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## Starzenie się i samodzielność kobiet z trzech odmiennych środowisk: miasta, wsi i Domu Pomocy Społecznej

### Streszczenie

**Wstęp.** Proces starzenia jest nieunikniony. Ma charakter indywidualny i może nasilać się na różnych etapach dorosłego życia. Istotnym czynnikiem wpływającym na tempo zmian starczych jest środowisko życia.

**Cel.** Celem pracy jest próba uchwycenia procesu zmian starczych u kobiet. Starzenie powiązано z pojęciem samodzielności w codziennych czynnościach.

**Materiał i metody.** Przedmiotem badań jest 208 kobiet. Średnia arytmetyczna wieku kalendarzowego badanych kobiet wyniosła =72.5 roku, z medianą równą  $Me=73$  lata. Kobiety zamieszkiwały trzy środowiska: wieś, miasto i Dom Pomocy Społecznej (DPS). Średnia dzietności badanych kobiet wyniosła 3 dzieci, ale więcej rodziły kobiety wiejskie. Pensjonariuszki DPS urodziły najmniej dzieci (średnio 1.7 dziecka) i choć kiedyś zamieszkiwały wieś lub miasto, to jako grupa z DPS była najmniej dzietna.

**Wyniki.** Kobiety z trzech analizowanych środowisk miały podobny wskaźnik stopnia starzenia (Wsst), co może świadczyć o ponad środowiskowym i indywidualnym występowaniu cech somatoskopijnych (siwienie włosów, zmarszczki, plamy na dłoniach, stan płytki paznokciowej). Niemal wszystkie kobiety ze wsi zadeklarowały, że nigdy nie paliły papierosów, rzadziej udawały się do lekarza i przyjmowały mniej medykamentów. Powodem tego stanu mogły być ówczesne uwarunkowania kulturowe (moda na niepalenie wśród kobiet na wsi), nie korzystanie z porad lekarskich, gorsza kondycja finansowa.

**Wnioski.** Wyniki samodzielności, w rozumieniu uniezależnienia od rodziny/opiekuna są zbliżone w trzech analizowanych środowiskach. Póki nie ma dolegliwości bólowych i są możliwości ruchowe, seniorzy chcą być samodzielni.

## The ageing and self-reliance of women from the three different environments: towns, villages and social welfare institutions

### Abstract

**Introduction.** The process of ageing is inevitable. It has an individual nature and may intensify in various stages of adult life. A significant factor affecting the rate of the changes due to old age is the living environment.

**Aim.** The purpose of study is an attempt to get hold of the process of ageing changes in women. Growing old has been related with the concept of self-reliance in daily activities.

**Materials and methods.** Two hundred and eight women have been included in the examinations. The arithmetical average of the calendar age of the examined women is equal to =72.5 years, with median equal to  $Me=73$  years. The women have inhabited three environments: villages, towns and social welfare institutions. The average number of children born by the examined women has amounted to three, but the village women gave more births. The residents of the social welfare institutions have given birth to the least number of children (average 1.7 children). Although once they lived in a village or a town, then as the group from the social welfare institution the number of their children has been the smallest.

**Results.** The women from the three analysed environments have a similar ageing degree index (ADI), which may confirm the trans-environmental and individual occurrence of the somatoscopic features (grey hair, wrinkles, spots on hands, the condition of finger nails). Almost all the women from villages have declared that they had never smoked, less frequently visited physicians and have taken less medicines. The reason for this could have been previous cultural conditioning (smoking was not considered appropriate for the village women), failure to use the physician's help, and worse financial status.

**Conclusion.** The results concerning self-reliance, in terms of being dependent from family/guardian are approximately the same in the three analysed environments. As long as there are no pain and mobility is preserved, the seniors wish to be self-reliant.

**Słowa kluczowe:** starzenie, miasto, wieś, aktywność ruchowa, samodzielność.

**Keywords:** ageing, town, village, physical activity, self-reliance.

## INTRODUCTION

The process of the population ageing makes its progress both in the town and village environment. The rate of the process may differ in the individual, local as well as the global aspect [1]. The village environment provides for a senior a different atmosphere of growing old. An old person is respected there. The older person is addressed by all the village society as “Wy” (French “Vous”; German “Sie”, no equivalent in English, just more politely) which adds respect in the local environment. Where such a senior shares residence with the family, everybody seeks advice from the senior whose opinion is appreciated. However, when the circumstances require a modern approach to the world, acceptance of the new technologies, the old people are stuck in their old positions and stereotypes. The advantage of the village environment is the fact that the people grow old in family homes, frequently in places where they have been born or have been living most of their lives. They know their neighbours who, together with the family, constitute for a senior a strongly active society influencing all the aspects of one's life [2].

The townspeople spend their time in a different manner, live in more anonymous environment. They notice the growing speed of modern living that affects individuals more clearly. For an ageing person, who has spent the majority of their adult life in town, the town environment is familiar and accepted. The problem appears when the old person stops being self-reliant. Less familiar contacts with the neighbours and family members can contribute to the cause of loneliness amongst old people in town, particularly among the widows and widowers [3,4].

The lack of care for ageing parents is often the cause of their being placed in social welfare institutions. The change of one's residence, reduction of the contacts with one's family and the new habits imposed by the way of living in such institution can result in the occurrence of different environmental factors for the senior population. The residents of social institutions also experience stresses for other reasons. Their daily routine is different. They encounter many situations, which they have never expected or experienced before in relation to many areas of daily living such as: permanent presence of another resident in the same room, fixed meal times, imposed menu, permanent medical care, physical activity different from that they had at their homes [5].

Both in villages and towns, a person living one's last years may feel not understood, not needed and lost. It largely depends on the individual acceptance or its lack in relation to one's own ageing process. The senior's expectations and demands from the living environment are inversely proportional to one's share in working on one's personality, self-reliance, abilities and being independent. The positive approach to living and sufficient self-reliance allow to come to terms with own ageing much easier [6].

## AIM

The purpose of this study is an attempt to investigate the process of ageing changes in women. Growing old, which depends on many factors, has been related to the concept of self-reliance in daily activities.

## MATERIAL AND RESEARCH METHODS

The basis for the conclusions presented in this study is 208 questionnaires filled-in while conducting the anthropological research amongst women over 50 years of age. The examined women represented three different environments: town (n=89), village (n=82) and social welfare institution (n=37). The examination has been subject to the women's consent for an interview, communication skills/willingness to talk and the fact of living for at least two years in one of the said environments. The selected descriptive features (somatoscopic nature) have been used for the establishing the Aging Degree Index (ADI).

The features of ageing have been categorised in relation to their intensity. The score of all points of the evaluated somatoscopic features creates the ADI. The following features have been categorised:

### Wrinkles around the eyes

0° – none

1° – “crow's feet”

2° – minor wrinkles around eyes (network of wrinkles)

3° – large amount of deep wrinkles, eyes poorly visible

### Wrinkles on forehead

0° – none

1° – short, shallow

2° – several deep ones

3° – deep, long and short

### Wrinkles around mouth

0° – none

1° – shallow wrinkles in mouth corners

2° – around whole mouth

3° – skin heavily wrinkled, paper-like around whole mouth area

### Grey hair

0° – no grey hair

1° – single grey hairs

2° – half-and-half

3° – big majority or completely grey

### Senile spots on palm outside

0° – none

1° – single, small, light brown

2° – more numerous, larger, dark brown

3° – clearly visible, large, overlapping, dark brown

### Stripes on finger nail plate

0° – no lengthwise stripes

1° – slightly marked lengthwise stripe-like thicker lines

2° – clearly visible

3° – very much visible, sharp lengthwise thick stripes

The remaining analysed features are not the components of the ADI, but form important information on the women's rate of ageing. Part of this information has also been categorised, with score of points assigned.

**Mobile activity**

- 0° – overall fitness within activities around herself and including ability to work in the field/garden
- 1° – overall fitness, some slight pains at times (partly of help in the work in the field), not performing any tiresome activities any more
- 2° – active participation in housework, no help in field/garden work
- 3° – performance of more than the basic jobs around herself
- 4° – performance of only most basic jobs around herself
- 5° – bed-ridden, completely dependent on the family/guardian

**Smoking**

- 0° – never
- 1° – occasionally, when young
- 2° – has been a smoker, but not any more
- 3° – regular smoker, also at present

**Reliance upon others' assistance**

- 0° – none, full self-reliance
- 1° – need of some small assistance
- 2° – help needed everyday
- 3° – reliant upon others, even in the most basic jobs

**The living conditions**

- 0° – alone
- 1° – with a spouse
- 2° – with the spouse and children/grandchildren
- 3° – with children/grandchildren

The analysis also includes non-categorised features: calendar age (date of birth), the number of children born and place of residence.

The village representatives were the inhabitants of the village of Andrzejówka in Zamość province and the village of Chłudnie in Podlaskie province. Those women have been born in these villages or arrived there after getting married, in the majority of cases, migration has been within one parish. On the day of the anthropologic examination, those women were still inhabitants of the village.

The examined women of the town environment were living in Szczecin and were also the residents of the national healthcare institution in Szczecin-Golęcin. The women arrived to the doctors on their own; in some cases, some member of the family helped them. The anthropological examination has been conducted after the visit to the doctor in a separate room.

The representatives of the residents of the social care institution are the residents of the Social Welfare Home in Krucza Street in Szczecin. The majority of the examined women had offspring, but for various reasons did not want or could not live with their children. This paper contains the analysis of the ageing features of the Social Welfare Home residents aiming at the comparison of the ageing in women who do not live at their family home. The social care institution has its own rules, therefore it creates a different environment than that of one's own home. The reasons for placing women in such an institution have not been analysed, but it has been assumed that living outside their own family home is a significant reason of separate consideration to the living environment.

The research was not a medical experiment, so it did not need the approval of the Bioethical Commission. The dignity of the examined women was respected; the interviews and somatoscopic evaluations were conducted in a separate room. The calculations for the examination results have been done by using software StatSoft, Inc. (2010). STATISTICA (data analysis software system), version 9.1.

**RESULTS**

The mathematical average of the calendar age of the examined women was =72.5 years of age, with the median equal to Me=73 years. Standard age deviation SD=10.2 years. The women's age ranged between 50 and 95 years, with a majority being over 60 years old and retired. The chief determinant of the division of the material collected was the living environment. The analysis of the ageing factors was performed for the three environments: town, village and Social Welfare Home.

The first analysed feature was the mode of living. This information allows dividing the entire collected data into three groups: townspeople, village women and the residents of the Social Care Home. These residents used to live in a village or in town, but for the purpose of this study, they represent a separate environment. In terms of the mode of living, the analysis shows that the biggest percentage of women living alone (although not always single) live in social welfare/care institution. More women live alone in the towns than in the villages (Table 1). The village environment provides more opportunities for multi-generation families.

**TABLE 1. The mode of living of the examined women (%).**

Environment Category	Town (n=89)	Village (n=82)	Care home (n=37)	Total (n=208)
0° Alone	30.0	19.5	91.7	36.5
1° With a spouse	23.3	20.7	8.3	19.7
2° With the spouse and children/grandchildren	20.0	23.2	-	17.8
3° With children/grandchildren	26.7	36.6	-	26.0

**TABLE 2. Physical activity of the examined women (%).**

Environment Category	Town (n=89)	Village (n=82)	Care home (n=37)	Total (n=208)
0° General fitness within activities around herself and including ability to work in the field/garden	28.9	35.3	2.8	26.9
1° General fitness, some slight pains at times (partly of help in the work in the field), not performing any tiresome activities any more	35.6	8.5	22.2	22.6
2° Active participation in housework, no help in field/garden work	14.4	30.5	25.0	22.6
3° Performance of more than the basic jobs around herself	11.1	13.4	22.2	13.9
4° Performance of only most basic jobs around herself	7.8	8.5	25.0	11.0
5° Bed-ridden, completely dependent on the family/guardian	2.2	3.7	2.8	2.9

Physical activity is the determinant of self-reliance in the broader sense. If the condition of health allows performing more than basic jobs around oneself, then it could be assumed that the senior is self-reliant in a bigger or lesser degree. The people who lead an active life throughout their lifetime are better able to cope with everyday activities until they get very old indeed and are characterised by less reduction in their body height accompanying the ageing process [7]. The village women complained about their health, but more often worked physically, thus forcing their bodies to be active. This might be caused by the habit of bustling around the home, since there is always something to do in the house, farm and garden. This is confirmed by the analysis of the correlation of the calendar age with mobile activity ( $r=0.5$  for  $p=0.0001$ ). This may prove a strong factor of self-reliance in jobs around oneself of a senior as they get older. Among the examined women, the large majority ( $0^{\circ}+1^{\circ}+2^{\circ}$ ), which constitutes over 72% did not need any help, in fact they themselves were of help to other community members. The village women were working physically more intensively, but more often complained about some ailments. Most probably this was caused by poor access to healthcare institutions in the country. The most frequent ailments of women from each environment were overloading changes and the painful consequences of a faulty spine as well as positioning of the legs (Table 2).

Smoking by women in the first half of the 20th century was a phenomenon closely related with the town environment. The women whose youth was in the 1930s, 40s, 50s, and were living in villages, were more frequently non-smokers. Their husbands smoked frequently, but women in Polish villages did not touch cigarettes. Non-smoking amongst women in villages was culturally and customarily conditioned, it did not look appropriate or acceptable, and was not trendy then. The women living in towns (although they might have been born in villages) as opposed to their village peers, started to smoke more frequently. Smoking was permissible in work places, in the streets, in companies [8-9]. Table 3 includes also the residents of social care institutions, but before living in such institution they also lived in the towns or villages.

**TABLE 3. Smoking (%).**

Environment Category	Town (n=89)	Village (n=82)	Care home (n=37)	Total (n=208)
0° Never	72.0	94.0	75.0	80.8
1° Occasionally, when young	2.0	1.2	-	1.4
2° Has been a smoker, but not any more	13.0	1.2	25.0	10.5
3° Regular smoker, also at present	13.0	3.6	-	7.2

The tendency to accept oneself as an old person encourages the individual to practice self-reliance. The majority of the examined women were self-reliant and independent in their daily activities without the need of help from the family/guardian. Very often the senior women have been an invaluable help in home. Living together with the grown-up children, they are housewives in fact. When living sepa-

ately, they also have been helpful to their families and friends as far as they could manage. In town, the fact of retiring from work does not mean the exclusion from family social life. In villages, the borderline of the calendar age is more flexible, a senior woman helps in housework as far as her strength allows her. Having to rely on the help of the others is equally troublesome both in town and in village (Table 4).

**TABLE 4. Necessity to rely upon others (%).**

Environment Category	Town (n=89)	Village (n=82)	Care home (n=37)	Total (n=208)
0° None, full self-reliance	83.3	79.3	80.6	81.3
1° Need of some small assistance	7.8	8.5	-	6.7
2° Help needed everyday	6.7	11.0	11.1	9.1
3° Reliant upon others, even in the most basic jobs	2.2	1.2	8.3	2.9

Most frequently the women have given birth to 2 to 4 children, out of which the average number of children born by the examined senior women is =3, but the village women used to give birth to average 4.4 children, the town women 2.2, and the residents of the social care institution gave birth to average 1.7 children. Almost 15% of all women have no offspring, out of which 13.4% women are from the town, among the villagers only 7.3% were childless, and 35% of women-residents of social care institutions had no children (Table 5).

**TABLE 5. Number of the children among all the examined women (%).**

Number of children born	0	1	2	3	4	5	6	7	8	9	10
%											
Women (n=208)	14.9	12.0	23.5	17.3	12.9	3.4	6.7	2.9	1.4	3.4	1.4

The ADI has been arranged into three divisions in order to find out the biggest factors contributing to this index. For the most numerous group of women the ADI index is contained within 6 and 14 and more than 81% of all examined women are included in this range. This indicates that those women have been medium-advanced in the analysed somatoscopic features (grey hair, wrinkles, spots on palms, the condition of the finger-nail). Within the ADI the division into living environment has not been considered because in all the three environments the percentage was similar (Table 6). The proposed ADI is based on the features (ageing signs) which occur in every population, and their presence or their lack is individual, but connected with the influences of the external environment, e.g. getting grey due to stress, wrinkles from long-time exposure to sunlight.

**TABLE 6. The ADI in terms of three ranges (ageing signs).**

Category ADI	% women
ADI to 8 (little ageing signs)	35.1
ADI from 9 to 14 (middle ageing signs)	55.3
ADI from 15 to 18 (great ageing signs)	9.6



These factors and many others exert the influence on the ageing condition and its rate. It is hard to grasp all the relations, since the field works should be as uncomplicated and non-invasive as possible.

## DISCUSSION

Old age is the effect of the dynamic ageing process and is related with the body changes, which are demonstrated, *inter alia*, by the impairment of general efficiency and effectiveness of systems and body organs, weakening of the immunological system, increased risk of the disease, limited adaptation abilities and the changes in social functioning. Minois in "History of Old Age" [10] states that in the nineteen-fifties the concept of "old age" has been substituted by the term "third age" in order to minimise the fear associated with getting old. Fear of the unknown, but also of the pain, being a burden to the family – these are the reasons for the escape from old age perception. The living environment has a large effect on the perception of ageing. One of the environmental factors within ageing is taking medications. Borowiak and partners [11] have conducted the analysis of the medicines systematically taken by the respondents. The biggest number of systematically taken medications has been demonstrated by the group of people living in the social care institutions, somewhat less medicines were taken by the townspeople, and definitely the smallest amount by the seniors from villages. These differences are most probably connected with the accessibility of the professional medical services. This confirms the sad reality that the village people have the most difficult access to the professional medical centres.

The nutritional status of the people advanced in years is related to the place of living. The research of Humańska [12] shows that the persons who were living with the family were characterised by statistically significantly better nutrition than the residents of the social care institution. The better nutrition of people living with their families may result from having meals together with the rest of the family, whereas people living in social care homes displayed the risk of undernourishment. On the other hand, people living alone in their own homes seldom make varied high quality meals, since living alone does not encourage people to celebrate meals.

The city dwellers have shown the higher level of daily functioning efficiency than the seniors from the villages [10,13]. In the studies by Wojszel and partners [14] one can observe that the condition of old people in the villages is dramatically worse in comparison to the senior population in cities. This could be explained by the existing civilisation gap between a large town and the poor Podlasie village [region in east of Poland]. An reason could be the difference in the education level amongst old people – this is one of the most significant factors affecting the human health condition. Another example of the environmental difference is the access to health and social services of the people living in towns and villages [14].

One third of seniors live alone, but the majority of the loners in the third age are the women. It does not have to mean that they are alone or single in the literal sense.

The definite majority of the women living alone regularly visit their acquaintances and friends, as well as meet their children. The social networks established by the older women usually consist of at least four people. The social support for the seniors does not have to be provided necessarily from their offspring. It can be offered by relatives, friends or members of some associations. The adult children of the nowadays seniors are professionally active and completely absorbed in earning money and upbringing their own offspring. If the senior-parents do not actively participate in taking care of the grandchildren, then the family contacts are seldom. From the comprehensive studies by Hank and partners [15] which covered ten European countries, it can be seen that in all the examined countries 58% of grandmothers and 49% of grandfathers provide some kind of support or take care of their grandchild under 15 years of age at least once a year. From the studies by Borowiak and partners [11], it can be concluded that the village seniors more often indicate the family as the people most expected to provide help and assistance. This might result from the bigger number of children born in the village families. It is easier then to choose from the more numerous siblings the ones who would take care of the parent. The village women more often live with their adult children, more often actively help in taking care of the grandchildren and this duty occupies most of their time. The townspeople also prefer family care, but this is not always possible in town conditions.

Population ageing causes the increase in the need of medical services in hospitals and patients homes. The work of a nurse, guardian, and care-taker in the home environment of a senior would allow in many cases to avoid hospitalisation.

The inseparable features of senility are sickness and disability; however, their occurrence is not equivalent to the helplessness and the need to rely upon others. Old age does not necessarily mean loneliness and resignation plus withdrawal from social activities for seniors [10]. In the initial stage of widowhood, the condition of health significantly worsens. The widowhood is one of the most frequently quoted negative living changes causing a deep stress [7]. As shown by Łukomska [9] in studies amongst city dwellers, more than the half of the respondents were of the opinion that old age is the time for educational activity and not the time for the withdrawal from social life.

Polish society keeps on changing. The younger generation, which is retiring now experienced acceleration in the living speed over the period of their own professional activity. A significant majority of the contemporary younger seniors are familiar with computers, the Internet, popular social communicators ("chat room", Facebook or Skype facilities), mobile telephone, has followed the smoking/non-smoking fashion, but at the same time the women have given fewer births and more often have been professionally working. These changes apply to both town and village environment.

The women whose data form the basis of this study were born before or during World War II and belong to the generations particularly burdened with stress, hunger and diseases. Their bodies have experienced and overcome several biological-social obstacles. They have raised their children in already different conditions.

## CONCLUSIONS

1. The living environment influences the quality of life, which translates into the rate and intensity of the ageing process. The ageing process itself, and its signs, are of an individual nature.
2. Village senior women less frequently live alone.
3. Limited financial resources of a senior can affect the contacts with the professionally active children and grandchildren.
4. The number of the offspring influences to a large degree the place of living during the senile age. More frequently, the social welfare institutions are inhabited by women, who are childless or have born one or two children.
5. It could be supposed that the worse health condition of the women from towns may result from more frequent smoking habit. The bigger awareness of diagnosed diseases has given the women from towns the feeling of being more affected with diseases.
6. The women seniors from towns more frequently complain about their health. Less frequently they participate in physical jobs within housework and take more medications.
7. The examined women from the three different environments spend their time in different manners, their food differs, they are characterised by different physical activity. These factors and many others have their effect on the rate of ageing.
8. The most frequent ailments of women from any environment are the overloading changes and the pain consequences of faulty spine positioning and pain affecting the legs.

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