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Attitudes of patients and staff towards tobacco smoking in hospital

Since 1<sup>st</sup> May 1996 "The Act on Health Protection Against the Consequences of Using Tobacco and Its Products" has been in force in Poland. Article 5 of this act forbids smoking tobacco products on the premises of health care institutions, outside rooms specially separated and appropriately adapted to serve this purpose. In special cases, the attending physician can let the patient being treated in a health care institution depart from the ban on smoking tobacco products. (4)

The aim of this paper was to establish the frequency and intensity of smoking by the patients and hospital staff and to define the attitudes of the polled persons towards smoking tobacco on the premises of the hospital and their opinions about the limitations in force.

## MATERIAL

The aim of this paper was to establish the frequency and intensity of smoking by the patients and hospital staff and to define the attitudes of the polled persons towards smoking tobacco on the premises of the hospital and their opinions about the limitations in force.

The examination in the form of a distributed questionnaire, comprised 101 patients and 127 staff members of Henryk Klimontowicz Specialist Hospital in Gorlice (province of Małopolska /Little Poland/). Both mobile and bed-ridden patients participated in the study. The personnel was represented by physicians, nurses, ward attendants, psychologists, secretaries, Medical School students doing their apprenticeships on the premises of the hospital, employees of technical and administrative departments. Table 1 shows the hospital administrative units in which the study was carried out.

| Table 1. Number of patients and staff members participating in the study within particular structural |  |  |  |  |
|---|--|--|--|--|
| units of the hospital   |  |  |  |  |

| No | Particular structural units of the hospital | Patients | Staff<br>members | Total |
|----|---|----------|------------------|-------|
| 1  | Ward of General Surgery                     | 15       | 20               | 35    |
| 2  | Ward of Internal Diseases                   | 21       | 25               | 46    |
| 3  | Laryngological Ward                         | 10       | 6                | 16    |
| 4  | Ophthalmologic Ward                         | 0        | 5                | 5     |
| 5  | Neurological Ward                           | 15       | 10               | 25    |
| 6  | Psychiatric Ward                            | 6        | 18               | 24    |

| 7  | Ward of Therapeutic Rehabilitation        | 19   | 4  | 23            |
|----|---|--|--|---------------|
| 8  | Geriatric Ward                            | 15   | 13   | 28            |
| 9  | Orthopedic Ward                           | 0  | 9  | 9             |
| 10 | Administrative and Economic<br>Department | 0  | 17   | 17            |
|    | Total                                     | 101<br>(44.3% of<br>the general<br>examined<br>population) | 127<br>(55.7% of<br>the general<br>examined<br>population) | 228<br>(100%) |

The age of the examined persons ranged from 18 to 80 years, arithmetic mean was 44.24 years, standard deviation equalled 15.59 years. 66.2% women and 33.8% men took part in the study. 50.4% of the polled persons permanently resided in the country, 49.6% came from urban areas. People with secondary education prevailed in the examined group (50% of the examined group), persons with vocational education constituted 20.2% of the general examined population, 19.7% were with university education, and 10.1% – with elementary education.

### METHODS

The study was carried out by means of a diagnostic sounding with the use of a distributed questionnaire technique in the period from September 2002 to July 2003. The questionnaire contained 38 questions, including closed, open half-open and multiple-choice questions. In our poll we used the Fagerstrom test, which determines the type of addiction to smoking tobacco (physical or psychological), and which was completed by tobacco-smokers (3). The statistical analysis was carried out by means of the Chi<sup>2</sup> test for independence, assuming the significance level of 0.05. The obtained results were analyzed according to the sex of the polled persons and their functions in the premises of the hospital (patient, staff member).

#### **RESULTS AND DISCUSSION**

Diagram 1 presents the spread of nicotinism among the patients and hospital staff. As it is revealed by the diagram, 15.8% of the examined persons smoked cigarettes every day, 7.5% smoked occasionally, i.e. in total 23.2% of the polled persons smoked, 21.1% of them were former smokers, and 55.7% were those who never smoked.

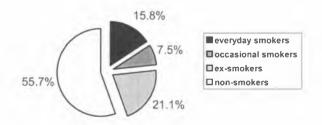


Diagram 1. Smoking cigarettes in the examined group (jointly: patients and staff members)

The duration of tobacco addiction in everyday smokers ranged from 7 to 60 years and equalled 22.6 years on average. The percentage of everyday smokers was significantly higher among the staff members (18.1%) than among the patients (13.9%, p < 0.05). Men smoked cigarettes every day significantly more frequently than women (men – 20.8%, women – 13.2%, p < 0.001).

The duration of occasional smoking ranged from 1 to 35 years, the arithmetic mean: 13.8 years. The duration of tobacco addiction in former smokers ranged from half a year to 40 years, arithmetic mean: 14.1. The former smokers abstained from nicotine for the period of one month to 40 years (arithmetic mean 9.3 years).

Using the Fagerstrom test we defined the kind of nicotine addiction for the present tobacco smokers. 75.9% of smokers were weakly, psychically dependent on nicotine, 13% of smokers were strongly, physically dependent on nicotine (in the Fagerstrom test they obtained the result of 7 or more points), 11% of the cigarette smokers disregarded the Fagerstrom test when filling in the questionnaire.

In our study the percentage of current tobacco smokers equalled 23.2% and was significantly lower than in a similar study comprising the patients and personnel of the hospital in Lambeth, Great Britain in the year 1975, where it was 41% (2). Diagram 2 illustrates the percentage of smokers in various subgroups of the polled persons.

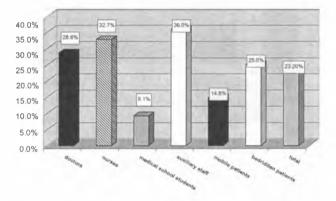


Diagram 2. Percentage of smokers (jointly: every day and occasional) in various polled subgroups

The highest percentage of smokers was found among the auxiliary personnel (36%) and nurses (32.7%), the lowest – among the medical school students (9.1%). 28.6% physicians working in the hospital admitted to smoking tobacco, while the British study revealed that it was the physicians who smoked most often (57% of physicians smoked) (2). The percentage of smokers among physicians working in a German university hospital, according to the studies of Albein and Jossen, equalled 52% among men performing this profession and 36% among women-physicians (1).

Half of the polled persons were exposed to passive cigarette smoking (10.5% often and 39.5% sporadically). Members of the staff declared being exposed to passive smoking on the premises of the hospital significantly more often than the patients (p < 0.01).

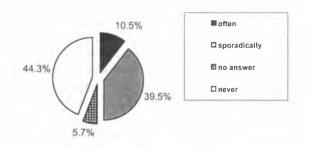


Diagram 3. Exposure to passive smoking on the premises of the hospital

Another diagram presents the answers of tobacco smokers to the question: "Do you smoke cigarettes when you are on the premises of the hospital?" (as 100% we assumed 54 polled persons who admitted to constant or sporadic cigarette smoking).

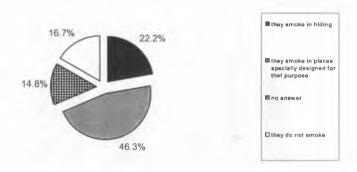


Diagram 4. Behaviour of smokers in hospital

It seems quite a worrying fact that as high a percentage of smokers as 22.2% (both the personnel and the patients) also smoke in hiding, outside the places designed for that purpose. 57.4% of cigarette smokers claimed that they were trying to cut down on smoking, because they were on the premises of a hospital, but 13% of smokers admitted that they could not curtail smoking cigarettes.

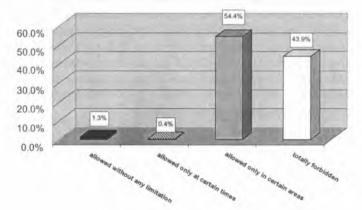


Diagram 5. Opinions of the examined persons on smoking tobacco by the staff on the premises of the hospital

More than half of the polled population were of the opinion that smoking tobacco by the hospital staff should be allowed in specified places only, 43.9% of the polled persons were for absolute ban on smoking, and only 1.3% believed that smoking tobacco by the hospital staff should be allowed without any limitations. The patients, significantly more often (54.5%) than the staff (35.4%), opted for absolute ban on smoking tobacco by the personnel in the hospital area (p < 0.01).

The psychiatric ward of the Specialist Hospital in Gorlice is the only ward where smoking tobacco by the patients is officially permitted. They have a specially designed and marked place, where they can smoke. 42.6% of the polled patients and 66.1% of the staff members agreed with this decision. The statistical analysis revealed that the personnel significantly more often (p < 0.01) expressed their support for such an ordinance.

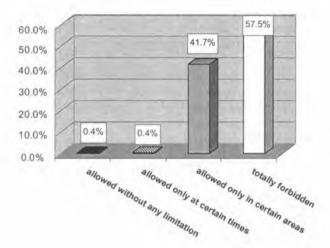


Diagram 6. Opinions of the examined persons on smoking tobacco by patients on the hospital premises

The polled persons were even stricter in their approach towards smoking tobacco by patients on the premises of the hospital; 57.5% of the respondents were for absolute ban on smoking, and only 41.7% – for smoking being allowed exclusively in the specially designed places.

However, the attitudes of the patients and staff of the hospital in Lambeth in Great Britain were definitely more liberal. Only 18% of the polled persons were for absolute ban on smoking on the premises of the hospital, and 18% opted for unlimited permission for smoking there (2). In the German university hospital 20% of the polled hospital staff members supported absolute ban on smoking and 7% were against any limitations (1). The above-mentioned differences may result from more than 25-year time difference between the date of these studies and our study. During that time the attitudes of the inhabitants of Europe towards nicotinism became definitely more negative. In Poland, which in the 70s of the 20<sup>th</sup> century was one of the world's leading countries in cigarette consumption per head, we are now observing a systematic decrease of the percentage of everyday cigarette smokers. The highest frequency of smoking in the Polish population was reported in the year 1982 and since that time its decrease has been observed, especially among better-educated men (5).

Another diagram illustrates the views of the polled persons on the ban on selling cigarettes in kiosks situated on the premises of the hospital, being presently in force.



Diagram 7. Opinions of the examined persons on the ban on selling cigarettes in kiosks situated on the premises of the hospital

More than two thirds of the polled persons supported the ban on selling cigarettes in kiosks situated in the area of the hospital. Against such a ban was 14.0 % of the polled persons. They were of the opinion that such a ban limits the rights and freedom of smokers and is a sign of their discrimination. Women were against such a ban significantly more often (p < 0.01) and the hospital personnel more often than the patients (p < 0.05).

### CONCLUSIONS

1. 13.9% of the polled patients of the Specialist Hospital in Gorlice smoked cigarettes every day. The percentage of everyday smokers among the staff of this hospital was significantly higher and equalled 18.1%.

2. Half of the polled persons were exposed to passive smoking on the premises of the hospital, the staff more than the patients.

3. The patients supported the restrictions concerning smoking on the premises of the hospital to a greater extent than the personnel.

4. Most of the smokers claimed that they were trying to cut down on smoking on the premises of the hospital. Despite these declarations, tobacco smokers smoked cigarettes in the area of the hospital anyway, and one fifth of the smokers smoked also outside the places designed for that purpose.

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### SUMMARY

The aim of this paper was to establish the frequency and intensity of smoking by the patients and hospital staff and to define the attitudes of the polled persons towards smoking tobacco on the premises of the hospital and their opinions about the limitations in force. The examination in the form of a distributed questionnaire, comprised 101 patients and 127 staff members of Henryk Klimontowicz Specialist Hospital in Gorlice (province of Małopolska /Little Poland/). Both mobile and bed-ridden patients participated in the study. The personnel was represented by physicians, nurses, ward attendants, psychologists, secretaries, Medical University students doing their apprenticeships on the premises of the hospital, employees of technical and administrative departments. The study was carried out by means of a diagnostic sounding with the use of a distributed questionnaire technique in the period from September 2002 to July 2003. The questionnaire contained 38 questions, including closed, open, half--open and multiple-choice questions. In our poll we used the Fagerstrom test, which determined the type of addiction to smoking tobacco (physical or psychological), and which was completed by tobacco--smokers. The statistical analysis was carried out by means of the Chi<sup>2</sup> test for independence, assuming the significance level of 0.05. The obtained results were analyzed according to the sex of the polled persons and their functions in the premises of the hospital (patient, staff member). The results of the obtained analysis show that 13.9% of the polled patients of the Specialist Hospital in Gorlice smoked cigarettes every day. The percentage of everyday smokers among the staff of this hospital was significantly higher and equalled 18.1%. Half of the polled persons were exposed to passive smoking on the premises of the hospital, the staff more than the patients. The patients supported the restrictions concerning smoking on the premises of the hospital to a greater extent than the personnel. Most of the smokers claimed that they were trying to cut down on smoking on the premises of the hospital. Despite these declarations, tobacco-smokers smoked cigarettes in the area of the hospital anyway, and one fifth of the smokers smoked also outside the places designed for that purpose.

#### Postawy pacjentów i personelu wobec palenia tytoniu w szpitalu

Celem pracy było ustalenie częstości i intensywności palenia tytoniu przez pacjentów i personel szpitala, a także określenie postaw badanych wobec palenia tytoniu na terenie szpitala i stosunku badanych do obowiązujących ograniczeń. Badaniem w formie rozdawanej ankiety objęto 101 pacjentów i 127 osób personelu Szpitala Specjalistycznego im. Henryka Klimontowicza w Gorlicach (województwo małopolskie). W badaniach uczestniczyli zarówno pacjenci chodzacy, jak i stale leżący. Personel był reprezentowany przez lekarzy, pielęgniarki, salowe, psychologów, sekretarki, uczniów Studium Medycznego odbywających praktyki na terenie szpitala, pracowników działu technicznego i administracyjnego. Badanie zrealizowano metodą sondażu diagnostycznego, techniką ankiety rozdawanej w okresie od września 2002 r. do lipca 2003 r. W ankiecie wykorzystano test Fagerstroma, określający rodzaj uzależnienia od palenia tytoniu (fizyczne czy psychologiczne), który był wypełniany przez palaczy tytoniu. Analizę statystyczną przeprowadzono za pomocą testu Chi<sup>2</sup> na niezależność, przyjmując poziom istotności 0,05. Otrzymane wyniki analizowano w zależności od płci ankietowanych i funkcji pełnionej w szpitalu (pacjent, personel). Wyniki przeprowadzonej analizy świadczą o tym, że 13,9% badanych pacjentów Szpitala Specjalistycznego w Gorlicach paliło codziennie papierosy. Odsetek codziennych palaczy wśród personelu tego szpitala był znamiennie wyższy i wynosił 18,1%. Połowa badanych była narażona na palenie bierne na terenie szpitala, personel bardziej niż pacjenci. Pacjenci w większym stopniu niż personel popierali ograniczenia palenia tytoniu na terenie szpitala. Większość palaczy twierdziła, że stara się ograniczyć palenie na terenie szpitala. Mimo tych deklaracji palili papierosy przebywając w jego obrębie, w tym jedna piąta palaczy paliła także poza wyznaczonymi do tego celu miejscami.