

Prevalence of Transsexualism in the Netherlands

P. L. E. EKLUND, L. J. G. GOOREN and P. D. BEZEMER

On the basis of the records of subjects undergoing cross-gender hormonal treatment at the only gender treatment centre in the Netherlands, the prevalence of transsexualism was assessed over the years 1976-1986. In 1980, the prevalence was 1:45 000 for male-to-female and 1:200 000 for female-to-male transsexuals. In 1986 the prevalence for male-to-female transsexuals was 1:18 000, and for female-to-male transsexuals, 1:54 000. The increased prevalence is apparently due to a lower threshold for applying for medical treatment rather than to a true increase in the prevalence. Nevertheless, the calculated prevalence is higher than hitherto recorded. The ratio of male-to-female compared with female-to-male transsexuals was found to remain constant at 3:1.

Estimation of the prevalence of transsexualism is a difficult task. The openness of transsexuals will be influenced by their social acceptance, legal rights, and the availability of medical treatment. Assessing prevalence rates using the number of known transsexuals will therefore represent only minimum values. The prevalence in the USA was estimated by Pauly (1968) to be 1:100 000 for male-to-female and 1:400 000 for female-to-male transsexuals. Wallinder (1968) calculated the prevalence rates for Sweden in the population above 15 years of age and he found 1:37 000 men and 1:103 000 women to be transsexual. Similar figures were presented by Hoening & Kenna (1974) in a study of the Manchester, England region. The Stichting Nederlands Gender Centrum, in Amsterdam, is the Dutch organisation that supports and co-ordinates the treatment of transsexual subjects. For somatic and follow-up treatments, subjects are recommended to contact the department of endocrinology of the academic hospital of the Free University of Amsterdam (AZVU). Consulting the gender team at the AZVU, as well as treatment provided for gender reassignment, is inexpensive, since the costs are fully refunded by the subject's medical insurance. Dutch law provides the transsexual with the possibility of changing the birth records regarding name and sex. Therefore, there is little incentive to seek treatment abroad. These factors encourage a high rate of manifestation of transsexuals. As it has a population of 14.5 million in a small-sized country and only one main centre for treatment of gender disorders, the Netherlands constitute an almost ideal country for conducting studies regarding prevalence. The purpose of this retrospective study was to assess the prevalence of transsexualism and to analyse possible trends in prevalence over the last 10 years.

Method

The gender team at the AZVU started work in 1976 and consisted of endocrinologists who co-ordinated the medical treatment, a plastic surgeon, and a psychiatrist. Transsexual subjects contacting the team, in most cases on the recommendation of the Stichting Nederlands Gender Centrum, start with hormonal therapy if no somatic contraindications are found.

The criteria of transsexualism used (Walinder, 1968) are as follows:

1. a sense of belonging to the opposite sex, of having been born into the wrong sex, of being one of Nature's extant errors;
2. a sense of estrangement from one's own body, all indications of sex differentiation being considered as afflictions and repugnant;
3. a strong desire to resemble the opposite sex physically via therapy, including surgery;
4. a desire to be accepted by the community as belonging to the opposite sex.

This study includes those subjects who actually started with hormonal therapy. For the assessment of the prevalence, subjects were selected from the registers of the department of endocrinology at the AZVU. Records of in which year each subject had contacted the clinic, and if and when hormonal treatment had been started, were kept. To calculate the prevalence of transsexualism, information about age- and sex-specific groups of the Dutch population supplied by the Dutch Bureau of Statistics was used (Centraal Bureau Voor Statistiek (1976-1986)). As it might be expected that the prevalence of transsexualism is not evenly divided over different age groups, subdivisions were made covering 5-year age spans.

Results

At the end of 1986, 538 transsexual subjects had started hormonal therapy. This number consisted of 399 male-to-female and 139 female-to-male transsexuals. The annual number of new subjects is presented in Fig. 1.

Prevalence rates, in

Age

M-F 1980
M-F 1983
M-F 1986

F-M 1980
F-M 1983
F-M 1986

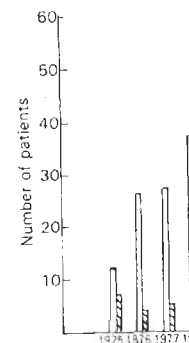


FIG. 1 Annual number of patients for male-to-female; \square , female-to-male.

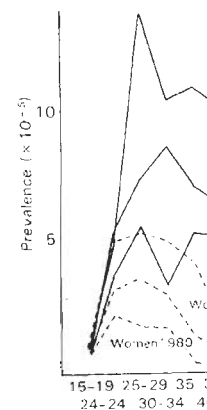


FIG. 2 Prevalence $\times 10^{-5}$ by age group.

TABLE I
Prevalence rates, in age groups, for male-to-female (M-F) and female-to-male (F-M) transsexuals, $\times 10^{-5}$

Age	15-19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70+	Total
M-F 1980	0.6	3.7	5.6	3.3	5.4	5.2	3.1	2.7	1.2	0.7	0.4	—	2.2
M-F 1983	0.6	5.3	7.5	8.7	7.2	6.4	6.5	5.3	2.6	1.9	0.4	0.2	3.8
M-F 1986	0.6	4.9	13.8	10.5	11.0	10.3	7.7	6.6	5.7	4.0	1.6	0.6	5.6
F-M 1980	0.6	2.2	1.8	1.7	0.4	0.2	0.3	—	—	—	—	—	0.5
F-M 1983	0.8	3.2	3.6	3.0	1.4	0.9	0.3	0.3	—	—	—	—	1.0
F-M 1986	1.0	5.1	5.4	5.1	4.2	1.8	0.8	0.8	—	—	—	—	1.9

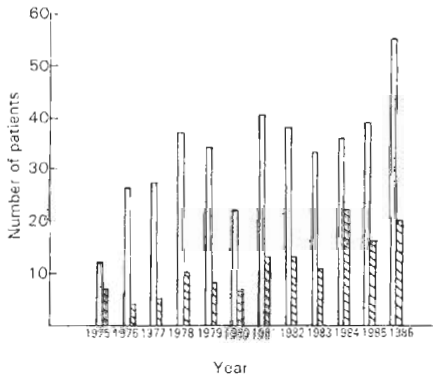


FIG. 1 Annual number of new patients 1975-1986, □, male-to-female; ▨, female-to-male.

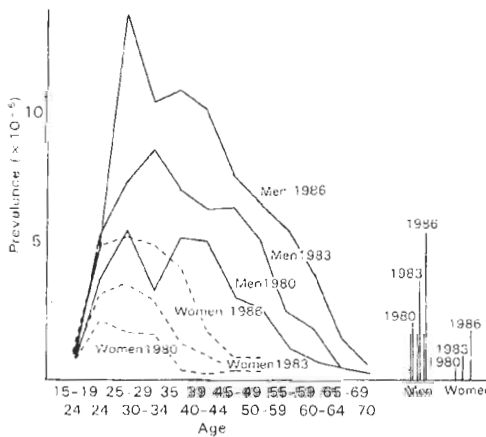


FIG. 2 Prevalence $\times 10^{-5}$ of transsexualism.

Prevalence rates of transsexualism in the total Dutch population in distribution of age groups for three different periods (1980, 1983, and 1986) are seen in Fig. 2 and Table I. These three years were chosen to analyse the trend over the last 10 years. Prevalence in 1980 was, for male-to-female transsexuals, 1:45 000, and in 1983, 1:26 000. For female-to-male transsexuals, the prevalence in 1980 was 1:200 000 and in 1983, 1:100 000. For 1986, the prevalence rate of male-to-female transsexuals was 1:18 000 and for female-to-male transsexuals, 1:54 000. The trend of the prevalence between the years 1980 and 1986 is shown in Fig. 2. The ratio of male-to-female compared with female-to-male transsexuals is 3:1. Compared with the figures of 1980, the prevalence in 1986 was two and a half times higher for male-to-female and four times higher for female-to-male transsexuals.

Discussion

Analysing subject records of the Free University over the years 1976-1986, the prevalence of transsexualism was assessed. Remarkably, the figures have shown a substantial upward trend. The interpretation of this trend can only be speculative. At first sight, it could be assumed that there has been indeed a substantial rise over the last 7 years. Alternatively, these figures could be the result of a higher percentage of transsexuals seeking hormonal treatment over the last 7 years in an increasingly more benevolent social climate. The latter assumption seems more likely, since the distribution of the prevalence over the different age groups remains almost constant. A true increase of prevalence would probably have shown a shift towards younger age groups, the older subjects having started treatment already.

The calculated prevalence appears to be two to three times higher than in the material hitherto published. In contrast to the findings of Walinder (1971), the ratio of male-to-female compared with female-to-male transsexuals was 3:1 in 1986. Also, female-to-male transsexuals almost all present themselves before the age of 50, whereas a number of male-to-female

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P. L. E. Eklund; *L. J. G. Gooren, *Division of Endocrinology, Department of Internal Medicine*; P. D. Bezemer, *Department of Medical Statistics, Free University of Amsterdam, The Netherlands*

*Correspondence: AZVU, P.O. Box 7057, 1007 MB Amsterdam, The Netherlands

... PRESCRIPTION INFORMATION ...
... 500mg fluvoxamine maleate, imprinted ...
... Uses: treatment of those affective dis- ...
... somatic activities and psychosomatic compla- ...
... followed without chewing and with water. ...
... and 200mg and should be adjusted to the ...
... The maximum recommended starting dose ...
... of 100mg should be given in divided doses ...
... in the general population. Children: Ther- ...
... **Contra-indications, Warnings, etc:** ...
... terminating treatment with monoam- ...
... iness should begin treatment with a low d- ...
... motor skills associated with driving and op- ...
... impairment may be seen. Use in pregnancy ...
... no adverse animal evidence. Avoid in preg- ...
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