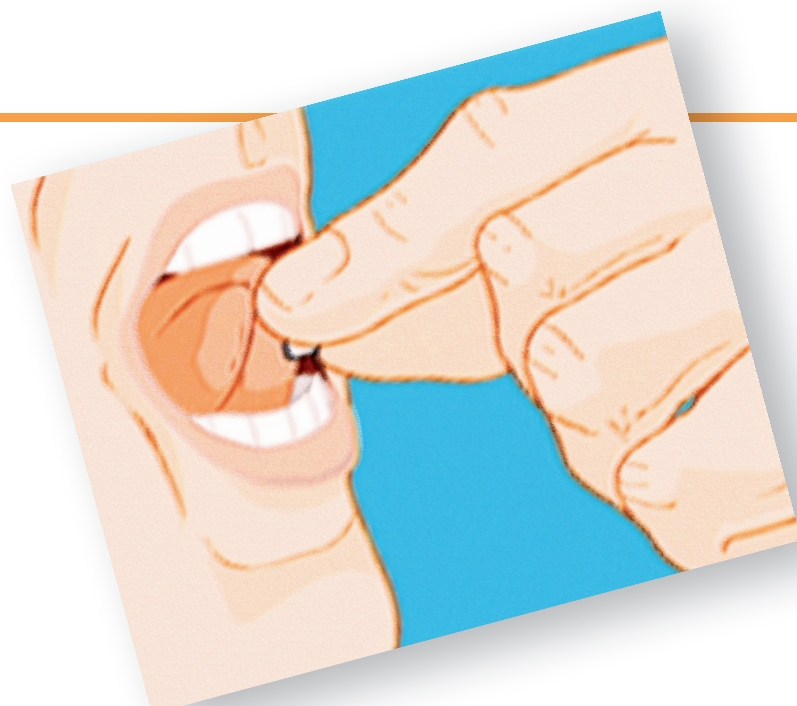


A SURVEY ON PATIENTS COMPLIANCE WITH NITROGLICERIN DOSAGE FORM

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Purpose No adherence to medications has been documented to occur in >60% of cardiovascular patients. Patient non-compliance is a major medical problem. While studies showed a wide variability in the factors related to poor adherence to the prescribed medicines, little attention was given to the preparation itself. Preferences and perceptions toward a particular dosage form (DF) play a crucial role.

The study was undertaken to investigate the most preferred nitroglycerin (NTG) dosage form among spray, tablets, drops, and soft gels.

Methods A cross-sectional study was conducted to survey general physicians and cardiologists in Riga, Latvia. Data was collected by interview and analyzed using SPSS 20.0. Multiple logistic regression analysis and Chi-square tests were used at alpha level = 0.05. The participants of the survey answered certain questions about their outpatients with stable angina pectoris. The questionnaire encompassed: preferable DF (spray, tablets, drops, and soft gels), possible adverse effects (if any) in every DF, therapeutic benefits assessment of the DF (effective, fast acting, safe, and high in quality, easy to use/to store) using four-point Likert-type scale anchored by 1 = strongly agree to 4 = strongly disagree. The study protocol, the agreement and participation protocols answer to Declaration of Helsinki of humanity in medicine and were approved by the Commission on Ethics of Riga Stradins, Latvia. Conflict of interests is absent.

Results A total of 35 questionnaires were processed, 78.7% of participants surveys stated that no adherence to NTG treatment is often, 62.3% of participants surveyed indicated that changes should be made to increase compliance. Of all respondents, 52.9 % reported soft gels as preferable in their patients; this preference varied significantly with a number of socio- demographic factors. Such characteristic as fast/easy dissolving (not to be chewed/swallowed) was the main issue, which resulted in preferences for a particular form. Multiple logistic regression analysis indicated that age, sublingual dissolving, and inconspicuous use were significant predictors of capsule preferences. Spray use failed the issue of inconspicuous.

Conclusions The patient-centered approach places the patient at the center of the treatment. The physician should accept the fact that the patient may be noncompliant. Rather, the physician must talk with the patient to understand the reasons for noncompliance. Preferences may influence response to the treatment, efforts are worthwhile by the prescribers and medicines' manufactures to understand consumers' preferences of a particular dosage form in order to achieve successful therapy outcomes.

Nitroglycerine (NTG) Survey

1. Do you recommend NTG as antianginal drug to the patients?
2. Have the patients complained about flushing during NTG use?
3. Have the patients complained about lightheadedness (dizziness) during NTG use?
4. Have the patients complained about headache during NTG use?
5. Have the patients complained about accelerated heart beats (palpitations, tachycardia) during NTG use?
6. Have you ever removed NTG because of side effect?
7. What do you recommend usually in case of side (adverse) effects to the patients?
8. Whether you guess it would be necessary to use some other drug to reduce NTG side effects? Is such preparation strongly wanted?
9. Would you recommend "advanced NTG" (=NTG with no side effects) to the patients even in case it would be 20% more expensive?
10. Do you prescribe NTG of the certain dosage (patches, capsules, tablets, ointment, or spray)?
11. Have you prescribed NTG -spray? How often?
12. Have you noticed the most preferred form of NTG?



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