

**SIDE EFFECTS TO THE HOSPITAL
EMPLOYEES DURING THE USE OF
DISINFECTANTS AND ANTISEPTICS
IN THE CENTRAL STERILIZATION
SERVICE DEPARTMENTS**

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AIM OF THE STUDY

- **The investigation and documentation of the health problems that can be caused to the CSSD`s staff by the extensive but necessary use of:**
 - **Detergents**
 - **Disinfectants**
 - **Antiseptics**
- during their work**

IDENTITY OF THE STUDY

Sample 111 employees from

- **18 large Hospital Units in Attica-Greece**
- **Duration: January to June of 2007**
- **Use of questionnaire consisted of 109 questions of both open and closed type as well as a personal interview.**

Fields of questionnaire:

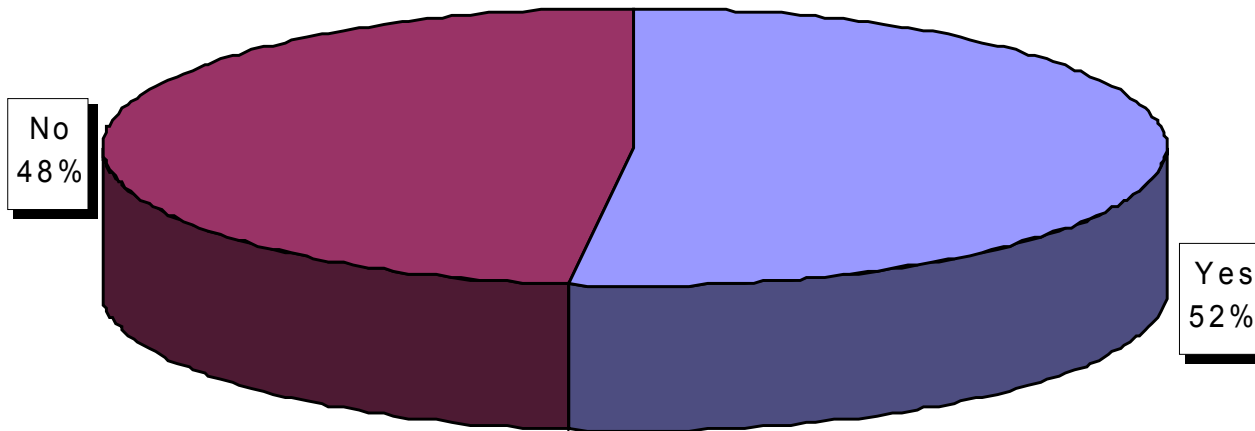
- **Demographic data**
- **Investigation of the employment**
- **Investigation of the contact and expose in surgical instruments disinfectants**
- **Investigation of the musculoskeletal burden by the use of surgical instrument disinfectants during manual or automatic cleaning**
- **Investigation of contact and exposure in hand antiseptic**

DEMOGRAPHIC DATA

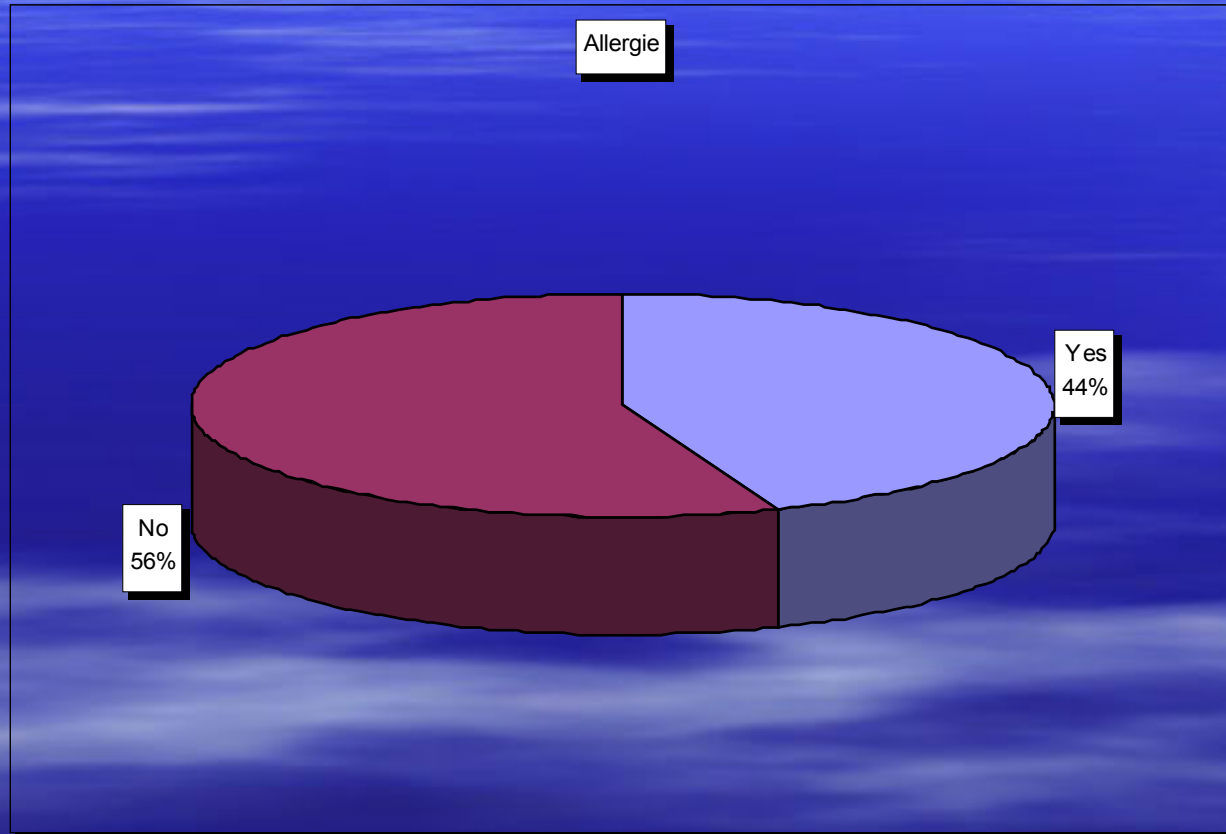
- **Women (8.65%)**
- **Mean age: 39 years**
- **High school graduates (32.4%) and technological education institute graduates (29.7%)**
- **Hired as unspecialized personnel (53.9%)**
- **Adoption of a healthy behavior in their life style such as stop smoking, exercise, diet (68.5%)**

SMOKING

Smoking



ALLERGIC

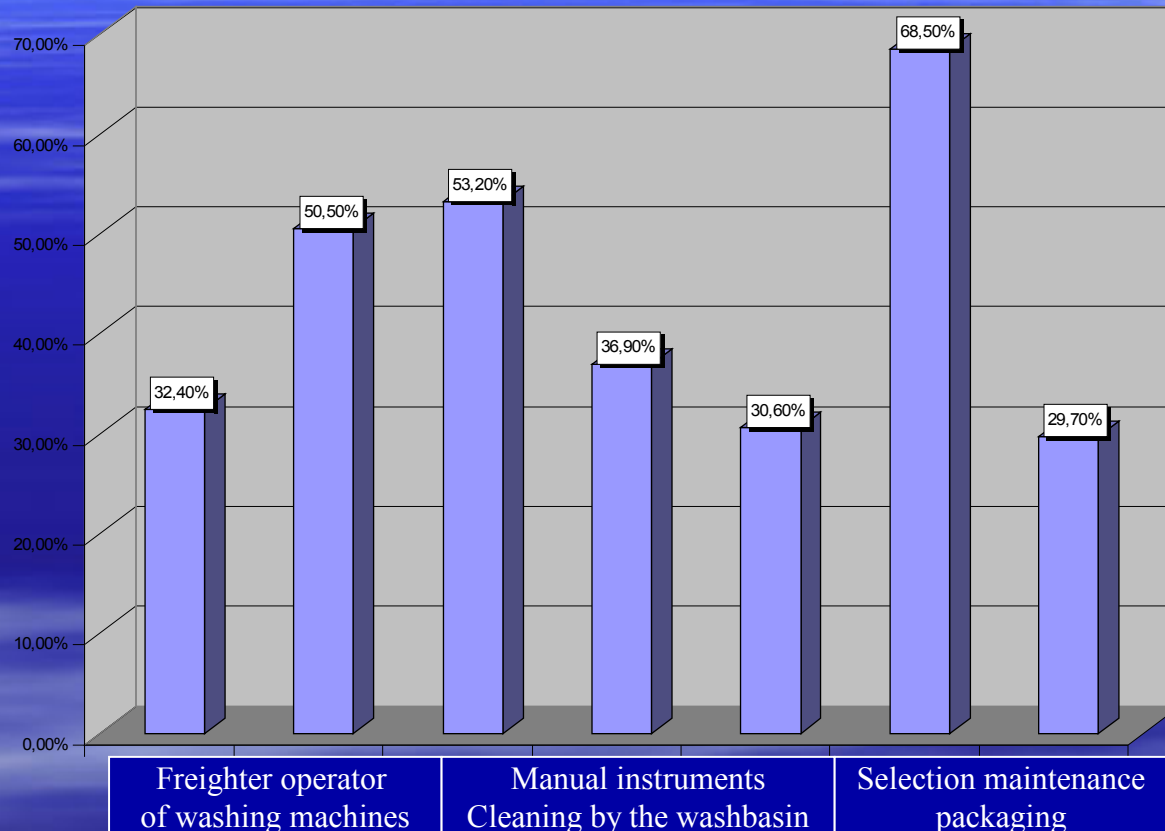


38% from the allergic, declare allergic especially in disinfectants

DECLARED SYMPTOMS

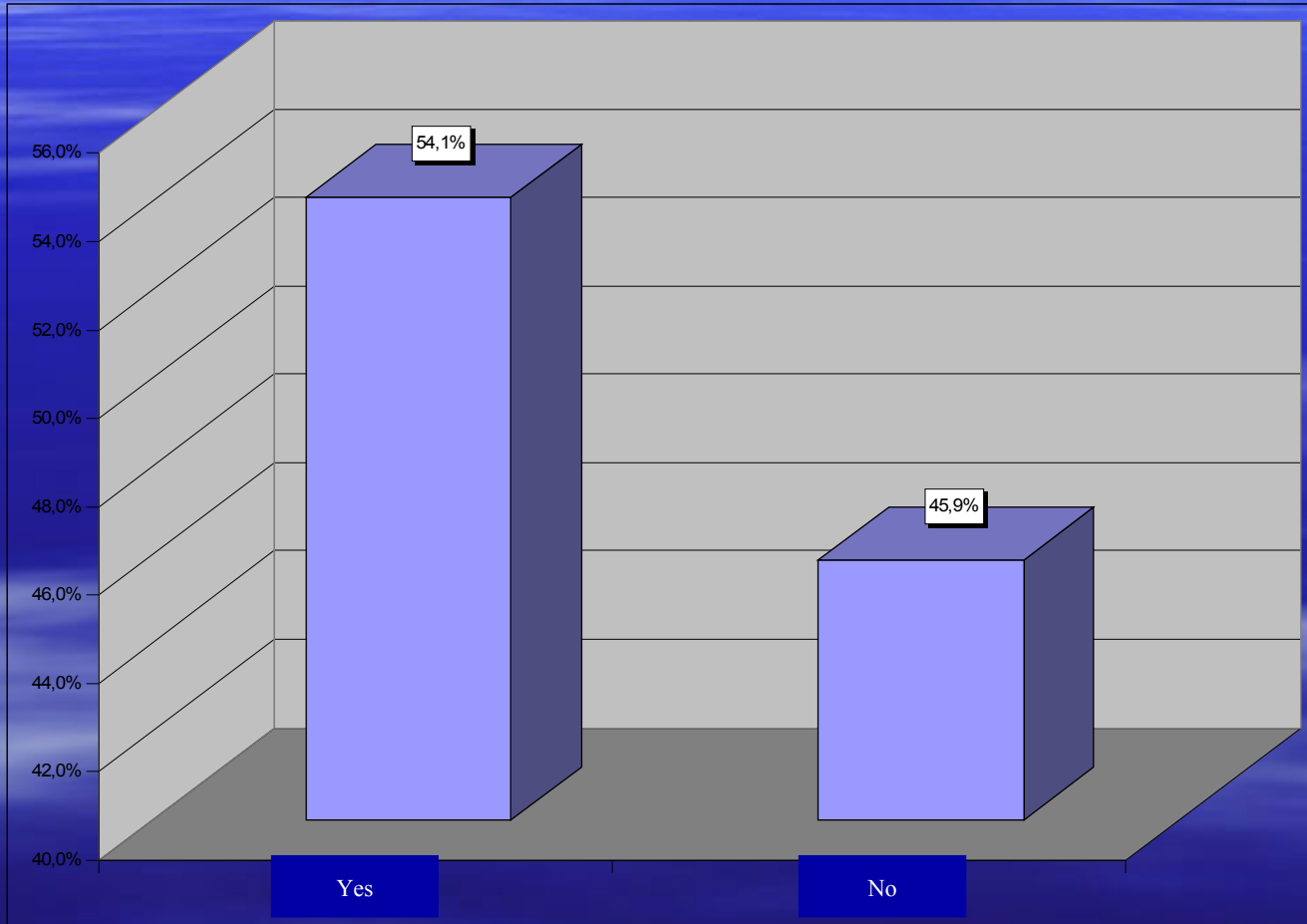
- **Suffer of bronchial asthma (26,1%) and thyroid illness (28,8%).**
- **Present migraines(26,1%).**
- **Complain of dermal illness(21,6%).**

USUAL EMPLOYMENT

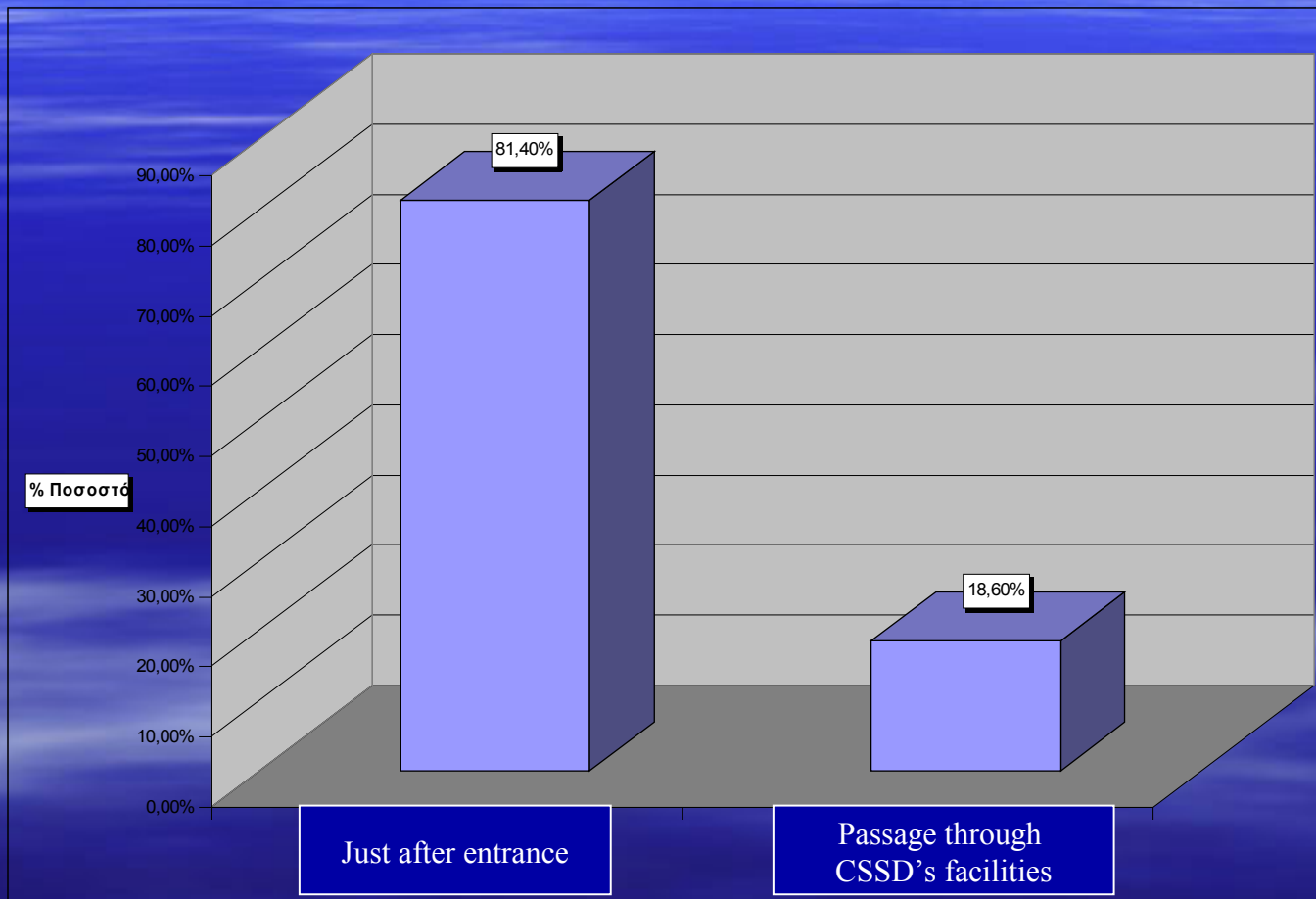


Deal with multitasking during their working hours.

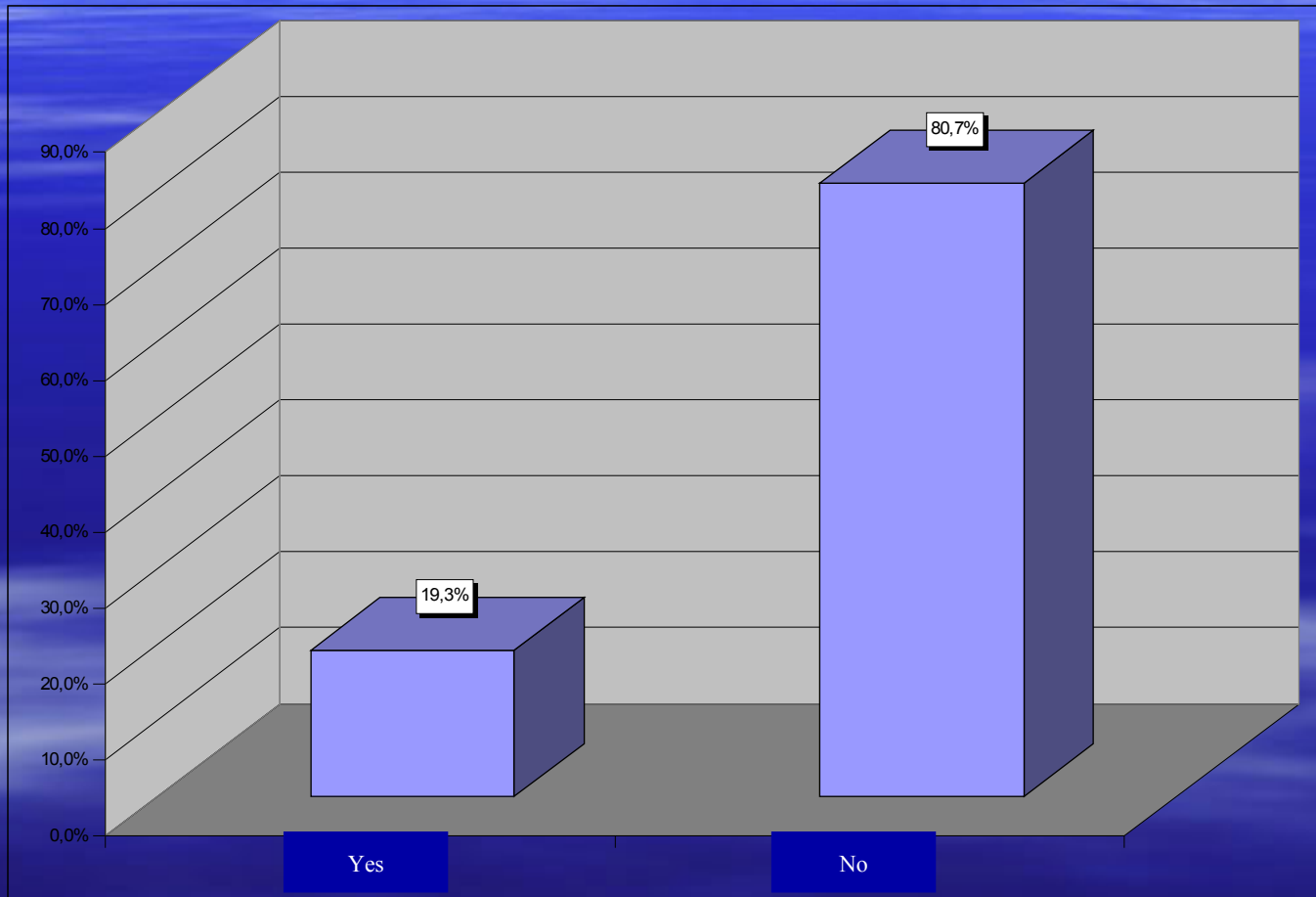
CSSD WITH A DESIGNED PLACE FOR PREPARING DISINFECTANTS



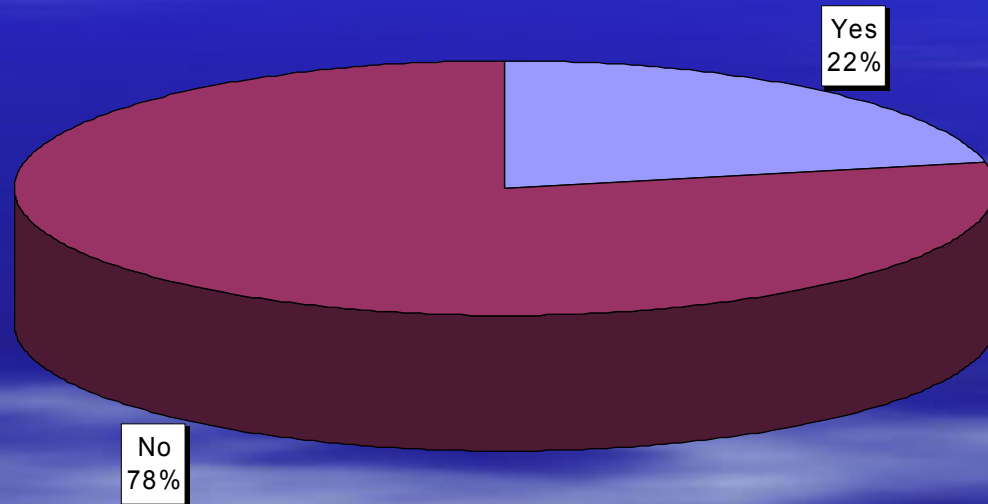
PLACEMENT OF THE LOCKER ROOMS



MIXING OF DISINFECTANTS



AWARENESS OF SAFETY DATA SHEETS BY THE PERSONNEL

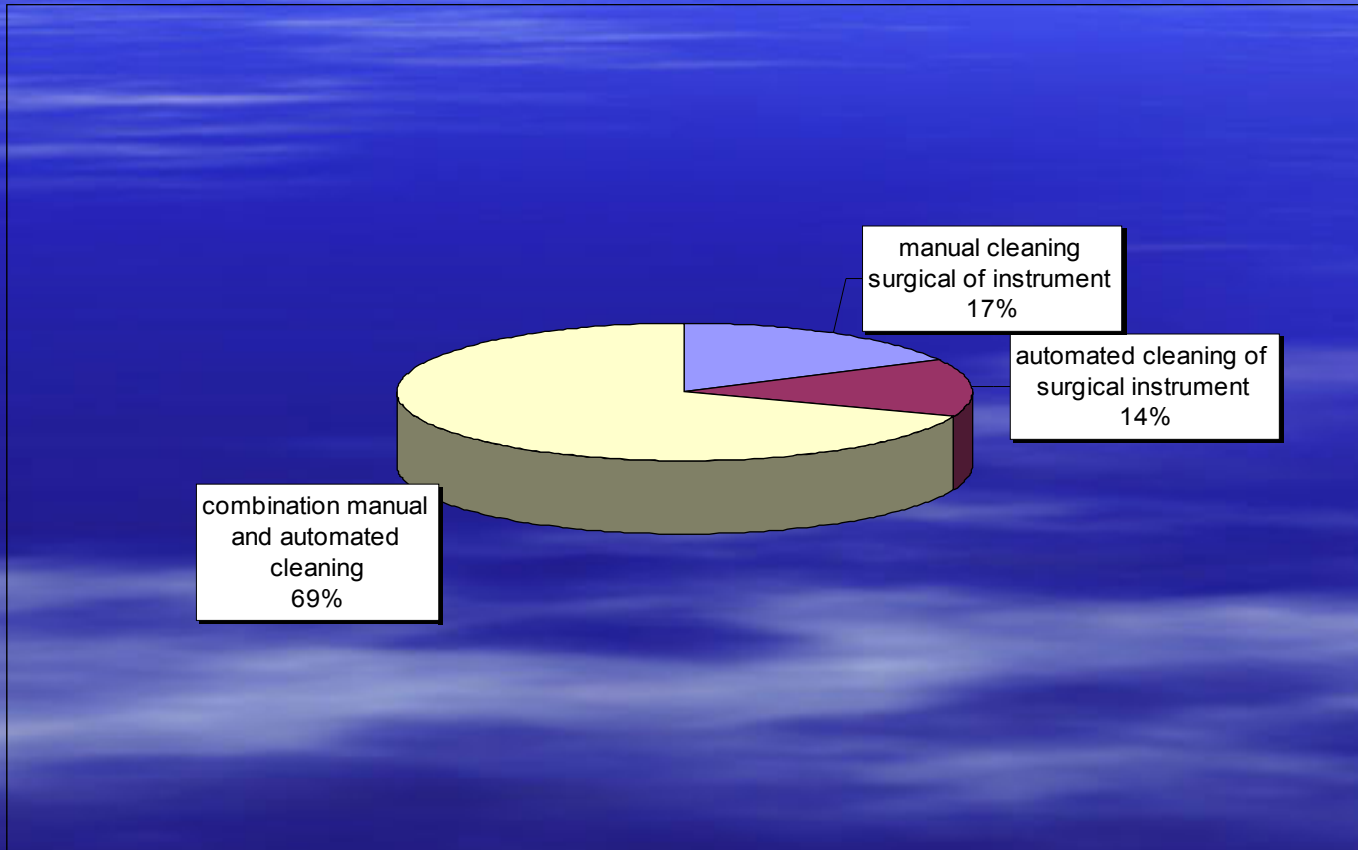


**USE OF PERSONAL PROTECTION MEANS
DURING THE SURFACE DISINFECTION.**

- **Gloves 94,2%**
- **Robe 16,3%**
- **Mask 36,5%**
- **Cap 1,9%**
- **Glasses 3,8%**

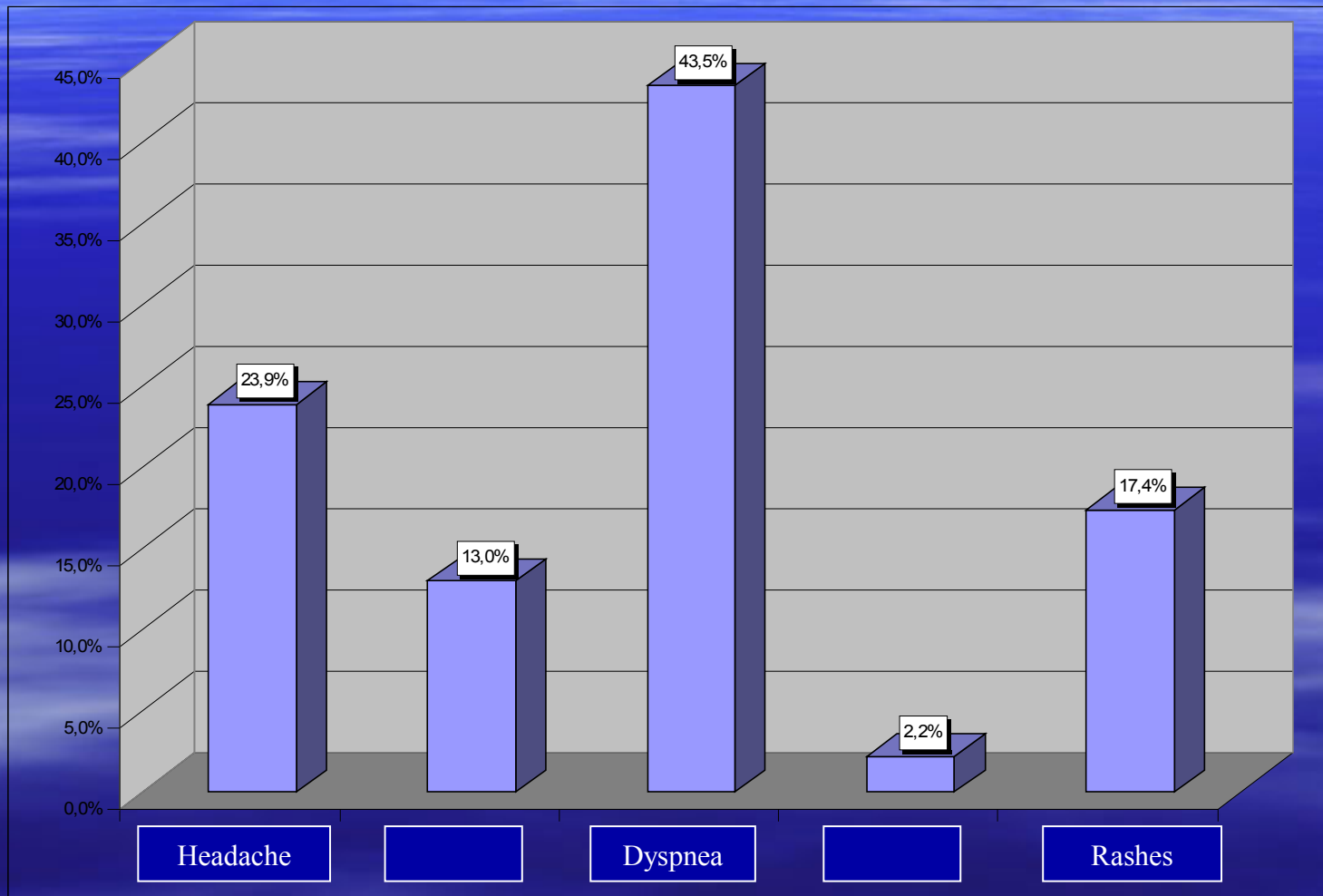
After surface disinfecting 30,6% has a headache.

**PARTICIPATION IN TESTING OF EVERY NEW
DISINFECTANT IS OFFERED TO THE HOSPITAL**

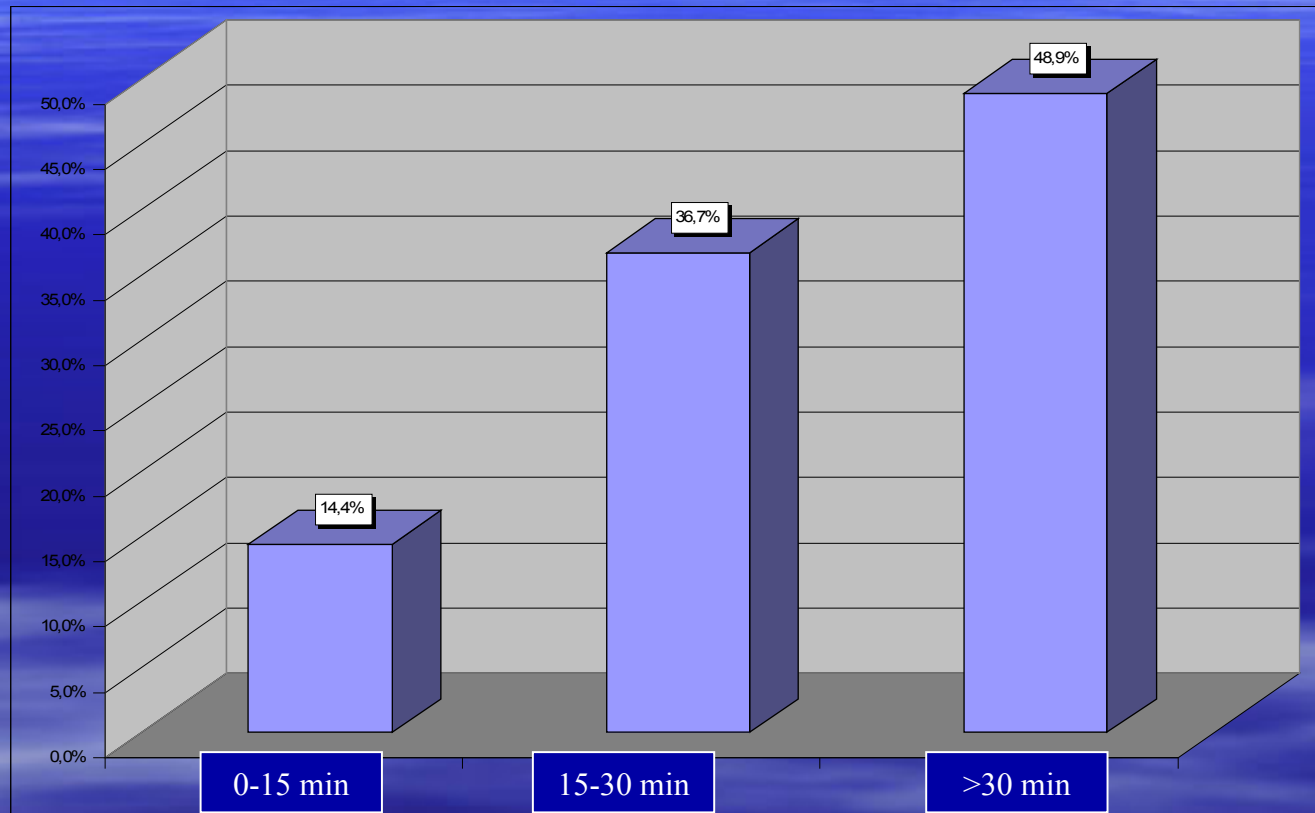


70,3% of the employees take part in testing of every new product is offered to the hospital by the companies

SIDE EFFECTS DURING THE TESTING OF THE NEW DISINFECTANTS



TOTAL TIME OF PARTICIPATION IN MANUAL CLEANING FOR AN EMPLOYEE



48,9% of the employees participate to manual cleaning of surgical instruments for a period of 30 minutes and more, at least 5-10 times a day.

SIDE EFFECTS DURING CLEANING OF SURGICAL INSTRUMENTS

- **Headache (44%)**
- **Rashes (16%)**
- **Dyspnea (10%)**
- **Eye irritation (12%)**

USE OF HAND ANTISEPTICS PER DAY

- **65% of employees uses hand antiseptics more than 10 times a day.**
- **Side effects like xerosis and hand irritation has been developed (54,1%).**

SAME DISINFECTANT AT HOME AND AT WORK

- **86,5% of the staff uses the same disinfectant (chlorine) at home as well as at work many times a day.**

CONCLUSIONS

- **The employees are not well informed and trained in the field of the safe use of chemical substances.**
- **During their working hours, multiple exposure conditions and side – effects are noted, while at the same time lack of infrastructure and inadequate management, exacerbate the problem.**
- **It is imperative to use measures of precaution and continuous training of the employees for the correct use of the means of personal protection.**

Thank you