences of climate change, it should connect old socioeconomic progress related health-determinants, like nutrition and hygienics, to new behavioural determinants such as a lack of physical activity. Furthermore, these determinants should link up to reality of today: “fast and easy hurry”. In the words of René Dubos, it signified a plea to restore the balance between “the myths of Asclepius and Hygieia symbolising the never-ending oscillation between two different points in view in medicine” [ref. 5, quoted]. Fiona Godlee’s “On your bikes: doctors should setting an example” was said to be a nice device [ref. 6], so that “Asclepius should go cycling” [note 2, 1].

Reactions were given from different sectors and fields: sustainable technology development, environment, nature, agriculture, hospital environmental care, and hospital quality care [note 2, 2,3,4,5,6]. The “factor 20 story” did not appear to be a real issue point. So apparently should be thought in that size for a term of 50 years. “More integration” came forward as a central point of consensus, proposed in several items.

## **No Perceptible Impact Of Very Welcome Charter**

The processes stagnated and recalled was by amplifying messages.

At local level we added to our 14 measures a proposal, suggesting that the part of the highway between Alkmaar and Heiloo that runs across the beautiful forest of Heiloo should be turned into a cycle highway, while the motorised transport to Alkmaar should be given a non-direct connection to the motorway.

At national level the second PH future-exploration was criticised for not having taken into account the PH consequences of climate change [note 2, 8], and therefore for not containing a complete review on health determinants. Created was an imaginable situation, backlooking from the year 2000 to 1997. Under the subheadings “Hygieia in action” and “Asclepius cycling”, it showed what would have happened if climate change had been taken seriously. In her “State of the Union” the Queen appeared to be wrong by reproaching the youth “doing not enough to physical activity” and the obligatory advice for more sports was considered to be a dangerous form of a combat of symptoms. That could cause again more hurry (and infrastructure to hurry) instead of desirable “dehurry”. The government was criticised not to have questioned in his Environment and Economy Plan, whether a growth in mobility was

linked to more “sitting mobile”. Have precaution, was the proposal, and take a causal instead of a symptomatic approach: stop building all solid infrastructure (except for walking and cycling) and organise a society wide debate on Mobility and Moving in the meantime.

During these tiring running processes we welcomed the Charter very much.

At the “Alkmaar-level” we saw it as an authoritative support for our further reaching “Cycling, unless ...”, and raised it during a special community conference. We stressed upon the articles 14 (general declaration, on reducing effects and consistent actions notably concerning the reduction of greenhouse gases), B 1-4 (promoting walking and cycling and reducing the need for motorised transport), D 1-4 (internalise external costs) and annex 1 (evidence for the links between Transport, Environment and Health) [ref. 1]. Also we proposed to integrate “D 1-4” in the document about community health policy and to change the “wait and see” membership of WHO’s network of healthy cities into an active one. Last but not least, the Charter was welcomed by the Alderman of Transport.

At national level, the PH minister’s point of view was criticised for not making a National Environment and Health Action Plan (NEHAP), as well as for having paid no attention to the mobility-question [note 2, 9]. The Charter’s Draft was referred to, and in a review of “London 99” a reference was made to the national Transport Plan which was being made [note 2, 10]. The true health services’ problem of waiting-lists and workload was linked to “epidemic forms that took mobility” [note 2, 11 and 12], criticising the PH-ministry for not participating actively in the national Transport Plan process. In the meantime the parliament passed a vote to make a NEHAP. However, the PH minister saw “little added value” and was prepared only “drawing up an inventory of interesting possibilities in the co-operation between PH- and Environment-Ministry”.

In spite of all this, no interaction came about between the transport and health sector. At local level, the health sector pointed to the national level: “D 1-4” is not a local but a national responsibility, and, besides nothing happens in WHO’s network of healthy cities, so we will stimulate cycling only by giving information that it is good for your health. At national level there was no clear “14, B 1-4 or D 1-4”-impact on the Transport Plan being made. As such of importance, fragments were brought forward, as ambitious safety-goals, necessary air pollution levels and desirable “80%-reductions after Kyoto”. But the plan-concepts expired no true overall reflection on mobility and seemed to be overwhelmed by the order of daily life: cars and traffic-jams. In short, the Charter had no perceptible impact.

### **Erroneus Health-concept Part Of The Problem**

Why is there no perceptible impact? Before answering this question, something should first briefly be said about how we came where we are, starting with Thomas Mc Keown’s well known review of the decline of mortality in England and Wales between 1850 and 1970 [ref. 5].

He assessed that the mortality-decline was principally due to a decline in infectious diseases. In order of time and importance, the main causing influences were: -first- socio-economic progress related environmental (nutrition and hygiene), -second- behavioural (control of reproduction), and -last- medical (immunisation and therapy). He concluded that in developed countries the main change in this determinants-pattern was from environmental to behavioural: to lack of Physical Activity, Smoking and (too much, too fat) Nutrition. In his view the crucial problem was: “The erroneous assumption about the basis of human health that the body can be regarded as a machine whose protection from disease and its effects depends primarily on internal intervention, an approach that led to indifference to the external influences and personal behaviour”. With this position he was distinguished by Cochrane’s “evidence based medicine”, which was directed to “Effectiveness and Efficiency”: as such entirely justifiable, but nevertheless an erroneous assumption.

Mc Keown’s supposed small importance of the medical determinant was criticized in this country [ref. 7]. Cochrane’s “evidence based medicine” became a leading principle, nicely illustrated by the foundation of a Cochrane Institute at the University of Amsterdam. The significance of behavioural determinants seemed to be considered as naturally following “internal intervention” to influence with “intervention mapping” by health education. Two were explicitly added: Alcohol abuse and Stress. In our health policy all were indicated with their first characters and comprised in: BRAVO. This also nicely illustrates the idea of full personal responsibility to influence with health education: well done, if you move (B), do’nt smoke (R), do’nt abuse alcohol (A), feed not too fat and too much (V), and relax (O). The non-personal, structural, component of behaviour, as to physical inactivity the link with

infrastructural and economic development, was neglected. To maintain, by means of health education the human body as a machine, seemed to be an additional value to Cochrane's "evidence based medicine". The worry about E&H came up separately, mainly in civil societies. Still another aspect appeared to be in the "machine-concept", reflected in: 'do'nt worry, there is no ("evidence based") danger for public health'. This, again, meant a friction with the also upcoming precautionary principle. So, in spite of Mc Keown, the human body continued to be considered as a machine, to be repaired "evidence based" and to be maintained "BRAVO".

This erroneous machine-assumption might be a reason for these tiring running processes and this not perceptible impact. It might also explain why our national PH-future exploration is short sighted and not linked to climate change. What may also be important is the belief in irreversible socio-economic progress. The possible danger of economic regression (connected to food and hygiene) due to the indirect consequences of climate change, so remains beyond the scope [note 2, 1]. Perhaps it explains too why our Queen reproached the youth about their lack of physical activity. It fits into the "machine-concept" of full personal responsibility for the own health and neglects the structural component of behaviour. Also the actual problem of workload and waiting-lists in health services seems to be considered in this way: more repair- and maintenance facilities are needed.

What to do? It would be wise anticipating from ending up in a pipe-dream by reflection, and look around at how other sectors are handling, especially where it concerns the problem of climate change. "The Dutch Experience" offers in this an interesting case. In the field of what at present is called watermanagement, in which Holland is one of the leading countries in the world, climate change is an accepted factor and policies are "no regrets" agreed. For example, increasing irregularities in the flow of the Rhine with more peaks are expected. The solution is an old one. Certain polderdikes will be cut at high floods and polders will be used as a water-buffer. It means that advanced ruling technics of building dams and dikes are considered to be second best. This signifies a certain shift within the concept of technology, to characterize as, from ruling with the help of advanced technics to managing even with old solutions.

### **Health Tax On Every Motorised Km**

Apparantly, the watermanagement sector faces new reality not by adhering rigidly advanced ruling technics, but does not regret and is prepared to practise with old solutions. In a same way should the health sector admit the erroneous assumption of the "machine-concept". The body is no machine to rule, but an organism to manage with precautionary intervention: "primum nihil nocere". So "more Hygieia" and "less Asclepius" is needed, to be balanced with predominant environmental and structural behavioural determinants.

How should this "hygienic revival" look like in a working-out of Charter's "D 1-4" (aloud thinking, not knowing other working-out's at this moment)?

First, the working-out should be a true reflection of the seriousness of the problem, dominated by the precautionary principle and not adapted "evidence based" in a spasmodic way. Then it should have a same approach as to other determinants. For example "Smoking" knows only a general tax, so no health costs related ex-/internalisation. Thus, a consistent approach urges also for an ex-/internalisation of "Smoking". This leads, analogue to the "polluter pays" principle, to the "diseaser pays", with a "health-tax". (And it means a shift, away from "pay (insured) for disease costs"). The working-out should be simple and universally adaptable, fitting in the International Classification of Diseases. (Simplicity also falls in with a sense of urgency). And last, it should clearly express a wise use of human power and look away from a foolish application of fossil power: "Cycling, unless ..."

Step by step is then an imaginable outline.

1. Take your national percentual mortality of traffic accidents as a starting point.  
(our national mortality in 1994 was absolute 76468, the traffic accidents mortality 1322, so this percentual mortality is 1,7% [ref. 9])
2. Multiply with a factor 3, a factor 1 added because of a same size link with air pollution [ref. 1], and a factor 1 added because of a substantial but difficult to estimate influence of physical inactivity attributable to coronary heart disease and other links between transport and E&H [ref. 1].  
(So that means  $3 \times 1,7 = 5,2$ )

3. Conceave this figure as the percentage of your annually national health services costs and externalise it.  
(5,2% of our costs meant (1994) 1.4 billion euro's, that is 3 billion guilders, based on a "real reflection of seriousness" and not on the real health costs of traffic accidents. For the real costs amounted 183 million euro's, that is 404 million guilders or 0.7% of the total costs [ref. 9].)
4. Take these costs as a base for a health tax to impose on every motorised km. (Walking and cycling stay as a matter of course tax free and fossil powered personal and structural mobility is imposed by km)
5. Internalise the health tax yield to reduce premiums for disease costs.  
(a possibility for us to do this could be at first settling in the national premium for special disease costs (AWBZ))
6. Take again your national percentual mortality of traffic accidents.
7. Externalise it as a part of your annually national health costs.  
(our amount was 0,46 billion euro's (1994), that is 1 billion guilders [ref. 9])
8. Conceave this amount for the time being as an indication of health costs due to direct and indirect consequences of climate change.  
(our relative energy-attribution of fossil powered traffic to the total national energy-consumption is 18 %)
9. Internalise the amount by labeling to your foreign policies for climate change linked health aid.

However, we have to do this globally, especially in the developed countries. For as soon as separate economic positions are at stake, these kind of solutions are resigned or mitigated. For instance, the principle of the "polluter pays" is fully agreed, but the consequent eco-tax on energy is moderate, not to damage our international economic position. On the reverse, if this position is not a controverse -see our watermanagement- solutions appear.

This obligation to one another urges for strong national and international co-operation. So our E&H civil societies should together with the Dutch PH-Federation in founding become part of the solution: work on a hygienic revival, here on a health tax on every motorised km. On the european level there is a same challenge for congenial organisations, respectively for EPHA and EUPHA.

And those Transport Plans? Our government should get rid from that cars and traffic-jams pipe-end, and must go in for some hard thinking. Not only this not perceptible impact of the Charter, but also the need for carfree days in Europe, must be a clear signal. So, it would be a sign of wise government to declare a moratorium on new infrastructure. In the meantime a society wide reflection on fossil powered Mobility and human powered Movement can be organized. (A comparable debate will be organized on xenotransplant, and was organized in 1981 on energy, which resulted in cancelling 3 new nuclear energy-plants ...)

## Notes

### *1. Local level. City of Alkmaar Transportsector process.*

- Invitation to DCU by the Alderman of Transport and Environment Wim van der Ham to point out what to do to drive back car traffic. (1997)
- Dutch Cyclist's Union City of Alkmaar policydocument. Cycling unless ... Alkmaar: car- or sustainmobile in the 21th century. (1998)
- Recall including a proposal. (1998)
- Community council commission on Transport wants to discuss DCU's policy- document. (1999)
- Special community workconference. (1999)
- City of Alkmaar Transport Policydocument, still in preparation. (april 2000)
- National Transport Plan, still in preparation. (april 2000)

## *2. National level. Health sector process.*

Published was mainly in the Dutch Journal of Public Health (TSG). Also were actively informed the PH-ministry, E&H civil societies and the Dutch PH-Federation in foundation.

### **Chronological publications (titles english translated):**

- 1 Man JCJ de. Sustainable Development and the meaning for environment, health and health services. TSG 1996;74:411-3
- 2 Vergragt PJ, Jansen JLA. Backcasting, a challenge for health services. TSG 1996; 74:411-3
- 3 Reijnders L. Care for the future. TSG 1996;74:417-8.
- 4 Cramer J. Up to a sustainable intramural care. TSG 1996;74:417-8.
- 5 Casparie AF. Environmental care in the wake of quality care? TSG 1996;74:415-6.
- 6 Fresco LO. Environment, nature, and health, approached integrated. TSG 1996;74:415-6.
- 7 Man JCJ de. Sustainable Development: the reactions. TSG 1996; 74:420-1.
- 8 Man JCJ de. Hygienic revival: vision or fiction? TSG 1998;76:105-6.
- 9 Man JCJ de. National Environment and Health Action Plan it is necessary. TSG 1999;77:129-30.
- 10 Man JCJ de. Environmental conference WHO "London 99": a review. TSG 1999;77:353-4.
- 11 Man JCJ de. Diseaser pays. Medical Contact 2000; 55:43.
- 12 Man JCJ de. Determinants and Aspect Policy (spread, not published).

### **References**

- 1 WHO website [http://www.who.it/london\\_conference/teh.htm](http://www.who.it/london_conference/teh.htm)
- 2 Lehner-Lierz U. The Netherlands. Program Vélo Mondial:23.
- 3 World Health Organisation, World Meteorologic Organisation, United Nations Environment Programme. Climate change and human health, Geneva 1996.
- 4 World Health Organisation regional office for Europe. Early human health effects of climate change. Rome 1998.
- 5 Mc Keown Th. The role of medicine: dream, mirage or nemesis? London Nuffield Provincial Hospitals Trust., 1976.
- 6 Godlee F. On your bikes: doctors should be setting an example. Br Med J 1992;304:588-9.
- 7 Mackenbach JP. Mortality and medical care. Thesis Rotterdam, 1988.
- 8 (Dutch) Ministry of Public Health, Welfare and Sports. Carenote 2000. The Hague 1999.
9. (Dutch) National Institute for Public Health and Environment. Public Health Future-exploration 1997, Sum of parts. Bilthoven november 1997.

### **Abbreviations**

D 1-4, Charter's articles 1-4 from "Economic aspects of transport, environment and health", comprized in: internalize external costs. DCU, Dutch Cyclist's Union; E&H, Environment and Health; EPHA, European Public Health Alliance; EUPHA, European Public Health Association; PH-minister, Dutch Minister of Public Health, Welfare and Sports; PH-ministry, Ministry of Public Health, Welfare and Sports; NEHAP, National Environment and Health Action Plan; SD, Sustainable Development; WHO, World Health Organisation