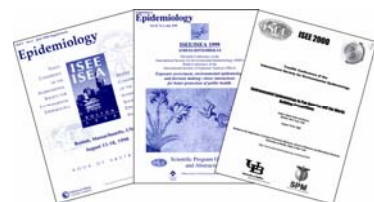




Review of SES, life-style and life-condition factors being investigated in the studies presented in the ISEE Conferences 1998-2000

Šlachťová H., Šplíchalová A.

Regional Institute of Hygiene, Ostrava, Czech Republic



Introduction

Socio-economic status (SES), as well as life-style and life-conditions, are the factors which cannot be ignored when providing an epidemiological research. A lot of epidemiological studies have found significant relationships with the SES (especially education) and health, life-style and life-conditions and health. The results of some studies confirm that low SES is in a significantly inverse correlation, e.g. with the prevalence of hypertension and lung cancer, higher cholesterol level, prevalence of obesity, an increase of the physician services use, and a decrease of the quality of health care. The lack of interest in participation and non-response of people with the low SES in health studies has led to an underrepresentation of this social class. It has also been confirmed that the low level of SES is related with the worse health (and self-rated health) and a lower level of well-being. From the above listed it is apparent that the life-style, the same as education and socio-economic status, significantly influence the health status of people, their subjective feeling of good health and well-being.

Objectives:

- to identify SES and life-style factors, which are of the highest interest in epidemiological studies being presented in the ISEE Conferences during the last 3 years
- to compare the proportion of particular factors in all SES and life-style factors being investigated
- to identify whether the factor was the aim of the study or a potential confounder
- to find out how the priority level of particular factors have been changed in the research during the last 3 years

Methods:

Using the ISEE proceedings we noticed all the factors such as smoking, type of heating, education, housing conditions, dietary habits etc., which were either the aim of the presented studies, the a-priori confounders or confounders resulted from the analysis of data. The identified factors were divided into 3 categories (grouped factors):

- socio-economic status (SES)
- life-style (with a sub-category of risk factors)
- housing/life conditions

It was also indicated whether the social factors were the a-priori aim of the study or were investigated as a potential confounder. The selected 3 categories were analysed in each year separately as well as differences between the years.

The data were analysed from the point of view of frequency, proportion and trends.

Results - All Factors

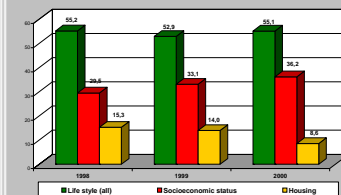
In total 1,550 abstracts were analysed; the total number of studies dealing with analysed issues was 359 (of that in 139 studies SES and life-style factors were the aim of the study).

We identified 21 different factors of the interest. In a lot of studies more factors were mentioned, therefore the total number of factors in all studies was 681.

The most frequently investigated factors were life-style ones (54.7 % of all factors), especially risk factors, namely smoking. The increasing interest was identified with SES factors investigation and the decreasing interest with housing in research during the last three years.

ISEE Conference Proceedings	1998	1999	2000	1998-2000
Total number of presentations	577	532	441	1 550
The analysed problems in %	23.05%	19.20%	28.00%	23.16%
The analysed problems in numbers	133	102	124	359

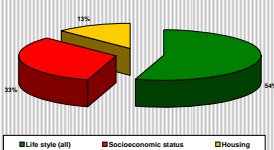
Proportion of grouped factors within years



Years	Factors being investigated in the ISEE studies	Aim	Confounder	Total	% of factors
1998-2000	Socioeconomic status	35	188	223	32.7
	Life style (all)	84	288	372	54.7
	Life style (all) without risk factors	55	208	263	38.8
	Risk factors of life style	29	80	109	15.9
1998	Total	139	542	681	100.0
	Socioeconomic status	13	79	92	13.5
	Life style (all)	28	139	167	24.5
	Housing	9	66	75	11.0
1999	Total	29	231	260	100.0
	Socioeconomic status	9	43	52	33.4
	Life style (all)	19	66	85	52.9
	Housing	1	22	23	14.4
2000	Total	39	127	167	100.0
	Socioeconomic status	18	48	66	39.5
	Life style (all)	18	61	79	47.3
	Housing	3	18	21	12.6

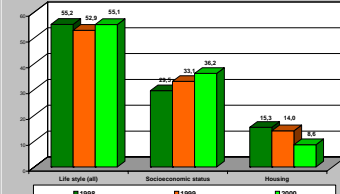
Aim of the studies	Number of studies	%
Sociological	23	6.4
Medical	270	75.2
Combination - Socio-medical	66	18.4
Total	359	100.0

ISEE 1998-2000 - Proportion of factors



Factors being investigated in the ISEE studies	Aim	Confounder	Total	% of factors
Socioeconomic status	35	188	223	32.7
Life style (all)	84	288	372	54.7
Life style factors (without risks)	55	199	254	37.3
Risk factors of life style	29	89	118	17.4
Housing	20	66	86	12.6
Total	139	542	681	100.0

Proportion of grouped factors in the years



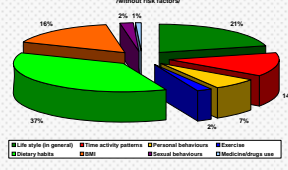
Life-style factors

Dietary habits (37.7%), life-style in general (21.0%) and body-mass index (15.9%) were the most frequently investigated factors of life-style in relationship with a health outcome. Out of the total life style factors being investigated in 77.4 % cases, these factors were thought as a potential confounder. As for risk factors of life style – mostly the environmental tobacco smoking (79.1%) and alcohol consumption (17.1%) were investigated.

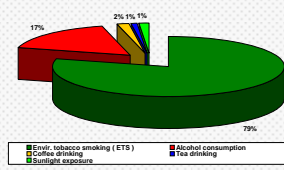
The comparison between the years – in 1999 the elevated interest in research of risk factors of life style (84.3%) was found comparing with the other years – where the life style risk factors made about 57%.

Type of factor	Factor in the aim of study	Factor in a confounder	Total number of factors in all studies	% of factors (out of total 681)
Lifestyle factors (all)	34	388	422	61.9
Lifestyle factors (without risks)	32	186	218	32.0
Life style in general	7	32	39	5.7
Time activity patterns	2	17	19	2.8
Personal behaviour	1	9	10	1.5
Physical activity	1	2	3	0.4
Dietary habits	29	32	61	8.9
BMII	1	31	32	4.7
Sexual practice	1	2	3	0.4
Drug use	1	1	2	0.3
Risk factors of lifestyle	22	182	204	30.0
Environmental tobacco smoking (active, passive)	49	136	185	27.2
Alcohol consumption	2	38	40	5.9
Coffee drinking	1	4	5	0.7
Tea drinking	1	2	3	0.4
Sunlight exposure	1	2	3	0.4

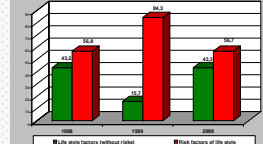
ISEE 1998-2000 - Proportion of Life Style Factors (without risk factors)



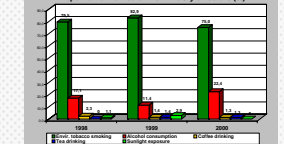
ISEE 1998-2000 - Proportion of Risk Factors in Life Style



Proportion of Risk Factors to the Other Life Style Factors



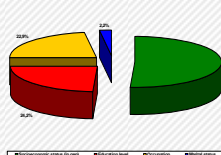
Proportion of Particular Risk Life Style Factors (%)



Socio-economic factors

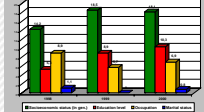
Among the SES factors predominating interest was focused on the SES factors in general (50.7%), less on the level of education (24.2%) and occupation (22.9%). During the last 3 years an increased interest has been found out with the education – it has risen from 5.3% to 10.3%.

Factors of Socioeconomic Status (1998-2000)

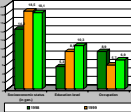


Type of factor	Factor in the aim of study	Factor in a confounder	Total number of SES factors in all studies	% of factors (out of total 681)
Socioeconomic status	35	188	223	32.7
Socioeconomic status - (in general)	13	100	113	16.6
Educational level	10	52	62	9.1
Occupation	2	48	50	7.3
Marital status	1	4	5	0.7

Proportion of particular SES factors in all SES factors (%)



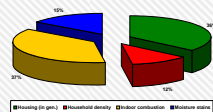
SES factors in proportion to all factors



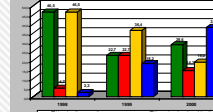
Housing conditions

The indoor combustion such as the type of heating, cooking etc. was a housing factor of the highest interest (37.2%). Another 15.0% of the investigated housing factors were moisture stains of moulds. Therefore 52.2% of the studied housing factors were the risks of housing. When looking at differences between the years, the interest in indoor combustion has decreased from 46.5% to 19.0%, while in moisture stains of moulds it has increased from 2.3% to 38.1%.

ISEE 1998-2000 - Proportion of Housing Factors



Proportion of Housing Factors in All Housing Factors (%)



Type of factor	Factor in the aim of study	Factor in a confounder	Total number of factors in all studies	% of factors (out of total 681)
Indoor combustion (type of heating, cooking)	30	32	62	9.1
Moisture stains of moulds	4	26	30	4.4
Marital status or marital	1	4	5	0.7

Conclusions:

The results of this review show that nearly a quarter of the epidemiological studies took into account life-style, SES or the housing factors as a potential confounder of health outcome. Social-science can help epidemiologists to understand better these circumstances and to identify social predictors of health outcomes or interpretation of the research results.

