

GROWTH IN DUTCH CARAVAN-CAMP CHILDREN*

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Abstract: One of the minority groups in The Netherlands consists of Dutch caravan-camp dwellers. Part of them stays more or less permanently on one caravan camp, others prefer to wander around from one camp to the other. Recently, their primitive dog-carts, horse-carts, and tilt-cars are exchanged for — often rather well-equipped — living-wagons and caravans. Yet, the overall hygienic and nutritional conditions clearly lag behind the average Dutch standards.

During 1978—1980 anthropometric data were collected to evaluate the health conditions of about 400 caravan-camp children of Dutch origin of 3—15 years of age. Their height and weight for height were compared with national Dutch growth standards. The caravan-camp children have proved to be significantly smaller, yet heavier than the average of Dutch children. Improvement of the overall camp environment should be further stimulated.

Key words: Caravan-camp children, Dutch children, height, weight for height.

Introduction

In 1975 in The Netherlands 20 000 Dutch caravan-dwellers were living on about 170 centra and camps (VERNOOY 1977). These are frequented exclusively by these caravan-dwellers and, incidentally, small groups of authentic gypsies and have not to be confused with tourist camping sites. Part of the caravan-dwellers stays more or less permanently on one caravan-area, others prefer to wander around from one camp to the other. The history of the caravan-dwellers of Dutch origin — who like to name themselves "travellers" — dates back to generations of rambling ancestors. At first, during their rambling around they spent the night in barns or cheap taverns. In the second half of the former century and the beginning of this century the "travellers" started to get their own means of transport, like dog-carts and horse-carts, also used for passing the night. Later, they used covered wagons, while nowadays they possess — often rather well equipped — caravans. In former days the contact with the rest of the society was good; the "travellers" were appreciated for bringing the latest news from other villages. When they did not longer nightly mix among other citizens, they lost more and more contact with their countrymen with fixed abode. Today, they are rather distrustful towards civil society.

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The occupation of male caravan-dwellers used to be pedlar, hawker, chair-mender, tinker, or scissors-grinder. At present, they often claim to be merchant, i.e. in most cases scarp-iron or junk-dealer; their camps — mostly situated at the outskirts of town — can be recognized from a distance by huge piles of old cars. Part of them used to work as a peat digger, while nowadays small part of them work as casual labourers on farms or factories. Others are musicians. Especially during summer, they like to travel to surrounding countries to play at fairs and festivities. Many of the caravan-dwellers are unemployed or rejected for labour as medical unfit.

Because of the deviating lifestyle of the caravan-dwellers, also resulting in different attitudes towards hygiene and diet, they can be considered as a separate sub-population of the Dutch nation.

Children of caravan-dwellers grow up under comparatively unfavourable conditions as compared with other Dutch children. Prenatal care leaves much to be desired; often the pregnant mother only consults a district-nurse just before delivery. Child mortality is higher than in the rest of the country. Though at present almost all children in the camps get the usual vaccinations, it is hard to instruct the mostly suspicious and often illiterate mothers. Infants, toddlers and schoolchildren often have alimentary disorders, and a high percentage suffers from asthma and bronchitis. These facts have been mentioned in reports concerning the status of health of this minority-group, but so far are not yet quantitatively evaluated.

For some time volunteers, mostly priests, tried to improve the conditions in the camps. Later, civil servants of the government started health care among the caravan-dwellers. At present, in the larger centres water-supply and sewage are provided for, while there is a building with room for a health clinic for infants and toddlers. Often, there is a small school, visited by the school doctor for inspection of the children according to the schedule that applies for all Dutch children of school age. School doctors included reports on their experiences with caravan children in their yearly reports, but until now no national survey was performed. It was thus considered a good opportunity to collect data on children of the above described sub-population during the third nation-wide Dutch survey on growth.

Methods

During the third nation-wide biometric survey in The Netherlands (1980) data on height and weight of about 40 000 boys and girls of 0–19 years of age were collected. The actual measuring and registration was done by teams of health clinics and school doctors during their regular inspection of the children. Through personal visits to all cooperating teams strict instructions about measuring techniques were given, and the measuring instruments verified. A small number of school doctors proved to be in the position to gather as well measurements of caravan children. Thus, data on 201 boys and 199 girls, 3–15 years of age, from 11 camps spread all over the country could be collected. The material did include some children of non-Dutch origin, mainly gypsies, but these have been excluded from the analyses.

Height was noted down in centimeters and millimeters, weight in kilograms and hectograms. It is the intention to compare the Dutch caravan children

with their simultaneously measured counterparts. However, while preparing this paper, the final results of the recent nation-wide survey, on growth were not yet available. Hence, it was decided to compare the Dutch caravan children with the results of the second nation-wide survey on growth of 1965 (VAN WIERINGEN 1972). This study was performed according a similar layout as the one of 1980. For each caravan child its standard deviation score ($SDS = (\text{attained height} - \text{mean height})/\text{standard deviation}$) was calculated, mean height and standard deviation being the 1965 values for each particular age. Moreover, for each child weight for height was calculated, expressed as percentage of the Dutch median values of weight for height of 1965.

Results

Height. As standard deviation scores are independent of sex the SD-scores of boys and girls were combined. Per age group the average SD-score and its standard deviation are given in Table 1. Table 1 shows that at all ages the caravan children have negative SDS values, thus being smaller than the average height of their Dutch contemporaries of 1965. Preliminary results of the nation-wide survey of 1980 indicate that for both boys and girls at subsequent ages the standard deviations do not differ from those of 1965, while the mean values of height of 1980 positively deviate from the 1965 values. The increase of height being roughly about half a cm for both boys and girls at the age of

Table 1

Standard deviation scores (\bar{x} and s.d.) (height) in caravancamp-children in 1980, as compared to Dutch P50 values of 1965

Age in years	N	s. d. score	
		\bar{x}	s. d.
3	13	-1.02	0.82
4	14	-0.69	0.96
5	35	-0.47	1.00
6	37	-0.77	0.75
7	34	-0.30	1.15
8	48	-0.35	0.88
9	54	-0.54	1.03
10	50	-0.36	0.87
11	47	-0.23	1.17
12	30	-0.21	1.54
13	18	-0.37	1.43
14	4	-0.16	—
15	3	-1.70	—

five, about 2 cm in boys and 3 cm in girls at the age of ten, and about 3 and 2 cm, respectively, at the age of fifteen. This leads to the conclusion that the caravan children will prove to be even smaller, when compared with their contemporaries measured in the same period around 1980.

Weight for height. Of the caravan boys 61.2 per cent and of the caravan girls 70.3 per cent proved to have a weight for height value above the median

Table 2

Weight for Height % (\bar{x} and s.d.) in caravancamp-children in 1980,
as compared to Dutch P50 W/H — values of 1965

Camp	♂ ♂			♀ ♀		
	N	\bar{x}	s. d.	N	x	s. d.
A	26	106.6	17.2	29	111.2	18.2
B	12	125.5	36.0	19	119.6	21.6
C	31	101.2	7.8	43	105.5	10.5
D	26	105.1	14.2	18	113.7	15.8
E	14	102.7	9.3	8	98.5	8.7
F	13	106.6	11.2	15	110.3	13.5
G	9	103.7	18.3	14	112.1	12.1
H	19	106.7	9.9	11	104.9	13.9
I	30	111.5	15.0	20	102.5	11.2
J	20	105.0	18.4	20	104.4	24.6

of 1965. In Table 2 per camp the mean weight for height percentage and its standard deviation are listed. This Table shows that on the average both caravan boys and girls surpass the 1965 values. In camp B extra high values were found. On the registration card the doctor was asked for his subjective impression of stature and weight of the child in terms of small, average, or tall, and thin, average, or fat, respectively. For camp B supplementary remarks were given such as "adipositas", "incredible fat", or "remitted for diet instructions". This makes it reasonable that in most cases the overweight of the caravan children is due to a surplus of fat.

A nation-wide survey on eight years old schoolchildren (DE WIJN *et al.* 1979) and the Nymegen Growth Study on 4–14 years old ones (ROEDE 1979) reported that since 1965 there hardly has been an increase in weight in Dutch children. Support for this phenomenon is given by preliminary results of the nation-wide survey on growth of 1980. On the average the Dutch child became taller but more slender. Accordingly, it may be expected that when the caravan children will be compared with the final weight for height standards of 1980, they will be found to be even more heavy than their contemporaries, measured in the same period of time. In this respect children of caravan dwellers with their in many ways deviating life-style resemble most children of the lowest social groups of their countrymen with fixed abode. At present in The Netherlands these have overweight, according to skinfold measurements, due to fat (DE WIJN *et al.* 1979).

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