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LETTER TO THE EDITOR

U. Lockemann · K. Püschel · V. Schneider · G. Geserick
H.-F. Brettel · R. Penning · P. Karhunen · J. Rajs
B. Kringsholm · D. Risser · B. Vonlanthen · R. Alcaraz
J. M. Abenza Rojo

Occurrence of HIV-antibodies among drug abuse-related fatalities in major European cities (up to December 31st, 1992)

Dear Sir,

Since 1985 a number of Institutes of Forensic Medicine in Europe have cooperated in a multicenter study to provide a constant monitoring of HIV-1-prevalence among drug abuse-related deaths [2, 3, 4]. In addition to the participating cities of the former years 1992 Helsinki, Bilbao and Madrid have also joined the study.

Since 1985 the data from 4637 drug deaths in 11 European cities have been collected and analyzed. Age, sex, HIV-1-status and the cause of death have been documented anonymously for each case. Technical details of postmortem serological HIV-testing (screening by ELISA,

U. Lockemann · K. Püschel
Institute of Forensic Medicine, University of Hamburg,
Butenfeld 34, D-22529 Hamburg, Germany

V. Schneider
Institute of Forensic Medicine, Free University of Berlin,
Hittorfstrasse 18, D-14195 Berlin, Germany

G. Geserick
Institute of Forensic Medicine, Humboldt-University,
Hannoversche Strasse 6, D-10115 Berlin, Germany

H.-F. Brettel
Institute of Forensic Medicine, University of Frankfurt,
Kennedy-Allee 104, D-60596 Frankfurt, Germany

R. Penning
Institute of Forensic Medicine, University of Munich,
Frauenlobstrasse 7a, D-80337 Munich, Germany

P. Karhunen
Institute of Forensic Medicine, University of Helsinki,
Kytösuontie 11, SF-00014 Helsinki, Finland

J. Rajs
Institute of Forensic Medicine, University of Stockholm,
Doktorsringen 14C, S-17126 Stockholm, Sweden

B. Kringsholm
Institute of Forensic Medicine, University of Copenhagen,
F. V's Vey 11, DK-2100 Copenhagen, Denmark

D. Risser
Institute of Forensic Medicine, University of Vienna,
Sensengasse 2, A-1090 Wien, Austria

B. Vonlanthen
Institute of Forensic Medicine, University of Zürich,
Winterthurer Strasse 190, CH-8057 Zürich, Switzerland

R. Alcaraz
Institute of Anatomical Forensic Medicine, Bilbao,
E-18013 Bilbao, Spain

J. M. Abenza Rojo
Institute of Anatomical Forensic Medicine, Madrid,
E-28040 Madrid, Spain

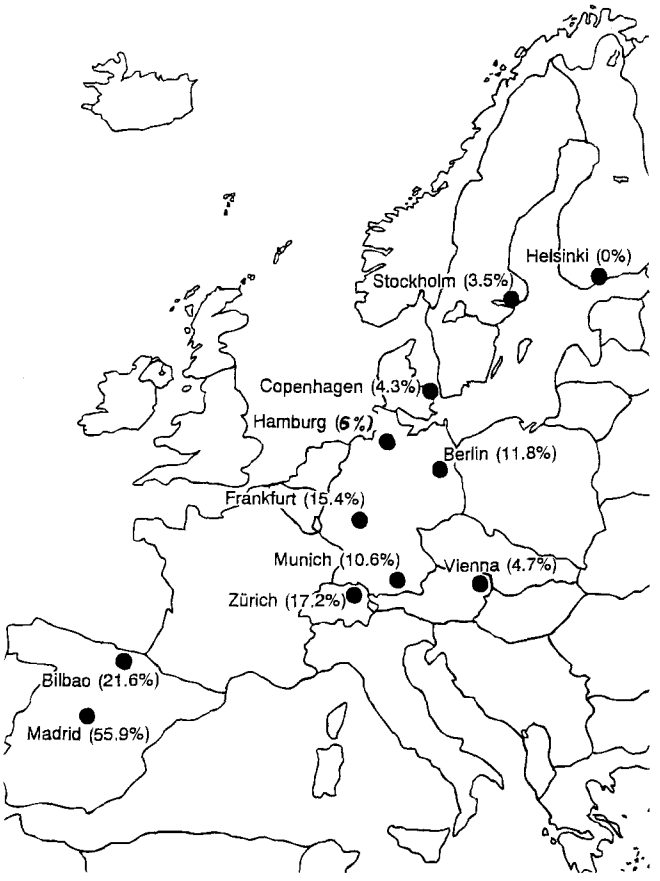

Fig. 1 HIV-1-prevalence among drug abuse-related fatalities of 1992 showing a north-south-cline

Table 1 HIV-1-prevalence among drug abuse-related fatalities of 1992 in major cities of northern, central and southern Europe; sex distribution of infected and non-infected IVDA

City	Number of drug deaths	Male	Female	HIV-1 positive	Male	Female	HIV-1 negative	Male	Female
Hamburg	151	126	25	9 (6%)	8	1	142	118	24
Berlin	110	92	18	13 (11.8%)	9	4	97	83	14
Frankfurt	162	128	34	25 (15.4%)	21	4	137	107	30
Munich	141	118	23	15 (10.6%)	9	6	126	109	17
Helsinki	12	12	0	0 (0%)	0	0	12	12	0
Stockholm	86	76	10	3 (3.5%)	3	0	83	73	10
Copenhagen	94	74	20	4 (4.3%)	4	0	90	70	20
Vienna	86	70	16	4 (4.7%)	4	0	82	66	16
Zürich	64	51	13	11 (17.2%)	9	2	53	42	11
Bilbao	37	34	3	8 (21.6%)	7	1	29	27	2
Madrid	111	96	15	62 (55.9%)	52	10	49	44	5
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Western blot confirmation in positive cases) have already been published [5].

The participating Institutes have not yet had a detailed discussion concerning the definition of drug abuse-related deaths [1, 6]. This means that the registration system in the different cities may be not uniform; conclusions have to be drawn carefully. The great majority of the drug abuse-related deaths were due to an overdose (mostly accidental).

A total of 4637 drug deaths since 1985 have been included in this multicenter study consisting of 3708 males (80%) and 929 females (20%); the distribution of the sexes was 4:1 men/women. Of these, 763 cases (16.5%) were HIV-positive: 558 males (15% of the male intravenous drug addicts [IVDA]), 205 females (22.1% of the female IVDA) indicating that females were relatively overrepresented (ratio 2.7:1 men/women).

There are striking regional differences in the HIV-1 prevalence among drug abuse-related deaths. In 1992 (n = 1054) the lowest rate of the major European cities was found in Helsinki (0%), the highest in Madrid (55.9%!) (see Table 1). The lowest rate in Germany was registered in Hamburg with 6%. In general the prevalence rates have slightly decreased in Germany during the last years and seem to be stabilizing at a level of about 8%. The situation in the other European metropoles is irregular and further developments must be observed before any conclusions can be drawn. There was a striking north-south-cline from 0% in Helsinki to 55.9% in Madrid (see Fig.1). Our data from drug abuse-related deaths correspond to the epidemiological findings in (living) drug addict populations of the European countries. The aim of our further cooperation and studies is a detailed description and interpretation of the regional differences and developments from the forensic medical point of view.

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