

SOCIO- ECONOMIC UNEQUALITIES AT THE HEALTH OF GROUPS WITH VARIOUS SOCIO-ECONOMIC STATUS

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Abstract

Aim. The main scientific aim of this research is the analyses of the socio-economic situation of the people at various socio-economic groups at the municipality of Stip and some rural areas (R Macedonia), in particular the socio-economic status and the determination of its influence over the health condition of the population. Of the 680 persons examined 430 or 63.23% were reported to have poor health, while 250 or 36.77% to be healthy. According to the results of a survey on morbidity according to specific causes, the most common are: diseases of the heart and blood vessels, 165 persons or 24.20%, then the respiratory system 60 or 8.80%, the digestive system 37 or 5.50%, mental disorders 35 or 5.10%, etc..

Specific morbidity by age shows that diseases of the heart and blood vessels suffer mostly older age groups of 61-70 years, which is a representation of 193 or 28,39% of the total morbidity. Respiratory diseases commonly occurring in the youngest age group 18-30 years, while diseases of the digestive system most commonly aged 31-40 years.

Methods. The following methods were applied: epidemiological research with a questionnaire. The starting point for the selection of villages within the municipality and the surrounding rural settlements is the average amount of social product per capita in 2009. In Stip municipality covers a total of 680 participants (eight in the city and villages). In the city of Stip, the population is divided into three strata (with high living standard, medium standard of living, low standard of living). The sample includes respondents who sought care from specific health practices, and by phone at random from the telephone directory. In the villages are covered eight towns, and the choice is made according to the location of the settlement.

Results. From total 680 studies people 463 or 68,08% declared to have worsened health, whereas 217 or 31,92% declared to be health. About 20% of respondents confirmed that there are deaths in the family. The most common causes of death were diseases of the heart and blood vessels 47.6%, then 28.6% malignant neoplasms, etc... There is a big difference in the percentage of representation of doctor visits between the illiterate population, compared with people with higher education (55.56%: 4.76%). There is a statistically significant difference between visits with the doctor and the level of education, including employment and doctor visits, including occupation and visits with the doctor between age and morbidity, including employment and morbidity. Occupational diseases and identified respondents (morbidity) are also statistically significantly related.

Conclusion. The results from the questionnaires confirm the hypothesis that the rate of morbidity at the population of this area is higher at the groups of people with lower socio-economic status relating to their education, occupation, employment, marital status, and environment factors.

Key words: *morbidity, mortality, socio-economic status, education, occupation, employment, health service, Stip.*

Introduction

The socio-economic conditions and their influence over the population today are subject of research in many developed countries in Europe and around the world. The research conducted in several countries in Europe and the world (Netherlands, Norway, Finland, Greece, Denmark, Britain, France, Sweden and others.) and R. Macedonia 1997, 2007, the impact of socio-economic status (education, occupation, employment, income) on morbidity and mortality of the population, showed that lower socioeconomic groups have higher morbidity and mortality and vice versa. (1)

The efforts of WHO have the feature of defining the theoretical values and attitudes about the differences in providing health care for all peoples and nations, regardless of gender, age, religious affiliation, property status, race etc... It aims to apply the policy of "equality in health" (EQUITY IN HEALTH). Following this policy, we tried to do a previous research in the Republic of Macedonia (1997.2007) and then in the municipality of Stip (2010), with an aim to determine the differences in the health status among the different socioeconomic groups and to compare the results with the other countries in Europe and worldwide.

Aim. The analyses of the socio-economic condition of the population in the municipality of, in Stip particular the socio-economic status and the determination of its influence over the health condition of the population is a basic scientific aim applies in this research. With the research the following objectives should be achieved:

- Presentation Stip of some indicators of socio-economic structure of the population in the municipality of and the surrounding area and some environmental factors;
- Determining the health of the population, by separating the indicators (morbidity and mortality);
- Bringing the morbidity and mortality as indicators applicable to the health in relation to the socioeconomic status of the population in the municipality of a Stip and some rural settlements;
- suggesting measures for the development of the systematic strategy for monitoring the socio-economic changes and their influence over the health;

The main social objective in this research, using the knowledge of domestic and world literature and practice is presenting the results to various professional, scientific and government bodies (local governments) and various interested organizations and formulating recommendations for addressing the health problems associated with socioeconomic position population.

The specific objective of this paper is to analyze and assess the health status among different socio-economic groups. The general hypothesis is set to determine the groups of the population with lower socioeconomic status (lower educational level, occupation and severe unemployment) have a higher rate of morbidity and mortality and vice versa. Implementation of survey research on population age population in the municipality of Stip and some rural settlements will help in getting the appropriate results. The purpose of this research is determining the existence of certain diseases or mortality among the population for reasons, but determining a condition which should show whether there is deterioration in health or presence of disease or death, where as etiological factors dominate unfavorable socioeconomic living conditions.

In terms of significant socio-economic fluctuations, which imposes new social order and the period of transition (J Jakimovski, Skopje, 1997) involve the measurement of socioeconomic change in R. Macedonia and separate settlements and their impact on health. (2)

It should be noted that in examining health status, socioeconomic status, and age are presented as "risk factors" but not the main factors that cause of disease. Risk factors (Cucich, ext., Beograd, 1993) etc. "Confounding factors", only markers for some still unknown biological factors, which appear as causes, and are closely associated with the occurrence of diseases, in many situations in health care. (3)

Definitions for the socio-economic inequalities in the health

Socioeconomic conditions and the impact on health problems can be defined as differences in rates of morbidity and mortality among different socioeconomic population groups. Health in all publications and documents (document EUR/RC41/Inf.Doc./1Rev.1), is presented with examples of the impact of socioeconomic factors, through which the population can be divided into groups: social classes, occupational groups, degree education and family income. (4) This hierarchy of social position (Giddens E., Cambridge, 1993) called "Socio-economic status." (5)

Today, health problems among the population that are observed by different socioeconomic groups may be a descriptive label using the term "socio-economic or socioeconomic inequality, poor quality." (Anton, EK, & Mackenbach, PJ, Copenhagen, 1994th (6)

Methods. The methods of research is applied research by conducting epidemiological survey prospectively. The starting point for selection of villages in the municipality and surrounding rural settlements is the average amount of social product per capita in 2010. The average is taken for ideksot RM = 100th Stip city and rural areas are divided into three strata:

- 734 total number of persons covered in the survey, 54 did not give accurate and complete answers when they are rejected questionnaires for further processing and data analysis. The survey covered a total of 680 respondents (valid ballots), of which the city of Stip and 463 villages in the 217th In the city of Stip, the population is divided into three strata (with high living standard, medium standard of living, low standard of living). The starting point for this division in the family income, job seekers, workers and bankruptcy redundant, according to the Employment Office of the Municipality Stip and in the urbanization of the settlements.

The sample included respondents who sought care from health service: health home, home for the elderly "Sue Ryder" zdravstveni more private offices, by phone at random from the telephone directory of people whose phone number ends in 43 and 34th In the villages covered eight towns, and the choice is made according to the location of the settlement. They are divided into three groups: flat (Karbinci village. Mound and village.Tarinci), hilly (Balvan the village. Karaorman the village. Cardaklija and.Lakavica), mountain - Village. Sleet. In this study the methods of epidemiological method was used by applying deskriptivnata analysis, to assess the health of the population in the Municipality and its Stip surroundings by measuring socioeconomic inequalities, which used data from a survey conducted in the Municipality of Stip in the months March, April and May 2011. Also used a statistical method of health work using the SPSS program and determining the statistically significant difference between individual characteristics, by Chi-square test, and establish the dependence between individual events (education and morbidity) by applying the coefficient of correlation. Measuring the impact of socioeconomic status on health status was conducted by using indirect indicators-indicators (education, occupation, employment, marital status) and assessment of health: morbidity, mortality, organization and operation of the health service, the way treatment, lifestyle etc...

Results

From the total of 680 respondents in the municipality of Stip, the male and female were almost equally present (49,78%:50,22%).

Table. 1 Number of respondents according to the sex

Sex	Number	Percentage
Male	339	49,78
Female	341	50.22
Total	680	100,00

Table.2 Number and structure of respondents according to age

Age	Number	Percentage
20-30	146	21,52
31-40	171	25,11
41-50	132	19,43
Over 51 years	231	33,94
Total	680	100,00

The most typical age structure of the test population are persons over 51 years to old age, the presence of 231 or 33.94%. People from 31-40 years are included in the survey with 171 face or 25.11%, while those 18-30 years 146 21.52% or person, then from 41-50 years 132 persons or 19.43%.

The analysis for determining the structure of households shows that households with a family is more characteristic in urban areas 67.80%: 62.54%, with two or more families of rural households.

The total number of persons interviewed in the largest percentage (591 or 86.85%) are reported to belong to the Orthodox religion, while 87 people or 12.85% of the Muslim. The remaining respondents are in a very small percentage present (2 or 0.3%). People of Muslim faith in a higher proportion living in rural areas 18.35%: 1.10% in urban areas.

Marital status

The majority of respondents reported living with spouse 531 or 78.08%. The ratio of divorced persons in the city is 3.00% higher: 1.10% in rural settlements.

Environmental factors

Survey data on housing, show that the population in the city of Stip, mostly living in own house 398 respondents or 58.60% of urban population and rural areas (591 person or 86.98% of rural population), while living in own apartment is registered in more urban population, compared to rural population (29.40%: 0.59%), which is characteristic of all urban settlements. The diet of the population in the municipality of Stip did not significantly differ in the number of meals received between urban and rural populations. The largest percentage of the population in both villages used three meals a day (64.20% in the city and 62.72% in villages). Regarding the quality of the received meals, the most common group is one that uses regular milk and fruit diet, while meat and alcohol are used sparingly. Daily alcohol use is more characteristic of rural families. Low living standards in recent years adversely affects the use of relaxation and recreation in the population, indicating that respondents answer the highest percentage (347 or 51.10%) never used vacation, vacation occasionally used 245 or 36.00 %, and just regular 88 or 12.90%. About 612 or 90.00% of respondents said they do not practice physical activity (sports), which reflects the logical representation of the number of diseases of the heart and blood vessels in the first place in the mortality statistics and second in morbidity statistics tend growth.

All previously analyzed modalities contained in the questionnaire confirm that the conditions identified in the surveyed households in this area can be considered as factors that significantly affect the impairment of health of the population, especially in the category of active population (18-65 years old.) of which depends on the economic power of the family.

Indicators for estimation of the health condition

Mortality

The question "Are there deaths in your household?" Most of the respondents answered negatively (566 or 83.29%). Among those who responded, yes, "the most common causes of death were diseases of the heart and blood vessels (324 persons or 47.6%), followed by malignant neoplasms (194 persons or 28.6%), etc.. Age as a cause of death register for 114 or 16.7% deaths in the household. Data on mortality in the population are covered by a declaration of family members, in which there was death. Such information that we should not take more credibility because of all the deaths had not been presented report or death certificate diagnosis of stands where the deceased. Because mortality in these studies can be used as a valid indicator of health.

Organization of the health service

In determining the operation and organization of health services in the municipality of Bitola, used the answers to questions, whether in your township has a mental institution? ", If and how often you visit a doctor?", The last time you were the doctor? ", because reason usually visit the doctor?"

The first question, 590 respondents or 86.76% said that it has all types of health institutions and organizational units, which is a positive indicator for assessing the health of the population.

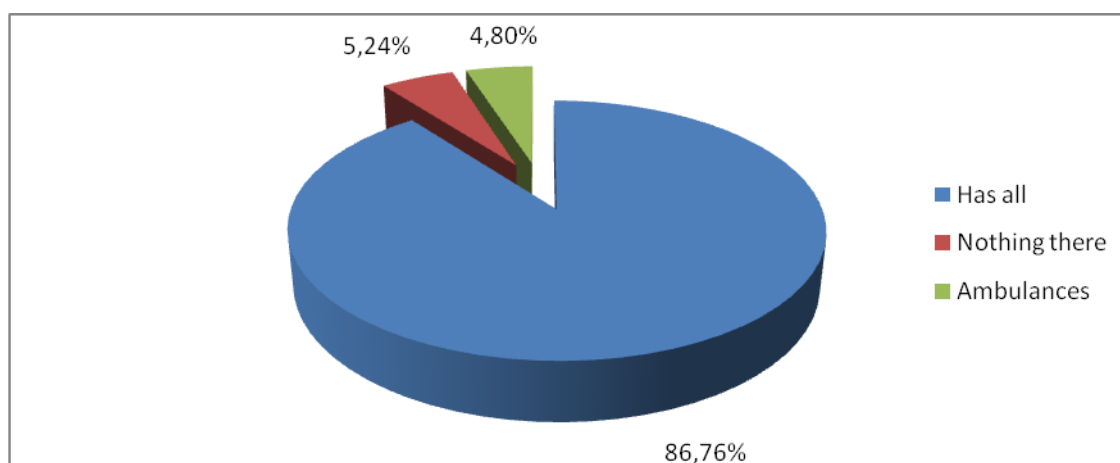


Chart 1. Existence of health institutions at the populated area

Most respondents said that town has all types of health facilities 590 or 86.76% (in urban areas). About 33 or 4.80% of the respondents answered that the settlement where they live no organized health service 36 or 24.5% did not know, while 22 persons or 3.20% said a doctor comes in occasionally during the week, a negative indicator in the assessment of health.

Analysis of visits to the doctor showed the most visited realized from lower socioeconomic groups, measuring the degree of education, employment and occupation.

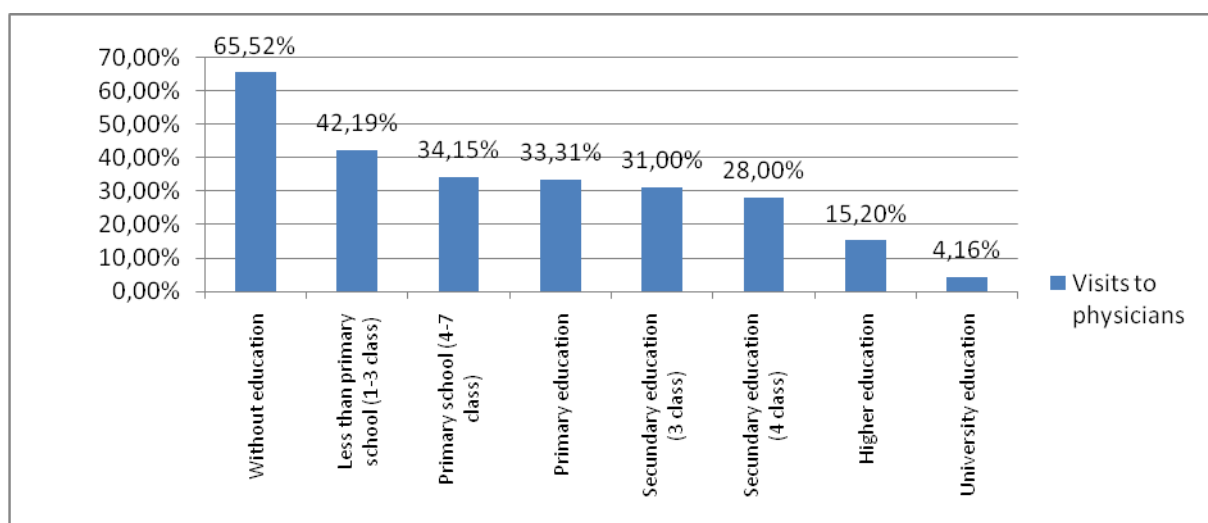


Figure 2. Structure of the visits to physicians in general medicine service, by level of education of patients

The diagram gives a clear picture of the increased number of physician visits in people with lower education nepismenoto population (65.52%) completed 1-3 grade (42.19%), the 4-7 grade (34.15 %). There is a big difference in the percentage of representation of frequent visits to the doctor between nepismenoto population versus higher education (65.52%: 4,16%). There is a statistically significant difference between visits with the doctor and the level of education: $X^2 = 74.13265$, $df = 12$, ($p < 0.01$)

Visits with health care facilities in the municipality of Stip are associated with employment and age structure of population.

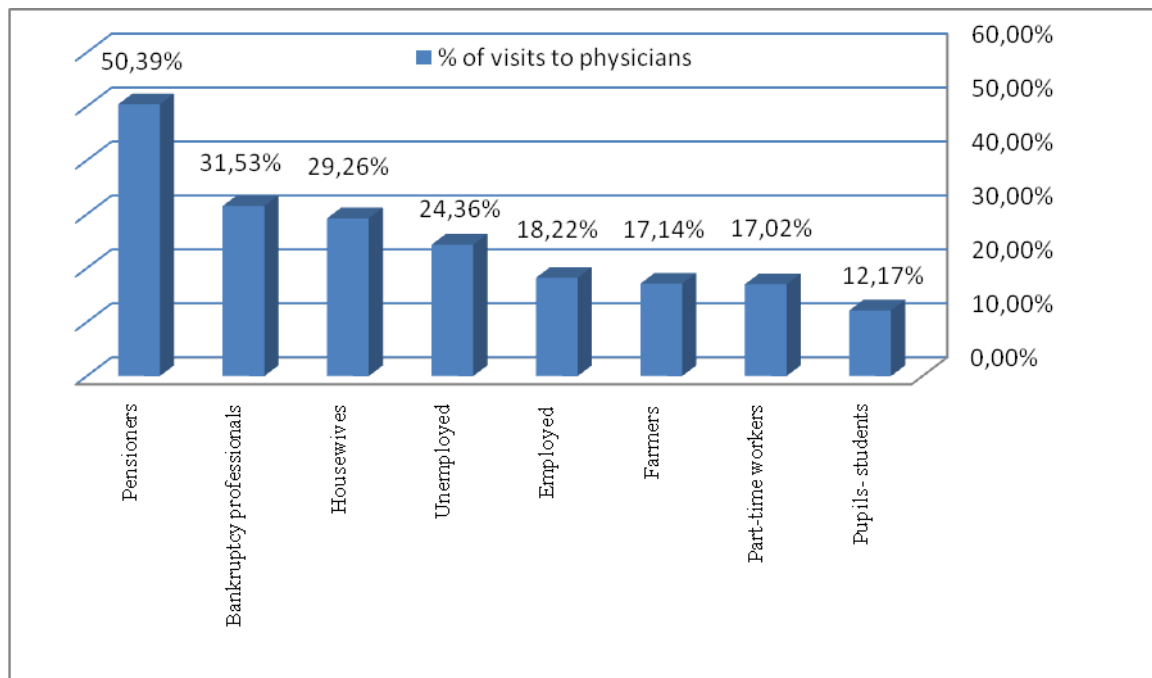


Figure 3. Structure of the visits to physicians in general medicine service, and employment of patients

Most visits to practices are observed among pensioners (343 or 50.39%), the redundant workers (214 or 31.53%) and unemployed persons (24.36% or 166). Healthy population (students) realize at least doctor visits (83 or 12.17%). There is more statistically significant difference between employment and doctor visits: $X^2 = 138.21352$, $df = 13$, ($p < 0.01$).

Frequent visits to the physician practice associated with the occupation. The largest percentage increase in the number visits to the doctor realized unskilled workers (174 or 25.64%), followed by workers with private business (160 or 23.53%), skilled workers (153 or 22.55%), while employees in the professional camera state and local authorities are very few visit the facility. There is a statistically significant difference between visits with a doctor and occupation: $X^2 = 129.41189$, $df = 18$, ($p < 0.01$).

Morbidity

For the determination of morbidity and causes of diseases were placed following questions: 'what is your health ', if you suffer from any disease and have not called the doctor, how to resolve your health problem?' And others. In the questionnaire, as causes of the diseases listed are the most common groups of certain diseases with an appropriate translation of the diagnosis, so the respondent to answer questions about the disease that is present in it, taking into account the educational structure of respondents (absence of medical education). The majority of respondents (with their permission) is reported health institution where it is treated and the name of the selected doctor. Thus it is possible to check the answers given for the diagnosis of the patient records or log of work. Tested a total of ten units of the health service (70 respondents or 10%) as follows: five health clinics in the House and one in five emergency units outside the

health house. It was found that 96.8% of respondents answered correctly about the question of the diagnosis, which confirms that morbidity can be taken as reliable data for assessing the health of the population in the municipality of Stip.

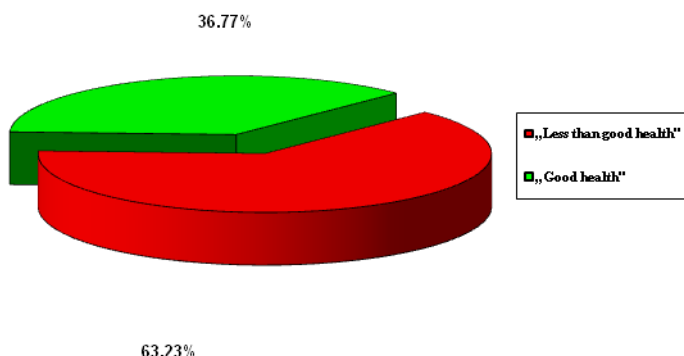


Figure 4. Structure of the self-reported modalities "good health" and "less than good health"

Of the 680 persons examined 430 or 63.23% were reported to have poor health, while 250 or 36.77% to be healthy. According to the results of a survey on morbidity according to specific causes, the most common are: diseases of the heart and blood vessels, 165 persons or 24.20%, then the respiratory system 60 or 8.80%, the digestive system 37 or 5.50%, mental disorders 35 or 5.10%, etc..

Specific morbidity by age shows that diseases of the heart and blood vessels suffer mostly older age groups of 61-70 years, which is a representation of 193 or 28.39% of the total morbidity. Respiratory diseases commonly occurring in the youngest age group 18-30 years, while diseases of the digestive system most commonly aged 31-40 years

Applying alternative methods of healing

Sick people are not called the doctor, use other ways to treat and often through the use of medicinal plants and herbs (338 persons or 49.68%); a large percentage of those who buy drugs from a pharmacy without a physician recommendation (225 persons or 33.04%). Insignificant number of people visiting or use bajachki bioenergy. There is no statistically significant difference between the use of other treatments, sex and age.

Indicators of the socio-economic status

As indicators of socioeconomic status in the municipality of Stip, are taken into account: the level of education, employment and occupation.

Education of the diseased people

There is a big difference between urban and rural population in the presence of higher education with respect 16,20:1,78 but also in relation to nepismenoto population is also more widespread in the metropolitan area 4,80:2,26.

The level of education in the municipality of Stip, statistically significantly associated with morbidity: $X^2 = 122.90412$, $df = 72$, ($p < 0.01$).

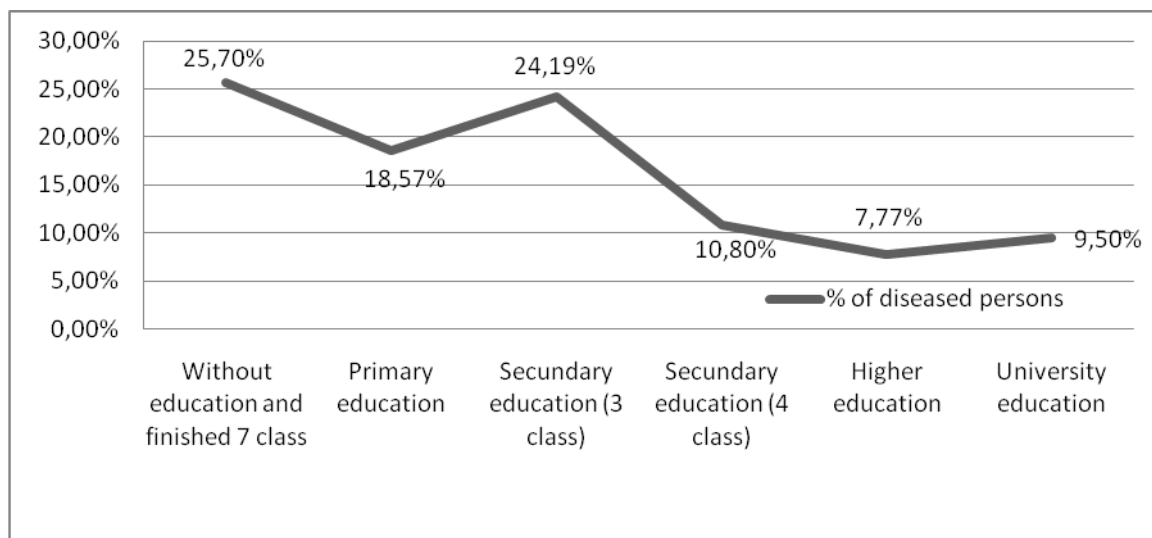


Chart 5. Correlation between the diseased people and the level of education

The equation of linear regression shows the opposite association, ie by increasing the level of education, decreasing the number of infected persons and vice versa. The lowest socioeconomic groups (nepismenoto population and completed the seventh grade) have the highest morbidity (184 persons or 27%). With increasing educational structure reduces morbidity. People with higher education are included in the total morbidity with 68 infected people or 10%.

The employment and the diseased people

The employment of the respondents most frequently affected are persons who are employed (284 or 41.75%), followed by pensioners (154 or 22.64%), redundant workers (81 or 11.87%), housewives (64 or 9.45%), unemployed (58 or 8.57%), while pupils / students registered with 13 or 1.98%, etc.. There is great statistics significant difference between employment and morbidity: $X^2 = 230.76$, $df = 84$, ($p < 0.01$).

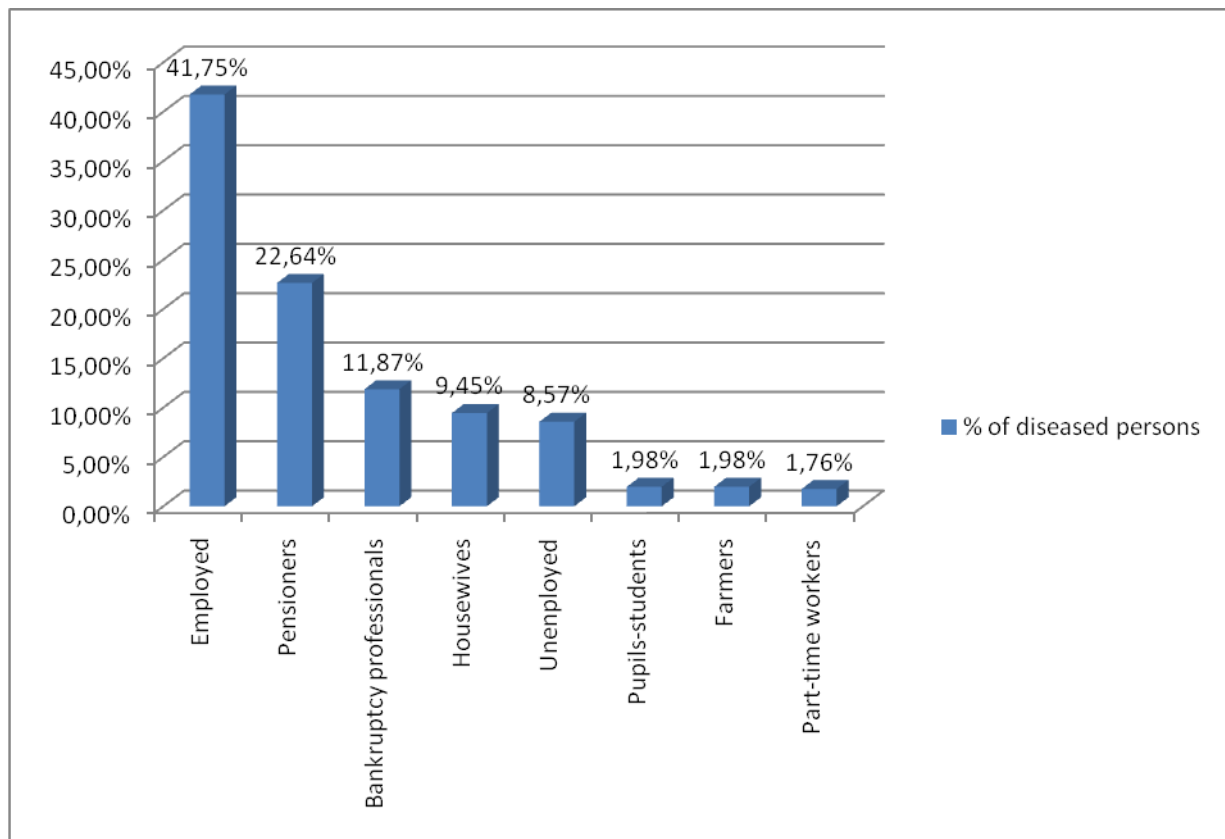


Chart 5. Structure of the diseased people according to the level of employment

The employment and morbidity

Occupation and morbidity are also statistically significantly related: $X^2 = 323.8653$, C coefficient = 0.474579, df 108, ($p < 0.01$). This finding confirms the notion that the higher morbidity observed in the group trades in economic activity, particularly among manual workers (unskilled and skilled, professional, administrative and other workers in economic activity).

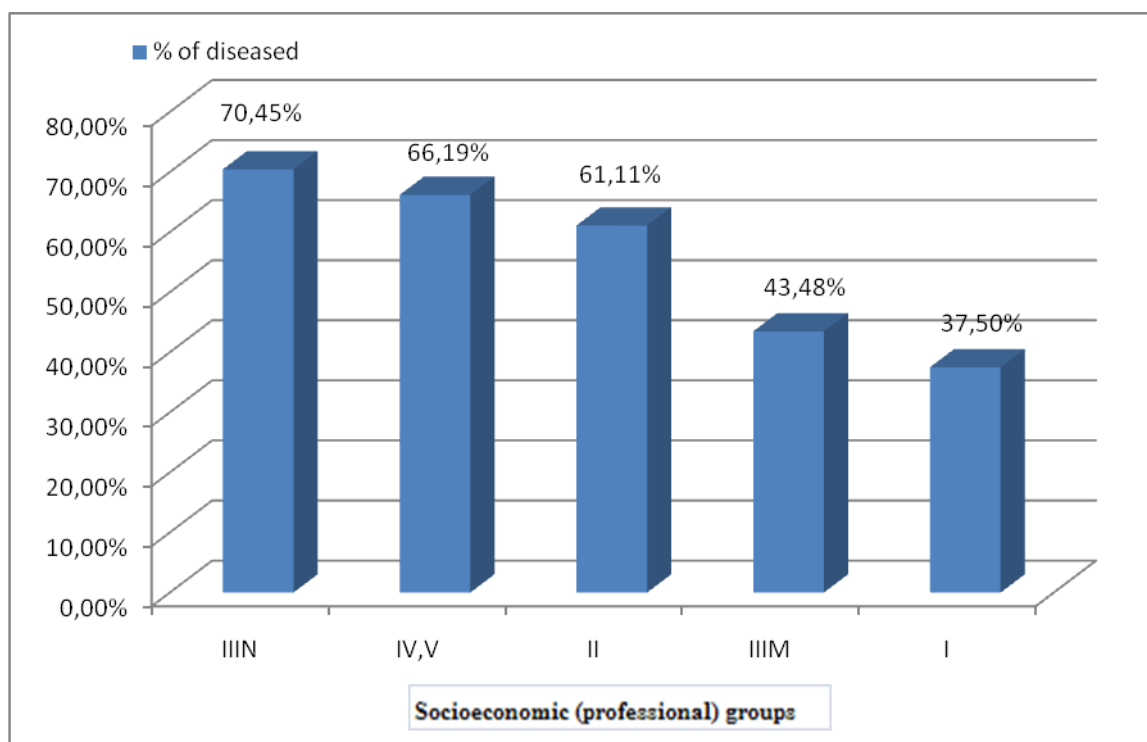


Chart 6. Structure of the diseased people according to occupation

Occupation	Socio-economic groups	% of presence
Professionals, administrative and other people at the economy sphere	IIIN	70,45
Manuel workers in the industry	IV ,V	66,19
People employed at public institutions	II	61,11
Self-employed and private people	IIIM	43,48
Professioanl tool for the state and local bodies	I	37,50

The highest morbidity is observed among workers employed in economic activities (479 or 70.45%) and manual workers (450 or 66.19%), calculated in terms of groups of employees in the same activity. Given the difficulty of the work in the economy and harmful factors are present in the work environment, this situation shows the reality of occupation in our conditions. Persons employed in professional camera in state and local authorities have the lowest morbidity (255 or 37.50%).

Discussion

The structure of the population examined in the survey, one can see an equal representation of both sexes, by observing the city and part of the rural population. Also in the survey included all age groups over 20 years. (Adult population) and population of different religion. The analysis shows that there are major differences in lifestyle, diet, housing conditions and other characteristics as gender and by religion, so the data is processed together respondents from urban and rural population, which included all respondents belonging to different ethnic communities. The largest percentage of population living in marital union (531 or 78.08%), and most divorces occur in marriages who live in urban areas (3.00%: 1.10%). The greater percentage of respondents that solved the housing (living in own house or apartment), 58.60% of the city or 86.98% of rural population, while the number of food servings is equal in the two settlements (mostly after 3 meals a day in cities and villages). Quality of food is different, with less representation of meat with traditional daily use of alcohol, more households in rural areas. So, according to many features today, the lifestyle in the city and the village is almost identical. Characteristic is the fact that still in some rural settlements has organized health service (4.80%), and the population must travel several miles to exercise the right to address the health needs and problems. In istarzhuvanjetu noted that there is a high statistically significant dependence between doctor visits and level of education, that most visits to the surgeries are performed by groups with lower education (65.52% people are illiterate and have completed grade 1-3 (42, 19%), and the pensioners (50.39%), who due to biological characteristics, atrophy of the organs and tissues develop more and require more frequent visits to the doctor. Unemployed people realize 24.36% and visits group of the population with insufficient income for normal living and payment services in the health system, so no risk of impairment of health among this group poshpulaciona, especially mental health. Morbidity was statistically significantly associated with vrbotenosta and occupation. The highest percentage of infected persons observed among persons employed (41.75%) 11.87% redundant workers, the unemployed 8.57%, while the occupation in severe occupations (in manual and unskilled workers 70.45%, while professional staff apparatus of state and local authorities only 37.50%). worrying is the fact that a large percentage of the population (33.04%) used medication without the recommendation of a physician, in order to avoid long waiting before the surgeries, which negatively affects health (incompetent treatment, using multiple medications during treatment). The absence of using annual leave in 51.10% of the population and practice of physical activities (90.00%) are visible indications that, among other factors determined where still has room for future research to look for causes of poor health, which is reported in a large percentage of respondents (63.23%).

Studies in several countries show that some indicators of socioeconomic status have an impact on morbidity and ill health. Sharing M., (Schuring M. at all, 2009) and collaborators in this work, Ethnic differences in unemployment and ill health, "set in order to evaluate whether there is a connection between ethnic groups, socioeconomic status and health in the Netherlands. The analysis in the study of intersection, they discover that there are no conclusions about causes, and suggest that it can be assumed that unemployment leads to poor health and health disparities in employment (unemployed) are major public health problems in all ethnic groups . (7)

Authors Kunst AE. And associates (Kunst AE., At al, 2005) in the paper, trends in socioeconomic inequalities in self-assessment of health in 10 European countries, "suggests that socioeconomic inequalities in self-assessment of health ('less than good health "in terms of education and family income) showed a high degree of stability in European countries. (8)

Authors Dalstra January, and collaborators (Dalstra JA., At al, 2006) in research on the topic, Comparative application of the relationship with education, income and housing owned "by, less than good health" among the elderly in Europe indicate that there are reliable differences in health starite people in terms of education and income in each country separately. In Britain and the Netherlands recorded strong health disparities among the elderly in terms of owning their own apartment. (10)

The studies in the Netherlands show that worse health is most frequent in people with lower educational level (elementary school). The situation is opposite within the population with completed third level (post-secondary) of education (6). In a Greek study (1983) the perinatal mortality rate was measured. In addition to the parents' education, two more indicators were considered: the mothers' health problems and the housing quality. The results have shown correlation between the education and the perinatal mortality rate. The Greek children whose parents are with lower educational level had higher perinatal mortality rate (6).

Another study in the Netherlands shows observations of general health, level of education according to the age of 16 years and over two periods: 1983-85 and 1992-93 year. The results vividly illustrate the general state of health, it being noted that the percentage of respondents who said they have less than good health "is the highest among those with primary education in both periods examined. (6) One of the countries, which conducted trials of disability due to illness or other reasons, in terms of life expectancy after 25 years of age is Finland. The results show that lower educational level is associated with shorter life expectancy. Valkonen authors and collaborators in 1994 (Valkonen, T., Et al., 1994) determined that people with lower education, not just die young, but suffer from long-term incapacity due to illness. (9)

The link between education levels and mortality is the example of interventional study Kaunas - Rotterdam. The project for this study was initiated by the World Health Organization, where he made two parallel studies in Kaunas - Australia and Rotterdam - Netherlands (1972-1982). Both studies included treatment mortality, following 2452 and 2365 in the first males in the other study. The data show that mortality is higher in lower levels of education in both countries. (6)

In the research from authors Johan Mackenbach at all, with title socioeconomic inequalities in health in 22 European countries, they compared the magnitude of inequalities in mortality and self-assessed health among in 22 countries in all parts of Europe. They concluded that these inequalities might be reduced by improving educational opportunities, income distribution, health-related behavior, or access to health care. (17)

The results from the survey in 1997 about the structure of the diseased persons according to their educational level in R. Macedonia showed higher morbidity rate (78.57%) in lower socioeconomic population groups (illiterate people) in comparison with people with higher educational level. The morbidity rate in people with higher educational level was 42.17% (upon the surveyed people's statements). Similar situation was registered in 2007, too. The level of education with

statistical significance correlates with the morbidity: $X^2=152.70342$, D.F.=84, ($p<0.01$). The linear regression equation shows reverse association. Increasing of the educational level decreases the morbidity rate and vice versa. Higher morbidity was registered in the illiterate and people with completed 4-7 elementary school levels (14).

According to the analysis of the population's health in regard to education (1997) surveyed people with elementary and incomplete elementary school had bad health in 57.4% of all cases. Similar situation was confirmed also in R. Macedonia in 2007 as well. This explains the significance of the educational level, as a socio-economic status indicator and its influence on population's health. Lower socio-economic groups (with lower educational level) have worse health and contrary, highly educated people have better health. Therefore, it can be concluded that health awareness and culture, acquired through learning and education, is very important for the health of the population. The analysis of causes of poor health in regard to the educational level in R. Macedonia have shown that cardiovascular and respiratory diseases most frequently occur in people with secondary, elementary and uncompleted elementary school (1, 14).

Majer at all authors in the research with title Socioeconomic inequalities in life and health expectancies around official retirement age in 10 Western- European countries conclusioned that higher educated persons live longer in good health before retirement and can expect to live longer afterwards. (18)

In the work Class-related health inequalities are not larger in the East: a coparison of four European regions using the new European socioeconomic classification in which they researched whether in Eastern Europe have larger health inequalities than their counterparts in three West European regions (North, Central and the South). They concluded that East European countries have larger class-related health inequalities than other European regions. People's income and educational attainment both contribute to occupational health inequalities in the East as well as in the West. (19)

Conclusion

The analysis of the survey results in Stip and the surrounding settlements, show that in recent decades socioeconomic situation of the population of this area is deteriorating. This condition leads to worsening health conditions, especially certain vulnerable population groups (elderly, unemployed, bankruptcy professionals, retirees, people with insufficient income family, with heavy occupations, etc.).

The survey results confirm the hypothesis that people with lower socioeconomic status (in terms of education, occupation, employment) have a higher morbidity, more frequent visits to the doctor practices. Respondents with lower education, heavier occupations (manual workers), unemployed and redundant workers are frequent visitors to health clinics and have a higher morbidity. The statistical analysis of data (correlation coefficient) for the association between morbidity and level of education, one can be seen as opposite apparent association (by increasing the level of education reduces the number of infected people). This information is important for health services and health workers, their activities need to focus on implementing various forms of special education and health education in order to promote health awareness and culture

among the population, thereby improving health. The analysis of data from surveys in some countries in Europe, one can see a similar situation among the various indicators of health status associated with different indicators of socioeconomic status.

Reccomendations

In order to reduce the disparities in morbidity and mortality among different socioeconomic groups, particularly those with lower socioeconomic status in terms of education, occupation, employment, it is necessary in the future to continue this kind of research in the population of this area for several reasons:

a) to determine whether there is a deterioration of health by comparing the results analyzed in two periods, b) to assess whether the deterioration of living standards and rising unemployment rate (now around 32%) will deteriorate health status, c) to determine whether the reforms in the health sector (reduction or abolition of certain preventive teams) will increase or decrease morbidity and mortality, d) to analyze whether the recommended measures in terms of improving health population, increasing the percentage of literate (educated) people, the territorial distribution of health personnel and facilities equally in all settlements, provision of adequate material assistance to persons who have no income, increasing the percentage of employment, use of preventive health propaganda, especially for vulnerable groups, current health problems, etc... will reduce those differences will reduce inequality will improve living standards among the population, and this will improve the health of any individual, groups and entire communities.

References

1. Mircevska L., Donev D., Mojsoska S. Level of Education and Health Status of the Different Social Groups: Case study Macedonia: in Donev D., Pavlekovic G., Kragelj, Zaletel L. Health promotion and disease prevention, Skopje 2007:434-449
2. Jakimovski, J. Economic transition in Macedonia and Bulgaria. Social problems in period of transition. Macedonian Academy of the scientific and arts, Bulgarian Academy of the scientific, Skopje 1997:197-203
3. Cucich, V. Basic methodology scientific-research work in medicine. Medical faculty, University in Beograd. CIBIF, 1994:31-63
4. Updating of the European HFA targets. Copenhagen, WHO Regional Office for Europe, 1991 (document EUR/RC41/Inf.Doc./1Rev.1).
5. Giddens, E. Sociology. 2nd ed. Polity Press, Cambridge, 1993.
6. Anton, E. K., & Mackenbach, P.J. Measuring socioeconomic inequalities in health. WHO Regional office for Europe, EUR/ICP/RPD 416, Copenhagen, 1994.
7. Schuring M., et al. Ethnic differences in unemployment and ill health. PubMed Central journal List 2009 August; 82(8): 1023-1030

8. Kunst AE., et al. Trends in socioeconomic inequalities in self-assessed health in 10 European countries. *PubMed Int J Epidemiol.* 2005;34;295-305
9. Valkonen, T. et al. Disability-free life expectancy by level of education in Finland. Presented to the 7th REVES International Meeting, Canberra, Australia, February, 1994: 23-25
10. Dalstra JA., et al. A comparative appraisal of the relationship of education, income and housing tenure with less than good health among the elderly in Europe. *PubMed, Soc Sci Med.* 2005, Apr, 62(8): 2046-60.
11. Lagasse, R. et al. Health and social inequities in Belgium. *Social science & medicine* 1990 . 31: 237-248
12. Liberatos, P. et al. The measurement of social class in epidemiology. *Epidemiologic reviews* 1988; 10: 87-121
13. Szreter, S.R.S. The genesis of the Registrar General's social classification of occupations. *British journal of sociology*, 1984, 35:522-546
14. Mirchevska L. Influence of some socio-economic conditions on the health condition of the population in Republic of Macedonia (doctoral dissertation). Institute for Sociological, Political and Juridical Research-Skopje, Skopje, 1997: 85-7, 1-12, 177.
15. Tzoumaka Bakoela, C. et al. The Greek National Perinatal Survey. II. Socioeconomic factors and perinatal mortality in Greece. *Paediatric and perinatal epidemiology* 1989; 3: 41-52
16. Duleep, H. Measuring socioeconomic differentials in mortality over time. *Demography* 1989; 26:345-351
17. Mackenbach P.J. et al. Socioeconomic inequalities in health in 22 European countries. *hinary-gw.who.int/.../NEJMsa0707519 N engl J Med* 2008;358:2468-2481
18. Majer IM. et al. Socioeconomic inequalities in life and health expectancies around official retirement age in 10 Western- European countries. *J Epidemiol Community Health*, 2010 Nov 23, hinary-gw.who.int/.../21106546
19. Eikemo TA et al. Class-related health inequalities are not larger in the East: a comparison of four European regions using the new European socioeconomic classification. *J Epidemiol Community Health*, 2008 Dec;62(12):1072-8

Readings

1. Dalstra JA. et al. Socioeconomic differences in the prevalence of common chronic diseases: an overview of eight European countries. *Int J Epidemiol.* 2005 Apr;34(2)316-26
2. Menvielle G., et al. Socioeconomic inequalities in alcohol related cancer mortality among men: to what extent do they differ between Western European populations? *Int J Cancer* 2007;Aug 1;121(3):649-55
3. Mackenbach P.J. et al. Economic costs of health inequalities in the European Union. *J Epidemiol Community Health*, 2010, Dec 23. hinary-gw.who.int/.../21172799
4. Alavinia SM. Burdorf A. Unemployment status, employment condition, and limited illness: prospective evidence from the British household panel survey 1991-2001. *J Epidemiol Community Health* 2008;58:501-506.doi:10.1136/jech.2003.009878 (PMC free article) (PubMed)
5. Morris JK, Cook DG, Shaper AG. Loss of employment and mortality. *BMJ* 1994;308:1135-1139 (PMC free article) (PubMed)
6. Janlert U, Unemployment as a disease and diseases of the unemployed. *Scand J Work Environ Health* 23(suppl 3):1997;79-83 (PubMed)
7. Schuring M. Burdorf A, Kunst AE., Mackenbach JP. The effect of ill health on entering and maintaining paid employment evidence in European countries. *J Epidemiol Community Health* 2007;61:597-604. Doi:10.1136/jech 2006.047456 (PMC free article) (PubMed)

8. Kunst A, Mackenbach J. The Size of Mortality Differences Associated with Educational Level in Nine industrialized Countries. *Am J of Public Health*, 1994;84(6):932-37.
 9. Stelmach W et al . How income and education, control over life and life style contribute to risk factors for cardiovascular disease amongst adults in a post communist country. *Public Health*, 2005, 119: 498-508.
 9. Stelmach W et al. How income and education contribute to risk factors for cardiovascular disease in the elderly in a former Communist country. *Public Health*, 2004;118:439-49.
 10. Malyutina S et al. Trends in alcohol intake by education and marital status in an urban population in Russia between the mid 1980s and the mid 1990s. *Alcohol and Alcoholism*, 2004;39:64-9.
 11. Malyutina S et al. Education, marital status, and total and cardiovascular mortality in Novosibirsk, Russia: a prospective cohort study. *Annals of Epidemiology*, 2004;214(4):244-9.
- 0.1136/JECH.2006.047456 (pmc FREE ARTICLE) (PubMed)