

THE EVALUATION OF THE USE OF PREVENTIVE HEALTH SERVICES BY THE POPULATION IN THE DEJ-GHERLA AREA

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Abstract: Introduction: The current main problem in the health reform refers to the directions in which the funds are directed. The tendency is that of reorientation towards preventive medicine, because prophylaxis can diminish the costs of health. The present study aims at assessing the way in which prevention programmes are currently used in Dej, Gherla and neighbouring communities. Material and methods: A questionnaire that refers to the use of some preventive medical services has been applied on 387 persons in the studied area. Results and discussions: The study highlights the low use of prostate cancer screening investigations for men, as well as the investigations for the early detection of cervical and breast cancer for women. Also, a very low percentage of people have had the influenza vaccination. Conclusions: The study shows an insufficient implementation of preventive medicine and its low efficiency in the studied community.

Cuvinte cheie: servicii medicale preventive, comportamente pentru sănătate, promovarea sănătății

Rezumat: Introducere: Principala problemă care se pune la ora actuală în cadrul reformei sanitare se referă la direcțiile către care sunt dirijate fondurile. Tendința este de reorientare către medicina preventivă deoarece profilaxia poate diminua costurile din sănătate. Studiul de față dorește să evalueze modul în care sunt utilizate în prezent programele de prevenție în comunitatea din Dej, Gherla și localitățile învecinate. Material și metodă: S-a aplicat un chestionar referitor la utilizarea unor servicii medicale preventive la un număr de 387 locuitori din zona studiată. Rezultate și discuții: Studiul evidențiază utilizarea scăzută a investigațiilor de depistare a cancerului prostatic la bărbați, la fel ca și a investigațiilor de depistare precoce a cancerului de col uterin și a celui mamar în cazul femeilor. De asemenea, un procent foarte scăzut de persoane au efectuat vaccinarea antigripală. Concluzii: Studiul arată o insuficientă implementare a medicinei preventive și o eficiență scăzută a acesteia în comunitatea studiată.

INTRODUCTION

According to the Dever's model (1,2), there are various types of determining factors of the health state, meaning endogenous factors (sex, age, biological characteristics etc.), environmental factors (physical, chemical, geo-climatic, biological, social) and behavioural factors (lifestyle, attitudes, habits).

There are numerous studies that show that the frequency of hospitalization use, of the units receiving emergencies and of the physician visits of patients with chronic diseases vary a lot from region to region and from one hospital to the other (3,4,5) because, besides the epidemiological factors, there are other important predictors for the use of health services, which implicitly influence the costs of these services in a certain population. Such factors are: perceived health status, life quality regarding health, demographic characteristics, socio-economic factors etc.

Prevention is the main way of diminishing health costs. Because the resources given to the public health system are not sufficient, the recent policy of the Ministry of Health targets the change of the population health approach perspective from treating the disease to preventing it.

Sure enough, this approach implies, in addition to the development of preventive programmes, a change in the mentality of the population, which should be actively involved

in enrolling in a prevention programme, predicting the saving of important resources from the public health budget which could be orientated towards the underfinanced areas in the system.

This study aims at identifying the way in which some preventive health services are used in the community from the Dej-Gherla area, to have a picture of how the population responds to the changes in the healthcare policies.

METHODS

The studied population is represented by the inhabitants of the 2nd territorial planning unit of Cluj county (6), - Dej, Gherla and the neighbouring areas, with a total of 105.987 inhabitants of the county (15,55%), out of which 56,65% in the urban area and 43,35% in the rural area.

The data has been collected transversely, by applying a structured questionnaire in the first semester of 2013, which contained questions referring to conducting investigations for the early detection of prostate cancer (PSA determination and prostatic exam) for men and cervical cancer (PAP-testing) and breast cancer (mammography and breast self-examination) for women, and for both genders conducting influenza vaccines.

Selection of study participants:

The criteria of inclusion are: inhabitants of Cluj County, from the 2nd territorial planning unit, aged over 20, randomly selected from the general population and who gave

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their consent to participate in the study by completing the questionnaire used in the research. People diagnosed with mental retardation, dementia or psychosis in flare have been excluded from the research because of their lack of judgment and inability to fully comprehend the meaning of the questions in the questionnaire.

The sample size (7) was established according to the formula: $n = t^2 * p * [(1-p) / e^2]$, resulting that the statistically representative sample contains 383 respondents, the resulting value being verified using the online calculator Creative Research Systems survey software.(9). In order to obtain this number of valid questionnaires, 400 questionnaires were administered, out of which 13 have been invalidated as being incomplete, resulting in a final group of 387 respondents.

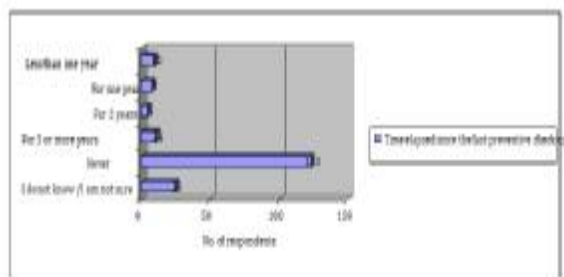
The mean age of the studied sample is 48,6 (std. dev. 15, 33), while the mean age of the Cluj county inhabitants, after the exclusion of people under 20 years old, is 47,98, values that do not statistically differ significantly at the significance limit $p=0,05$ ($t = 0,7958$). The studied sample is made out of 182 men and 205 women, the proportion being 1:1,12, which is not significantly different than the proportion in the general population in the same age category, which is 1:1,11.

Concerning the rural-urban repartition, 168 respondents are from the rural area and 219 from the urban area, resulting in a ratio R: U of 1:1,305 similar to 1:1,306 which is the rural: urban ratio in the population from the 2nd territorial planning unit.

RESULTS

Out of the total 182 male respondents, the majority (67,58%) have declared that they have never had a prostate exam, a percentage of 13,74% declared they do not know, and just 18,68% declared they have had that examination before (5,49% in the past year, 4,40% over a year ago, 2,75% two years ago and 6,04% three years ago or before) (figure no. 1). The results indicate a very low use of preventive services, given that 87 of the respondents (47,80%) are aged over 50 years old, an age at which the American Cancer Society (10) recommends annual preventive check-ups such as prostate exams and PSA determination for early detection of prostate cancer.

Figure no. 1. The share of respondents according to the frequency of executing preventive check-ups such as a prostate exam

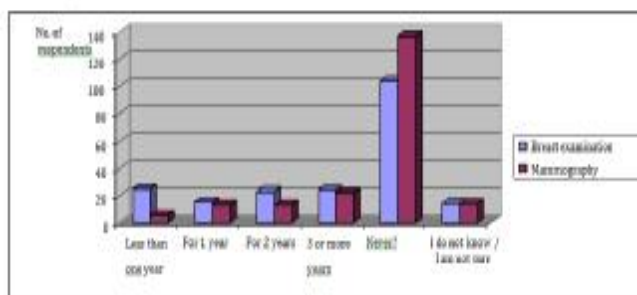


The results are even more suggestive regarding the harvest of a prostate-specific antigen, so that out of the 182 male respondents only 9,34% (17) declared they have ever taken a PSA analysis for an early prostate cancer screening, while 69,23% (126) declared they have never had this investigation, and 21,43% (39) do not know what that means.

The American Cancer Society (10) recommends a monthly breast self-examination for the early screening of breast cancer for women over 20 years old, and for those over 40 years old, they recommend taking the annual clinical breast exam and mammography.

The results referring to the manoeuvres done for early detection of breast cancer show a similar situation to the one from the male respondents, with a very low use of preventive services like screening (figure no. 2). Thus 73,65% of the female respondents (151) declared they have never had a mammography or do not know what that is, and 62,44% (128) gave the same answer regarding the clinical breast examinations. At the same time, only 9,27% (19) declared that they have had a mammography in the last year or less, and 19,51% (40) have had their breasts examined in the past year, given that 137 of the respondents (66,82%) are over 40 years old.

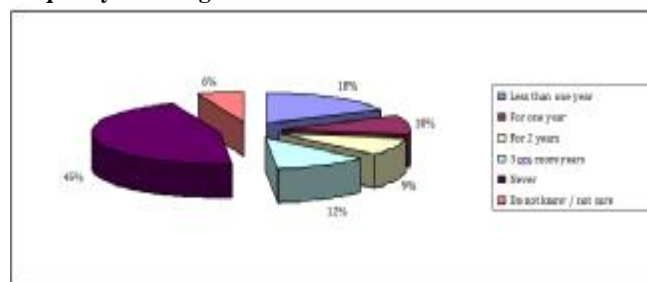
Figure no. 2. The share of female respondents according to the frequency of executing preventive check-ups like breast examination and mammography



The aim was to see if these preventive check-ups correlate with the family history of one or more women that have been diagnosed with breast cancer, getting in the case of the mammography a correlation coefficient $r=0,1698$, which is statistically significant at a limit $p = 0,05$, indicating a higher frequency of doing a mammography in the women with a heredo-collateral history of breast cancer.

For the early detection of cervical cancer, the American Cancer Society recommends taking the PAP-test every three years for women between 21 and 65 years old. The results show a low use of this preventive screening type service (figure no. 3), although presently, the screening programme for this type of cancer is done from the budget of the Ministry of Health.

Figure no. 3. The share of respondents according to the frequency of taking the PAP-test



All respondents, regardless of their sex, were asked if they have been administered the influenza vaccine. Results show a very low share (9,82%) of respondents to whom the vaccine has been administered.

DISCUSSIONS

It can be observed that in the studied community, both women and men, in their large majority, have never taken an early breast and cervical cancer screening test, respectively prostate cancer, or do not know anything about these tests. The data are consistent with the ECHI indicators (11) of EUROSTAT which show Romania on the last place in what

concerns the percentage of women (50 to 69 years old) who have had a mammography in the last 2 years (8%). Also, Romania is on the second to last place regarding the execution of PAP-tests, with a frequency of 14,6% to the 81,5% reported by Austria.

The data from the studied community show a better frequency of cervical cancer screening, 49% in the past few years, but this is in the context of the current running of a national screening programme and is still much lower than the frequency in the European Union.

The majority of respondents were not vaccinated against influenza, even though this is given freely, through a programme of the Ministry of Health, for people at risk.

CONCLUSIONS

The study highlights a much lower use in the community of the medical preventive services. For this reason we consider that, without a sustained promotion campaign of the preventive programmes and sanitary education, the actual policies of the Ministry of Health to direct funds predominantly towards preventive medicine will not have the desired impact.

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